

**CHILE**  
**An Economy in Transition**



# CHILE

## An Economy in Transition

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The Report was discussed with the Chilean Government in April 1979 and subsequently updated to include major developments which occurred during 1978.

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## PREFACE

World Bank country economic reports, such as this report on Chile, provide the information and analysis which the Bank needs for planning its country lending programs as well as for reviewing national development policies with the officials of the country concerned. Circulation of these reports is normally restricted to the "official community" -- member governments of the Bank and international organizations concerned with development problems. When the World Bank and the Government concerned agree that a report may be of use to a wider audience, it is published by the Bank. This is such a case. While this report is based on a working document, rather than a study prepared with a view to broader distribution, in the interest of brevity, certain annexes detailing sectoral issues have been omitted from this published version. These annexes will be made available to interested readers by the Bank.

While this report traces the development of the Chilean economy since the Great Depression of the 1930's, its major emphasis is on the traumatic economic events of the 1970's and their effect on Chile's economic prospects. During the last decade Chile had three different Governments with different economic philosophies: the Christian Democratic Frei Administration, the socialist Popular Unity Allende Administration, and the free-market oriented military Government headed by General Pinochet. These changes were accompanied by complementary political and social policies; indeed, many recent analyses of Chile's economy have stressed the importance of political and social events, often to the virtual exclusion of economic analysis.

In our analyses of the economies of member countries, consistency between stated objectives and the use of policy instruments to achieve those objectives is of paramount importance. In supporting the integral development of the member countries and their peoples, our analyses normally try to show the inter-relationships between the development goals and the effectiveness of the use of policy instruments within the political framework existing in those countries. In this light, the Chilean experience of recent years is worthwhile analyzing. The work included in this report is useful in our on-going dialogue with the Chilean authorities, and it may also prove to be useful for those interested in the development process of other nations.

While the report remains the responsibility of its authors, particularly Mr. Fred Levy, the mission chief, the Bank believes it will prove valuable to those interested in Chile as well as a wider audience. Although it does not attempt to review the political and social environment in which economic changes occurred, it is a detailed, empirical analysis of one of the world's most controversial economies. The complex development issues that were faced by Chile in the 1970's are often similar to those confronted daily in other developing countries.

Nicolas Ardito Barletta  
Regional Vice President  
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CHILE: AN ECONOMY IN TRANSITION

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## COUNTRY DATA - CHILE

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
756,826 km <sup>2/</sup>	10.7 million (mid-1978) Rate of Growth: 1.7 (from 1970 to 1978)	14 per km <sup>2/</sup> 232 per km <sup>2/</sup> of arable land

<u>POPULATION CHARACTERISTICS (1975)</u>	
Crude Birth Rate (per 1,000)	24
Crude Death Rate (per 1,000)	7
Infant Mortality (per 1,000 live births)	55

<u>HEALTH (1976)</u>	
Population per physician	2,323
Population per hospital bed	311 <sup>1/</sup>

<u>INCOME DISTRIBUTION (1968)</u>	
% of national income, highest quintile	51
lowest quintile	4

<u>DISTRIBUTION OF LAND OWNERSHIP</u>	
% owned by top 10% of owners	..
% owned by smallest 10% of owners	..

<u>ACCESS TO PIPED WATER (1976)</u>	
% of population - urban	98
- rural	..

<u>ACCESS TO ELECTRICITY (1975)</u>	
% of population - urban	90
- rural	35

<u>NUTRITION (1975)</u>	
Calorie intake as % of requirements	117
Per capita protein intake (grams)	78

<u>EDUCATION (1978)</u>	
Adult literacy rate %	90 <sup>2/</sup>
Primary school enrollment	%102

GNP PER CAPITA in 1977<sup>3/</sup>: US \$1,170

GROSS NATIONAL PRODUCT IN 1978

	US \$ Mln.	%
GNP at Market Prices <sup>4/</sup>	16,635	100.0
Gross Domestic Investment <sup>5/</sup>	1,768	10.6
Gross National Savings <sup>5/</sup>	981	5.9
Current Account Balance	-730	-4.3
Exports of Goods, NFS	3,080	18.6
Imports of Goods, NFS	3,413	20.5

ANNUAL RATE OF GROWTH (% constant prices)

	1965-70	1970-75	1976
GNP at Market Prices <sup>4/</sup>	3.9	-0.4	4.3
Gross Domestic Investment <sup>5/</sup>	3.8	-10.9	-9.2
Gross National Savings <sup>5/</sup>	3.9	-12.1	122.2
Current Account Balance	.	.	.
Exports of Goods, NFS	3.9	6.9	20.0
Imports of Goods, NFS	9.6	-0.2	-14.6

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1970

	Value Added		Labor Force <sup>6/</sup>		V. A. Per Worker	
	US \$ Mln.	%	Mln.	%	US \$	%
Agriculture	593	7.2	0.55	21.1	1,079	34.3
Industry	3,500	42.6	1.57	60.2	2,229	70.8
Services	4,127	50.2	0.30	11.5	13,757	436.7
Unallocated	.	.	0.19	7.3	.	.
Total/Average	8,220	100.0	2.61	100.0	3,150	100.0

GOVERNMENT FINANCE

	Public Sector			Central Government		
	(Pesos Mln.)	% of GDP		(Pesos Mln.)	% of GDP	
	1977	1977	1974-76	1977	1977	1974-76
Current Receipts	.	.	.	63,521	19.8	20.5
Current Expenditure	.	.	.	54,902	17.1	16.2
Current Surplus	24,731	7.7	7.7	8,619	2.7	4.3
Capital Expenditures	28,586	8.9	11.0	8,138	2.5	3.4
External Assistance (net)	-642	-0.2	-1.5	-5,443	-1.7	-2.5

<sup>1/</sup> Data for 1975.

<sup>2/</sup> Data for 1970.

<sup>3/</sup> The Per Capita GNP estimate calculated by the conversion technique of the 1978 World Atlas. All other conversion to dollars in this table are at the average exchange rate prevailing during the period covered.

<sup>4/</sup> Preliminary estimate.

<sup>5/</sup> From preliminary data; inventory changes are not known for 1977-78, thus the investment and national savings are underestimated.

<sup>6/</sup> Total labor force; unemployed are allocated to sector of their normal occupation. "Unallocated" consists mainly of unemployed workers seeking their first job.

.. not available

. not applicable

## COUNTRY DATA - CHILE

## MONEY, CREDIT and PRICES

	1973	1974	1975	1976	1977	1978
	(Million pesos outstanding end period)					
Money and Quasi Money	324	1,166	4,602	16,767	41,280	81,979
Bank Credit to Public Sector	777	3,832	19,040	45,630	88,281	--
Bank Credit to Private Sector	131	565	2,928	12,562	49,063	--
(Percentages or Index Numbers)						
Money and Quasi Money as % of GDP	26.7	12.1	10.9	11.3	12.9	23.8
General Price Index (Dec. 1969=100) <sup>1/</sup>	2,315	10,177	48,339	150,812	289,064	404,839
Annual percentage changes in:						
General Price Index	461.9	339.4	375.0	212.0	91.7	40.1
Bank credit to Public Sector <sup>2/</sup>	726	393	397	140	93	-
Bank credit to Private Sector <sup>2/</sup>	424	331	418	329	291	-

## BALANCE OF PAYMENTS

	1976	1977	1978
	(Millions US \$)		
Exports of Goods, NFS	2,392	2,636	3,089
Imports of Goods, NFS	1,946	2,723	3,413
Resource Gap (deficit = -)	+446	-87	-324
Interest Payments (net) <sup>3/</sup>	-323	-339	-424
Workers' Remittances	-	-	-
Other Factor Payments (net)	-3	-23	-39
Net Transfers	+28	+50	+57
Balance on Current Account	+148	-399	-730
Direct Foreign Investment	+7	+30	+187
Net MLT Borrowing			
Disbursements	737	888	2,124
Amortization <sup>3/</sup>	-685	-852	-910
Subtotal	+52	+36	+1,214
Capital Grants	-	-	-
Other Capital (net)	+84	+254	+6
Other items n.e.i	+164	+72	-60
Increase in Reserves (+)	+455	-7	+617
Gross Reserves (end year)	783	827	1,521
Net Reserves (end year)	-96	-103	+515

## RATE OF EXCHANGE (Average December Rates)

	1975	1976	1977	1978
US \$ 1.00 = Ch\$	8.25	17.03	27.59	33.84
Ch\$ 1.00 = US \$	.1212	.0587	.0362	.0296

## MERCHANDISE EXPORTS (AVERAGE 1976-78)

	US \$ Mln	%
Copper	3,635	54.4
Paper and Cellulose	429	6.4
Canned and Frozen Fish	253	3.8
Iron Ore	247	3.7
All other commodities	2,117	31.7
Total	6,681	100.0

## EXTERNAL DEBT, DECEMBER 31, 1977

	US \$ Mln
Public Debt, incl. guaranteed	3,583
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..
DEBT SERVICE RATIO for 1978 <sup>3/</sup>	
	%
Public Debt, incl. guaranteed <sup>4/</sup>	43.2
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

## IBRD/IDA LENDING, (March 31, 1979) (Million US \$):

	IBRD	IDA
Outstanding & Disbursed	156.3	21.2
Undisbursed	60.5	0.0
Outstanding incl. Undisbursed	216.8	21.2

<sup>1/</sup> IBRD index of consumer prices in Chile.<sup>2/</sup> Change measured from December to December.<sup>3/</sup> Ratio of Debt Service to Exports of goods and Non-Factor Services.<sup>4/</sup> Amounts shown for principal and interest repayments are taken from Central Bank estimates and are not the same as those reported by IBRD External Debt Division.

.. not available

. not applicable

LC1DD

June 12, 1979

EXCHANGE RATES, ANNUAL AVERAGES

	<u>U.S. Dollar</u>	<u>Peso</u>
1970	1.00	0.0118
1971	1.00	0.0135
1972	1.00	0.0219
1973 Jan.-Sept.	1.00	0.0588
1973 Oct.-Dec.	1.00	0.4052
1974	1.00	0.8637
1975	1.00	4.903
1976	1.00	13.052
1977	1.00	21.540
1978	1.00	31.670

GLOSSARY OF ABBREVIATIONS

AID	= Agency for International Development	
BECH	= Banco del Estado de Chile	(State Bank of Chile)
BIH	= Hectareas Basicas de Riego	(Basic Irrigated Hectares)
CANAEMPU	= Caja Nacional de Empleados Publicos	(National Fund for Public Employees)
CAP	= Corporacion Acero del Pacifico	(Pacific Steel Corporation)
CAR	= Certificado de Ahorro Reajutable	(Adjustable Savings Certificate)
CEDEM	= Centro de Estudios Estadisticos y Matematicos	(Center for Statistical and Mathematical Studies)
CELADE	= Centro Latinoamericano de Demografia	(Latin American Demographic Center)
CEPLAN	= Centro de Estudios de Planificacion Nacional	(Center for National Planning Studies)
CEPP	= Caja Nacional de Empleados Publicos y Periodistas	(National Fund for Public Employees and Journalists)
CEPRO	= Centro de Produccion	(Production Center)
CERA	= Centro de Reforma Agraria	(Agrarian Reform Center)
CHILECTRA	= Compania Chilena de Electricidad, S.A.	(Electric Company of Chile)
CIF	= Cost, Insurance, and Freight	
CNR	= Comision Nacional de Riego	(National Irrigation Commission)
CODELCO	= Corporacion del Cobre	(State Copper Corporation)
CONAF	= Corporacion Nacional Forestal	(National Forestry Corporation)
CONPAN	= Consejo Nacional para la Alimentacion y Nutricion	(National Council for Food and Nutrition)
CORA	= Corporacion de la Reforma Agraria	(Agrarian Reform Corporation)
CORFO	= Corporacion de Fomento de la Produccion	(Development Corporation)
CORVI	= Corporacion de Vivienda	(Housing Corporation)
CPI	= Consumer Price Index	
DINAC	= Direccion Nacional de Comercializacion	(National Directorate for Marketing)
ECA	= Empresa de Comercio Agricola	(Agricultural Marketing Enterprise)
EMPART	= Caja de Prevision de Empleados Particulares	(Private Employees' Social Security Fund)

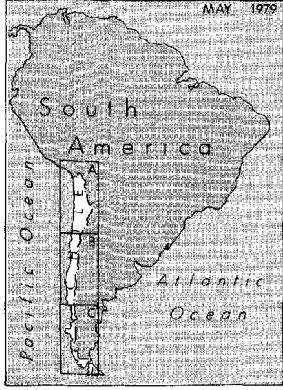
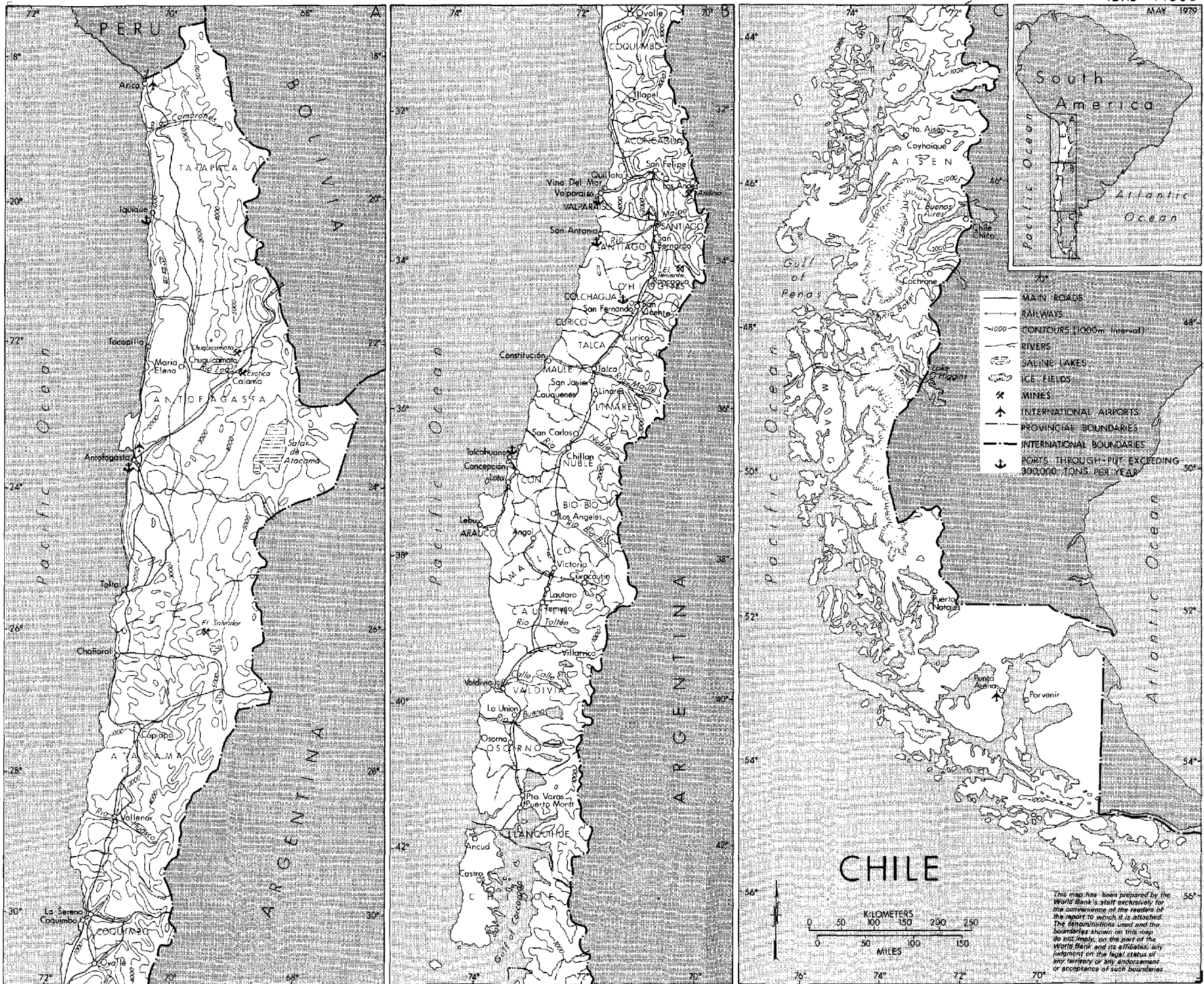
EMPORCHI	=	Empresa Portuaria de Chile	(Port Authority of Chile)
EMPREMAR	=	Empresa Maritima del Estado	(State Maritime Company)
ENACAR	=	Empresa Nacional de Carbon	(National Coal Company)
ENDESA	=	Empresa Nacional de Energia, S.A.	(National Energy Company)
ENAP	=	Empresa Nacional de Petroleo	(National Petroleum Company)
ENADI	=	Empresa Nacional de Distribucion	(National Enterprise for Fuel Distribution)
ENAVI	=	Empresa Nacional de Avicultura	(National Poultry Enterprise)
ETC	=	Empresa de Transporte Comercial	(Urban Bus Company)
FAM	=	Fondo de Asistencia Medica	(Fund for Medical Assistance)
FAO	=	U.N. Food and Agriculture Organization	
GATT	=	General Agreement on Tariffs and Trade	
GDP	=	Gross Domestic Product	
GDY	=	Gross Domestic Income	
GNP	=	Gross National Product	
IANSA	=	Industria Azucarera Nacional, S.A.	(National Sugar Industry, Inc.)
ICIRA	=	Instituto de Capacitacion e Investigacion en Reforma Agraria	(Agrarian Reform Training and Research Institute)
IDB	=	Inter-American Development Bank	
IFICOOP	=	Instituto de Financiamiento Cooperativo	(Institute for Cooperative Finance)
ILO	=	International Labour Office	
INDAP	=	Instituto de Desarrollo Agropecuario	(Agricultural Development Institute)
INE	=	Instituto Nacional de Estadistica	(National Institute of Statistics)
INFORSA	=	Industrias Forestales, S.A.	(Forest Industries, Inc.)
INIA	=	Instituto Nacional de Investigacion Agropecuaria	(National Institute for Agricultural Research)
INPROA	=	Instituto de Promocion Agricola	(Institute for Agricultural Promotion)
INTA	=	Instituto de Nutricion y Tecnologia de los Alimentos	(Institute of Nutrition and Food Technology)
JAP	=	Junta de Abastecimiento y Precios	(Supply and Price Committee)
JANEB	=	Junta Nacional de Auxilio Escolar y Becas	(National Council for Educational Assistance and Scholarships)
JNJI	=	Junta Nacional de Jardines Infantiles	(National Council of Nursery Schools)
LAN	=	Lineas Aereas Nacionales	(National Airlines)
MINVU	=	Ministerio de Vivienda y Urbanizacion	(Ministry of Housing and Urbanization)
MOP	=	Ministerio de Obras Publicas	(Ministry of Public Works)
ODEPA	=	Oficina de Planificacion Agricola	(Office of Agricultural Planning)
ODEPLAN	=	Oficina de Planificacion Nacional	(National Planning Office)
PEM	=	Programa de Empleo Minimo	(Minimum Employment Program)
PREALC	=	Programa Regional del Empleo para America Latina y el Caribe	(Regional Employment Program for Latin America and the Caribbean (I.L.O.))

SAG	=	Servicio Agrícola y Ganadero	(Agricultural and Livestock Service)
SARA	=	Sociedad Agrícola de Reforma Agraria	(Agricultural Society of Agrarian Reform)
SEAM	=	Servicio de Equipos Agrícolas Empleados	(Agricultural Equipment Service)
SERVIU	=	Servicio de Vivienda y Urbanización	(Housing and Urbanization Service)
SINAP	=	Sistema Nacional de Ahorros y Prestamos	(National System of Savings and Loans)
SMA	=	Salario Mínimo Agrícola	(Agricultural Minimum Wage)
SMI	=	Salario Mínimo Industrial	(Industrial Minimum Wage)
SNA	=	Sociedad Nacional de Agricultura	(National Agricultural Society)
SNS	=	Servicio Nacional de Salud	(National Health Service)
SOCA	=	Sociedad de Cooperación Agrícola	(Society for Agricultural Cooperation)
SOFOFA	=	Sociedad de Fomento Fabril	(Industrial Development Society)
SOQUIMICH	=	Sociedad Química Minera Chilena	(Chilean Chemical Mining Corporation)
SSS	=	Servicio de Seguro Social	(Social Insurance Service)
SV	=	Sueldo Vital	(Vital (Minimum) Salary)
UAF	=	Unidad Agrícola Familiar	(Family Agricultural Unit)
UC	=	Universidad de Chile	(University of Chile)
UF	=	Unidad de Fomento	(Development Unit)
UP	=	Unidad Popular	(Popular Unity)
VAT	=	Value-Added Tax	
VHR	=	Valores Hipotecarios Reajustables	(Readjustable Mortgage Securities)
WPI	=	Wholesale Price Index	

FISCAL YEAR

January 1 - December 31





- MAIN ROADS
- RAILWAYS
- ~ 1000 — CONTOURS (1000m interval)
- RIVERS
- SALINE LAKES
- ICE FIELDS
- MINES
- INTERNATIONAL AIRPORTS
- PROVINCIAL BOUNDARIES
- INTERNATIONAL BOUNDARIES
- PORTS THROUGH-PUT EXCEEDING 300,000 TONS PER YEAR

CHILE



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## SUMMARY AND CONCLUSIONS

1. Few economies have been more studied, debated, and prescribed for for so many years as has the Chilean. While the Chilean people are highly developed politically, culturally, and demographically, their economy is not. Once ranked among the most advanced of the developing countries, Chile's relative position eroded steadily since the 1930s; by the mid-1970s, its per capita income was below that of Brazil, Panama, Mexico and many others. The wide ideological swings that occurred from one election to another may have been partly due to voter dissatisfaction with the pace of economic progress. Successive governments brought abrupt changes in economic philosophies, from the mild socialism of the Popular Front regimes of the late 1930s through the 1940s, to the charismatic populism of President Ibanez (1952-58), Alessandri's partial restoration of orthodox capitalism (1958-64), Christian Democracy under Frei (1964-70), and the Marxist socialism of Allende (1970-73). The latter administration was ended by a military coup d'etat, resulting in a sharp swing toward laissez faire capitalism under the present Pinochet Administration.

2. Despite the major shifts in economic doctrine and the varying demand management problems encountered by each administration, several consistent policy threads characterized the fabric of economic policy from the Great Depression until 1973. In pursuit of greater insulation from externally generated economic shocks, as well as domestic growth, stabilization, allocative, and distributional objectives, governments actively intervened in the economy. They did so directly, through state ownership of production, distribution, and financial enterprises; and indirectly, through controls on prices, wages, interest rates, selective credit allocation, subsidies, tax exemptions, multiple exchange rates, import quotas, and so on. Among the tendencies which dominated the period were:

- a. Overvalued exchange rates supported by high levels of tariff and nontariff protection;
- b. Negative real interest rates;
- c. Low administered prices for food and other wage goods;
- d. Legally mandated wage adjustments intended, in varying degrees, to control inflation, protect real incomes in the face of inflation, and alter income distribution;
- e. High and growing levels of social benefits;
- f. Large public sector deficits financed in varying proportions by monetary expansion and foreign loans; and
- g. Many specific exemptions from taxes, tariffs, controls, rules, and subsidies in pursuit of special distributional or allocative objectives.

3. As the inconsistencies among these various policies became evident, additional controls, expenditure programs, tax exemptions, etc., were overlaid on the existing structure in an effort to offset the negative effects. Support of these activities required a substantial shift of resources to the public sector, a shift accomplished to a significant degree by inflationary monetary expansion and foreign borrowing.

4. Periodic efforts were made to reform the tax system, improve incentives to farmers, simplify and streamline the public administration, reduce the strong bias of the above-mentioned policies against export industries, and otherwise improve the allocation of resources. Important progress was also made in the expansion of education, the provision of medical services, the improvement of working conditions, and the redistribution of agricultural land. Nevertheless, in the post-Depression decades, Chile experienced slow growth of output and employment; rapid inflation; frequent balance of payments crises; a growing foreign debt burden; a highly protected, concentrated and inefficient manufacturing sector; and continued dependence on a single primary export commodity, copper.

5. The poor performance of the Chilean economy has frequently been attributed to underlying structural rigidities, such as the land tenure system, monopolistic industries, the secular deterioration of the international terms of trade of primary commodities, the protection of foreign markets, and the capital intensity of imported technology. Without denying the importance of many of these structural characteristics of the Chilean and world economies, responsibility must also be shared by domestic economic policy. Low productivity in agriculture, for example, may have derived partly from the psychology of latifundistas but was also the logical consequence of discriminatory price controls and an overvalued exchange rate. Similarly, concentrated industrial markets were encouraged by high levels of protection and a cascading sales tax; the foreign trade regime inhibited the growth and diversification of exports as well as the integration of the copper sector into the national economy; subsidized interest rates and heavy payroll taxes stimulated the substitution of capital for labor; and the steady annual expansion of Central Bank credit to the Treasury, which averaged 33 percent of the previous year's total money supply between 1956 and 1970, was a powerful source of inflation.

6. Helped by high copper prices and a debt rescheduling, substantial progress was made during the first two years of the Frei Government (1965-1966). The growth of output accelerated, while unemployment and inflation declined. Government spending grew rapidly, but improvements in the progressiveness and buoyancy of the tax system produced an even faster growth of revenues. The current account deficit of the balance of payments was reduced, and net international reserves increased. The introduction of a crawling peg exchange rate stimulated significant export diversification; improved terms of trade for agriculture elicited a strong production response; and the State acquired for the first time an equity position in the large copper mines, while assuring a major expansion of mine capacity.

7. By 1967, however, momentum was slipping. Investment and output lagged, while the rates of inflation and unemployment began to rise. Many important programs in education, agriculture and public housing launched by the Christian Democrats also appeared to be losing momentum. Nevertheless, the external accounts remained strong, and net international reserves rose to record levels.

8. The immediate economic objectives of the Allende Government, which took office in November 1970, were the reactivation of the economy, early progress toward the establishment of direct state control over those sectors whose resources and functions were deemed essential to fulfillment of the Government's development plan, an increase of the wage share of national income, acceleration of the agrarian reform set in motion by Frei, and reduction of the rate of inflation. Although rapid initial progress was made on all these fronts, the limits of resource availabilities were soon met, and the unavoidable trade-offs among objectives proved unmanageable.

9. Aggregate demand expanded rapidly in 1971, stimulated by a 58 percent nominal increase in central government expenditures, a 55 percent average wage adjustment, tapered to provide larger proportional increases to the lower paid workers, and a more than doubling of the money supply. Idle industrial capacity, an excellent agricultural harvest, and the drawing down of international reserves contributed to a strong supply response. Real GDP rose almost 8 percent and real consumer goods imports increased 17 percent over the previous year. At the same time, increased price controls, the fixing of the exchange rate, and the freezing of public enterprise tariffs helped to restrain inflation. Thus, employment expanded, and average real wages rose almost 20 percent. Also during 1971 the State took control over more than 80 enterprises, including the copper, iron, nitrate and coal mines; 16 commercial banks accounting (along with the State Bank) for more than 90 percent of outstanding credit; and the major enterprises in the metallurgical, metal-mechanical, cement, textile, fisheries, beer, and wholesale marketing sectors. Furthermore, under the land reform, almost as many farms were expropriated in 1971 as in the previous six years under Frei.

10. Although 1971, viewed in isolation, was thus a year of spectacular progress toward the Government's objectives, serious problems were becoming apparent as the year ended. Capacity limits had been reached in a number of sectors, breakdowns were occurring in the distribution system, and labor-management conflicts were increasingly disruptive. Supply shortages of both immediate and consumer goods were increasingly evident, and more and more transactions were being shifted to the black market. Private investment declined, and instead of providing investable resources for the rest of the economy, as intended, the state-run enterprises found their own profits squeezed by the redundant expansion of their work forces, increased wages, controlled prices, and inexperienced management. Net medium- and long-term lending dropped drastically, and international reserves were rapidly being exhausted. By year-end Chile had suspended foreign debt service.

11. While some external events were not helpful to the administration -- such as a fall in copper prices -- the administration's most serious economic problems were associated with domestic and monetary policies which resulted in substantial fiscal deficits, exploding growth in

the money supply, an extensive system of subsidies, and gross price distortions. World copper prices fell in 1971 and 1972, and there was a net withdrawal of resources by international creditors in 1971. Moreover, after 1971, Chile's usual sources of short-term credits dried up; in spite of a shift to socialist and neighboring country sources, the total volume of short-term credit dropped. Even had these sources of foreign exchange remained at or above their previous levels throughout the Allende period, however, the economy could not long have withstood the strains placed upon it.

12. All told, some 500 enterprises were taken over during the 1971-73 period, and more than one-fourth of total agricultural land was expropriated. The period was marked by deepening economic and political crises. Before it ended, real GDP per capita and real wages had fallen well below the levels of 1970, agricultural output had dropped to the level of the early 1960s, monthly inflation had reached an annualized rate above 1,000 percent, the deficit of the central government alone exceeded 20 percent of GDP, the black market exchange rate had risen to over 10 times the official rate, and net international reserves were negative.

13. The Pinochet Government, which took power on September 11, 1973, made a clear break with the development approach of the preceding four decades. The import-substitution model of the past was rejected in favor of opening Chile to the world economy. The present authorities view the proper economic role of government as one of setting the overall rules of the game and otherwise facilitating the allocative decisions of the private sector. The State is to play a "subsidiary" part, intervening only where there exist clear divergencies of social and private benefits and costs or to attack the causes and relieve the effects of "extreme poverty." Preferred policy tools are those which are general and indirect and minimize distortions to the price system. At this stage the goal of improved economic efficiency is given highest priority. Improving the efficiency of government programs -- particularly that of social programs -- is an important objective. The present poverty emphasis is directed towards reducing absolute poverty.

14. Accordingly, since September 1973 virtually all prices, including interest rates, have been progressively freed; most tax and subsidy distortions to relative prices have been removed; tariff and nontariff trade barriers have been drastically reduced, the exchange rate was massively devalued and a crawling peg reestablished, exchange controls have been largely eliminated, and foreign investment is being actively encouraged. In addition, reforms have been introduced in the tax structure, public sector budgetary process and banking legislation; land expropriations were ended and by mid-1978 individual titles had been issued to some 37,000 peasant farmers; and most of the enterprises taken over by the Allende Government have been returned to the private sector. In one of the few exceptions to the general aversion to subsidies, a massive reforestation program was undertaken which will approximately quadruple Chile's long-fiber forest resources by the late 1990s. Programs in the social area are being restructured in an effort to better identify and more efficiently reach the truly needy while eliminating subsidies to the middle- and upper-income groups.

15. Adjustment to these changes, which amount to a total restructuring of the economy, has been complicated by difficult short-term economic conditions. High copper prices and initially increased resource flows from foreign lenders helped to sustain a mild recovery in 1974. Not foreseeing the problems ahead, the authorities failed to take adequate stabilization measures which might, in retrospect, have attenuated the need for drastic austerity that became evident in early 1975. With real copper prices falling to their lowest level in two decades, copper earnings fell almost 50 percent, a resource loss to the economy equivalent to about 10 percent of the 1974 GDP. Additional resources, equivalent to 2.5 percent of GDP, were withdrawn from the economy in the form of net repayment and interest to foreign lenders. Chile was also hard hit by the leap in oil prices; it imports three-fourths of its oil needs.

16. In response to the severe foreign exchange crisis and reaccelerating inflation, the Government introduced a drastic austerity program in April 1975, and the Chilean economy suffered its worst depression since the 1930s. Real GDP fell more than 11 percent, and per capita GNY (adjusted for the deterioration of the terms of trade) fell 19 percent. Open unemployment reached 20 percent of the labor force of Greater Santiago in spite of a major government work program that offered emergency employment to about one-third of the unemployed.

17. The economy bottomed out during the first quarter of 1976, and output, employment, and real wages have been growing buoyantly since. The public sector deficit has been virtually eliminated, net international reserves are at their historically highest levels and inflation has been reduced from 400 percent in 1973 to 30 percent in 1978. Agricultural and manufactured exports each grew more than seven-fold between 1973 and 1978; agricultural value-added rising about 9 percent per year over this period. Copper output has reached record levels, even though one of the large mines has been shut down since 1975. This fast turnaround was accomplished despite continued low copper prices, a heavy foreign debt service burden, and with the only significant external official support being provided by the IMF.

18. These achievements, however, were accompanied by great material sacrifice on the part of the vast majority of Chilean citizens. By 1978, per capita GDP had only regained the level of 1968; in effects the shocks endured since 1970 have cost the nation a full decade of economic growth. The loss of real income and employment during the austerity period brought widespread hardship, particularly for the urban unemployed who lacked a cushion of savings to fall back on. Nevertheless, while it may be possible to criticize some aspects of economic management during this period, it is difficult to see how a major economic downturn could have been avoided in view of the nation's negative international reserves and high debt service obligations, the disastrous decline in its capacity to import, and the lack of confidence and/or hostility of foreign lenders.

19. In the mission's judgment, many of the policies introduced since 1973 have opened the door to a more rapid and sustained growth of output and employment and to a steady reduction of Chile's historical dependence on a single primary export commodity. Many of these structural reforms are consistent with advice long offered Chile by the World Bank and other international institutions.

The steps taken to liberalize trade, rationalize the exchange rate, and eliminate price distortions have substantially reduced the former biases against export diversification and in favor of capital-intensive production, and provide a powerful prod to the improvement of productive efficiency generally. Inflation and inflationary expectations have fallen steadily. This, along with the greatly improved financial performance of the public sector and the appearance of positive real interest rates significantly enhances the system's ability to generate savings and should raise the efficiency of investments.

20. Caution is called for in the use of Chilean economic statistics. The rapid changes that have occurred in recent years have made their interpretation subject to a wider than normal range of error. Despite such caveats, however, the mission believes that it has been possible to identify correctly the fundamental trends of economic policy and performance in Chile over the past several decades and that conclusions of the report are supported by the evidence. The mission's projection of future growth is, therefore, based on economic logic as well as empirical measurement. It is still too early to define secular trends; to a large extent these are obscured by the overwhelming impact of the 1975-76 depression. It was not until 1977, for example, that the competition of imports became an influential force in the local marketplace. It is clear, however, that the ultimate success of the Government's development strategy depends heavily on the private sector's ability to rise to the challenge of increased competition and to supply the entrepreneurship required to sustain export expansion; and on the ability of the Government to demonstrate that the fruits of efficient resource allocation and growth can be shared equitably. It is toward these issues that most of the mission's recommendations are directed.

21. In brief, the mission believes that the considerable uncertainties created by the sudden and profound change in the rules of the Chilean economic game--exacerbated by the very difficult financial situation in which many enterprises found themselves after the management disruptions of the early 1970s, the reduced cash flows of the depression years, the freeing of interest rates, and five consecutive years of three-digit inflation; as well as certain structural rigidities in Chilean financial markets--have severely inhibited the private investments needed to fulfill the Government's development objectives. In spite of some government efforts, small farms and enterprises remain hard pressed. The probable consequences of ignoring these adjustment problems may be slower growth, the unnecessary failure of some enterprises with otherwise favorable prospects for survival, higher levels of frictional unemployment and increasing concentration of asset ownership. Among the transitional measures recommended by the mission are the introduction of an investment tax credit, dropping real interest rate levels, expanded programs of credit and technical assistance to small farms and industries, expanded training and information programs to promote labor mobility, an improved program of agricultural price stabilization, the maintenance of restrictions on the sale of reformed sector land, and a review of the adequacy of existing antitrust law and its enforcement, with particular attention to the interlocking ownership of industrial, financial, and commercial enterprises.

22. While the Government shares many of the concerns of the mission, it believes that presently high domestic interest rates averaging, for example, 43 percent in real terms in 1978 for short-term funds, will drop significantly in the near future, thus encouraging investment and reducing the differential

between foreign and domestic loans. To promote this reduction in differentials, in early 1979 the Government placed reserve requirements on most foreign borrowed funds thus increasing their cost. The authorities remain convinced that, as the economy readjusts and interest rates drop, those advantages presently enjoyed by larger private corporations will be drastically reduced. While antitrust action may be useful in specific situations, the Government places greater reliance on the elimination of market distortions and the opening of the economy to foreign competition to deter the negative impact of market concentration on efficiency and income disparities. The Government agrees that volatile agricultural prices could indeed lead to misallocation in agriculture and will attempt to dampen these possible oscillations through the establishment of a futures market for agricultural products. Finally, the authorities are generally satisfied with the pace of investment recovery and question the desirability of an investment tax credit in view of the possible abuses and resource distortions such a credit might encourage. Instead, they intend to concentrate on the still very high wage (social security) tax as the major area for tax relief.

23. The Government's strategy gives emphasis to the role of private initiative. Nevertheless, the public sector, in addition to its traditional responsibility for economic and social infrastructure, will continue for the foreseeable future to control a substantial proportion of Chile's productive capital in both mining and industry. The anticipated growth of copper revenues and the buoyancy of the present tax system imply that the State will continue to generate a significant share of domestic savings in the years ahead. If Chile is to achieve the very high marginal savings rate now required, decisions regarding the extent to which the public sector's savings potential is to be mobilized and how it is to be shared among private and public sector uses, through either net lending by the public sector or tax reductions, must be made an explicit part of the planning and budgeting process.

24. With effective administrative control having been established over public sector activities, and the imperatives of the austerity period now relaxed, more aggressive programming and expenditure policy is called for in meeting the sector's legitimate high priority needs. Better coordination is required among public sector agencies for the proper programming of investments in such areas as energy, transport, and water resource development. While the recently established energy commission is an encouraging step in resolving this problem, more effort is needed. Greater resources must also be devoted to such essential pre-investment activities as basic data collection, resource surveys and sector studies. Government action is also needed to reduce the adverse impact of copper price fluctuations on the economy. Toward this end, the Government is considering a mission recommendation to establish a special fund to even the flow of copper receipts into the economy.

25. Chilean governments have traditionally ascribed high priority to considerations of equity and income distribution. The means chosen to accomplish these objectives, however, often resulted in a severe distortion of resource allocation, and the primary beneficiaries were frequently members of the urban middle class rather than the truly poor. The present Government has declared the elimination of "extreme poverty" to be one of its primary socio-economic objectives. Consistent with its overall strategy, strong

preference is given to programs of direct subsidies and/or remedial services carefully targetted at identified groups or individuals rather than on general programs of price controls or subsidies which distort market incentives and are available to everyone.

26. Lack of data, the complexity of past controls and of the policy shifts that have occurred, the massive changes in price levels and in relative prices that have taken place, and other problems described in the text make it impossible to reach any confident determinations regarding the impact that recent policies have had on the distribution of income. Moreover, the long-term trends are once again obscured by the tremendous impact of the 1975-76 depression. Although the report offers a number of tentative observations, the essential conclusion is that each individual has been affected differently as both a buyer and a seller, and none of the conventional sectoral, function, or income categories can be treated homogeneously as net gainers or losers.

27. A number of significant and promising innovations have been introduced in the Government's specific antipoverty programs, particularly in the field of nutrition. Important steps have also been taken to rationalize the social security system and to improve the distribution and quality of its benefits. In general, however, program development has been slow because of the general constraints on public sector expenditures, managerial weaknesses, lags in working out the operational details of the new approach, and the statistical and administrative difficulties inherent in target group identification. With the greater fiscal and managerial resources now becoming available, it is hoped that the Government's full energies will be devoted to making its antipoverty effort more effective.

28. Apart from progressively reducing the regressive inflation "tax," the greatest contribution of the new strategy to the long-term improvement of income distribution will perhaps derive from the enhanced prospects for employment generation derived from faster growth and more rational factor pricing. Toward this end, the mission notes with satisfaction the progress made in lowering payroll taxes and urges that this process be continued as rapidly as is financially practicable. The speed and magnitude of the structural change through which the economy is currently passing, however, can be expected to create significant problems of frictional unemployment and skill obsolescence. Unemployment remains a nagging problem. While the number of employed has grown steadily in the past few years, the unemployment rate in the greater Santiago area remained at almost 14 percent at the end of 1978. Improved information flows are needed to monitor this process, so that the magnitude and content of publicly funded retraining programs can be properly adjusted. While the emergency employment program, introduced during the depression, will be continued at least through the transition period, its education and training components could be enriched. Interim technical assistance and credit programs for small farmers and industries should also be considered for their possible favorable impact on employment.

29. Finally, the mission notes its concern that the existing tendency towards a concentration of asset ownership may have negative long-term implications for both income distribution and the future viability of the present Chilean economic strategy. The continued growth and stability of strong, oligopolistic interests may ultimately become incongruent with the present liberal, open trade strategy. Nonsubsidized assistance to small enterprises and a vigorous enforcement of antitrust regulations may be the key to avoiding this possible, future issue.



## CHAPTER I

### A HISTORICAL OVERVIEW OF CHILEAN ECONOMIC POLICY

#### A. INTRODUCTION

1. Chile is an economically underdeveloped country as that term is normally understood. Among its identifying characteristics are a heavy dependence on a single primary export commodity, low productivity in agriculture, a high rate of infant mortality, high chronic unemployment and underemployment, and significant absolute poverty. In contrast, however, its per capita income, extensive manufacturing sector, and high degree of urbanization rank Chile among what has come to be treated as a middle tier of nations, while its moderate population growth, early introduction of social security other public welfare programs, and the literacy and sophistication of its people place it close to the ranks of developed countries. To complicate the image further, although prosperous in comparison to the subject countries of most World Bank reports, Chile's relative position has eroded steadily for the past several decades. While development began to accelerate in many Latin American and Asian countries, Chile experienced slow growth, extreme price instability, and recurrent balance of payments crises.

2. During the 19th Century, Chile was one of the leading economies of South America. Its markets and people were open to both trade and ideas; and Chilean statesmen and institutions had a great influence throughout Latin America. Unlike Uruguay and Argentina, however, the Chilean population was not supplemented by large waves of non-Spanish immigration. The proportion of foreigners to the total population peaked in 1907, but was then only 4.2 percent. While German immigrants had a great impact in developing the south central part of the country, and British surnames are common, the Chilean population is mostly of Hispanic and Indian origin. Moreover, equally unlike Argentina or Uruguay, Chile was spared bloody disputes over land and the relative political power of landowners and urban workers. Large farms and ranches coexisted with a growing urban work force. Their relative influence was disputed through an electoral process that increasingly shifted power from the land and agriculture to urban, industrial employers and employees. By 1940 more than half of Chile was urban, and resources were increasingly shifted towards urban voters.

3. In the four decades that followed the Great Depression, successive governments accepted increasing responsibility for promoting economic development and achieving a more equitable distribution of its fruits. In seeking to guide the allocation of resources accordingly, governments increasingly intervened in the determination of the prices of both goods and factors of production, erected high protective barriers against foreign competition, offered special tax and other incentives, and entered directly into production and distribution activities as well as the allocation of credit and foreign exchange. The results of these efforts, as evidenced by economic performance over most of this period, did not match the intent. Because of failures in execution or design, the increasingly large and complex governmental machinery required to administer these policies was often diverted to the

service of private individual or group interests. Policies invoked to accomplish one end--e.g. hold down the cost of living of urban workers--frequently conflicted with other objectives--e.g. increased domestic food production and external payments viability--and a new set of taxes, subsidies or controls and/or a new public agency would have to be added to repair the damage. Support of these activities required a substantial shift of resources from the private to the public sector. Given the political inability to cover all the costs via taxation and the weakness of the domestic capital market, the transfer was accomplished via inflation and foreign borrowing.

4. The picture was not, of course, unremittingly negative and unidirectional. In recognition of the above problems, periodic efforts were made to reform the tax system, dampen inflation, simplify and streamline the public administration, reduce the bias against export industries, and otherwise improve the allocation of resources. Moreover, important progress was made in the expansion of education, the provision of medical services, the improvement of working conditions, and agrarian reform. Nevertheless, in reviewing the period one is still faced with a reality of slow growth, rapid inflation, frequent balance of payments crises, heavy foreign debt burden, backward agriculture, a highly concentrated, inefficient manufacturing sector and continued dependence on a single primary export commodity--the very condition the policies adopted were most intended to change. That the Chileans themselves were dissatisfied with this progress is evident in the wide ideological swings that occurred from one election to another, as the voters repeatedly gave up on the party in power.

5. The Government that took power in September 1973 has made a clear break with the development approach of the past. The present authorities view the proper role of government in the economy as one of setting the overall rules of the game and otherwise facilitating the resource allocation decisions of the private sector. Government is to play a "subsidiary" role, intervening only where there exist clear divergences of social and private benefits and costs or to achieve a more equitable distribution of income. 1/ In carrying out this reduced responsibility, clear preference is given to policy tools which are general and indirect and minimize distortions to the price system.

6. The historical overview presented in this chapter and supplemented in later chapters and annexes is essential to understanding the magnitude of the policy change that has occurred and of the process of adaptation through which the economy must now move. It also points up the difficulty of projecting the future of the Chilean economy in any precise terms. The policy parameters that shaped such basic relationships as consumption functions, import elasticities, capital-output ratios, input-output coefficients, the buoyancy of tax collections, etc. have changed not marginally, but radically. Chilean decision-makers are now operating in a very different world, and the future cannot be extrapolated from the past.

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1/ A statement of this philosophy may be found in ODEPLAN, Eficiencia Economica para el Desarrollo Social: Plan Nacional Indicativo de Desarrollo, 1976-1981, Santiago, 1976.

B. OVERVIEW OF THE MACROECONOMY

1. Population

7. Chile had a population in 1978 of approximately 10.7 million persons. <sup>1/</sup> Table I.1 summarizes the decline of both birth and death rates since 1920. Inasmuch as Chile has not experienced significant net migration in recent decades, population growth has been explained almost entirely by natural increase. The rate has historically run considerably below the average both for Latin America and for countries with comparable per capita incomes (Table I.2). The more rapid decline of the mortality rate during the 1940s and 1950s led to a sharp increase in the population growth rate, but by the mid-1960s the birthrate had also dropped substantially. In demographic terms, Chile now appears relatively advanced. Since 1970, total population has been growing at about 1.7 percent per year.

Table I.1: CHILE - RATES OF BIRTH, DEATH AND NATURAL GROWTH OF POPULATION, 1920-1975

(Percent)

Year	Crude Birth Rate	Crude Death Rate	Rate of Natural Increase
1920	4.4	3.1	1.3
1930	4.3	2.4	1.9
1940	3.8	2.1	1.7
1950	3.4	1.5	1.9
1960	3.6	1.3	2.4
1970	2.7	0.9	1.8
1975	2.4	0.7	1.7

Source: INE; U.S. Bureau of the Census, Country Demographic Profiles

<sup>1/</sup> The 1970 census showed a total population of 8.9 million, but the estimate used for 1970 is 9.4 million since there is estimated to have been an underenumeration of about 4.8 percent. (ODEPLAN, Proyeccion de la Poblacion de Chile por Sexo y Grupos Quinquenales de Edad, 1950-2000, Santiago, 1975.

Table I.2: CHILE - COMPARATIVE RATES OF BIRTH AND NATURAL INCREASE, 1975

	Crude Birth Rate	Rate of Natural Increase
Chile	2.4	1.7
Other Western Hemisphere Developing Countries	3.7	2.8
Middle Income Countries <u>a/</u>	4.0	2.7
Industrial Countries	1.6	0.8

a/ Per capita incomes between US\$376 and US\$1,000 (1970 dollars).

Source: Table I.1 and IBRD, World Development Report, 1978

8. The rapid fall in the death rate after 1940 was the result of the availability of new drugs, improved public health measures, and wider distribution of health services. Particularly dramatic has been the reduced number of deaths caused by tuberculosis, digestive disorders, and other parasitic infections. By 1970, the average life expectancy at birth had reached 62.6 years, compared to only 30.5 years in 1920 and 38.1 in 1940. 1/ Although infant mortality had declined by almost two-thirds since 1930, it still remained relatively high in 1970 at 78.8 deaths per 1,000 live births. Most of these infant deaths occurred after one month of age, indicating that a high proportion were attributable to exogenous causes. The more rapid reduction of mortality in the first month of life reflects improvements of prenatal care and average nutrition levels.

9. The falling birth rate mirrors important long-term trends in fertility. Age-specific fertility rates have fallen for women at all age levels, particularly sharply for those in the older childbearing years. In accordance with the fertility pattern prevailing in 1970, an average woman who survived the entire 35-year childbearing period could be expected to give birth to 3.5 children, as compared to 5.1 in 1960 and 5.5 in 1930. Among the factors contributing to declining fertility are rising education levels, urbanization and growing female employment opportunities outside the home, and expanded public health services which have since the mid-1960s included government sponsorship of family planning. 2/

1/ Female life expectancy was 65.7 years in 1970; that for males was 59.5.

2/ The adoption of an official family planning program was apparently prompted more by concern about the medical problems which stemmed from the high rate of induced abortion, rather than an effort to control population growth per se. It was estimated that in Santiago in 1962-63 between 17 and 23 percent of pregnancies ended in induced abortion.

10. The distribution and rate of growth of population vary widely from one region to another. Not surprisingly, the greatest population concentration and most rapid growth has occurred in the industrial centers and rich agricultural areas of the central zone, bordered by the Province of Aconcagua in the north and Linares and Maule in the south. By 1970, this zone included almost 60 percent of the population; the Province of Santiago alone accounted for more than one-third of the population. 1/

11. Population has become increasingly concentrated in urban areas. According to Chilean census definitions, 75 percent of the population was urbanized by 1970, as compared to 60 percent in 1952 and 49 percent in 1930. 2/ Urban population grew 2.8 percent per annum between 1960 and 1970, as compared to a total annual growth rate of 1.9 percent. By 1970, there were seven cities with populations of 100,000 and over, in contrast to only three in 1952, and they accounted for over 43 percent of the population. The population of the Greater Santiago metropolitan area doubled during this period, reaching 3 million inhabitants in 1970.

12. Much of this urban growth is, of course, the result of internal migration. About one-fourth of Chile's population was found in 1970 to be living outside of the province where born, indicating a high degree of mobility. The greatest net gainers in these movements were the provinces of Santiago, Valparaiso, and Concepcion, the nation's major industrial-commercial centers. Much of this migration was between cities rather than directly rural-urban. A survey of migrants to Greater Santiago showed more than 42 percent had come from cities of 20,000 or more, while only 13 percent had come to the capital directly from rural areas. 3/ More than 60 percent of the migrants were young, unmarried adults, and 58 percent were female.

13. Table I.3 summarizes the impact of the changing population growth rate on the age distribution of the population. The accelerated growth rate of the 1950s lowered the median age of the population at the same time that the falling mortality rate led to an increasing proportion of aged. The result through the late 1950s and early '60s was a small relative decline of the population of labor force age. This trend has been sharply reversed since the mid-1960s. Although the proportion of the population over age 65 continues to increase, the decline in the birth rate has reduced and will continue to reduce the fraction of the population below 14, thus generating a rapid rise in the proportion of the population of labor force age.

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1/ For further detail, see Tables 1.4 - 1.5 in Appendix II.

2/ For census purposes, "urban" has been broadly defined as denoting a populated center of some regional and administrative importance which provides a certain level of public services. It thus does not depend on a specified minimum population or population density.

3/ Juan Elizaga, Migration in Metropolitan Areas in Latin America, CELADE, Santiago, 1970.

Table I.3: CHILE - SUMMARY MEASURES OF THE AGE DISTRIBUTION  
OF THE POPULATION, 1950-1985

	(Percent)				
	1950	1960	1970	1975	1985
Median Age (years)	20.3	19.5	20.1	21.3	24.1
Proportion of Population (0-4 years)	14.8	15.4	12.9	11.8	9.8
Proportion of Population (5-14 years)	23.4	23.8	25.2	23.7	19.4
Proportion of Population (15-64 years)	57.8	56.5	57.2	59.5	64.8
Proportion of Women (15-49)	48.1	46.9	47.4	49.7	54.0
Proportion of Population (65+ years)	4.0	4.3	4.8	5.1	5.9
Total Age Dependency Ratio	73.0	76.9	75.0	68.2	54.3

Source: Appendix II, Tables 1.2 and 1.3

14. Chile has been a historic leader in the effort to provide universal education, at least through the primary grades. Primary enrollment growth was particularly rapid during the second half of the 1960s, averaging 9 percent per year compared to 4 percent from 1958 to 1964. The growth of secondary school enrollments averaged about 6 percent per year in both periods. <sup>1/</sup> University enrollments have grown even more rapidly, averaging 9 percent over the entire period 1958-1970 and 14 percent in the subperiod 1964-1970. Table I.4 provides some comparative education indicators and shows Chile's position relative to both industrial and other developing nations.

<sup>1/</sup> The expansion of primary education is slightly overstated and secondary education understated as a consequence of an educational reform in the late 1960s which increased the number of years of the former and reduced the number of years of the latter. (See: Christian Eyzaguirre, Educacion y Distribucion del Ingreso, Corporacion de Promocion Universitaria, Santiago, 1974).

Table I.4: CHILE - COMPARATIVE EDUCATION INDICATORS, 1970

(Percent of Relevant Age Group)

	Primary School Enrollment Ratio b/	Secondary School Enrollment Ratio	Adult Literacy Rate
Western Hemisphere Developing Countries	100.1	26.1	81.5
Middle Income Countries <u>a/</u>	94.4	33.7	70.3
Chile	119.0	29.0	90.0
Industrial Countries	107.0	73.6	98.7

a/ Per capita incomes between US\$376 and US\$1,000 (1970 dollars)

b/ Ratios greater than 100 result from the enrollment of students above the ordinary primary school age and indicate a combination of grade-level repetition and delayed entry.

Source: IBRD, World Tables 1976

## 2. Production

15. Propelled by large mining exports, a relatively productive agriculture, high government spending, and foreign investments, the Chilean economy grew fairly rapidly before the Depression of the 1930s, and Chile achieved a comparatively prosperous middle-class status among the world's nations. 1/ Since that time, however, aggregate economic growth has been among the lowest in the developing world. After a cataclysmic decline during the Great Depression of the 1930s, the growth of per capita GDP averaged about 2 percent per year between 1937 and 1952, slowing to about 0.3 percent per year during the middle 1950s (Table I.5). Economic growth accelerated during the 60s, averaging 2.3 percent per capita, but still remained significantly below the average for developing countries generally (see Table I.6).

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1/ It is estimated that per capita income grew around 2.7 percent per annum between 1908 and 1927, and 4.5 percent per year from 1915 to 1930. (Markos J. Mamalakis, The Growth and Structure of the Chilean Economy: From Independence to Allende, Yale University Press, New Haven, 1976.)

Table I.5: CHILE - GROWTH RATES OF GDP AND GDP PER CAPITA, 1952-1970

(Percent)

	GDP	Population	Per Capita GDP
1953-1958	2.5	2.2	0.3
1959-1964	5.0	2.3	2.7
1965-1970	3.9	1.9	2.0
1952-1970	3.6	2.2	1.4

Source: Appendix II, Tables 1.1 and 2.2 and Instituto de Economía, U. de Chile, La Economía de Chile en el Periodo 1950-63, Santiago, 1963

Table I.6: CHILE - COMPARATIVE GROWTH RATES OF GDP PER CAPITA

(Percent)

	1950- 1960	1960- 1965	1965- 1970	1950- 1970
Higher Income Developing Countries <u>a/</u>	2.7	3.5	3.6	3.1
Western Hemisphere Developing Countries:	2.0	2.1	2.8	2.1
Argentina	(1.4)	(2.0)	(2.8)	(1.9)
Brazil	(3.1)	(1.2)	(4.6)	(3.0)
Chile	(0.5)	(2.7)	(2.0)	(1.4)
Colombia	(1.3)	(1.4)	(2.4)	(1.6)
Mexico	(2.4)	(3.8)	(3.3)	(3.0)
Peru	(2.6)	(3.6)	(0.7)	(2.4)
Industrial Countries	2.8	3.9	3.6	3.3

a/ Per capita income above US\$375 (1970 dollars)

Source: Table 1.5 and IBRD, World Tables 1976



16. Table I.7 traces the evolution of the sectoral distribution of output since 1940. While these data must be treated with some caution, 1/ several important characteristics are evident. The first is the relatively small role of agriculture as a source of product. Even though agriculture's share is likely to be understated by the available data, it is well below the roughly 25 percent average for developing countries generally. In Latin America, only Venezuela reports a lower agricultural share in GDP. Once an important exporter of wheat and other agricultural products, output has not kept pace with population since the 1930s. It is also striking that more than half of Chile's GDP, at least since 1940, has been contributed by the non-goods producing sectors. Although manufacturing is reasonably well developed in comparison with most other developing countries, and mining is of considerable importance, Chile evolved as a heavily service-oriented economy.

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1/ Among the statistical problems in dealing with Chilean national accounts data are the considerable price distortions among sectors created by years of rapid inflation, and the discriminatory application across sectors of price controls and effective protection against imports, the extent of which, moreover, has varied significantly over time. As a consequence, for example, the national accounts data undoubtedly tend to undervalue the sectoral products of agriculture and mining and to overstate manufacturing output. (See the Note on Chilean Economic Statistics appended to this volume).

Table I.7: CHILE - SECTORAL DISTRIBUTION OF GDP, 1940-1970 a/

(Percent)

Sector	1940	1950	1960	1965	1970
Agriculture <u>b/</u>	15.5	15.6	11.6	9.5	9.0
Mining	9.1	6.2	9.9	9.4	9.9
Manufacturing	18.3	19.6	22.8	24.4	24.0
Construction	2.7	2.2	5.1	5.3	4.6
Commerce	16.1	19.0	22.0	20.0	20.6
Public Utilities	1.0	0.9	1.4	1.5	1.5
Transport, Storage and Communications	7.3	6.4	3.1	4.4	4.4
Finance <u>c/</u>	2.9	3.2	2.8	2.2	4.0
Government and Other Services	<u>27.1</u>	<u>26.9</u>	<u>21.3</u>	<u>23.3</u>	<u>22.0</u>
Total	100.0	100.0	100.0	100.0	100.0

a/ Product data for 1940 and 1950 were valued at 1960 prices; data for 1960-70 were valued at 1965 prices.

b/ Includes forestry, hunting and fishing.

c/ Includes banking, insurance and real estate.

Source: 1940 and 1950 are taken from Instituto de Economía, op cit.;  
1960-70 data is from ODEPLAN

### 3. Employment

17. There are, unfortunately, no reliable national employment data for Chile, either historical or current. Systematic, regular labor force surveys are carried out only in the Santiago metropolitan area. These are supplemented on the national level by information from the demographic census. 1/ With the rate of economic growth during the 1960s exceeding the post-depression average, it is likely that employment grew more rapidly than the active labor force. This supposition is consistent with the estimated decline in the national rate of unemployment over the decade, from a range of 7-8 percent between 1960 and 1964 to an average of 5.5 percent from 1965 to 1970. 2/ However, the sluggish growth of the total labor force, and particularly the numbers of persons attached to the goods-producing sectors and in wage-earning occupations, suggest little dynamism.

18. Although the proportion of the population of labor force age remained roughly constant from 1950 to 1970, a significant decline occurred in the labor force participation rate--the proportion of persons of labor force age actually employed or seeking employment. Over the 1960s, the economically active population grew only 0.9 percent per year according to the 1960 and 1970 censuses. A tendency to retire at an earlier age as well as a rapid expansion of school enrollments are the primary explanatory factors for the falling participation rate. As a combined consequence of these phenomena, the economically active proportion of the total population dropped from 37 percent in 1952 to 29 percent in 1970.

19. Table I.8 shows the sectoral distribution of the economically active population as reported in the last four censuses. Its basic trends and characteristics parallel the evolution of output shown in Table I.7: viz, the secular decline of agriculture's role as a source of employment and the importance of non-goods producing activities in Chile. More than 100,000 persons (net) are reported to have left the agricultural labor force during the 1960s, flowing primarily into commerce and services. More surprising is

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1/ The Direccion de Estadistica y Censos (precursor of INE) carried out a series of household surveys in the late 1960s, based on a sample drawn from the 1960 census. In "blowing up" the sample results, however, the investigators apparently assumed much too high a rate of labor force growth during the interim. Consequently, the published data for employment, total and by sectors, exceeds by a substantial margin the numbers given for economically active population (employed plus unemployed) in the 1970 census, even after the latter is corrected for probable underenumeration. Similarly, ODEPLAN has published an employment series for the 1960s ("Balance de Poblacion Ocupada por Sectores Economicos 1960-1970," in Balances Economicos de Chile 1970-1970, Santiago, 1973), which projects from the 1960 census on the basis of sectoral rates of output growth, assumed labor-output ratios, and the above-mentioned household surveys. This exercise, too, resulted in what appear to be, on the basis of the 1970 census, grossly inflated employment figures.

2/ ODEPLAN, "Notas Sobre el Desempleo en Chile," 1971.

the relative decline of the manufacturing labor force over the decade, despite the high priority given to the sector's development and the relatively rapid rate of growth of output. Although a decline in the labor force is not inconsistent with rising employment in the sector (if, for example, the sectoral unemployment rate were declining and/or unemployed persons formerly attached to the manufacturing sector dropped out to seek jobs in other sectors), it does suggest that the growth of job opportunities was limited. The largest increases in wage employment during this period apparently occurred in commerce, transport, and services.

Table I.8: CHILE - DISTRIBUTION OF ECONOMICALLY ACTIVE POPULATION  
BY SECTORS, 1940-1970 a/

(Percent)

Sector	1940	1952	1960	1970
Agriculture	35.0	29.7	27.7	21.1
Mining	5.4	4.8	3.8	3.0
Manufacturing	16.9	19.1	18.0	16.6
Construction	3.3	4.8	5.7	6.5
Commerce	9.2	10.4	9.2	11.2
Transport and Communications	4.2	4.5	4.9	6.1
Services	24.3	23.1	24.5	26.5
Not Specified	<u>1.7</u>	<u>3.6</u>	<u>6.2</u>	<u>8.9</u>
Total	100.0	100.0	100.0	100.0

a/ 1940 and 1952 data cover the economically active population 15 years of age and older; the 1960 and 1970 figures refer to those 12 and older. The inclusion of younger workers probably raises slightly the relative shares of agriculture and services.

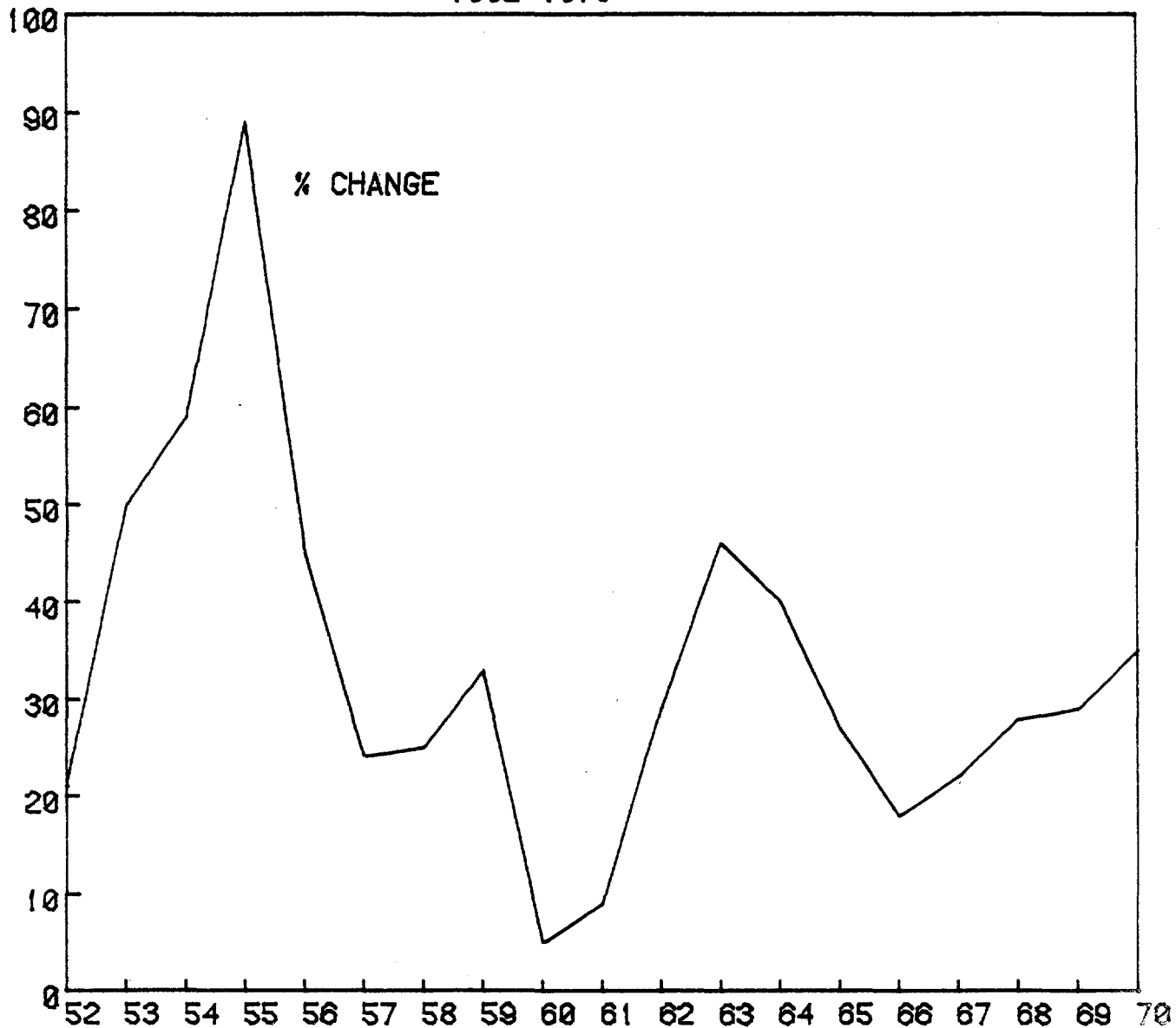
Source: 1940 and 1952 are from Instituto de Economía (op. cit.); 1960 is from Direccion de Estadística y Censos, Características de la Población (Censo 1960), Santiago, 1964; 1970 is from INE, Resultados Definitivos del XIV Censo de la Población 1970, Total País, Santiago, 1977

#### 4. Price Stability

20. Accompanying the low rate of economic growth in recent decades has been a rate of sustained inflation which has perhaps been the highest in the world. Figure I.1 shows the annual percent rise of the consumer price

FIGURE I.1

CHILE  
ANNUAL INCREASES IN CONSUMER PRICES  
1952-1970



Source: Appendix II, Table 9.1

index since 1952 (data are from Table 9.1 of Volume III). In only two of those years, 1960 and 1961, did the rate of inflation fall below the two-digit level, as a consequence of a short-lived stabilization effort during the administration of President Alessandri. The average compound annual rate for the entire 19-year period 1951-70 was 32.2 percent.

## 5. Summary

21. Many other facets of the Chilean economic landscape--including its heavy continuing dependence on world copper markets, heavy foreign debt, relative egalitarianism, high degree of state ownership of the means of production, etc.--will be painted in the pages and chapters that follow. The foregoing brief overview serves, however, to present the paradox of a well-educated, highly sophisticated society propelled early into the ranks of the world's middle class but which lacked the momentum to sustain growth at a pace that would maintain its relative position in the world or satisfy the aspirations of its people. In short, applying the criteria and value judgments commonly associated with these terms, Chile may broadly be described as a nation whose citizens are highly developed--politically, culturally, and demographically--but whose economy is not.

### C. POLICIES THAT HAVE SHAPED THE CHILEAN ECONOMY

22. Few economies in the world have been as much studied, argued over, and prescribed for. Chile has continually been at the center of international debates regarding the causes and effects of inflation; the proper role of government in promoting development; the dependency of developing on developed economies; the instability arising from reliance on a single export commodity; and the implications for economic growth of democratic decision-making, welfare programs, agrarian reform, foreign investment, and import-substitution industrialization. The poor performance of the Chilean economy since the 1930s, marked also by low domestic savings rates and high per capita foreign debt, has been attributed by various observers to such exogenous factors as the instability of world commodity markets and exploitation by foreign investors, and to such domestic structural characteristics as the political domination of a feudal landowning aristocracy and the lavish consumption propensities of the urban bourgeoisie. Whatever influence these and other factors may have had, however, the outcomes cannot be divorced from the policies instituted by a long succession of Chilean governments.

23. Depending on the level of analysis, economic policy in Chile in the four decades following the Great Depression can be cited either for its unsettling instability or for the remarkable constancy of its overall approach and underlying trends. At the most general level of abstraction, changing governments brought abrupt changes in proclaimed economic philosophies, from the mild socialism of the Popular Front governments of the late 1930s through the 1940s, to the charismatic populism of President Ibanez (1952-58), the partial restoration of orthodox capitalism under Alessandri (1958-64), the shift to Christian Democracy with Frei (1964-70), the socialism of Allende (1970-73), and most recently the strong free-market orientation of the Pinochet

Administration. Thus, Chile has often been characterized as a laboratory in which many of the prevailing economic doctrines of the 20th century have had an opportunity, albeit brief, to be tested. The picture becomes even more confused, if one examines the details of policy within each administration. At this level one finds, at least through the Frei Government, continued shifts in the direction of macroeconomic policy between expansionism and stabilization, and in basic approach between radicalism and orthodoxy, as policy measures were introduced and discarded in an effort to resolve finally the chronic problems of Chilean development.

24. Nevertheless, in another sense the fundamental approach to economic management of successive Chilean governments followed a remarkably stable trend in the four decades after the Great Depression. <sup>1/</sup> In the pursuit of greater independence from economic shocks originating abroad, as well as domestic growth, stabilization, allocative, and distributional objectives, governments of otherwise disparate philosophies increasingly intervened in economic decision-making at both the macro and micro levels. The administration of the economy was carried out directly, through the ownership of important production, distribution, and financial enterprises; and indirectly, via controls on prices, wages and interest rates, the direct allocation of credit, subsidies, special tax exemptions, multiple exchange rates, import quotas, and so on.

25. The extent and direction of government intervention varied in its detail over time, largely in response to successive booms and crises in the balance of payments, but some of the interrelated economic policies that dominated the period from 1930 to 1973 were:

- (a) An overvalued exchange rate, supported by high levels of tariff and nontariff protection;
- (b) Interest rates at negative real levels;
- (c) Price controls aimed primarily at food and other urban wage goods;

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<sup>1/</sup> A detailed accounting of Chilean economic policy over much of this period may be found in Ricardo Ffrench-Davis, Políticas Económicas en Chile: 1952-1970, Centro de Estudios de Planificación Nacional (CEPLAN), Universidad Católica de Chile, Santiago, 1973. Tariffs, exchange rates and other policies applied to the foreign sector since 1930 are given detailed examination in Jere R. Behrman, Foreign Trade Regimes and Economic Development: Chile, National Bureau of Economic Research, Columbia University Press, New York, 1976. The policies of the Allende Government are reviewed in Stefan De Vylder, Allende's Chile: The Political Economy of the Unidad Popular, Cambridge University Press, London, 1976. Finally a broad overview of economic performance across the entire period may be found in: Markos Mamalakis, op. cit.

- (d) Legally mandated wage adjustments intended, in varying degrees, to control inflation, protect real incomes in the face of inflation, and alter the distribution of income;
- (e) High and growing levels of social benefits, financed largely by payroll taxes and government subsidies;
- (f) Large public sector deficits financed in varying proportions by monetary expansion and foreign loans; and
- (g) Numerous exemptions from taxes, tariffs, and quantitative controls, exceptions to rules, and direct subsidies in pursuit of special distributional or allocative objectives.

26. The remainder of this Chapter examines some of the forces and policies that shaped the evolution of the Chilean economy over the years prior to the elections of 1970. Particular attention is given to the copper sector, the foreign trade regime, monetary and fiscal policies, and wage policies. Chapters II and III will describe the evolution of the economy since 1970. Chapters IV and V and sectoral working papers available from the World Bank examine certain policies and sectors in greater detail, emphasizing the implications of recent policy changes on Chile's development prospects, as well as the short- and medium-term problems of adaptation.

#### 1. Copper and the National Economy

##### a. The Early Years of Copper

27. Archeological finds indicate that copper was being mined and worked in Chile at least 2,000 years before the Spanish conquest, and its production continued throughout the colonial period. 1/ The red metal first began to acquire significance for the national economy in the 1820s and 1830s when the growth of world demand, stimulated by the industrial revolution, coincided with the founding of the Chilean Republic and the invention in Chile of a process for treating copper sulphates. 2/ By the 1940s, Chile was the second largest

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1/ A short history of copper in Chile is found in Alexander Sutulov, "Antecedentes Historicos de la Produccion de Cobre en Chile," in El Cobre Chileno, CODELCO, Santiago, 1975. An analysis of copper's impact on the national economy during the period 1925-1959, as affected by public policies toward the sector, is provided by Clark W. Reynolds, "Development Problems of an Export Economy: The Case of Chile and Copper," in Markos Mamalakis and Clark Reynolds, Essays on the Chilean Economy, Richard Irwin, Homewood, Ill., 1965. A similar analysis for the 1952-71 period is found in two essays by Ricardo Ffrench-Davis in Ricardo Ffrench-Davis and Ernesto Tironi (eds.), El Cobre en el Desarrollo Nacional, CEPLAN, Santiago, 1974. Chile's relations with the international copper companies is described in Theodore H. Moran, Multi-national Corporations and the Politics of Dependence: Copper in Chile, Princeton University Press, Princeton, N.J., 1974.

2/ Until that time, Chilean copper had been refined entirely from oxides which were becoming increasingly scarce.



producer of copper (behind England) and by the 1850s had taken over first place. At its relative peak in the 1860s, Chile accounted for 40 percent of total world production. Despite buoyant world demand, Chile's copper output began to fall both absolutely and relatively after 1880, as the highest grade ores were exhausted and output expanded rapidly in the U.S. mines. Productivity at Chilean mines was extremely low at the end of the 19th century, with only 50 of 748 operating mines reporting any degree of mechanization. <sup>1/</sup> Output had fallen to half the level of 20 years earlier and represented only about 5 percent of the world's total. Meanwhile, national attention and fortune had shifted to nitrates.

b. The Nitrate Fantasy

28. Even at copper's absolute peak in the 1870s, Chile was also exporting large quantities of silver, wheat and other agricultural products. All of these were swamped, however, by the nitrate boom. The land won by Chile in the 1879-82 War of the Pacific made it owner of the world's only known source of natural sodium nitrate. <sup>2/</sup> Riding the boom created first by Nobel's inventions of nitroglycerin and dynamite, and then the discovery of sodium nitrate's value as a fertilizer, the volume of nitrate exports more than sextupled from 1880 to the end of the century and doubled again by 1913. From 1890 through 1924, nitrate production averaged almost one-fourth of the GDP. About one-third of the gross value of nitrate production over this period went to the government in the form of export taxes and accounted for 46 percent of its ordinary revenues. <sup>3/</sup> It is estimated that an additional 30 percent of nitrate value--about 7 percent of GDP--was repatriated by foreign mine owners.

29. The 50-year Chilean nitrate bonanza was slowed by the development of synthetic nitrates during World War I and ended by the Great Depression. In the meantime, however, it had provided Chile, through its government, with enormous investible resources. A substantial expansion did occur in economic and social infrastructure during this period, but much of this resource was dissipated as well on luxury imports and high wages for public sector employees. While nitrate revenues were treated as ordinary income, other taxes were lowered or abolished thus reducing public sector savings, increasing the system's vulnerability to export fluctuations, and establishing an expectation among Chile's landed aristocracy and growing urban population of high levels of government benefits without a matching tax sacrifice. In short, nitrates catapulted Chile into international middle class status but failed to provide, either directly or indirectly, an economic base that could sustain the momentum.

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<sup>1/</sup> Alexander Sutulov, op. cit.

<sup>2/</sup> A brief history of nitrates in Chile and its impact on the national economy is found in Markos Mamalakis, "The Role of Government in the Resource Transfer and Resource Allocation Process: The Chilean Nitrate Sector, 1880-1930," in Gustav Ranis, Government and Economic Development, Yale University Press, New Haven, 1971.

<sup>3/</sup> Data include export taxes on iodine.

c. The Birth of the Gran Minería del Cobre

30. World copper consumption, which had tripled from 156,000 mt in 1880 to 500,000 mt in 1890, exceeded one million mt by 1912. Meanwhile, methods were being developed in the United States for the large-scale mining of lower-grade ores, as the higher copper-content ores were progressively exhausted. On the basis of these methods and the projected growth of demand, large-scale foreign investment (mostly U.S.) began in Chilean mines, with the founding of El Teniente in 1904, Chuquicamata in 1912, and Potrerillos in 1920. These three companies formed the heart of the resurgent Chilean copper industry and were legally and conventionally referred to as the Gran Minería del Cobre (Large Copper Mining). <sup>1/</sup> Reflecting the rapid growth of the Gran Minería, copper output rose from 26,000 mt in 1906 to 100,000 mt in 1917 and 320,000 mt by 1929. Chile once again had become the second producer worldwide (now behind the United States) and accounted for almost 17 percent of world production. At the same time, the gross value of copper production was, in 1929, equivalent to about 14 percent of GDP and 38 percent of export revenues.

31. El Teniente, which had been started by William Braden, was sold to the Guggenheims in 1908 and, in turn, to the Kennecott Copper Company in 1915. The Guggenheims also founded Chuquicamata, which they sold to the Anaconda Copper Company in 1923. A subsidiary of Anaconda, the Andes Mining Company, was responsible for Potrerillos. Thus, foreign ownership, which had accounted for only about 10 percent of copper output in 1876, had increased its share to 96 percent by 1918. With the subsequent collapse of the world demand for natural nitrates, copper became a dominant element in the Chilean economy and stood for four decades at the center of national political debate until its complete nationalization in 1971. The major policy issues discussed here concern the share of copper income captured by the national economy, and the impact on the economy of unstable world copper prices.

d. Chile's Share of Copper Earnings

32. The enormous investment required to open the large mines and to install the infrastructure necessary to settle the desolate mining areas, mill and smelt the ores, and move the copper to the ports, and the need for externally developed technology and ties to the highly integrated international copper market probably made inevitable the heavy dependence of the Gran Minería on foreign capital. Chile's retained share of copper income was thus made up of the taxes exacted by the government and the sector's local operating and capital expenditures. Prior to 1955, little effort was devoted, either by the companies or by the public authorities, to integrate copper into the national economy. Indeed, as will be seen below, public policy inadvertently discouraged the industry's use of local inputs. With taxes also low in the early years, the income retained by Chile (excluding new investments) averaged

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<sup>1/</sup> Potrerillos was shut down in 1959 with the depletion of its economically exploitable ores and was replaced by El Salvador. The Exotica and Andina mines were added in 1970. Although Andina does not technically conform to the legal definition of a "large mine", it is usually included in both the data and discussion of the Gran Minería.

only 35 percent of the gross value of Gran Minería production during 1925-29. <sup>1/</sup> Thus, while copper production was equivalent to 14 percent of GDP in 1929, Chile's share of this value amounted to only 4.3 percent of GDP, the remainder accrued to foreign factors of production.

33. Table I.9 summarizes the growth of Chile's retained share of the value of copper output over time. From 1925 to 1970, Chile's retained share rose from little more than a third to reach three-fourths of the total value of copper output. <sup>2/</sup> Increased taxes in one form or another accounted for almost all of this growth. Taxes on company earnings were steadily increased from 1925 through 1954 and supplemented in 1932 with a law requiring the enterprises to return a minimum proportion of earnings to the local economy at a discriminatory fixed rate of exchange. The tax implicit in the differential between the copper exchange rate and the rate at which the dollars were sold by the Central Bank grew rapidly and by the early 1950s was equivalent to 17 percent of the gross value of production. While this exchange rate policy may not have been significant to the overall expansion of copper exports, it was important over a long period in shaping factor use in the sector.

Table I.9:

CHILE'S RETAINED SHARE OF THE CIF VALUE OF COPPER PRODUCTION,  
1925-1970

(Percent)

Year	Fiscal Revenues	Exchange Rate Differential	Local Operating Expenditures	Total
1925	4.9	-	33.1	38.1
1935	8.2	- <sup>a/</sup>	24.8	33.0
1945	16.9	- <sup>a/</sup>	41.2	58.0
1950-54 (average)	33.6	17.3	21.0	71.9
1955-59 ( " )	32.5	2.1	25.3	59.9
1960-64 ( " )	25.9	1.5	35.2	62.6
1965-69 ( " )	35.2	1.0	32.0	68.2
1970	39.5	0.7	35.4	75.6

<sup>a/</sup> Included in local operating expenditures.

Source: Appendix II, Table 8.9

<sup>1/</sup> Clark W. Reynolds, op. cit.

<sup>2/</sup> The discussion in this section concerns relative shares and disguises the sharp fluctuations in absolute returns as a function of copper prices and the level of output. The absolute growth and stability of Chile's returns from copper are discussed in the next section.

34. Table 8.7 in Appendix II summarizes the nominal exchange rate affecting local purchases of the major copper companies, as compared to the average rates applied to other exports and to foreign currency transactions generally. Until 1955, the rate at which the copper producers were able to convert foreign currency earnings into local currency to cover domestic expenditures was substantially inferior to the rate earned by other exporters or applied to foreign transactions generally and amounted to a tax of almost 100 percent on the cost of domestic inputs. Other foreign currency earnings of the companies were not affected by this tax, however, since there were no controls or offsetting taxes on purchases of capital goods or other inputs abroad. Moreover, the copper sector was exempted from prior import deposit requirements and a variety of customs surcharges. Consequently, the differential exchange rate created a significant incentive to favor foreign over domestic inputs, and thus reduced whatever linkage effects the mining industry might otherwise have had on the local economy. 1/ In particular, there was an induced substitution of foreign capital goods for domestic labor. This discrimination against the use of labor was intensified from 1948 to 1955 when the exchange rate for the local costs of investment were raised to .043 escudos per dollar, and then to .060 escudos per dollar, while the rate for local production expenditures remained fixed at .019. The distortion emanating from differential exchange rate treatment was largely eliminated after 1955. It reappeared again during the Allende Government, but by then the mines had been nationalized and factor use decisions were presumably responding to different criteria. 2/

35. Also of interest was an additional 15 percent tax on copper company profits introduced in 1939 and earmarked for the newly created state development corporation (CORFO). This represented one of the few explicit measures to direct copper revenues to developmental purposes. Nevertheless, government developmental expenditures failed to keep pace with its growing retained share of copper output. In a pattern similar to that of nitrates, copper revenues were used in large part to cover the operating expenditures of the public sector, including operating subsidies to the railroad and other state enterprises, rather than productive investment. 3/ It is thus not surprising that the fairly rapid increase of receipts from copper exports after 1940, and the government's rising share of those receipts, had little apparent impact on Chile's lackluster growth performance.

36. In reaction to a copper price-fixing agreement between the companies and the U.S. Government during the Korean War, the Chilean Government in 1952 took control over copper exports, requiring the sale of all copper to the Central Bank at the price the companies had previously agreed with the U.S.;

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1/ This differential further exacerbated the situation created by the general deterioration of the real exchange rate (see paras. 49-51). Also, by raising production costs and thus lowering profits, revenues derived via the exchange rate differential were partially offset by reduced income tax collections.

2/ Even so, the use of imported inputs increased after 1970.

3/ See discussion in Reynolds, op. cit.

24.5 US cents per pound. The copper was in turn sold on the open market, the profits resulting from the price differential going to the Chilean Treasury. 1/ This mechanism was maintained until 1955, even after the U.S. had removed price controls and copper was again trading freely. During this period, Chile's retained share of gross value increased to more than 70 percent, of which more than 50 percent of gross value flowed to the government in the form of taxes. 2/

37. Although the national share of copper output had risen significantly, the absolute returns to Chile were being constrained by the virtual stagnation of total output, and concern was rising that perhaps the heavy taxation of the industry was, in effect, killing the goose. While output from the Gran Minería had averaged 461,000 mt during World War II, it fell to 385,000 mt in 1946-49 and further to 359,000 mt during 1950-53, despite demand stimulated by the Korean War. Between 1945 and 1953, Chile's share of world production fell from 22 percent to 14 percent. 3/ Exports fell even more than production as unsold stocks accumulated in the government's hands. Also of increasing public concern was the declining share of domestic factors of production in the sector's operating expenditures. By 1955, domestic inputs (including dollar payments to executive personnel and import duties paid on imported inputs but excluding the exchange rate differential) accounted for less than 15 percent of the gross value of production. 4/

38. The tax treatment of the Gran Minería was completely revamped in 1955. The reform law, known as the Nuevo Trato (New Deal), replaced the old complex system of taxes, surtaxes, etc. with a new single 50 percent tax on company profits plus a variable surtax of zero to 25 percent inversely related to the level of production. 5/ Furthermore, the exchange rate differential was eliminated, accelerated depreciation was introduced for machinery and equipment purchases leading to expanded mining capacity, and favorable tax treatment was offered for investments in additional refining capacity. The law also created a new government agency, the Copper Department, to oversee production and export in the industry and to promote the use of domestic inputs.

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- 1/ An agreement reached in 1951 with the U.S. Government to raise the fixed price by 3 cents per lb, that amount going entirely to the Treasury, failed to satisfy domestic political pressures and was effectively abrogated by the 1952 law. An earlier price-fixing agreement with the U.S. during World War II had been concurred in by Chile.
- 2/ Not all of this revenue appears in the fiscal accounts, since it resulted from the purchase and sale of dollars by the Central Bank and was used, in part, to subsidize private sector imports.
- 3/ See Appendix II, Table 8.1 for production data. World production figures do not include the centrally-planned economies.
- 4/ Chilean copper mining was far more capital-intensive than that found in other developing countries. According to Reynolds (op. cit.), the Gran Minería of Chile in 1951 employed 20 workers per 1 million lbs of copper produced, while the corresponding ratio in Northern Rhodesian mines was 155.
- 5/ A base level of output was fixed at 95 percent of the average level of 1949-53. Production at the base level would carry the full 25 percent surtax, the latter declining gradually to zero as output approached twice the base level.

39. Passage of the Nuevo Trato coincided with a new surge of world demand for copper and a resultant jump in both price and output. By 1959, output of the large companies had risen to almost 500,000 mt, and Chile's share of world output had climbed to 17 percent. Moreover, the share of domestic inputs rose sharply to 30 percent of gross output in response to the elimination of the exchange rate differential and the efforts of the Copper Department to restrict imports and promote import-substitution by local suppliers. On the other hand, the more favorable tax treatment of the Gran Minería provided by the Nuevo Trato substantially reduced the Treasury's participation in gross output, leading to an overall decline in Chile's retained share to an average 58 percent in the five years following the law as compared to 71 percent during the 1950-55 period. Tax rates on the Gran Minería were again raised in 1961. In response to this increase, and in the absence of a 20-year tax guarantee sought by the companies, plans were shelved for substantial new investments in mining and refining capacity.

40. The expansion of mining capacity and an increasing Chilean role in its management were central elements of the Christian Democratic electoral campaign in 1964. Even prior to his election, President Frei had entered into preliminary negotiations with the companies for a plan under which the State would gradually acquire an equity position in the industry at the same time that both mining and refining capacities would be greatly increased. The agreements reached and the enabling legislation were submitted to Congress at the beginning of 1965. After intense debate and some amendment, the legislation was approved a year later.

41. Acting on this mandate, the Frei Government proceeded to negotiate separate "Chileanization" agreements with the foreign mine-owners. Under its agreement with Kennecott, signed in 1967, CODELCO, the State Copper Corporation (successor to the Copper Department) acquired 51 percent ownership of El Teniente for US\$80 million. The remaining minority interest in El Teniente was retained by Kennecott, and the partners in the newly formed mixed enterprise agreed on the joint financing of a \$230 million investment program that would raise El Teniente's capacity to 280,000 mt per year by 1973 (compared to a 1967 output of 182,000 mt). Also as part of the agreement, the tax on Kennecott's share of the profits was reduced to a combination of 20 percent of income plus 30 percent of repatriated dividends. Added to its own dividends as majority shareholder, the Chilean State now received 72.6 percent of El Teniente profits.

42. Under agreements also reached in 1967 with Anaconda's operating subsidiaries, CODELCO entered into a mixed venture to open the Exotica mine contiguous with Chuquicamata. CODELCO acquired a 25 percent interest in the new enterprise, which was programmed to reach an output level of 162,000 mt by 1972. Investment programs were also agreed to expand mining and refinery capacities at both El Salvador and Chuquicamata at a cost in excess of US\$126 million. The combined output of Anaconda mines was to exceed 500,000 mt by 1972, as compared to a 1967 output of 355,000 mt. Some modification of Anaconda's tax treatment was made, but the net rate of taxation did not change significantly. Finally, the Government also entered into a mixed enterprise agreement with the Cerro Corporation to begin operations at Andina with an investment of US\$156 million. The Government's ownership share was 25 percent, and the mine was projected to reach an annual output level of 75,000 mt by 1972.

43. Similar to what had occurred after the promulgation of the Nuevo Trato, completion of the Chileanization agreements of 1967 were followed by a sharp increase in the international price of copper. The resultant inflation of company after-tax profits brought renewed pressures for government action. 1/ Accordingly, in 1969 the Government negotiated the purchase of 51 percent ownership of both Chuquicamata and El Salvador for a total price of \$182.2 million, with payment to be made over 12 years at 6 percent tax-free interest. In addition, Chile would also hold an option to buy out the remaining shares at any time between January 1, 1973 and December 31, 1981, purchase becoming mandatory by the latter date. 2/ Also in 1969, the taxation of the companies' incomes was made uniform, and a new progressive tax was placed on net incomes deriving from copper prices in excess of US40 cents per lb. (For future purposes, the base price was indexed to the unit costs of production.) As a result of these measures, Chile's retained share of copper output rose to 76 percent in 1970, compared to a 67 percent average from 1965 through 1968. In December 1970, the new Government of President Allende introduced legislation calling for the complete nationalization of the Gran Minería del Cobre, a proposal which received the unanimous concurrence of the Congress on July 11, 1971.

e. The Stability of Copper Earnings

44. The vulnerability of a single-export economy to fluctuations in world commodity markets is well known, and copper has historically been among the most unstable. From 1925 to 1952, year-to-year changes in the real price of copper received by the companies forming the Gran Minería averaged 16 percent, rising in 15 of those years, falling in 12. 3/ The sharpest single year decline, 43 percent, occurred in 1931, the mid-year of a three-year slide that saw the purchasing power of a pound of copper decline a total of 57 percent. Fluctuations in the volume of sales added to the instability, the average year-to-year change in sales value thus exceeding 27 percent over the same period. In terms of the domestic economy, what matters, of course, is the retained share of copper sales. Fluctuations in this variable averaged just under 22 percent per year. Its somewhat reduced volatility relative to total sales is explained largely by the buffering of demand changes via accumulation and decumulation of inventories, thus stabilizing local factor payments while imparting even greater volatility to the profits share. The cumulative decline of the value of Gran Minería sales and of Chile's retained share from 1929 to 1932 totaled 86 percent and 70 percent, respectively. Combined with the final collapse of nitrates, the impact on the national economy was devastating.

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1/ Anaconda's profits on Chuquicamata rose from US\$32.1 million in 1965 to \$73.8 million in 1968; profits at El Salvador over the same period rose from \$3.3 million to \$25.0 million. Kennecott earned US\$26.9 million in 1968 from its 49 percent interest in El Teniente as compared to \$8.5 million as full owner in 1965.

2/ For details of buy-out terms, see: IBRD Report No. 551-CH, Annex II, of October 18, 1974.

3/ From data in Reynolds, op. cit.

45. The evolution of copper exports and Chile's retained share of the value from 1952 to 1970 is summarized in Table I.10. The world market was more stable in this latter period, and exports from the Gran Minería grew at an average annual rate of 6.3 percent in real terms. Exports from the small and medium-mines grew even more rapidly, 11.0 percent per year, raising the overall rate of growth for copper exports to 7.1 percent. Nevertheless, the copper market and Chile's returns therefrom, continued to be marked by a high degree of volatility. The year-to-year fluctuations of the real copper price and the value of copper exports averaged 14 percent and 18 percent, respectively, over the period. <sup>1/</sup> This time, moreover, the instability of Chile's retained share was even greater than for copper sales generally. This instability resulted primarily from major changes in the Government's policies toward the large companies as reflected in the real value of tax collections (Appendix II, Table 8.9). In particular, the lowering of taxes, including the exchange rate differential, as a result of the Nuevo Trato in 1955, sharply reduced the revenues flowing to the public sector. The public sector share was later increased abruptly by the Frei Government's decision in 1966 to start pricing copper exports on the basis of quotations from the London Metal Exchange rather than the controlled U.S. price. This action was followed by the Chileanization agreements and the reintroduction in 1969 of a graduated tax on "windfall" profits deriving from unusually high copper prices.

Table I.10 - CHILE - SUMMARY OF GROWTH AND STABILITY OF REAL COPPER REVENUES, 1952-1970 <sup>a/</sup>

(Percent)

	Average Annual Rate of Growth	Average Year-to-Year Fluctuation
Real copper price	4.0	13.8
Copper exports	7.1	17.7
<u>Gran Minería</u>	(6.3)	(17.6)
Small and medium mines	(11.0)	(23.4)
Retained value of <u>Gran Minería</u>		
Output	7.0	19.0
Taxes	(5.2)	(28.0)
Local production costs <sup>b/</sup>	(11.0)	(14.4)

<sup>a/</sup> Deflated by IBRD index of Chile import prices.

<sup>b/</sup> 1952-1969.

Source: Appendix II, Tables 8.6 and 8.8

<sup>1/</sup> These averages are not precisely comparable to those cited above for the earlier period because of the use here of different price deflators and slight differences in coverage.



46. As a consequence of these measures, as well as the inherent volatility of taxes based on profits, the public sector's retained share of copper revenues suffered an average year-to-year rise or fall of 28 percent. The growing share of local factors of production in the Gran Minería's operating expenditures ameliorated somewhat this instability, however, and the average annual fluctuation for total retained value was 19 percent. On the other hand, the growing share of the small- and medium-mines in total exports probably raised the volatility of the national returns from copper as a whole. In any event, it is clear that the instability of copper exports, two-thirds of total exports, represented a significant chronic problem for economic management.

## 2. Foreign Trade Policies

47. Although many writers ascribe the origins of Chilean protectionism to the tariff law of 1897, tariffs were low (relative to later periods) and intended to serve primarily a revenue-generating function prior to the Great Depression of 1929. The economy was open, and import taxes were equivalent to an average of only 13 percent of import value. Taxes on trade (including income taxes from copper) accounted for 83 percent of total tax revenues during 1908-1927, while imports and exports each amounted to more than half of GDP. 1/

48. No country was more traumatized than Chile by the collapse of the international economy that began in 1929. Copper production fell 32 percent in 1930, and nitrate output, already hurt by the development of synthetic nitrates during World War I, declined 47 percent. The collapse of Chile's foreign markets continued in 1931 and 1932. By the latter year, the capacity to import had fallen 82 percent from the 1929 level; the real value of imports had been reduced 87 percent; and per capita GDP had declined more than 50 percent. Imports were reduced to 7 percent of GDP as compared to 31 percent in 1929. In response to this economic disaster, Chile instituted a complex and highly restrictive system of trade and foreign exchange controls which generally prevailed, though varying significantly in detail, for the next 40 years.

### a. Exchange Rate Policy

49. In broad terms, the foreign trade regime of Chile in the four decades following the Great Depression was characterized by an overvalued exchange rate whose disequilibrating effect on the balance of payments required counterbalancing exchange controls, high tariffs, quantitative restrictions on trade, and high levels of foreign borrowing. Estimates of the extent of overvaluation prevailing in the early 1960s suggest a range of 45 to 68

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1/ Behrman, op. cit. Nevertheless, as Behrman points out, consumer goods industries have enjoyed at least moderate protection for most of the years since Independence. As a consequence, most of Chile's import-substitution industrialization occurred prior to the 1930s.

percent. 1/ As one crude indicator of overvaluation, the ratio of the black market exchange rate to the mean legal exchange rate averaged 1.64 during the period 1961-65. 2/

50. Large devaluations occurred periodically in response to balance of payments crises, but the exchange rate would then again lag behind domestic inflation. Table I.11 reviews the course of the average nominal and real exchange rate beginning in 1958. 3/ After a substantial devaluation in January 1959, the nominal exchange rate was held fixed for the next three years despite a 66 percent increase in the consumer price level. Consequently, the peso exchange rate tended to appreciate once more in real terms before being devalued and beginning the cycle again in 1963. 4/ In April 1965, the Frei Administration introduced a crawling peg, the exchange rate being adjusted by small increments once or twice per month. The exchange rate was thus devalued some 25 percent before the crawling peg was abandoned during the 1970 electoral campaign. 5/

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1/ See Edmar Bacha and Lance Taylor, "Growth and Trade Distortions in Chile and their Implications in Calculating the Shadow Price of Foreign Exchange", in Richard Eckaus and Paul Rosenstein-Rodan, Analysis of Development Problems: Studies of the Chilean Economy, North-Holland, Amsterdam, 1973; Teresa Jeanneret, "Estructura de la Proteccion en Chile", in Bela Ballassa, et. al., Estructura de la Proteccion en Paises en Desarrollo, Centro de Estudios Monetarios Latinoamericanos, Mexico, 1972; and Dominique Hachette, "Efectos de la Sobre-valoracion del Escudo en la Distribucion del Ingreso en Chile," Cuadernos de Economia, Vol. 3, No. 10, December 1966.

2/ Behrman, op. cit., Table A.7.

3/ Chile maintained a multiple rate system throughout this period until 1975. The rate shown is a weighted average of prevailing legal exchange rates.

4/ The escudo replaced the "old" peso in 1962 as Chile's currency unit, at the rate of  $1E^0=1,000$  pesos. The escudo was in turn replaced by a "new" peso in October 1975, again at the rate of 1,000 to one. The currency unit used throughout this report is the "new" peso unless otherwise indicated.

5/ Behrman (op. cit.) calculated a real appreciation of the peso over this period, but he failed to take international inflation into account. Taylor and Bacha (op. cit.) suggest that the degree of overvaluation had fallen to around 25 percent by 1969. Nevertheless, the black market exchange rate exceeded the average legal rate by some 58 percent, apparently reflecting pre-electoral jitters.

Table I.11 : CHILE - AVERAGE ANNUAL EXCHANGE RATES, 1958-1970

(Escudos per US dollar) a/

Year	Nominal Exchange Rate <u>b/</u>	Ratio - Domestic to International Prices <u>c/</u>	Real Exchange Rate (1969 escudos per US\$)
1958	0.715	0.0803	8.9
1959	1.049	0.1130	9.3
1960	1.049	0.1259	8.3
1961	1.049	0.1374	7.6
1962	1.153	0.1572	7.3
1963	1.871	0.2254	8.3
1964	2.418	0.3232	7.5
1965	3.237	0.4127	7.8
1966	4.000	0.5021	8.0
1967	5.080	0.5949	8.5
1968	6.860	0.7819	8.8
1969	9.040	1.000	9.0
1970	11.83	1.218	9.7

a/ The escudo replaced the peso as Chile's currency unit in January 1962 at the rate of 1,000 pesos = 1 escudo. The escudo was in turn replaced by a new peso in October 1975, again at the rate of 1,000 to 1.

b/ Weighted average of legal exchange rates. Data are taken from Behrman, op. cit.

c/ (1969=100) The Chilean consumer price index is taken as a proxy for domestic prices. The international price index applied is a weighted average of the CIF index of prices of developed-country manufactured exports and the IBRD price indices for agricultural exports, petroleum, and 34 commodities.

Source: J. Behrman, op. cit.; Central Bank of Chile; National Statistical Institute

51. The chronic overvaluation of the Chilean currency, by raising the cost of Chilean goods in foreign markets and reducing the returns to the domestic exporter, was a major retarding factor in the growth and diversification of exports, thus perpetuating the vulnerability of the economy to fluctuations in the world market for copper. Between 1930 and 1965, exports in per capita terms fell to around one-fourth the average level of the three decades preceding the Great Depression. Table I.12 compares the growth of non-mining exports with changes in the real exchange rate. The relationship is illustrated in Figure I.2. Other factors, of course, have affected these

exports, including climatic conditions in agriculture and the level of domestic economic activity. Other policy variables such as export controls and special incentive schemes also had some impact. There is no doubt, however, that the real exchange rate played a major role in determining the rate of growth and diversification of exports. In addition to the absolute overvaluation of the real exchange rate, Behrman's econometric analysis shows that exports were further inhibited by the instability of the exchange rate -- the intermittent large adjustments and subsequent erosion through domestic inflation. The relative stability achieved by the crawling peg from 1965 to 1970 was apparently an important factor in the growth of Chile's industrial exports during that period.

Table I.12 - CHILE - INDICES OF REAL EXCHANGE RATE AND NON-MINING EXPORTS, 1958-1970

(1969=100)

Year	Real Exchange Rate	Agricultural Exports <u>a/</u>	Manufactured Exports <u>b/</u>
1958	98	91	42
1959	103	88	48
1960	92	91	39
1961	84	112	46
1962	81	112	37
1963	92	105	39
1964	83	102	50
1965	87	88	49
1966	88	82	81
1967	94	92	75
1968	97	99	87
1969	100	100	100
1970	107	116	105

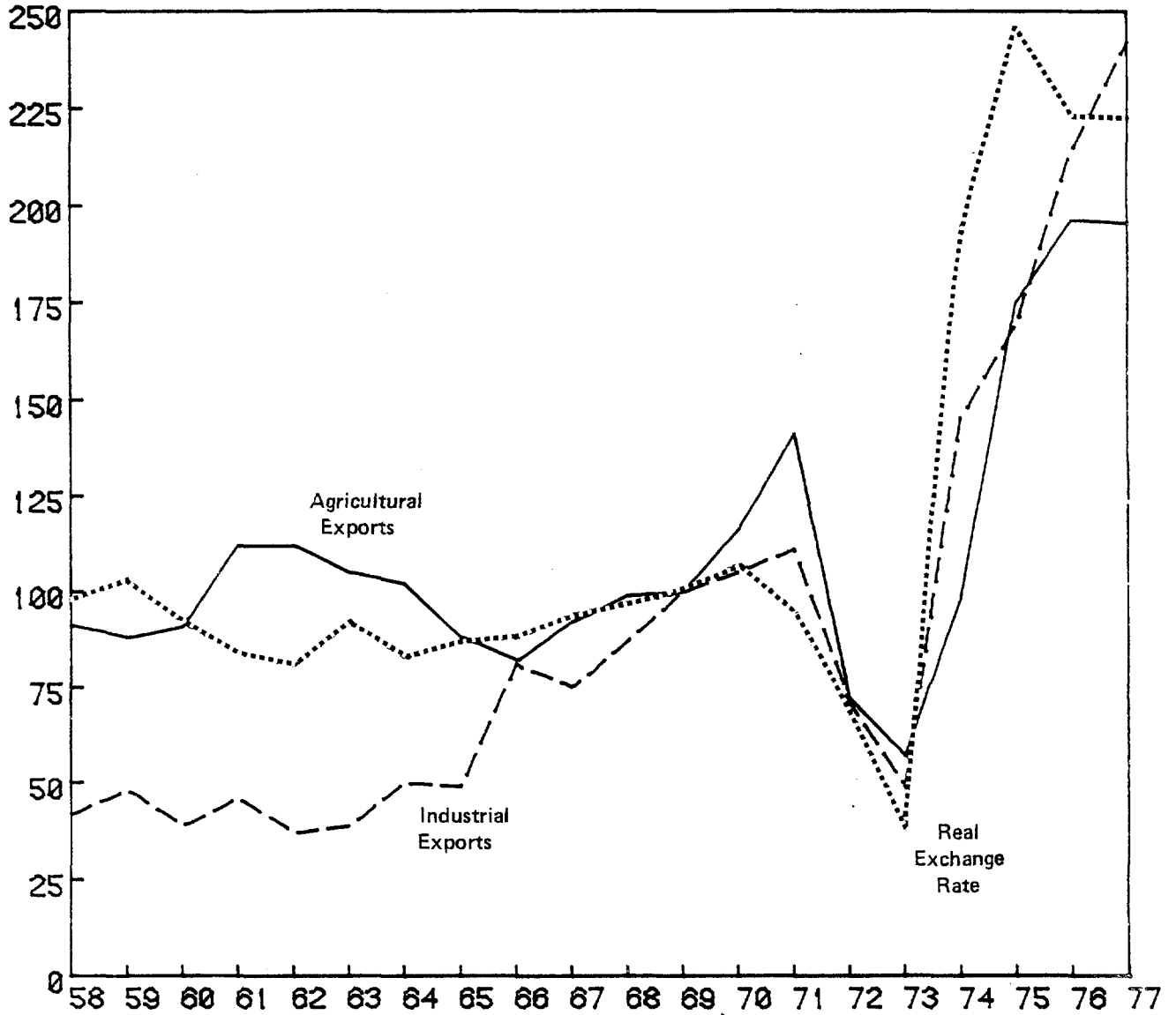
a/ Deflated by IBRD index of agricultural export prices.

b/ Excludes manufactures and semi-manufactures of copper. Deflation is by CIF index of developed-country manufactured exports to developing countries.

Source: The exchange rate index is calculated from Table I.11. The data on agricultural and industrial exports are from the Central Bank of Chile.

FIGURE I.2

CHILE  
INDICES OF REAL EXCHANGE RATE AND NON-MINING EXPORTS 1958-1977  
(1969=100)



Source: Appendix II, Table 1.12

b. Import Restraints

52. Just as it retards the growth of exports, an overvalued exchange rate, other things being equal, tends to encourage the growth of imports. Balancing external accounts therefore required the imposition of barriers to imports. Partly in reaction to the severe shock of the 1930s, moreover, the development of import-substituting industry was advocated as necessary to reduce Chile's vulnerability to external fluctuations and to assure sustained economic growth. Trade restrictions, therefore, were used to influence the composition of domestic output. While trade policy remained restrictive throughout the period, the mix of policy tools, the overall level of protection, and the relative protection levels accorded specific products were frequently varied in accordance with general stabilization objectives or with specific allocation or distribution objectives. These shifts occurred largely in response to changes in the short-term macroeconomic or balance of payments situation and the pressures of particular interest groups.

53. Among the many devices used to control imports and other foreign exchange outflows were a variety of tariffs, fees, customs surcharges, taxes on foreign exchange transactions, import quotas and licenses, intentional administrative delays in the processing of permits, and mandatory waiting periods for foreign exchange cover. The major policy tool in use since 1956 was the mandatory prior import deposit, with rates varying initially among product categories from 5 to 5,000 percent, and rising in some periods to as high as 10,000 percent. The exchange regime itself, through the use of multiple rates, was employed for specific allocative and distributive purposes throughout this period. In the early 1950s, for example, there were five legally-defined fixed exchange rates and three "free" rates, with a potentially infinite number of variations as some export goods were treated as combinations of various categories. 1/

54. Whatever import regime was currently in force, there were always a large number of exceptions for particular purposes -- e.g. to promote development in the extreme north and south of the country--accounting for a significant proportion of total imports; and through most of the period, public sector agencies were exempted from duties and other restrictions. In short, the system was extremely complex, frequently modified, costly to administer, and offered substantial rewards to enterprises or industries able to gain special exceptions or other favored treatment.

55. Trade restrictions were tightened during the first years of the Frei Administration in response to the low level of Chile's international reserves and high impending debt service payments. In addition to prior import deposits, the major instrument of control was a "positive list" of allowable imports and a quota system by which import permits for a given commodity category in any month were subjected to a ceiling set at 5 percent

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1/ The system was made even more complex by the continued existence of a number of bilateral trade agreements, initially negotiated in compensation for foreign credits frozen in the 1930s, which fixed different dollar exchange rates for transactions with each trading partner.

above the average monthly imports of that category over the preceding twelve months. Rising copper prices, nontraditional export growth, and a rescheduling of foreign debt service improved the balance of payments situation and permitted some easing of restrictions. The positive list was significantly expanded to include all but 50 "sumptuary" goods. In addition, a major effort was made to simplify the system through unification of the exchange rate, reduction of the number of prior deposit categories and the number of goods subject to prior deposit; consolidation of the multitude of previously existing taxes and fees into a specific duty; elimination of the compulsory 120-day deferred payment period; and some reduction of the myriad of special regimes. The lowering of restrictions was not evenhanded, however, the greater liberalization occurring in favor of imported capital goods and industrial inputs not domestically produced. As a consequence, the level of effective protection accorded many final goods industries increased.

56. One indicator of the benefits afforded domestic producers by the quantitative import barriers described above is the "import premium" earned by sellers of the restricted goods, whether imported or produced at home. The import premium, defined as that percent by which the domestic price exceeds the CIF import price, converted at the applicable effective exchange rate, 1/ averaged 7.7 percent in Chile for the period 1946-1970, peaking in the mid-1950s. The rate was around 69 percent in 1964, falling to 47 percent by 1970, 2/ but still providing substantial returns to importers and protected industries.

57. The level of protection was far from uniform across product categories. In the decades following World War II, the effective exchange rate (including the import premium) for manufactured goods averaged twice the rate for mining and more than 50 percent above that for agricultural products. In other words, the total effect of the import regime was to raise very substantially the cost to the Chilean consumer of imported manufactured goods relative to agricultural or mining products. Within manufacturing, the highest effective exchange rates and import premium were accorded to footwear, textiles, leather products, and nonmetallic mineral products -- traditional sectors that had enjoyed protected "infant industry" treatment since the beginning of the century. Barriers were generally highest for consumer goods, averaging more than 50 percent above the rates for either capital goods or intermediate goods. Finally, the system distorted profit incentives strongly in favor of import substitution and against export expansion. The effective exchange rate plus import premium for imported goods as a whole was more than 50 percent above that of export products. The distortions among sectors tended to narrow during the 1965-1970 period, but still remained considerable by 1970.

58. These distortions were reflected also in differential rates of effective protection. Table I.13 summarizes the results of one study of effective

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1/ The effective exchange rate is the nominal rate adjusted to take into account taxes, duties, surcharges, interest foregone on mandatory prior deposits, etc.; i.e. the actual local currency cost of a US\$1.00 international transaction.

2/ Behrman, op. cit., Table 5.1.

protection rates for 92 products in 1967. <sup>1/</sup> The rates shown would be reduced somewhat in magnitude if corrected for overvaluation of the peso, but the wide variations observed among sectors would remain. The powerful bias favoring manufacturing over agriculture is evident, as is the high protection that continued to be accorded such long-shielded industries as textiles, processed foods, and certain consumer durables. Some shift in the pattern of protection had occurred, however, with respect to earlier years, in favor of nontraditional intermediate goods.

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<sup>1/</sup> Sergio de la Cuadra, "Towards a New Trade Policy for Chile", U.S. Agency for International Development, mimeo., Santiago, 1971. Effective protection is defined as the percent by which domestic value-added exceeds value-added at international prices.



Table I.13: CHILE - EFFECTIVE PROTECTION RATES, BY SECTOR, 1967

(Percent)

Sector	Effective Protection Rate /a
Agriculture and forestry	-7
Manufacturing:	
Food products	365
Beverages	-23
Tobacco	-13
Textiles	492
Footwear	34
Clothing	-2
Wood products	-4
Furniture	-5
Paper and paper products	95
Printing and publishing	-15
Leather and leather products	18
Rubber products (tires)	304
Chemical products	64
Petroleum and coal products	1,140
Glass and glass products	723
Cement and cement products	-11
Iron and steel	35
Metal products	92
Nonelectrical machinery	76
Electric engines	740
Household appliances	384
Naval construction	-14
Bicycles	555
Unweighted Mean	217

/a Unweighted average of products within each category.

Source: Appendix II, Table 8.15

59. These policy biases, along with others to be noted below, must have contributed to the slow growth of agriculture and of non-mining exports over the several decades since the 1930s. While the prices received by farmers were controlled in the interest of protecting the real wage of urban workers, the trade regime raised the cost of manufactures, contributing still further to

the deterioration of agriculture's terms of trade. Moreover, the very high levels of protection provided domestic industry made possible substantial profits from production for the domestic market with little pressure for improvements in efficiency. Table I.14 compares the prices of selected domestic manufactures with those of competing imports.

Table I.14: CHILE - PRICE COMPARISONS, SELECTED METAL-MECHANICAL PRODUCTS, 1969 (first semester)

(US dollars)

Product	Price in Chile <u>/a</u>	International <u>/b</u> Price	(1) ÷ (2)
Electric sewing machine	366	120	3.05
Automatic washing machine	510	200	2.55
Home refrigerator	498	80	6.23
Gas stove	177	63	2.81
Air conditioner	1,156	150	7.71
TV set	415	110	3.77
Bicycle	133	27	4.93
Disc for agricultural implements	17	10	1.70
Industrial abrasive wheel	281	95	2.96
Electric drill press	593	140	4.24
Three-phase electric motor, 1/2 HP	101	33	3.06

/a Ex-factory or wholesale, with exception of washing machine which is priced at the consumer level.

/b CIF Valparaiso.

Source: Survey by Chilean Steel Institute, cited in Bacha and Taylor, op. cit., p. 129

### c. Export Policy

60. The growth of non-copper exports has been influenced more by general exchange rate policy and the generous protection accorded production for the domestic market than by programs aimed at exports per se. Nevertheless, special mechanisms for the promotion of non-copper exports (including that of the small- and medium-scale copper mines) have existed at least since the 1930s, when some exporters were permitted to pay for imports directly out of their export proceeds, thus enjoying a preferential exchange rate.

Special treatment has long been given the nitrate industry and small- and medium-copper miners, and in the 1950's preferential treatment was also accorded to the fishing industry and exports from the northern provinces. Among the incentives offered non-copper exports were exemptions from indirect taxes affecting inputs to export products, tax rebates of a fixed percentage of FOB export value, and special credit facilities to exporters. By the mid-1960s, however, industrial exports were little higher, in real terms, than they had been in the early 1950s, and agricultural exports were substantially lower in both real and nominal terms.

61. In 1966, the Frei Administration introduced a new export incentive system under which exporters were granted tax refunds of up to 30 percent of the CIF price of the export. By 1968, about half of all non-copper exports received such rebates at a rate averaging 22 percent. In addition, the Central Bank provided preferential credits, both pre-shipment and post-shipment, for up to 80 percent of the FOB value of the export. The level and scope of both rebates and credits were cut back in 1969, on the grounds that devaluation of the peso had improved the international competitiveness of Chilean goods and reduced the need for subsidization, but both programs were later re-expanded under the Allende Government. These programs only succeeded in attenuating somewhat the anti-export bias of the overall trade regime. Because of the devaluation and relative stability of the real exchange rate, industrial exports doubled from 1965 to 1970. Once the exchange rate was again fixed in 1970, however, this momentum was lost.

d. Import-Substitution and Domestic Economic Stability

62. One stated objective of Chile's import-substitution strategy was the reduction of short-run instability generated by fluctuations of the world copper market. The instability resulting from Chile's volatile export proceeds emanates primarily from its impact on the government budget and on Chile's capacity to import. In an aggregate sense, dependence on the external sector was reduced in both respects. The average ratio of imports to GDP fell from 52 percent in the 1908-27 period and 38 percent in 1928-30, to a range of 9-14 percent in the years since. At the same time, with the development of other taxes and the slow growth of imports and exports, the dependence of tax revenues on foreign trade declined from 83 percent of total taxes in 1908-27 to 21 percent in the period 1956-70. 1/

63. Thus, although Chile remained heavily dependent on a single commodity, copper, for the bulk of its foreign exchange receipts, a dependence prolonged and exacerbated by a trade regime that inhibited export diversification, the economy as a whole became somewhat less vulnerable to trade fluctuation. The damage of volatile copper revenues was also attenuated by demand management and import control policies. Consequently, the year-to-year fluctuation of real imports was held to an average 8.8 percent between 1952 and 1970, as compared to 19.0 percent in the returned share of the value of copper production. Moreover, the greatest import fluctuations were concentrated

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1/ The numerator includes all import and export taxes and income taxes paid by the Gran Minería. Denominator includes social security taxes.

among the nonessential consumer goods and capital goods categories rather than the potentially more disruptive intermediate goods, industrial raw materials, and essential wage goods categories. <sup>1/</sup> Nevertheless, the continued necessary preoccupation with short-term economic management, the low efficiency of many of the import-substitution industries that had been created, and the high levels of subsidization needed to sustain them inevitably exacted a heavy price in terms of economic growth. Satisfactory growth and stability as joint long-term objectives would only be achievable in the context of vigorous export diversification.

### 3. Fiscal and Monetary Policies

64. As in the case of trade policy, Chile's monetary and fiscal history since the 1930s was characterized by extreme instability with abrupt changes in direction. Rapid expansions of public investment programs and credit were sharply curtailed after one or two years as a consequence of accelerating inflation or balance of payments crisis, while intermittent stabilization efforts were aborted in the euphoria of rising copper prices or in the face of growing political pressures. New policy tools were created and destroyed with unsettling frequency. Nevertheless, a number of significant trends are clear in addition to the chronic underlying problems that generated the above-noted instability.

65. Government has long played a large role in the Chilean economy, deriving in part from the tax revenues generated by nitrate exports during the pre-Depression period. When this revenue source was irretrievably lost after 1929, the government was called upon to cushion the shock to the economy, alleviate its social costs, and to promote the development of the domestic economy in order to reduce its vulnerability to the vagaries of international markets. This role was played directly through large and steadily expanding social welfare programs, infrastructure investments, and state ownership and management of industrial and service enterprises. In addition, the State intervened extensively via controls on prices, wages, and interest rates, the use of special tax incentives, and the direct allocation of credit and subsidies, besides its controls on trade and foreign exchange. While public sector revenues also rose steadily, they chronically fell short of expenditures. The resulting deficits were covered by a combination of monetary expansion by the Central Bank and foreign borrowings, and Chile became distinguished as having the highest chronic inflation rates and second highest level of per capita foreign debt in the developing world (after Israel).

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<sup>1/</sup> Jere Behrman, Macroeconomic Policy in a Developing Country: The Chilean Experience, North-Holland, Amsterdam, 1977.

a. Public Finance 1/

66. By 1952, central government expenditures, including transfers to other public sector institutions and to the private sector, already accounted for around 18 percent of GDP, a relatively high ratio for developing countries even today. Tax collections chronically lagged behind expenditures as Chilean legislators and administrators lacked the political will to exact the cost of growing expenditures from the electorate, and inflation, an inelastic tax structure with an ever-increasing number of special exemptions and exceptions, delayed payments, and evasion continuously eroded the tax base. 2/ Prior to the partial implementation of the stabilization program recommended by the Klein-Saks mission in 1956, tax receipts failed even to cover current expenditures, and the overall deficit of the central government was equivalent to around 5 percent of GDP. Borrowings from the Central Bank and payments arrearages were the principal means of financing. Arrearages, for example, amounted to 20 percent of total expenditures in 1953. 3/ Central government expenditures were fairly constant in real terms during the 1950s, declining in 1956 with the adoption of some of the stabilization measures recommended by the Klein-Saks mission, but rebounding as the austerity program broke down. Current expenditures and transfers averaged 80 percent of the total and were determined primarily by the government's annual decisions regarding wage and salary adjustments. The central government's share of GDP declined slightly over this period.

67. Table I.15 summarizes public sector fiscal performance as a percentage of GDP during 1960-70. Current revenues grew about 3.4 percent per year in real terms, slightly lower than the growth of GDP through the first four years of the decade, but then rose rapidly, about 14.6 percent per year from 1964 to 1970 as a result of rising copper prices, modifications to the tax treatment of the copper companies and major improvements in the general tax system. 4/ Among the improvements were the indexation of tax liabilities to protect against erosion from inflation and a reduction in the lag time on tax

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1/ Although data are abundant, the analysis of Chile's public sector accounts (along with other elements of the national accounts) is made exceedingly difficult by lack of information, frequent changes of format, coverage, categories, and definitions within the accounts, as well as the problems of adjusting for price level changes and exchange rate movements in a highly inflationary economy. The discussion here is thus intended to emphasize orders of magnitude and trends rather than precise calculations. (Some of the statistical problems alluded to are detailed in the Note on Chilean Economic Statistics, Appendix I).

2/ Mamalakis, (The Growth and Structure of the Chilean Economy) blames much of Chile's poor economic performance since the 1930s on the country's having become accustomed to finance its high public spending out of the revenues generated by nitrates, and the subsequent efforts of the middle- and upper-income groups to avoid picking up the burden when the nitrate sector collapsed. Congress throughout the 1952-73 period repeatedly voted down tax reforms and rate increases proposed by the Executive, frequently substituting new preferences for one or another favored group.

3/ R. Ffrench-Davis, (Políticas Económicas en Chile, 1952-1970).

4/ Data are provided in current and constant prices in Appendix II, Tables 5.0 and 5.0a.

Table I.15: CHILE - PUBLIC SECTOR FINANCIAL PERFORMANCE, 1960-1970

(Percent of GDP)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1968 Adj.	1969	1970
A. Current Revenues	30.0	30.7	31.0	29.6	28.4	31.3	33.2	34.3	35.8		36.4	35.9
Central government <u>a/</u>	17.0	16.8	16.9	15.6	14.8	17.1	18.7	18.4	18.9		19.4	19.9
Other public sector <u>b/</u>	13.0	13.9	14.1	13.9	13.6	14.2	14.5	16.0	16.9		17.0	16.0
B. Current Expenditures	25.6	26.2	26.2	23.8	22.7	25.4	26.0	26.9	27.3		27.2	29.6
Central government <u>a/</u>	10.1	9.0	9.7	8.4	8.2	8.8	8.5	8.6	8.5		8.3	9.9
Other public sector <u>b/</u>	15.5	17.2	16.5	15.4	14.5	16.6	17.5	18.3	18.8		18.9	19.6
C. Current Balance (A-B)	4.4	4.5	4.8	5.8	5.7	5.8	7.2	7.5	8.5		9.2	6.4
Central government	6.9	7.8	7.2	7.2	6.7	8.3	10.3	9.8	10.4		11.0	10.0
Other public sector	-2.6	-3.3	-2.4	-1.5	-1.0	-2.5	-3.0	-2.3	-1.9		-1.9	-3.6
D. Capital Expenditures <u>c/</u>	6.0	6.1	8.5	7.7	8.0	8.9	9.3	8.9	9.6	11.8	12.1	13.4
Central government <u>a/</u>	2.5	1.9	2.4	2.4	2.4	3.2	3.1	2.5	2.5	2.5	2.4	2.5
Other public sector <u>b/</u>	3.4	4.3	6.1	5.4	5.6	5.7	6.1	6.3	7.1	9.3	9.6	10.9
E. Overall Balance (C-D)	-1.6	-1.6	-3.7	-2.0	-2.3	-3.1	-2.0	-1.4	-1.1	-3.3	-2.9	-7.0
Central government	4.4	6.0	4.9	4.9	4.2	5.1	7.1	7.2	7.9	7.9	8.6	7.5
Other public sector	-6.0	-7.6	-8.5	-6.8	-6.5	-8.2	-9.2	-8.6	-9.0	-11.1	-11.5	-14.5

a/ Includes transfers to other public sector institutions.

b/ Excludes transfers from central government.

c/ Net of capital revenues and excludes amortization payments.

d/ Data re capital expenditures of other public sector for 1968-70 include amounts imputed from foreign borrowings and are not exactly comparable to data for earlier years.

Source: Appendix II, Table 5.0

payments. In addition; tax rates were increased, and a number of new levies, including a tax on wealth, were introduced. By 1970, public sector current revenues were equivalent to 36 percent of GDP.

68. Public spending increased during the early years of the Alessandri Administration (1958-64) in an effort to stimulate the economy and in response to the availability of U.S. Alliance for Progress assistance. Investments were increased in housing and public works, in addition to relief for the 1960 earthquake. Central government expenditures during the period averaged about 15 percent of GDP, but slightly more than one-third of that amount was shifted to other public sector agencies as operating subsidies or capital transfers. Thus, the central government per se was required to generate a substantial fiscal surplus to offset, in part, the operating deficits of the public enterprises and social security institutions and to finance their investments. The public sector, by this time, accounted directly for around half of the economy's gross fixed capital formation, while providing credit or other financing for a significant proportion of the remainder. By 1962, the overall public sector deficit had again risen to about 4 percent of GDP, the gap being filled to a significant degree by external credit. 1/ The Government acted to curtail official wage and salary adjustments in 1963 and 1964, allowing public sector remuneration levels to fall in real terms, while holding real investment constant.

69. The growth of the public sector accelerated under President Frei, total expenditures rising 16 percent per year in real terms from 1964 to 1968, or from 31 to 37 percent of GDP. Government explicitly assumed primary responsibility for promoting economic and social development. Capital outlays accounted for about 30 percent of public expenditures, as compared to 26 percent in 1960-64, but part of this difference was accounted for by the acquisition of existing assets - e.g., equity in the copper companies rather than fixed investment. An effort was also made, via wage adjustments, to restore to public employees the real income loss experienced under the previous administration. Nevertheless, the revenue growth described in para. 67 more than doubled the real current surplus of the central government, which reached 10 percent of GDP in 1968, and the overall deficit of the public sector fell to about 1 percent of GDP. This apparent improvement, however, disguised the seriously eroding situation of the decentralized agencies and enterprises (excluding the copper sector), whose current deficit had risen to about 9 percent of GDP as compared to 4 percent in 1964.

70. The data for 1968 (adjusted) - 1970 are not strictly comparable with those of preceding years, inasmuch as an estimate has been added of the unaccounted expenditures financed with foreign credits. 2/ The difference, which has been attributed entirely to other public sector investments, amounted in 1968 to about 2 percent of GDP. With this adjustment, the public

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1/ Indeed, these data understate the size of the public sector and its deficit, inasmuch as some public sector investments financed abroad were not included in the public sector accounts (see para. 70).

2/ See IBRD, Report No. 551-CH of October 18, 1974.

sector deficit for 1968 is calculated at 3.3 percent of GDP. Faced with accelerating inflation, the Government restrained the growth of expenditures in 1969 and cut the deficit below 3 percent of GDP. Large wage increases at the end of the year, however, in response to pressures from the military and a wave of strikes by public employees, pushed public sector expenditures up to 43 percent and the deficit to 7 percent of GDP as the Frei Administration ended.

b. Monetary Policy

71. Rather than being determined simultaneously through the interaction of the monetary authority with the nation's money and capital markets, money supply, interest rates, and credit have tended to be administered as separate policy variables.

(i) Money Supply

72. In the narrow sense of controlling the growth of the money supply, monetary policy was virtually nonexistent in the post-Depression period as a concern independent of the financial requirements of the public sector. The combined deficits of the central government, decentralized agencies, and public enterprises were financed in large part via monetary expansion, which permitted the public sector to bid away from the private sector the resources it was unable or unwilling to tax away directly.

73. Table I.16 reviews the growth of privately held currency and demand deposits since 1952. The average annual expansion of the money supply exceeded 40 percent through 1970. In real terms, however, the money supply shrank in several years of the period as inflation exceeded the growth of nominal money. Chileans have long sought to protect themselves against the erosion of their assets by inflation, thus preferring either to accelerate consumption or to hold land, real commodities, foreign exchange, or indexed instruments rather than money.



Table I.16: CHILE - SUPPLY OF MONEY, 1952-1970 a/

(Millions of escudos)

End of Year	Money Supply <u>a/</u>	Annual Change (%)	Money supply (December 1969 prices) <u>b/</u>	Annual change (%)
1952	26.2		3203	
1953	37.2	+42	3037	- 5
1954	53.4	+44	2747	-10
1955	91.8	+72	2503	- 9
1956	128.8	+40	2428	- 3
1957	164.8	+28	2512	+ 3
1958	221.5	+34	2709	+ 8
1959	293.7	+33	2699	- 0
1960	383.4	+31	3343	+24
1961	431.5	+13	3439	+ 3
1962	556.7	+29	3450	+ 0
1963	746.3	+35	3170	- 8
1964	1129.2	+51	3417	+ 8
1965	1864.	+65	4431	+30
1966	2590.	+39	5221	+18
1967	3240.	+26	5358	+ 3
1968	4481.	+38	5794	+ 8
1969	6057.	+35	6057	+ 5
1970	10049.	+66	7449	+23

a/ Supply of money is here defined as currency and demand deposits owned by the private sector.

b/ Deflated by CPI.

Source: Ricardo French-Davis (op. cit.); Central Bank of Chile

74. To a considerable degree, the growth of the monetary base was fueled by credit to the public sector. Local currency loans outstanding from the banking system to the government rose seven-fold in real terms (52-fold in nominal terms) from 1955 to 1970 (Table I.17). 1/ Over the same period, bank credits to the private sector, including some public enterprises, grew only around 14 percent in real terms. Inasmuch as gross domestic product approximately doubled over this time, it is clear that the banking system was failing to meet the credit needs of the private sector, while making possible a substantial shift of resources to public sector control. Table I.18 relates the expansion of total Central Bank credit (both local and foreign currency denominations) to the Treasury to the previous year's money supply. This ratio averaged an astounding 33 percent for the fifteen years 1956-1970. 2/

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1/ Jorge Gregoire Cerda and Hugo Ovando Zeballos, "El Mercado de Capitales en Chile", in Banco Central de Chile, Estudios Monetarios III, Santiago, 1974. These data, in fact, understate the growth of credit to the public sector, since they exclude many public enterprises as well as credits from nonbank sources -- e.g. CORFO. Moreover, many additional loans legally denominated in dollars were actually converted to pesos and used to cover local expenditures, and rediscounts to the commercial banks frequently included public sector securities. Prior to 1931, Central Bank credits to the public sector were subject to a legal limit of 30 percent of the Bank's capital and reserves. After that date, however, the limit was removed, and in addition, commercial banks could include government papers in their reserves with the Central Bank required to rediscount them upon demand. See: Rolf Luders, Una Historia Monetaria de Chile, 1925-1958. Law No. 7200 promulgated in 1942, authorized the government to borrow up to one-twelfth of its annual budget from the Central Bank.

2/ The relatively low level of Central Bank credit expansion to the government during the years 1956-59 is somewhat deceptive, inasmuch as a large part of the deficit in those years was financed by foreign loans which were added to reserves. Thus much of the monetary growth in that period is attributed statistically to foreign exchange transactions rather than to its underlying source--the fiscal deficit.

Table I.17: CHILE - CENTRAL BANK CREDIT OUTSTANDING TO THE TREASURY, 1955-1970

End-Year:	<u>Local Currency Loans</u>	<u>Foreign Currency</u>	
	(Millions of escudos)	(Millions of US dollars)	(Escudo equivalent millions) <u>a/</u>
1955	16.2	12.5	2.3
1956	18.5	40.1	14.1
1957	26.1	61.6	38.4
1958	38.9	100.1	71.6
1959	-	98.1	102.9
1960	0.1	191.4	200.8
1961	0.8	267.6	280.7
1962	16.4	367.2	423.4
1963	56.3	410.6	768.2
1964	81.2	455.8	1,102.1
1965	160.5	507.6	1,643.1
1966	177.7	556.8	2,227.2
1967	363.9	559.0	2,839.7
1968	303.2	566.6	3,886.9
1969	510.6	575.4	5,201.6
1970	839.5	617.9	7,309.8

a/ Converted at average legal exchange rates shown in Table I.11.

Source: Central Bank of Chile

Table I.18 CHILE - VARIATION IN CENTRAL BANK CREDIT TO TREASURY IN RELATION TO PREVIOUS YEAR'S MONEY SUPPLY, 1956-1970

	(Percent)
1956	15.4
1957	24.8
1958	27.9
1959	-3.4
1960	33.4
1961	21.0
1962	36.7
1963	69.1
1964	48.1
1965	54.9
1966	32.3
1967	30.8
1968	30.4
1969	34.0
1970	40.2

Source: Tables I.16 and I.17

75. Meanwhile, as would be expected in a chronic inflationary environment offering few indexed financial instruments on either the assets or liabilities side, lending activity to the private sector shifted increasingly to nonbank financial intermediaries, including suppliers, who were able to place monetary correction clauses on their loans. By 1971, almost half the loans to the private sector originated in these institutions as compared with 34 percent in 1960, 21 percent in 1950, and only 3 percent in 1940. 1/ Moreover, the proportion of long-term credits out of total bank lending to the private sector fell from 45 percent in 1945 to 19 percent by 1960 and only 9 percent by 1965. 2/

(ii) Interest Rates

76. Prior to 1965, interest rates on loans were subject to an upper limit determined as a function of the average rate charged by the banking system during the previous six months. 3/ In addition, the Central Bank acted to keep interest rates low through direct lending to the private sector and by setting a maximum interest rate, substantially lower than the legal rate, on loans eligible for rediscounting. In 1966 the maximum rate became a policy variable to be set by the Central Bank. At the same time the Bank eliminated its direct lending activities to the private sector.

77. The maximum legal interest rate rarely exceeded the annual rate of inflation during the entire three decades following the 1930s (Table I.19). included, however, the real effective interest rate to borrowers was negative in most years prior to 1965 and, again with the exception of 1960 and 1961, was far below the real cost of capital. The exceptions occurred in 1960 and 1961, when unusually low inflation rates resulted in positive real interest rates on bank loans. On the other hand, the effective cost of borrowing was significantly increased by taxes and other charges applied to loan transactions. Even with these costs included, however, the real effective interest rate to borrowers was negative in most years prior to 1965 and, again with the exception of 1960 and 1961, was far below the real cost of capital. As a consequence, the banking system provided a substantial subsidy to those borrowers fortunate enough to have access to it. 4/

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1/ Cerda and Ovando, op. cit.

2/ Ibid.

3/ The limit was set at 1.5 times the average rate of the previous semester until 1953, when the ratio was lowered to 1.2.

4/ French-Davis, (Políticas Económicas...) estimates that in 1964 the implicit subsidy to borrowers was equivalent to one-fifth of that year's total tax collections.

Table I.19: CHILE - MAXIMUM LEGAL ANNUAL INTEREST RATES  
FOR BANKING SYSTEM, 1940-1970

(Percent)

<u>a/</u> Year	Maximum Legal Interest Rate	Real Legal Rate <u>b/</u>	Effective Interest Rate <u>c/</u>	Real Effective Rate <u>b/</u>
1940-44	12.9	- 2.9	n.a.	
1945-49	14.2	- 3.2	n.a.	
1950-54	16.2	-13.2	22.9 <u>d/</u>	-14.2 <u>d/</u>
1955	16.2	-38.4	22.8	-34.9
1956	16.6	-19.4	23.6	-14.5
1957	16.8	- 5.6	26.4	+ 2.2
1958	18.0	- 5.3	30.5	+ 4.7
1959	19.3	-10.4	32.8	- 0.2
1960	19.8	+13.7	33.6	+26.8
1961	19.6	+ 9.3	27.5	+16.5
1962	17.9	- 8.3	26.2	- 1.9
1963	17.0	-19.8	24.8	-14.5
1964	17.4	-16.4	25.3	-10.8
1965	18.2	- 7.1	29.5	+ 1.7
1966	19.0	+ 0.9	36.8	+16.0
1967	19.0	- 2.4	33.4	+ 9.4
1968	19.9	- 6.3	36.8	+ 7.0
1969	23.2	- 4.7	41.6	+ 9.5
1970	24.0	- 8.1	44.5	+ 7.1

a/ Interest rate data for 1955-1970 are simple averages of semestral rates; other years give second semester rates only. Nominal rates shown for five-year periods are simple averages of second semester rates.

b/ Deflated by annual changes in CPI.

c/ Includes taxes and fees charged to borrower on a 90-day letter of credit, with interest prepaid.

d/ 1952-54.

Source: Jorge G. Cerda and Hugo Ovando Z., (op. cit.), Tables 25, 28, 33; Ricardo Ffrench-Davis (op. cit.), Tables 32 and 54

78. In such an excess demand situation, the allocation of credit became a function of administrative decision rather than of price and relative rates of return. Except as modified by government-imposed selective credit controls (see below), these decisions almost certainly favored the relatively larger and longer established enterprises and those enjoying interlocking ownership with the financial sector. While subsidized interest rates were frequently advocated as incentives to investment and the expansion of priority sectors, it appears that many of the credits from both bank and nonbank sources were instead diverted by the original borrowers into highly remunerative, unregulated suppliers credits and consumer loans. <sup>1/</sup> Given the profits that could be earned from such financial transactions as well as from commodity and foreign exchange speculation, it is perhaps not surprising to find little evidence that overall investment levels were raised by credit subsidies. At the micro-level, however, low interest rates may in many cases have stimulated excessively capital-intensive production techniques by those with access to credit, at the expense of employment opportunities.

79. The effective maximum interest rate, including taxes and other charges, was raised to positive real levels during the Frei period but became sharply negative again during the Government of President Allende (see Chapter II). Both regimes extensively used selective controls to direct the allocation of credit.

80. Low bank lending rates were matched on the liabilities side by zero or low nominal interest paid to depositors. Persistent inflationary expectations were consistently proven justified and help to explain the low propensity of Chileans to hold unindexed financial assets. Prior to 1957, the rate on savings accounts had been fixed at 4.5 percent. In an effort to attract funds into the banking system and reduce dependence on Central Bank rediscounting, interest paid on term accounts was freed from controls in October 1957, but remained subject to the general maximum legal interest rate. Thus, while its terms improved, the interest offered remained at negative real levels. Interest on bank accounts was exempted from the income tax in 1959. In addition, measures were introduced to facilitate foreign currency denominated loans and deposits in the banking system with interest on savings accounts payable in foreign currency. By the end of the year, foreign currency accounts amounted to 12 percent of the money supply, and the increment in foreign currency loans during the year was equivalent to one-third of total bank credits outstanding.

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<sup>1/</sup> Ibid.

81. Indexed savings accounts were introduced for the first time in 1960 with the creation of the savings and loan institutions. Such funds were to be loaned exclusively for housing construction or purchase; the loans, too, were indexed. The availability of indexed financial instruments was expanded in 1965 when the State Bank (BECH) was authorized to index its savings accounts, and the Central Bank began the issuance of adjustable savings certificates (CAR). It was not until 1967, however, that the State Bank was authorized to index medium-term loans. In the meantime, the savings account adjustment had to be financed by a new government tax on bank loans. The funds generated by the sales of CAR were used to finance the purchase of domestically produced capital goods.

82. In order to dampen the growth of liquidity, minimum holding periods were specified to qualify for monetary adjustments, and restrictions have generally been placed on the transferability of indexed instruments. Nevertheless, the introduction of indexing spurred a rapid growth of private financial savings, real term liabilities of the financial system rising approximately three-fold between 1961 and the end of 1970. During this period, non-indexed certificates and accounts fell 35 percent in real terms, and by 1970 indexed instruments accounted for 80 percent of the total. The real holdings of financial savings instruments continued to rise in 1971 but declined sharply thereafter in the face of rising economic and political uncertainties.

(iii) Selective Credit Controls

83. In addition to the setting of reserve requirements on BECH and commercial bank deposit liabilities, direct controls have frequently been used since 1953, though with varying effectiveness, to limit the rate of credit expansion or to guide its allocation. Selective rediscounting by the Central Bank and variations in the kinds of assets that could be counted as part of required reserves have been the major vehicles for effecting these policies.

84. During the 1950s monthly or semestral credit quotas were assigned to each bank, and banks which exceeded them were denied access to the rediscount window. The rediscount rate in general was kept well below commercial bank lending rates during this period and was not itself an effective instrument in limiting credit expansion. Quotas were frequently increased to meet unforeseen credit demands, and the Central Bank occasionally acquired portions of a bank's portfolio, thereby reducing the charges against its quota. The effectiveness of the quotas were thus weakened, permitting rapid monetary expansion. The use of differential rediscount rates was introduced in 1958, with preferential treatment accorded to credits for agriculture. Throughout the 1950s, the Central Bank reiterated the recommendation that credits be directed primarily toward the productive sectors, as opposed to commerce and speculative activities, but little was done to enforce this prescription.

85. Quantitative controls were removed by the Alessandri Government in 1959, and the rediscount rate was raised in an effort to force the banks to rely on their own resources. The admonition to direct credit to the productive sectors was continued but remained unenforced until 1960, when the

Central Bank required that one-fifth of net increments to bank loan portfolios be directed to productive activities at specified preferential interest rates below the legal maximum. Funds were also diverted to the government via increased reserve requirements and the issuance of bonds which could be counted as part of legal reserves. 1/ Prices were effectively stabilized in 1960 and 1961. When inflation again began to accelerate, the Alessandri Government reimposed quantitative credit controls, but with little effect.

86. Improved control over the rate of monetary expansion and the redirection of credit toward "productive" activities, and in particular toward small- and medium-sized enterprises and the reformed subsector within agriculture, were among the basic commitments of the Government of President Frei. The reserve requirement on commercial banks was raised, forcing greater dependence on Central Bank rediscounts. The amounts available for rediscounting and the interest rates charged were then varied among end uses in accordance with the Government's priorities. In addition, banks were assigned specific obligatory lending quotas by type of operation. Although interest rate differentials were narrowed over the 1965-70 period, quantitative controls were strengthened.

87. An overall credit expansion target was determined on the basis of a monetary program tied into the Government's development plan and the short-term economic outlook. Individual bank quotas and access to the rediscount facility were then made a function of the bank's previous performance in adhering to Central Bank guidelines as well as its success in attracting new deposits. Certain preferred activities -- e.g. acquisition of government bonds -- were not counted against the quota ceiling. Also exempted from these controls were the Government's overdraft privilege on the consolidated account of the public sector held by BECH. Nevertheless, it is estimated that around 90 percent of bank credit operations were subject to these quantitative guidelines by the end of 1969. 2/

88. A large number of selective credit facilities were created in an effort to divert the flow of funds to priority uses. Preferential interest rates, supported by softer rediscount terms, were fixed for a variety of end-uses including low-cost housing construction, export credit, agricultural and industrial development, purchases of domestically produced capital goods, and artisan activities. In addition, special treatment was accorded to cooperatives and small enterprises generally. Interest rate differentials were narrowed over time, and rates generally were raised in real terms. Preferences continued to be granted, however, in the form of exemptions from legal reserve requirements and quotas and the amounts of rediscounting made available.

89. The most innovative of the special credit facilities was "the line of credit according to cash budget" established in 1965. To qualify, an enterprise was required to submit an annual cash budget to the commercial

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1/ Such bonds constituted 18 percent of bank reserves by the end of 1960.

2/ IMF Report SM/70/109, June 17, 1970.



bank, or consortium of banks. Upon approval the latter would guarantee to provide the necessary financial resources. In addition to submitting an acceptable cash budget and meeting normal creditworthiness criteria, the enterprises were obligated to pay their suppliers on a cash basis and, beginning in 1969, to dedicate half of their annual profits to increasing working capital. All credit lines in excess of E<sup>o</sup> 500,000 had to be approved by the Central Bank. In considering renewals of outstanding credit lines, preference was to be given to enterprises that pledged to lower their prices in real terms and to increase output. The primary purposes of this program were to eliminate the day-to-day uncertainties faced by the typical Chilean enterprise in meeting its financial needs, to reduce its financial costs, to improve the financial planning and management of both the enterprises and the banks, and to strengthen Central Bank control over credit allocation. 1/ Banks were required to increase by specified stages the proportion of their total loan portfolios represented by this program and also to increase gradually the share of the program's loans allocated to borrowers of E<sup>o</sup> 4 million or less.

90. Table I.20 summarizes the distribution of credits from the banking system to the private sector, by economic activity, from 1950 to 1970. The primary beneficiary of selective credit policies, to the extent they were effective, would appear to have been the industrial sector, whose share of credit outstanding might have been expected to rise in any case along with its growing relative importance in the economy. Despite the priority given to it by the Frei Government, agriculture's share of bank loans declined after 1964, the annual average of credits outstanding to the sector even declining slightly in real terms as compared to 1960-64. 2/ It may still be true, however, that a relatively larger share of credit went to small farmers as a consequence of the land reform and in accordance with Government policy objectives. 3/ Nevertheless, it remains apparent that selective controls were relatively ineffective in affecting the allocation of private credit. While the combined share of the "productive" sectors, agriculture and industry, had grown markedly relative to the commerce and services sectors, there is considerable evidence that monies borrowed for ostensibly productive purposes were in fact turned over and relent in the informal market. 4/

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1/ See: Maria Elena Ovalle de Vigneaux, "Linea de Credito segun Presupuesto de Caja," in Banco Central de Chile, Estudios Monetarios, Vol.I., Santiago, 1968.

2/ See Appendix II, Table 6.6. Indeed, the data in the table probably understate agriculture's relative decline, inasmuch as the earlier figures refer to June when agriculture's credit demands are seasonably lower than in December.

3/ The present section refers only to credits from the monetary system. Other institutional sources of credit to agriculture -- e.g. CORFO, INDAP, etc. -- are examined in Annex I.

4/ See: Javier Fuenzalida and Sergio Undurraga, El Credito y su Distribucion en Chile, Editorial Lambda, Santiago, 1968.

Table I.20: CHILE - DISTRIBUTION OF BANKING SYSTEM CREDITS TO PRIVATE SECTOR, a/ 1950-1970

(Percent)

Years <u>b/</u>	Agriculture <u>c/</u>	Industry <u>d/</u>	Other
1950-54 (avg.)	24.5	32.0	43.5
1955-59 ( " )	37.5	32.0	30.5
1960-64 ( " )	32.9	34.9	32.2
1965-69 ( " )	27.5	45.4	27.0
1970	24.6	47.3	28.1

a/ Banking system refers to private commercial banks and the Banco del Estado.

b/ Data for 1950-64 refer to loan portfolios as of June 30; 1965-70 data refer to December 31.

c/ Includes fishing and forestry.

d/ Includes manufacturing, construction, mining, and transport and storage.

Source: Appendix II, Table 6.6

c. Foreign Debt

91. Even prior to the Depression of the 1930s, Chile had relied heavily on foreign credits to help finance its budgetary deficits. In some years, external public debt service was as high as 35 percent of total government expenditures. External loan funds dried up in the wake of the world depression, and Chile was forced to suspend debt service in mid-1931. Outstanding credits were renegotiated, and service payments resumed in 1939.

92. Foreign borrowing began again after World War II, although at a relatively moderate level through the first postwar decade. Public loan authorizations from 1945 to 1955 averaged about US\$21 million and emanated primarily from the U.S. Export-Import Bank (EXIMBANK), the IBRD, and private

U.S. banks. <sup>1/</sup> The inflow of foreign credit jumped sharply in 1956 with the negotiation of a US\$75 million loan package in support of the stabilization program recommended by the Klein-Saks mission. The lenders were led by the IMF, which provided a \$35 million standby credit; the rest of the package being made available by the U.S. Treasury and private U.S. banks. Although the stabilization program had essentially been aborted by the end of 1957, the loans were renewed and supplemented annually for the next several years with additional monies also supplied by EXIMBANK, the Federal Reserve Bank of New York, the International Cooperation Administration (precursor of AID) and the German Credit Institute for Reconstruction. Large untied credits for earthquake relief, totaling over \$100 million from U.S. government agencies alone, were added in 1961.

93. Specific project lending also increased after 1958, as the Alessandri Government actively sought foreign credits to supplement domestic savings in financing its investment program. This initiative coincided with the growing foreign aid commitment of the U.S. Government, as reflected in the launching of the Alliance for Progress and its participation in the establishment of the Inter-American Development Bank (IDB).

94. The major public agency borrower for investment purposes was the State Development Corporation (CORFO) and its affiliates, which included the public enterprises for power (ENDESA), steel (CAP), and petroleum (ENAP). CORFO, the oldest development corporation in Latin America, was established in 1939 as the agency principally responsible for planning and promoting Chile's economic development. It was authorized to make direct investments in enterprises on either a wholly-owned or mixed-enterprise basis and to lend directly or act as guarantor of loans to public or private enterprises. Its major programs were carried out through independent affiliates, but its activities stretched also into agriculture, fishing, mining, tourism, and a wide variety of manufacturing industries. Through 1960, about 30 percent of CORFO's investments, including those of its affiliates, were financed externally. (It also received 5-6 percent of the national budget.) <sup>2/</sup> Other important public sector borrowers abroad were the State Railway Company and the Housing Corporation (CORVI).

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<sup>1/</sup> A detailed discussion of foreign public credits to Chile from 1945 to 1962 is found in Public International Development Financing in Chile, Columbia University School of Law, New York, March 1964. A public loan is defined here as one which at least one of the parties--borrower and/or lender--is a public agency. The more conventional definition used for later periods will include only loans to, or guaranteed by, public sector agencies. It thus excludes non-guaranteed loans to private borrowers regardless of the lender. Since nonguaranteed loans from public lenders to private borrowers have been few and small in magnitude, the differences in definition are for practical purposes not significant. Both concepts exclude direct transactions between purely private parties.

<sup>2/</sup> A fuller discussion of CORFO is found in Chapter IV. See also: Mamalakis (op. cit.).

95. Table I.21 shows the evolution of Chile's medium- and long-term public external debt during the 1960s. The data include separately the obligations of the public sector and non-guaranteed financial credits to the private sector. By the end of 1960, total public debt outstanding amounted to US\$589 million, which was equivalent to 125 percent of that year's merchandise exports and approximately 20 percent of GDP. Over the next 5 years, the public debt rose 72 percent reaching US\$1.0 billion at the end of 1965, or the equivalent of 149 percent of the level of exports and 26 percent of GDP. If paid, the total service of foreign capital (including profit remittances) would have amounted to 70 percent of exports in 1965. This burden was unmanageable, and the new Frei Government renegotiated the debt service schedule. The rescheduling of repayments of previous credits and the accumulation of new borrowings doubled the outstanding public debt to \$2.1 billion, or about 38 percent of GDP and 186 percent of exports, by the end of 1970. An additional element in the debt was the "Chileanization" agreement under which Chile was to acquire 51 percent ownership of the major copper mines in return for bonds.

Table I.21: CHILE - OUTSTANDING PUBLIC EXTERNAL DEBT, 1960-1970

(Millions of US dollars)

End of Year	Debt Outstanding a/
1960	589
1961	668
1962	762
1963	854
1964	940
1965	1,016
1966	1,104
1967	1,236
1968	1,461
1969	1,727
1970	2,066

a/ Medium- and long-term debts only; does not include undisbursed balances or loans from the IMF.

Source: Central Bank; IBRD External Debt Division

96. The foreign financing of private sector expenditures also grew rapidly during this period. According to Central Bank estimates, foreign financial credits to the private sector (not including short-term credits to the monetary system) rose from US\$63 million at the end of 1960 to \$219 million in 1965 and \$436 million by the end of 1970.

#### 4. Wage Policies

97. High chronic inflation rates and the early appearance in Chile (relative to other developing countries) of an organized urban labor force have long involved the government in the process of wage and salary determination. <sup>1/</sup> Wage policy has, in varying degrees over time, been intended to reduce inflationary pressures in the economy, protect real incomes in the face of inflation, and/or alter the distribution of income in favor of the lower-income groups. The setting of wage and salary levels in the public sector has an important impact on remunerations paid elsewhere. In addition, the tools of wage policy have included the legislating of minimum compensation levels, across-the-board wage adjustments, and mandatory fringe benefits and bonuses paid in the private sector. Also relevant are the substantial benefits paid out through the social security system.

##### a. Minimum Wages and Salaries

98. Prior to 1974, wages and salaries were subject to three legally set minima: the suelo vital (SV), first established in 1937 and applied to private sector, white-collar workers (empleados); the salario minimo agricola (SMA), established in 1953 for workers in the agricultural sector; and the salario minimo industrial (SMI), created in 1956 for blue-collar workers (obreros) in industry and commerce. The SV and SMA were set and adjusted on a regional basis in accordance with regional cost-of-living surveys, while a single SMI was fixed nationwide. Inasmuch as annual percentage adjustments of the legal minima were mandatorily applied to workers earning up to several multiples of the minimum, a large proportion of the labor force was theoretically affected.

99. As in other aspects of Chilean labor law, wage legislation historically discriminated between white-collar and blue-collar workers and between rural and urban workers. Thus, although the minimum wage was viewed at least partly as a device for narrowing income disparities, the SMA and SMI were initially set equivalent to only 25 percent and 45 percent, respectively, of the SV. This gap narrowed only slightly through the 1950s and early '60s. During the Administration of President Frei, however, distributive objectives were given higher priority. Between 1964 and 1967, the SMA was increased 164 percent in nominal terms, in comparison to 103 percent for the SMI and SV. These adjustments brought the rural and urban minimum wages for manual workers into equality at a level equivalent to 48 percent of the SV. That relationship was maintained until 1970, when a 60 percent adjustment of the now uniform salario minimo brought the manual worker standard up to 59 percent of the SV.

100. Despite annual adjustments, however, the average real value of the suelo vital eroded steadily from 1952 through 1960, losing 35 percent

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<sup>1/</sup> A more detailed review of wage and income policies and their effect is found in an internal working document of the World Bank.

of its purchasing power over this period. <sup>1/</sup> The real SV rose in 1961 and 1962, as the Alessandri Government's short-lived stabilization program sharply reduced the rate of inflation, but then lost these gains with the reacceleration of price increases in the following two years. The SV was adjusted upwards in real terms during the first two years of the Frei Administration but was then allowed again to erode. By 1970, the SV's average real value was back to the level of 1964 and 36 percent below the level of 1952.

101. The real values of the two blue-collar minima were better protected throughout the period. Both moved higher during the first half of the Alessandri period, the SMA in particular gaining 33 percent in real terms between 1958 and 1962. Both were then allowed to erode before real increases were achieved during the first half of the Frei Administration. Again, the SMA adjustment exceeded all others as it was brought into equality with the SMI. During Frei's final year, while the purchasing power of the SV continued to decline, the blue-collar minimum wage was increased 21 percent in real terms to an all-time high.

b. Family Allowances

102. In addition to the minimum wage and salary, all workers covered by one of the institutions of the social security system (about 70 percent of the work force) were entitled to a monthly monetary allowance per dependent. While the size of the allowance was not tied formally to a worker's income, it did vary from one social security institution to another, and the system overall discriminated markedly in favor of already more affluent (on average) white-collar workers. When first extended to blue-collar workers in 1953, the allowance per dependent was fixed at only one-third the amount already being paid to private sector, white-collar workers (see note page 53). <sup>2/</sup> This disparity remained fairly constant through the 1950s and early '60s,

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<sup>1/</sup> The practice of adjusting minimum wages and salaries once a year, of course, yielded pay rates of varying value in real terms over succeeding months of the year. The real value was highest at the moment of adjustment and declined steadily thereafter as the price level rose. The deterioration of the real minimum wage is thus a function of the rate of price change. Even when fully indexed, moreover, the average real minimum wage may rise or fall from year to year depending on whether inflation is slowing down or accelerating. If, for example, the inflation is slowing, the nominal adjustment based on last year's price rise will exceed the erosion of purchasing occurring in the present year. The average real wage will thus have increased. If, on the contrary, inflation has accelerated, the average real wage will decline.

<sup>2/</sup> In this discussion, the family allowances for blue-collar workers are those paid by the Social Insurance Fund (SSS), while the white-collar allowances refer to those paid by the Social Security Fund for Private Sector White-Collar Workers (EMPART). Together these two institutions account for almost 80 percent of workers covered by social security and virtually all those in the private sector.

the family allowance paid to white-collar workers falling somewhat less in real terms than that provided blue-collar workers. For a blue-collar worker with 3.5 dependents (census average), the family allowance was equivalent to from 24 percent (1964) to 40 percent (1957) of the minimum wage. The supplement was even more important for low-pay, white-collar workers, ranging from 43 percent of the SV in 1964 to 56 percent in 1960. Thus, the allowance served to narrow income disparities within the manual and white-collar categories and to increase significantly the absolute incomes of each, while at the same time contributing to the widening of the gap between them.

103. During the Frei Administration, the family allowance became an increasingly important tool of income redistribution, as the allowance paid to the dependents of blue-collar workers was increased 115 percent in real terms from 1964 to 1970, as compared to a 36 percent real increase for white-collar dependents. Within each group, the blue-collar allowance was now equivalent to 42 percent of the SMI (for a worker with 3.5 dependents), and the white-collar allowance had reached 58 percent of the SV. Nevertheless, the disparity of treatment between the two groups remained substantial, the allowance per dependent for blue-collar workers being equal to only 42 percent of that received by white-collar workers.

104. The addition of the respective family allowance to the minimum wage and salary to derive a minimum income level for urban blue-collar and white-collar workers 1/ does not significantly alter the picture from that observed for minimum wages and salaries alone. The more generous adjustments of family allowances increased the relative rate of improvement of low-paid workers after 1964. Total real receipts for minimum pay workers in 1970 were up 42 percent and 10 percent for blue-collar and white-collar workers, respectively, as compared to 1964.

c. Average Wages and Salaries

105. The above discussion applies only to workers whose hourly or monthly pay rates were directly tied to the minimum wage and is not necessarily

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1/ In fact, workers commonly received a large number of monetary and non-monetary benefits in addition to basic wages and family allowances, but there are no systematic data regarding their coverage or value over time. A survey of 55 large enterprises and public agencies in 1969, employing 108,000 workers, identified 98 different forms of compensation in addition to the basic wage. These included inter alia sales commissions; bonuses for productivity, night work, overtime, and holidays; allowances for transportation, meals, housing, dependent education, tools, and work clothes; and provision in kind of housing, meals, clothes, sport facilities, nursery care, company products, etc. It was estimated that these non-wage incomes, along with family allowances, approximately doubled the compensation of white-collar workers (i.e. were equal in total value to average wages), and raised blue-collar incomes by a factor of about 2.2. (Sociedad Minera El Teniente, "Análisis Sobre Remuneraciones y Beneficios Accesorios en Chile a 31 de Mayo de 1969," Rancagua, 1969.)

reflective of the earnings of higher paid workers. In fact, although adjustments to the legal minima necessarily became a datum for wage negotiations, collective bargaining agreements or private wage contracts could and frequently did diverge from them both in timing and amounts. Figure I.3 compares the index of real average wages and salaries with that of the legal minima since 1963. 1/

106. This comparison illustrates the limited impact of minimum wage and salary legislation on the course of average compensations paid in speed, direction, or the relationship between blue-collar wages and white-collar salaries. For example, while the real SMI was essentially flat from 1965 to 1969, average real wages rose 45 percent. The divergence between the legal minimum and the average is even more striking with regard to white-collar workers. The SV rose slowly in real terms from 1964 to 1966 but then declined steadily; by 1970 it had returned to the 1964 level. Nevertheless, average real salaries rose steadily (except for a brief dip in 1968) and by 1970 were more than double the level of 1964. Despite the Government's efforts to reduce it, the gap between blue-collar and white-collar workers widened over the period.

107. It is clear that average wage and salary increases, at least in the urban sectors sampled, tended to exceed the legally mandated adjustments. Several explanations are possible; unfortunately, the data available do not permit them to be tested. If the proportion of workers whose earnings were at, or were tied to, the legal minima remained about the same, the above trends would indicate not only a widening of pay differentials between blue-collar and white-collar workers, but within each group as well. On the other hand, the divergence might reflect a generally tight labor market in which the rapid bidding-up of wages simply made the trailing legal minimum irrelevant over time for an increasing proportion of workers. Large adjustments, such as the one enacted in 1970, may have been a case of the law catching up with the market rather than of leading it. Finally, the divergence between legal minimum and average could also have resulted from rising unemployment concentrated among the lowest wage workers. The average wage compensation of employed labor would thus have risen as minimum wage workers simply dropped out of the survey.

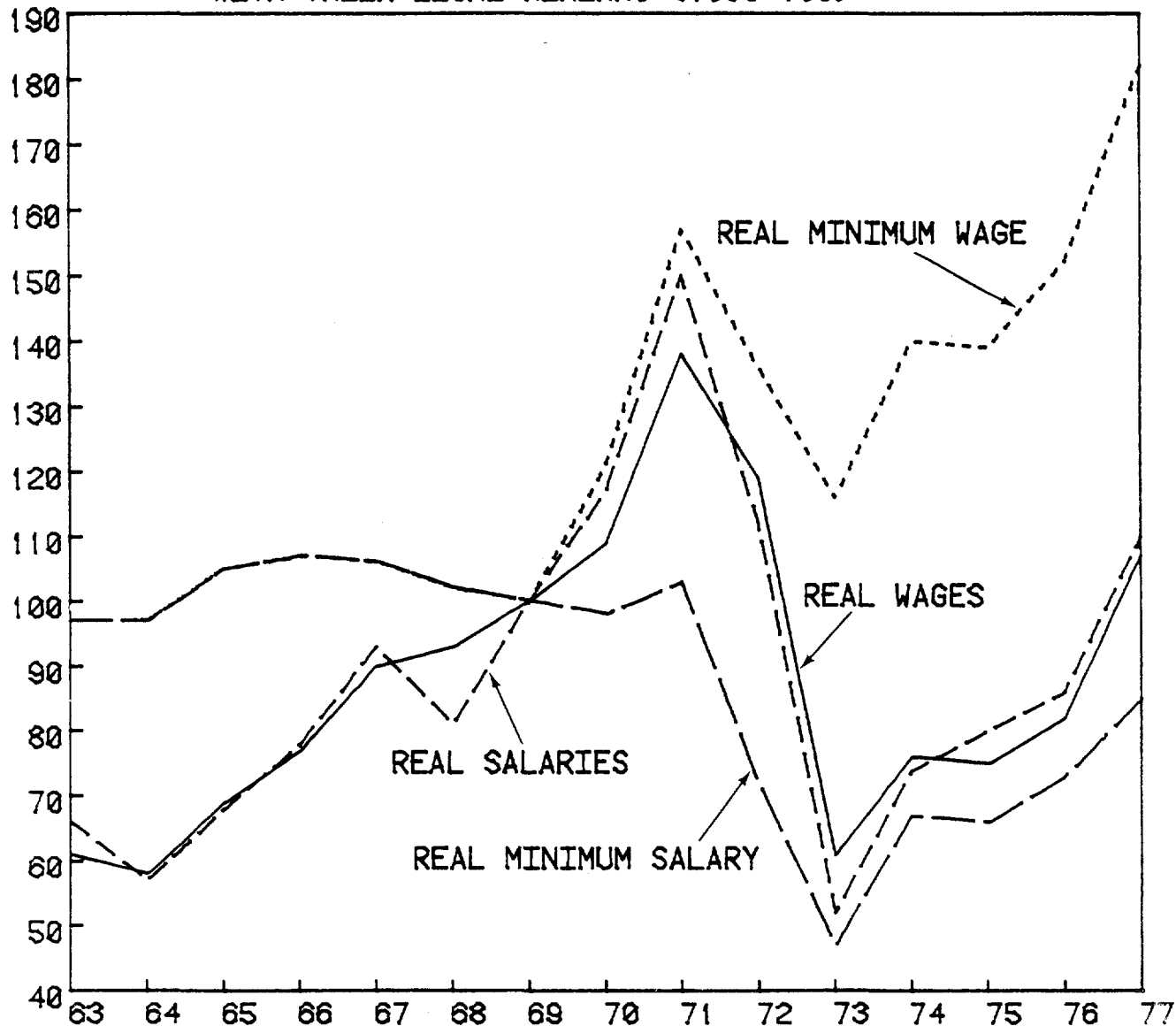
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1/ The data for average wages and salaries cover both public and private sector institutions and include basic wages; pay for vacations, holidays and overtime; and the value of all fringe benefits, in cash or kind, which are regularly provided. Excluded are irregular cash bonuses and family allowances. It should be noted that these data derive from a 1957 sample of the modern, large-enterprise industrial, mining, and public utility sectors and government, all of which have historically employed the elite of the manual work force, which together with the white-collar employees of these sectors form the backbone of the middle class of Chile. It is not certain that wages in non-surveyed enterprises consistently followed a similar pattern. Further detail on the survey's coverage is in the Note on Chilean Economic Statistics, Appendix I.



FIGURE I.3

CHILE  
COMPARISON OF THE INDICES OF REAL AVERAGE WAGES AND SALARIES  
WITH THEIR LEGAL MINIMAS (1969=100) \*



Source: Appendix II, Tables 9.21, 9.15a, 9.13a and 9.9a

\*Note: Indices of Real Average Wages and Salaries Derived from April Data while Legal Minimas taken from Yearly Averages.

Until 1967, there were two minimum wages--industrial and agricultural. Figure I.3 refers to industrial minimum wages.

108. In the light of other economic indicators describing the progress of the late 1960s, the first explanation above appears the most probable, viz. an actual widening of pay differentials across the labor force. In view of the slow growth of the active labor force during the Sixties, the gains experienced by the better paid workers probably had more to do with the power of unions, the relative freedom from competition enjoyed by their employers, and the "demonstration effect" of high wages received by the copper miners and workers in the State enterprises. At the same time, the urban flow of labor displaced from the countryside, the heavy burden of payroll taxes, and the substantial subsidies offered by public policy for the adoption of capital-intensive techniques of production kept downward pressure on the wages of the unskilled. In such a situation, minimum wage legislation may put a floor on the incomes of those who retain jobs in the covered sectors, but these benefits may come at the cost of jobs for some and/or of an inflationary shift of the entire pay structure which eventually erodes the real value of the floor income itself. 1/ It would, in any event, be difficult in a labor force as well organized as the Chilean had become to compress traditional wage differentials as implied by a redistribution policy relying only on a minimum wage. While such compression might be achieved briefly, the labor force "elite" groups are likely to reassert their customary differentials fairly quickly.

d. Conclusions

109. Little can be said regarding the impact of wage policies on income distribution on the basis of available data (see note page 53). The most notable distributive effects probably occurred within the labor force, particularly in the context of other policies that offered substantial subsidies to the purchase of capital goods while heavily taxing the employment of labor. The rapid real growth of average labor remunerations over the second half of the 1960s, coupled with a slow growth of employment, undoubtedly improved labor's share of national income. 2/ This probably came at the cost, however, of a slower rate of growth of job opportunities and some widening of income differentials among workers. Moreover, to the extent that the improvement of wages and fringe benefits were financed through inflation and/or taxation, the primary losers were the unemployed and workers in sectors not covered by social security or other labor legislation.

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1/ The difficult trade-off between increased welfare for the employed labor force and the level of employment is heightened by the very high payroll taxes levied in Chile to support the extensive social security system (see Annex II, Section B.2.). The employer contribution alone to the two major institutions providing coverage to private sector workers amounted to 55 and 62 percent, respectively, of taxable payrolls in 1968.

2/ The national income accounts report an increase in labor's share from 45 percent in 1964 to 52 percent in 1970. Some of the problems involved in interpreting this data are studied in an internal working document of the World Bank.

D. SUMMARY OBSERVATIONS

110. Chile's long history of slow growth, rapid inflation, balance of payments difficulties, and frustrated aspirations is well known and has inspired many of the debates familiar to students of development economics. A number of these issues are encompassed within the body of literature commonly referred to as the monetarist vs. structuralist theories of inflation. <sup>1/</sup> According to the structuralists, the root causes for Chile's poor development performance were to be found in systemic structural rigidities explained by skewed land tenure, monopolistic industries, the secular decline in the international terms of trade of primary commodities, the instability of primary commodity prices, the demonstration effect of foreign luxury consumption, the protection of foreign markets, the power of foreign multinational corporations, and the capital intensity of modern production techniques.

111. Without denying the importance of many of these structural features of the Chilean and world economies, the discussion of this Chapter suggests that Chile's poor economic performance over recent decades is also not unrelated to domestic economic policies. The motivations of agricultural producers may rest partly in the psychology of latifundistas but are also negatively affected by discriminatory price controls and an overvalued exchange rate. Similarly, concentrated industrial markets were encouraged by high levels of protection, while a cascading sales tax made vertical integration profitable; the foreign trade regime inhibited exports as well as the integration of the copper mines into the national economy; subsidized interest rates and heavy payroll taxes stimulated the substitution of capital for labor; and the chronic failure to cover the costs of public goods and services through tax collections and user charges helped to fuel the inflation.

112. Despite the pronounced social orientation of the Frei Government and the considerable progress achieved during its tenure, <sup>2/</sup> the economy presented a very mixed picture in 1970. Some improvements had been accomplished in trade and monetary policies, education, agriculture, public housing, and other socioeconomic areas; and an agreement had been concluded with the copper companies for the Chileanization of the mines that promised large new investments in that sector. The balance of payments was strong, and international reserves were, for that period, at record levels. On the other hand, the fiscal situation was deteriorating, inflation was again accelerating despite slackening production and rising unemployment, private saving and investment remained low, and to many it appeared that the social programs launched by the Christian Democrats had lost their momentum. Consequently, the party that had won an unusual absolute majority of the votes

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<sup>1/</sup> See: Werner Baer and Isaac Kerstenetzky (eds.), Inflation and Growth in Latin America, Irwin, Homewood, Ill., 1964.

<sup>2/</sup> For a detailed analysis, see: IBRD Report No. WH-202b of September 10, 1970.

in the 1964 presidential elections, finished a poor third in the three-way race of 1970. The winner was Salvador Allende as the head of a coalition of parties, the Popular Unity, which promised a radical departure from past policies, and whose stated central objective was "the replacement of the present economic structure, putting an end to the power of national and foreign monopolistic capitalism and of the latifundio, in order to initiate the construction of socialism." 1/

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1/ Presentation of Finance Minister Americo Zorilla to the Mixed Budgetary Commission of Congress, November 27, 1970 (mission translation). The potential for political polarization was clear in the vote totals. The right-wing National Party received 35 percent of the vote, only 39,000 votes behind the Popular Unity out of 3 million votes cast. The Christian Democratic candidate received 28 percent.

CHAPTER II

THE CHILEAN ECONOMY 1970-SEPTEMBER 1973

A. INTRODUCTION

113. Although the present chapter is concerned with the evolution of the Chilean economy and of the economic policies that propelled it, it is necessary to recognize the highly charged political environment in which economic events unfolded. The Allende Government came to power in 1970 with its Popular Unity (UP) coalition receiving slightly more than one-third of the popular vote and facing a Congress firmly controlled by opposition parties. Nevertheless, the Government reiterated its determination to move its revolutionary program forward as quickly as possible and, moreover, to do so within the bounds of Chile's democratic, constitutional process. The atmosphere during this period was thus increasingly confrontational. The conflict was not limited to the polarization of Government and Opposition. As time passed, increasing disagreement appeared within the UP coalition itself regarding the acceptable pace of reform, the need for concessions to obtain or retain the support of one or another group--e.g., small shopkeepers and manufacturers--and the feasibility of achieving the Government's objectives by traditional means. Thus, the economic events of this period cannot be explained entirely by the production, consumption, and investment functions, savings propensities, etc. of conventional economic analysis. The economic behavior of workers, investors, and consumers was affected as much by the intensive enthusiasms, loyalties, fears, uncertainties and animosities being created as by economic policies per se, and the objective functions of the participants increasingly included political goals as well as material ones.

114. According to the UP analysis, Chile's poor economic performance since the 1930s was rooted in an economic structure characterized by dependence on the capitalist industrial economies, control of local markets by domestic and foreign monopolists, and the concentration of agricultural resources in the hands of a small, feudal landowning aristocracy. These characteristics resulted, inter alia, in the concentration of income and wealth, the virtual exclusion of large segments of the population from the economic mainstream, a pattern of production that emphasized sumptuary goods at the expense of basic needs, and the generally inefficient use of domestic resources, particularly labor resources. 1/ The solution to these problems, therefore, lay in the fundamental restructuring of the economy--i.e., elimination of the crippling control exercised by foreign and domestic monopolists and latifundistas and establishment of the basis of a new socialist order.

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1/ For an exposition of this analysis, see: Sergio Aranda and Alberto Martinez, "Estructura Economica: Algunas Caracteristicas Fundamentales," in Anibal Pinto, et. al., Chile, Hoy, Centro de Estudios Socioeconomicos, Universidad de Chile, Santiago, 1970; and Jose Ibarra, "Some Aspects of the Popular Unity's Development Model," in J. Ann Zammit (ed.), The Chilean Road to Socialism, Institute of Development Studies, University of Sussex, England, 1973.

115. The UP's immediate economic objectives upon the inauguration of President Allende (November 4, 1970) were the reactivation of the economy, early progress toward establishing state control over the "commanding heights" of the economy--those sectors whose resources and functions were essential for assuring the fulfillment of the Government's development plan--and acceleration of the agrarian reform. The first objective was to be achieved by a combination of traditional public works programs, with an emphasis on housing construction, and a major increase in the wage share of national income. With regard to the second objective, three areas of the economy were defined: the social property area, consisting of all present and future state enterprises; the mixed area, in which the State would enter into partnership with domestic and foreign private entrepreneurs; and the private sector which would remain wholly privately-owned but subject to the planning, marketing and other guidelines set by the State. Targeted for immediate expropriation and integration into the social area of the economy were the large copper, iron and nitrate mines, the financial system, export-import enterprises, large distribution companies, and all strategic activities, including, among others, utilities, petrochemicals, chemicals, pulp and paper. 1/

116. The Government was committed, at the same time, to reducing the rate of inflation. While it viewed Chile's chronic inflation as resulting from structural characteristics, the Government expressed as a priority short-term goal the dampening of inflation through direct price controls (which also formed a basic part of the income redistribution strategy), the maintenance of a fixed exchange rate, special financial assistance for the elimination of supply bottlenecks, and proper programming of the fiscal deficit and the expansion of money and credit. 2/ Experience, however, would demonstrate the great difficulties involved in managing the unavoidable trade-offs among the UP's stated objectives, particularly in the context of Chile's increasingly polarized political environment.

#### B. THE REACTIVATION OF THE ECONOMY: 1971

117. The first two years of the Frei Administration, helped by high copper prices and a debt rescheduling, had witnessed substantial economic progress. The growth of output accelerated, while unemployment and inflation declined. The central government's deficit was reduced in real terms despite a substantial increase in investment spending. Average real wages and salaries had grown by one-third (Appendix II, Table 9.21). The current account deficit of the balance of payments was greatly reduced, and net international reserves became positive for the first time since 1960. Significant improvements had been made in the progressiveness and buoyancy of the tax system, the foreign trade regime had been simplified and rationalized, and the State had taken steps to acquire for the first time an equity position in the Gran Minería del Cobre while assuring large new investments in mine capacity.

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1/ The entire program presented to the electorate during the campaign is presented in "The Popular Unity Programme," in J. Ann Zammit (ed.), op. cit.  
2/ Americo Zorilla, op. cit.

118. By 1967, however, the momentum was slipping. Inflation, which had fallen from 40 percent in 1964 to 18 percent in 1966, began once again to rise, albeit slowly, reaching 35 percent in 1970. Private investment lagged, and GDP grew only 2.4 percent in 1967 (as compared to 7.0 percent the year before) and averaged 3.3 percent in the subsequent three years. The unemployment rate was also rising slowly. On the other hand, copper prices, which dipped in 1967, recovered strongly and industrial exports were expanding rapidly. Thus, the current account situation was strong and, coupled with substantial capital inflow, resulted in a continuous growth of net international reserves to reach US\$409 million by 1970, the highest in Chile's history. Foreign debt also grew to the highest level in history, however. The public external debt had more than doubled since 1964 to exceed US\$2 billion at the end of 1970, while non-guaranteed foreign financial credits to the private sector had also more than doubled, amounting to an estimated \$436 million.

### 1. Wage Policy

119. The first important economic action taken by the UP Government was with regard to the annual wage adjustment due in January. The UP program called initially for full restoration of real wages and salaries to the level of January 1970. If adhered to, this would have meant a general wage increase of 35 percent, the rate of inflation recorded during 1970. Instead, an adjustment averaging 55 percent was declared, tapered to provide larger proportional increases to the lower paid workers. The effort to improve the relative economic position of blue-collar workers vis-a-vis white-collar workers was also intensified by the Allende Government. Thus, the wage and salary minima were raised in nominal terms by 67 percent and 35 percent, respectively, in 1971, bringing the manual worker's minimum to 72 percent of that of salaried workers. Finally, the Government continued the Frei policy of adjusting the family allowance for blue-collar workers faster than for white-collar workers. A doubling of the blue-collar allowance in 1971, compared to a 44 percent increase for private sector white-collar employees, brought the former up to 53 percent of the latter. The result of these measures was a sharp increase in the real incomes of workers generally and particularly of the lowest paid members of the labor force.

### 2. Fiscal Policy

120. Central government expenditures were increased more than 66 percent in nominal terms in 1971 over 1970. <sup>1/</sup> Direct personnel expenditures alone rose 69 percent as a consequence of the massive adjustment of wages and benefits and the expansion of government employment. Capital expenditures, including transfers to other public sector agencies, rose 51 percent but fell as a proportion of the total budget. In this one year alone, total central government expenditures (excluding debt amortization payments) rose from the equivalent of 21 to 27 percent of the GDP. At the same time, central government current revenues rose only 24 percent, declining from 20 percent to 18.5 percent of the GDP, and resulting in a more than eight-fold increase in the nominal size of the fiscal

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<sup>1/</sup> Detailed breakdowns of the figures presented here are found in Tables 5.1-5.9 of Appendix II.

deficit. In 1971, the deficit was equivalent to 29 percent of fiscal expenditures and 8 percent of GDP as compared to 4 percent and 1 percent, respectively, in 1970.

121. The consolidated expenditures of the public sector as a whole were roughly twice that of the central government alone. 1/ During the first year of the Allende Administration, public sector expenditures are estimated to have risen 57 percent in nominal terms to reach the equivalence of about 55 percent of GDP. Public sector revenues during the year grew only 34 percent, thus requiring a five-fold increase in the use of domestic credit; the public sector's use of domestic credit was equivalent to about 15 percent of GDP.

122. Unemployment was directly attacked through substantial expansion of public works programs and additions to the government payroll. The public sector alone undertook the construction of 76,000 new housing units in 1971, as compared with total public and private housing starts of fewer than 24,000 units in 1970. Of these, only 6,000 had been initiated directly by the public sector. 2/

### 3. Monetary Policy

123. As in the past, the credit policies of the Central Bank were determined largely by the financing needs of the public sector. The money supply was more than doubled in 1971, with the expansion of credit to the central government alone equivalent to 124 percent of the previous year's money supply. Central Bank local currency credits to the public sector rose, in nominal terms, more than eleven-fold, or over 1,000 percent, as local currency credits to the central government rose from E<sup>0</sup>840 million at the end of 1970 to more than E<sup>0</sup>9.2 billion by the end of 1971, and local currency loans to the public enterprises grew from E<sup>0</sup>536 million to E<sup>0</sup>5.4 billion. Not included in these figures is the parallel expansion of dollar-denominated credits from the Central Bank to the public sector. These loans totaled US\$960 million at the end of 1971, compared to US\$665 million a year earlier. As indicated in Chapter I, a large proportion of such dollar-denominated loans in fact constituted an expansion of domestic credit. For the monetary system as a whole, credit to the public sector increased from E<sup>0</sup>2.1 billion to E<sup>0</sup>16.1 billion in local currency loans and from US\$691 million to \$1.0 billion in dollar loans. 3/ Thus, more than 90 percent of the credit extended to the public sector in 1971 was in the form of "high-powered" money created by the Central Bank.

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1/ The reliability of the public sector accounts is particularly precarious between 1970 and 1974 because of the rapid rate at which new agencies and enterprises were being incorporated into it (and later divested) and because of the breakdown of normal budgetary and accounting procedures. Consequently, the reader is again cautioned to read these data as orders of magnitude rather than precise measurements. Other difficulties of interpretation resulting from price and exchange rate changes are discussed in the Note on Chilean Economic Statistics, Appendix I.

2/ The evolution of government housing policy is described in an internal working document of the World Bank. Data on annual housing starts is found in Table 8.52 of Appendix II.

3/ These data do not include local currency loans from the Central Bank to the development banks, some of which may have been relent to public enterprises.



124. During the year, local currency credits from the banking system to the private sector expanded by 59 percent in nominal terms. Nevertheless, the private sector's share of bank credit fell from 77 percent of the total in 1970 to only 40 percent by the end of 1971. The use of bank credit to shift control over the real resources of the economy to the State was explicit Government policy, and part of these monies were applied directly to the acquisition of private sector assets. By the end of 1971, virtually the entire financial sector had itself been transferred to the social property area.

125. The maximum legal interest rate was lowered from 24 percent to 18 percent in 1971. As during the Frei Administration, selective credit policies continued to be a major tool for influencing resource allocation and the distribution of income, with the further objective of facilitating the transition of the economy from capitalism to socialism. The differentiation of interest rates was widened with the whole rate structure (taxes included) reduced again to negative real levels. Preferences were increased for small enterprises, the reformed agricultural sector, lower income groups generally, and to enterprises entering the social area of the economy. The "line of credit according to cash budget" (Chapter I, para. 89) was expanded and explicitly tied to production, price and employment targets. Approval of a credit line under this program, as well as that established for small producers, required the prior confirmation of the State Technical Cooperation Service that the enterprise was conforming to the Government's socioeconomic norms. Similarly, production credits to farmers were contingent on a contract for later deliveries to the State purchasing agencies. 1/

#### 4. Foreign Trade Policy

126. Immediately upon its inauguration, the Allende Government announced its intention to maintain a fixed exchange rate. The crawling peg which had been introduced by the previous administration was considered to be a generator of cost increases and inflationary expectations. Consequently, the escudo, unchanged since July 1970, continued to appreciate in real terms. The average real exchange rate for the dollar fell from 9.7 escudos (1969 prices) in 1970 to 8.6 escudos during 1971, despite a large nominal devaluation finally effected in December in the context of the reinstatement of multiple exchange rates.

127. Exchange controls were tightened. Although a number of items were added to the list of goods eligible for import, the number of goods subjected to the 10,000 percent prior deposit requirement was also steadily increased. 2/ The public sector, however, was exempted from the prior deposit

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1/ It has been alleged that credit was denied or impossible production and price conditions set in order to force enterprises into either insolvency or breach of contract, thus justifying state intervention or expropriation.

2/ All but the 10,000 percent prior deposit category had been eliminated in 1970. The cost to an importer of a 10,000 percent prior deposit requirement at an annual real interest rate of 10 percent is around 2-1/2 times the value of the import at the end of 90 days, and 3-1/4 times the imported good's value after 120 days.

requirement, giving public agencies an effective monopoly over a number of imports and providing enterprises in the social property area of the economy a significant competitive advantage vis-a-vis the private sector. The public sector accounted for more than half of total imports in 1971 as compared to 34 percent in 1970. Finally, the Government expanded use of tax drawbacks and credit subsidies in an effort to stimulate exports.

#### 5. Price Controls

128. The strict enforcement of price controls in the face of expansive demand management policies was viewed as essential both to meet the Government's anti-inflationary objective and to assure that the distributive gains achieved by labor were sustained and not siphoned back into the profits of monopolists and speculators. The expansion of the social property area would itself extend direct control over pricing in many key sectors, including important wholesaling activities. Thus the Government moved to enlarge the commercial functions of existing state marketing and control agencies, including the Agricultural Marketing Enterprise (ECA), the Society for Agricultural Operations and Construction (SOCOAGRO), and the Society for Assistance to Cooperatives (SACOOP); created several new national marketing agencies--the National Enterprise for Distribution and Marketing (DINAC), the National Poultry Enterprise (ENAVI), and the National Enterprise for Fuel Distribution (ENADI); and nationalized major private wholesaling and importing firms. In addition, the Government itself increasingly entered into direct purchasing agreements with private enterprises, and eligibility for credit through the various selective credit facilities was made contingent on pricing agreements. Finally, citizens' Committees on Supply and Prices (JAPS) were organized at the neighborhood level to keep vigil over the activities of local shopkeepers and assure the availability of popular consumer goods at official prices.

#### 6. Establishment of the Social Property Area

129. The UP Government considered the socialization of large segments of the economy essential if the authorities were to possess the information and perspective necessary for the comprehensive planning of the economy, as well the direct control necessary to assure the desired allocation and distribution decisions. The sectors targeted for nationalization were those providing crucial inputs, including credit and foreign exchange as well as raw materials and intermediate goods, to the rest of the economy. Their profits were viewed, on the one hand, as monopoly rents to be redistributed to labor and to the formerly marginalized members of the society (via lower prices, higher wages, and the financing of the public sector's social programs) and, on the other, as an economic surplus to be tapped to raise investment levels throughout the economy.

130. The first priority was the expropriation of the large copper companies which was completed, with the unanimous approval of the Opposition-controlled Congress, in July 1971. Nationalized earlier in the year were the nitrate, coal, and iron mines. Also incorporated into the social area during 1971 were 16 commercial banks, accounting (along with the State Bank) for more than 90 percent of outstanding credits, and the major enterprises in the metallurgical, metal-mechanical, cement, textile, fisheries, beer, and wholesale marketing sectors.

In all, more than 80 enterprises were expropriated, requisitioned, or intervened in the first year of the Allende Government. 1/

131. The eventual scope of the nationalizations to be undertaken was a matter of bitter conflict between the political left and right and within the UP itself. 2/ In October 1971, the Government sent a draft law to Congress which would have permitted the expropriation of enterprises whose capital at the end of 1969 exceeded E<sup>o</sup>14 million (about US\$1.5 million), while providing guarantees against expropriation to smaller firms. It was estimated that 253 companies (some of which had already been nationalized), accounting for 90 percent of outstanding corporate shares, would have been eligible for expropriation under this criterion. The proposal was rejected by Congress, and the uncertainties created by the continuing lack of definition of the social property area remained a serious disincentive to investment.

#### 7. Land Reform 3/

132. Land reform in Chile, which began in earnest during the Frei Administration, was governed by Law No. 16,640 of July 1967. This law greatly broadened the criteria for expropriation of land to include for the first time excessive size per se, as well as abandonment, poor exploitation, corporate or absentee ownership and breach of pertinent labor laws and regulations. Expropriable under the new law were landholdings in excess of 80 basic irrigated hectares (BIH). 4/ Certain exceptions were made by the law, or left to

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1/ Presentation by Finance Minister Americo Zorilla to the Mixed Budgetary Commission of Congress, November 16, 1971. A variety of procedures were utilized to extend State control. Expropriation of the copper mines required a constitutional amendment, while the iron, nitrate and coal takeovers were negotiated with their foreign owners. Existing legislation permitted the expropriation of industries of prime necessity found to be in violation of the law, but action under this statute required the payment of full court-determined compensation in cash. Because of its high cost, this authority was applied in only a few cases. In addition, however, an existing 1932 law permitted the requisition or intervention of an enterprise in order to prevent disruption of supplies or resolve a labor dispute. While such procedures were legally defined as temporary measures, in practice the affected owner frequently negotiated a sellout or simply abandoned the enterprise. In some cases, particularly the banks, the Government acquired control through the public purchase of shares.

2/ An excellent discussion of the practical and ideological dimensions of the issue within the UP is found in Stefan De Vylder, op. cit.

3/ An extended discussion of the land reform is undertaken in an internal Bank document.

4/ The BIH is legally defined as equivalent to one hectare of first quality, irrigated land in the Maipo valley of central Chile. BIH conversion coefficients had been assigned to each zone and sub-zone on the basis of a nationwide land survey carried out in 1965.

Executive discretion, for lands suitable only for forestry, vineyards forming part of an integrated wine-making enterprise, nonprofit experimental farms, and farms found to be exceptionally well managed and sharing profits with its workers. A landowner expropriated on grounds of excessive size was entitled to retain a "reserve" of up to 80 BIH.

133. The 1967 Law also substantially reduced the cost of expropriation to the Government by permitting compensation at tax assessment value, rather than market price, and allowing a cash downpayment of only 1 to 10 percent of the compensation award, the percentage depending on the cause for expropriation. The remainder could be paid in long-term bonds carrying a 3 percent rate of interest only partially indexed for inflation.

134. During the six years of the Frei Government, some 1,400 farms covering 3.6 million ha were expropriated, the process speeding up somewhat after passage of the 1967 Law. Expropriations greatly accelerated after 1970, however. Almost as many farms were taken in 1971 alone as in the previous six years. In contrast to the farm-by-farm approach taken by Frei, the Allende Government sought to implement the expropriation and settlement process on an area-wide basis. This was deemed essential to assure adequate control over sector planning and to take advantage of presumed economies of scale. The retention of legal reserves by the original owners conflicted with this integrated, area-wide concept, and the Government indicated its intention to seek repeal of that right.

135. While Congressional opposition ruled out modification of the Law, expropriations frequently spilled over the statutory boundaries. Parcels below the 80 BIH limit, legal reserves, and legally exempted forest lands were all taken. In some cases, the Government acted in response to a land seizure by the workers on the grounds that expropriation was thereby made necessary to maintain public order. Almost 1,300 land seizures were reported in 1971, compared with 340 in 1969 and 1970 combined.

136. The Allende Government, consistent with its objective of greater centralized planning and control, also altered somewhat the pattern of land settlement. During the Frei regime, workers on the expropriated estates were organized into cooperative settlements or asentamientos, which in turn entered into a three-year partnership agreement with the Agrarian Reform Corporation (CORA) to form an Agrarian Reform Society (SARA). To this partnership the asentados brought their labor and modest capital, while CORA provided the land, water, credit, and technical and administrative assistance. At the end of the transition period, which was extendable to five years, the asentados were to choose one of three forms of permanent land ownership--individual, cooperative, or mixed--and titles would be assigned accordingly. More than 900 asentamientos were formed during the Frei years, and 109 completed the transition period. Of these, 95 opted for cooperative ownership, and the remaining 14 chose a mixed form.

137. Although the SARAs continued to function at the individual settlement level after 1970, a new regional cooperative known as an Agrarian Reform Center (CERA) was created to exercise administrative and financial control over them. Operations requiring larger capital inputs, such as livestock, forestry and vineyards, were organized as state farms known as Centers of

Production (CEPROs). These organizational modifications apparently resulted, in practice, in little change in the operations of the asentamiento. <sup>1/</sup> The most serious effect was the uncertainty created for asentamiento members. Although some completed their three-year transition periods, no new titles were conferred, contributing to the deterioration of investment incentives in the agricultural sector.

#### 8. Results of the First Year

138. The expansion of consumer demand engendered by the Government's wage, fiscal and monetary policies was met on the supply side by a significant increase in domestic production, the drawdown of accumulated inventories, and a rapid growth of imports. Thus the considerable excess industrial capacity and high international reserves left by the previous administration permitted a substantial supply response, and the rate of inflation in 1971 was, according to the official consumer price index, below that of 1970. Even if inflation exceeded the official figures, it is clear that the economy experienced a considerable increase in real production, and that the rise of both real wages and employment succeeded in achieving a substantial shift of distributive shares in favor of labor. By the end of the year, however, serious supply shortages were becoming evident as inventories and foreign exchange reserves were exhausted, the distribution system was increasingly strained, and capacity limitations were being reached in many sectors.

##### a. Output and Employment

139. The gross domestic product in 1971 grew an estimated 7.7 percent in real terms, resulting in a per capita gain of almost 6 percent. Gross industrial output was up an average 11 percent over 1970, the greatest gains being experienced by consumer durables and nondurables which grew 22 percent and 13 percent, respectively. Meanwhile, value-added in the construction sector rose 11 percent, and agriculture's contribution to GDP, benefitting from a good harvest, was up 7 percent. <sup>2/</sup>

140. Total employment <sup>3/</sup> initially dipped in the last quarter of 1970 and the first quarter of 1971 but then recovered strongly, and its average for the year was about 6 percent above the 1970 level. The unemployment rate in Greater Santiago, which had peaked at 8.3 percent in December 1970, was reduced

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<sup>1/</sup> Solon Barraclough and Almino Affonso, Critical Appraisal of the Chilean Agrarian Reform (November 1970-June 1972), Occasional Paper 73/12, Vienna Institute for Development, 1973. This paper is a summary of a joint FAO/UNDP report submitted to the Minister of Agriculture in November 1972.

<sup>2/</sup> The sectoral breakdown of GDP is found in Appendix II, Tables 2.1 and 2.2, and breakdowns of the index of industrial production are presented in Tables 8.17 and 8.20.

<sup>3/</sup> Data are for Greater Santiago only. Quarterly data by sectors and job classifications are found in Tables 1.15 - 1.19a of Appendix II.

to 3.8 percent by the end of 1971. The absolute number of persons reported as unemployed was cut by more than half. The greatest employment gains were in the manufacturing, construction, and government sectors. Unemployment in construction fell from 27 percent to 10 percent of the sectoral labor force.

b. Prices

141. The problem of measuring and properly distributing through time the rise in prices that occurred between 1970 and 1974 is discussed in the Note on Chilean Economic Statistics. That the official CPI grossly understates the inflation of this period is beyond doubt. The most serious information gap concerns the chronology of estimated total inflation. In fact, different groups and individuals experienced the inflation very differently, depending on what proportion of their respective consumption demands each was able to satisfy at controlled prices as opposed to having to go to the black market or do without.

142. Two attempts have been made to construct alternatives to the official CPI, one by a 1974 Bank mission to Chile, and the other by the Department of Economics at the University of Chile. It is not possible to claim accuracy for either, and the expedient adopted here is to describe the inflation of the period within a range set by the two estimates. In general, the IBRD index would seem to apply best to those individuals who had to rely relatively heavily from the beginning of the period on the black market, while the UC index applies better to persons for whom the major breakdown of price controls did not occur until 1973.

143. With this introductory caveat, it is estimated that consumer prices rose between 27 and 53 percent between December 1970 and December 1971. <sup>1/</sup> In either case, the size of the increase is surprisingly small in view of the massive expansion of the money supply (114 percent) that occurred over the year and suggests a substantial decline in the velocity of money. Why the demand for money should have increased to such an extent in the face of obvious inflationary pressures and uncertainty is not clear. One possibility is that the growing uncertainty led to increased savings and asset liquidation on the part of the middle- and upper-income groups, and that a growing proportion was held in the form of cash to protect the anonymity of black market earnings and/or capital flight. <sup>2/</sup> The real cost of such cash-hoarding would have been extremely high, however, and one would expect it to have been turned over fairly quickly into foreign exchange or some other store of value.

c. Real Wages and Salaries

144. The large adjustment announced in January 1971 of the legal minimum rates of remuneration and family allowances resulted in an immediate, sharp

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<sup>1/</sup> Monthly inflation rates according to the official and two adjusted CPIs are shown in Appendix II, Tables 9.3a-9.3c.

<sup>2/</sup> See: Joseph Ramos, "Inflacion Persistente, Inflacion Reprimida e Hiperstanflacion: Lecciones de Inflacion y Estabilizacion en Chile," Cuadernos de Economia, December, 1977.

increase in the real incomes of the lowest paid workers. The average real receipts of a minimum-income blue-collar and white-collar worker, with 3.5 dependents, were some 56 percent and 23 percent higher during the first quarter of 1971 than their respective averages for all of 1970. Although these values were eroded over the course of 1971 by continuing inflation, the average real receipts for the year were roughly 37-41 percent above the 1970 level in the case of blue-collar workers, and 8-10 percent above for white-collar workers. 1/

145. As shown in Chapter I, average wages and salaries do not closely follow the adjustments of the legal minima. The average real wages of blue-collar workers during 1971 were 18-19 percent above 1970, which when compared to the higher legal adjustment suggests a significant narrowing of wage differentials within the blue-collar ranks. 2/ In contrast, average white-collar salaries rose more rapidly than the legal minimum in 1971, running some 12-19 percent above the level of 1970 in real terms. This is not surprising considering the very tight market created for white-collar workers during the year. Data for Greater Santiago show the white-collar unemployment rate falling from 4 percent in December 1970 to less than 1-1/2 percent a year later. (Over the same period, the unemployment rate for manual workers fell from 12 percent to 5 percent.) Consequently, the intended narrowing of blue-collar/white-collar differentials apparently did not occur during the first year of the UP Government.

146. On the other hand, the wage policy, combined with the growth of employment and lagged price adjustments, resulted in a sharp increase in labor's share of the national income. Wages and salaries accounted for an estimated 61.7 percent of incomes in 1971, as compared to 52.2 percent in 1970 and an average of 48.4 percent for the decade 1960-69. Although the data are subject to considerable error and definitional problems, it is clear that a significant shift of national income in favor of labor was accomplished in 1971. Despite rising output, profits declined in real terms.

d. The Foreign Sector

147. In 1970 the Allende Government inherited a historic high level of international reserves from its predecessor, significant momentum had been achieved in the growth of non-copper exports, and large investments had recently been made to expand copper mining capacity. On the other side of the ledger, however, a high outstanding debt and debt service requirement were also

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1/ From 1971 on, real wages and salaries have been computed monthly (Appendix II, Tables 9.12a - 9.19b) because the high and variable inflation rate and the introduction of intra-year wage adjustments (in 1972) greatly reduce the usefulness of annual averages. Furthermore, because of the indicated doubts regarding the chronology of inflation from 1971 through 1973, and the fact that different individuals were affected differently depending on the relative proportions of their purchases made at official controlled prices and at black market prices, a range of real values is given for this period.

2/ Quarterly average wage and salary data are provided in Appendix II, Tables 9.20 and 9.21.

inherited, and during 1971 the average price of copper fell to US49.3¢ per lb from the 64.1¢ averaged in 1970, representing a real decline of 27 percent. 1/ The drop in the world copper price and declines in output at the three major mines 2/ resulted in a fall in the value of copper exports totaling US\$140 million, or 16.5 percent of the 1970 value. This loss was only partially offset by the continued expansion of non-mining exports which grew 13 percent. In total, export earnings were off 10 percent.

148. A turnaround also occurred in Chile's relations with its traditional lenders. Gross disbursements on medium- and long-term public loans fell from US\$397 million in 1970 to \$190 million in 1971. 3/ Suppliers credits, bilateral assistance, and private bank lending all dropped sharply. Deducting payments for amortization and interest, the shift was from a net resource inflow of US\$156 million to a net outflow of \$52 million.

149. The exchange rate was held fixed until December 1971, even though domestic prices had risen some 34-60 percent since the last devaluation in July 1970. Tightening controls limited the increase of total real merchandise imports to 3 percent, less than the growth of GDP, despite the appreciating real exchange rate. The increase was very uneven across product categories, however, as real consumer goods imports rose 17 percent over the level of 1970. Despite the excellent 1970/71 harvest, the demand impact of the shifting income distribution and the substantial subsidies offered by the multiple exchange rate system was such that food imports alone rose 43 percent in real terms. In contrast, real capital goods imports fell 15 percent reflecting the decline in investment, the reduced availability of suppliers credits, and the tendency of the import control system to treat capital goods as a residual.

150. With the decline in exports and rise in imports the trade balance turned from a US\$95 million surplus in 1970 to a \$90 million deficit in 1971, a deterioration of \$185 million. Net factor payments declined, however, particularly the repatriation of profits, and the current account deficit was held to US\$205 million, a deterioration of \$102 million with respect to 1970. Combined with the worsening capital account situation, and despite the non-payment of \$80 million in debt service due during the last two months of the

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1/ Deflated by IBRD index of Chilean import prices (Appendix II, Table 9.8).

2/ A series of technical problems, the departure of technical and managerial personnel following nationalization, and a series of labor conflicts all contributed to the decline in mine productivity. The total output of the Gran Minería went up, however, as a result of the opening of the Andina and Exotica mines.

3/ Included in these data are bilateral, multilateral, suppliers and other private credits, public bonds, and nationalization compensation agreements, owed or guaranteed by public sector agencies, of greater than one-year maturity, and repayable in foreign currency. For details see Appendix II, Table 4.1.



year, Chile's loss of net reserves during 1971 totaled US\$300 million, or three-fourths of its holdings at the beginning of the year. As reserves fell to the equivalent of only one month's imports and with the situation worsening steadily, the Allende Government in November 1971 announced the suspension of debt service on most outstanding obligations, while it entered into negotiations with its creditors for a rescheduling agreement.

e. Summary

151. Viewed in isolation, 1971 was a year of spectacular progress toward the Government's objectives. Production, employment and real wages were up strongly, and the supply of consumer goods had been augmented by a sizeable jump in imports. While inflation was high, it remained within the limits of Chilean historical experience, and for those with access to goods at official prices it actually fell below the rate of the previous couple of years. At the same time, the process of establishing direct state control over key sectors of the economy was well advanced, and the land reform had been greatly accelerated. The Government also instituted a significant expansion of social expenditures in both new and existing programs. School enrollments grew rapidly, public housing starts rose almost 13-fold, eligibility for free milk was extended to all children to age 15 as compared to the previous cutoff at age six, and social security benefits were improved.

152. Serious problems were becoming apparent, however. Capacity limits had been reached in a number of sectors, breakdowns were occurring in the distribution system, labor-management conflicts were increasingly disruptive, and these factors combined were resulting in serious supply bottlenecks and shortages of goods at the retail level. More and more transactions were being consummated in the black market, further disrupting normal distribution channels, undercutting the Government's proclaimed anti-inflationary and redistribution objectives, and eroding the tax base. Monetary expansion was out of control. Private investment had declined; and, instead of producing investable resources for the rest of the economy, the social area enterprises found their profits squeezed by the expansion of their work forces, increased wages and controlled prices, as well as by inexperienced management. Disagreement both within the Government and between the Government and the Opposition parties was growing regarding the scope of intended expropriations. Finally, international reserves were rapidly being exhausted, and by year-end Chile suspended payment on its foreign debt.

153. In short, by the end of the first year of the Allende Government the economy was faced by severe economic constraints, and it was clear that the momentum achieved in 1971 could not be sustained. Indeed, the continuation of any forward motion and consolidation of the gains already made would depend on substantial reduction in the demand pressures being exerted by fiscal and monetary policies, as well as a strong recovery of the world copper price and increased flows of foreign credits.

C. THE ECONOMIC DECLINE: 1972-SEPTEMBER 1973

154. The next 20 months was a period of deepening crisis. The Government's ability to rein in the rapid growth of demand was limited by its commitment to maintain the real wage gains and expansion of social services achieved in 1971, the breakdown of financial control over the State enterprises and autonomous agencies, and the refusal of Congress to approve the tax increases proposed by the Executive. In addition, the economy was increasingly disrupted by strikes, boycotts, street demonstrations, land invasions, and outright sabotage of plant and equipment. Before it ended, real GDP per capita and real wages had fallen below the level of 1970, agricultural output had declined to the level of the early 1960s, monthly inflation had reached an annualized rate in excess of 1,000 percent, several years of debt service had to be rescheduled, and the nation's net international reserves were more than US\$200 million in the red.

1. Output, Employment and Prices

a. Output

155. Production stagnated in 1972, when the real GDP per capita is estimated to have declined 1.9 percent. The real changes by major sectors are summarized in Table II.1. Agriculture, mining and construction all declined in 1972, the latter being particularly affected by supply shortages, stemming in part from disruptions in the transport sector. New public sector housing starts were cut back 75 percent from the record level of 1971. Manufacturing showed a small average increase in 1972 over 1971 as shown in Table II.2, but the subindices for durable and non-durable consumer goods production and sales fell below the 1971 level, reflecting the weakening of real personal incomes. <sup>1/</sup>

Table II.1: CHILE - YEAR-TO-YEAR CHANGES IN REAL GDP BY SECTORS, 1971-1973

(Percent)

Sectors	1971	1972	1973	Total % Change 1970-73
Agriculture	6.3	-3.0	-15.0	-12.3
Mining	2.0	-2.1	1.6	1.5
Manufacturing	13.7	2.8	-6.5	9.3
Construction	11.4	-9.3	-11.8	-10.9
Commerce	5.1	0.6	-0.5	5.3
Other	6.5	-0.1	-0.7	5.7
Total GDP	7.7	-0.1	-3.6	3.7

Source: Appendix II, Table 2.2a

<sup>1/</sup> See Appendix II, Tables 2.2, 8.19, 8.22 and 8.52.

156. The recession deepened in 1973, GDP and GDP per capita falling 3.6 percent and 5.3 percent, respectively. Agricultural value-added declined an estimated 15 percent, led by a 28 percent reduction in the output of the 14 major crops. 1/ After four consecutive years of slow increase, the land under crops had fallen 21 percent for the 1972/73 crop year. Substantial reductions were also suffered in construction and manufacturing; only mining showed a small gain in the wake of improving international prices.

Table II.2: CHILE: INDEX OF INDUSTRIAL PRODUCTION BY QUARTERS, 1971-1973 (III)  
(1969=100)

Quarter	1971	1972	1973
I	95.2	107.9	102.1
II	113.7	123.5	108.4
III	120.8	121.2	102.1
IV	<u>129.2</u>	<u>117.8</u>	_____
Annual Average	114.7	117.6	104.2 <u>a/</u>

a/ Average of three quarters.

Source: Appendix II, Table 8.16

b. Employment

157. Despite the drop in real economic activity, employment continued to increase. Average employment in Greater Santiago was 2.1 percent higher in 1972 than in 1971, and 3.4 percent higher during the first semester of 1973 as compared to the same period of 1972. 2/ Experience was very uneven across sectors, however, employment falling 28 percent in construction reflecting the materials shortages and curtailment of public works activities. This loss was more than offset by the growth of jobs in the government and

1/ Appendix II, Table 7.3a.

2/ Figures cited are calculated from simple average of labor force surveys carried out in the months of March, June, September and December by the Department of Economics at the University of Chile. (See the Note on Chilean Economic Statistics.) No survey was carried out in September 1973 because of the political upheaval then in progress.

service sectors, particularly in the white-collar and self-employed categories (see Appendix II, Tables 1.16 and 1.17). Incomplete data show a growth of the personnel roles of the general government (excluding public enterprises) of more than 60 percent between September 1970 and September 1973. 1/ Service sector employment continued to expand in 1973, with significant new growth also in manufacturing jobs. In view of the declining output, labor productivity was clearly falling rapidly.

158. The unemployment rate reached the lowest level ever recorded by these surveys, 3.0 percent, in September 1972 and was only 3.1 percent in June 1973, the last survey before the Allende Government was overthrown. During this period, the absolute number of persons reported as openly unemployed in the Greater Santiago metropolitan area was the lowest in more than a decade. Part of this reduction in unemployment, however, was the statistical result of an unusual and unexplained decline in the labor force participation rate that began in mid-1971. If the decline in participation were as great as the data suggest, it would account for around two-thirds of the observed reduction of the unemployment rate. 2/

c. Prices

159. Inflation was accelerating rapidly by the end of 1971. Table II.3 shows the average annual and December-December inflation rates as described by the official CPI and the two adjusted CPIs used in this report. As previously explained, the three indices implicitly assume different degrees of success in repressing inflation via price controls. In practice, experience varied widely among individuals, and it is probably not possible to consider any of the conventionally defined groups as having been affected homogeneously.

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1/ Major groups not included in these data, for lack of information, are teachers and members of the armed forces. (See Appendix II, Table 5.22.)

2/ The mission has not found a satisfactory explanation for such a reduced rate of participation, which, in any event, is probably somewhat exaggerated by the data. For further discussion, see internal Bank working document.

Table II.3 - CHILE - YEAR-TO-YEAR INCREASE IN CONSUMER PRICES,  
1971-SEPTEMBER 1973

(Percent)

	1971	1972	Jan.-September 1973
Annual Averages:			
Official CPI	20.0	77.8	188.1
IBRD-adjusted CPI	34.9	145.6	305.5
UC-adjusted CPI	25.0	105.7	239.9
December-December Change:			
Official CPI	22.2	163.4	192.9 <u>a/</u>
IBRD-adjusted CPI	53.4	253.7	227.9 <u>a/</u>
UC-adjusted CPI	27.2	212.4	244.6 <u>a/</u>

a/ December 1972 - September 1973.

Source: Appendix II, Tables 9.3a - 9.3c

160. Moreover, given the differential effectiveness price controls were bound to have among goods, enterprises, and points in the distribution chain, and the continuing appreciation of the real exchange rate amid an increasingly divergent multiple rate system and tightening administrative controls, massive distortions inevitably arose in relative prices as well as large unintended shifts in the distribution of income and wealth. For example, with price controls more easily administered at the wholesale than at the retail level, it is likely that retailers were able to gain substantial windfall profits in black market operations. Similar rewards were available to those with access to foreign exchange or domestic credit at official exchange and interest rates. As illustrations of the opportunities existing, by 1972 the black market exchange rate was ten times the average legal exchange rate; and while the effective nominal interest rates on short-term loans from the banking system ranged from 18 to 51 percent, consumer loans were paying from 74 to 254 percent. 1/

## 2. Wages

161. The Government's wage policy continued to be full compensation for the loss of purchasing power due to inflation since the last adjustment, with greater increases for the lowest paid workers and selected groups in the public sector--e.g. members of the armed forces. Thus in January 1972, the

1/ Cerda and Ovando, op. cit. By 1973, the ratio between the black market and average legal exchange rates reached 40:1.

sueldo vital was raised 22 percent, equivalent to the rise in the official CPI during 1971, while a 50 percent increase was decreed for the blue-collar minimum wage. At the same time, blue-collar and white-collar family allowances were raised 38 percent and 44 percent, respectively. With inflation accelerating, another pay adjustment was declared for October 1972, amounting to 100 percent for the SV and 111 percent for the SM. Family allowances for both blue-collar and white-collar workers were doubled. A further general wage and salary adjustment of 60.8 percent was approved in May 1973 and made retroactive to April 1.

162. As previously indicated, however, actual inflation exceeded that reported by the official CPI, as goods disappeared from store shelves and transactions shifted to the black market. Table II.4 shows the impact of these remuneration and family allowances adjustments on the real receipts of a minimum wage or salary blue-collar and white-collar worker having 3.5 dependents. For reasons presented earlier, the evolution of real receipts after 1970 are depicted in a range set by the two adjusted price deflators described in the Note on Chilean Economic Statistics.

Table II.4: CHILE - INDEX OF AVERAGE ANNUAL REAL RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR AND WHITE-COLLAR WORKERS, 1970-1973 a/

(1968=100)

Year/Quarter	Blue-Collar Workers	White-Collar Workers	Ratio of Average Blue-Collar to Average White-Collar Receipts (%)
1970	118	100	51
1971	I 186-182	125-122	65
	II 176-169	118-113	65
	III 155-162	103-107	65
	IV 132-152	88-101	65
1972	I 170-186	101-111	72
	II 138-157	82-94	72
	III 105-116	63-69	72
	IV 130-156	74-89	75
1973	I 93-136	52-76	77
	II 65-116	35-62	80
	III 48-70	26-38	80

a/ Minimum blue-collar receipts include the industrial minimum wage plus the family allowance paid by the Social Insurance Fund (SSS); minimum white-collar receipts are the sum of the sueldo vital and the family allowance paid by the Social Security Fund for Private Sector White-Collar Employees (EMPART). Both workers are assumed to have 3.5 dependents.

Source: Appendix II, Table 9.17a-b and 9.19a-b.

163. While the timing and extent of the eventual erosion of purchasing power are significantly different depending on which of the two deflators is used, the overall trends are the same. The massive wage and salary adjustments of January 1971 resulted in a quick and considerable improvement in the real earnings of workers in the lowest pay brackets. These gains rapidly began to fade away, however, as inflation accelerated. Despite the increasing frequency of adjustments, by the third quarter of 1972 the real minimum wage had fallen below the average level of 1970, and by the third quarter of 1973 it had fallen to or below the levels of the mid-1960s. In the meantime, smaller nominal adjustments were applied to the white-collar minimum salary: by the end of 1971, its real value had already fallen below the 1970 average, and it declined steadily thereafter. It is likely that the SV had by then become irrelevant as a salary standard.

164. Table II.5 describes the course of average wages and salaries over the same period. Comparison with Table II.4 suggests that wage differentials among blue-collar workers, initially squeezed by the large adjustment of the minimum wage at the beginning of 1971, gradually stretched out again. Although the minimum and average real wage were both deteriorating by 1972, the erosion of the receipts of minimum pay workers was much faster as the higher paid and better organized workers were apparently more successful in protecting their incomes through collective bargaining. Similarly, the average pay of white-collar workers held much better than the legal minimum, but white-collar workers on average appear to have been somewhat less successful in defending themselves against inflation than were blue-collar workers. Alternatively, the divergence of the average from the minimum may simply reflect the latter's growing irrelevance as the proportion of workers actually employed at that pay level declined. At any rate, it appears that for both wage and salary workers the gains achieved in 1971 had disappeared, and by mid-1973 many workers must have found that their real purchasing power had slipped back to the level of the mid-1960s.

Table II.5: CHILE - INDICES OF REAL AVERAGE WAGES AND SALARIES, 1970-1973  
(April 1968=100)

Year/Month	Blue-Collar Wages	White Collar Salaries
1970 April	118	143
1971 January	135-129	157-150
April	149-141	186-176
July	149-147	179-176
October	136-150	159-175
1972 January	134-150	150-168
April	127-138	139-150
July	107-129	121-145
October	112-120	127-135
1973 January	96-129	100-135
April	66-113	65-112
July	61- 96	60- 94

Source: Appendix II, Table 9.21

### 3. Fiscal Performance

165. Table II.6 summarizes the evolution of central government revenues and expenditures in real terms during 1971-1973. 1/ The expansion of the central government budget continued in the second and third years of the UP Administration. After the 58 percent increase in 1971, nominal expenditures rose 85 percent in 1972 and almost 400 percent in 1973. 2/ With inflation also accelerating, however, these nominal increases represented real growth of only 10 percent and minus 17 percent, respectively, as compared to 35 percent in 1971. Real investment expenditures actually declined in 1972 and 1973, as a consequence of increasing supply shortages and disruptions in the transport sector.

Table II.6: CHILE - CENTRAL GOVERNMENT REVENUE AND EXPENDITURES, 1970-1973

(Millions of pesos at December 1969 prices) a/

	1970	1971	1972	1973	% Change 1970-73
Current Revenues <u>b/</u>	17.0	17.0	15.7	9.9	-41.8
Current Expenditures	<u>13.7</u>	<u>18.3</u>	<u>21.3</u> <u>d/</u>	<u>18.6</u> <u>d/</u>	<u>+35.8</u>
Current Balance	3.3	-1.3	-5.6	- 8.7	n.a.
Capital Expenditures <u>c/</u>	<u>4.0</u>	<u>5.5</u>	<u>4.9</u>	<u>3.1</u>	<u>22.5</u>
Overall Balance	-0.7	-6.8	-10.5	-11.8	1,585.7

a/ Nominal data for 1971 and 1972 are deflated by official CPI; 1973 data are deflated by a simple average of the official and IBRD adjusted CPIs.

b/ Includes nontax current revenues.

c/ Net of capital revenues and excluding debt amortization.

d/ Includes some expenditures financed directly by the banking system.

Source: Appendix II, Table 5.2

1/ It should be noted that both the tax and expenditure data in Table II.6 are deflated by the official consumer price index through the Allende Administration on the presumption that Government purchases were transacted at official prices. If our purpose were to measure the real sacrifice imposed by the tax system on taxpayers, the IBRD or UC adjusted CPIs would be more appropriate deflators. Application of the IBRD deflator would show real tax receipts falling after 1970, reaching only 55 percent of the 1970 level by 1973.

2/ Expenditures during the last quarter of 1973 were the responsibility of the Pinochet Government.



166. Executive efforts to raise property and capital gains taxes were rejected by Congress, while the latter's legislation to impose a tax on foreign exchange sales was vetoed by the Executive. 1/ Meanwhile, a growing proportion of economic activity was shifting to black market channels, further eroding the tax base. In 1971, increases in income, property, and sales taxes had more than offset the loss of copper tax revenues that derived from the low copper price and the discriminatory exchange rate applied to the sector (Table II.7). By 1972, however, the revenue yields of all tax categories were falling in real terms with the sole exception of recently introduced production taxes. 2/ Thus, the deficit of the central government alone rose to unprecedented levels--reaching the equivalence of around 22 percent of GDP in 1973. Central government expenditures by then amounted to about 39 percent of GDP. 3/

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1/ These taxes would, in any event, have fallen far short of closing the fiscal gap. By the Government's own projections, the measures proposed in 1972 were to raise total collections by about 3.2 million pesos (prices of December 1969), or one-third of that year's eventual deficit.

2/ See Appendix II, Table 5.8.

3/ Because of the structural changes occurring in the size and definition of the social area of the economy, the large direct credits made available to public sector enterprises and agencies outside of the normal budgetary procedures, and the gaps in information from many of these enterprises and agencies, the consolidated public sector accounts presented in Tables 5.13-5.18 of Appendix II are incomplete and subject to considerable error. Although it is known that the total deficit of the public sector during these years are substantially greater than that shown above for the central government alone, no effort is made here to quantify it.

Table II.7: CHILE - CENTRAL GOVERNMENT TAX REVENUES BY TYPE OF TAX, 1970-1973  
(Thousands of pesos at December 1969 prices)

	1970	1971	1972	1973
Direct Taxes	6,161	5,260	3,784	3,400
Income	3,027	4,082	3,110	3,063
Property	642	859	605	290
Copper	2,493	320	45	-
Other	-	-	24	47
Indirect Taxes	8,563	9,914	9,830	7,082
Sales	3,814	5,124	5,019	3,659
Production	1,112	1,287	1,673	1,417
Foreign Trade	1,646	1,565	1,422	696
Other	1,991	1,938	1,715	1,309
Total	14,724	15,174	13,614	10,483

Source: Appendix II, Table 5.8

#### 4. Monetary Policy

167. Despite increases in the commercial bank reserve requirement and the Central Bank's rediscount rate, the expansion of credit continued unabated. After the eleven-fold expansion in 1971, by August 1973, Central Bank local currency credit to the public sector had grown 12 times relative to the end of 1971--i.e., a total growth of Central Bank credit to the public sector of 125 times the level outstanding at the end of 1970. Local currency credit to the public sector from the monetary system as a whole grew 83 times over the entire period. The comparable figure for private sector credit shows a growth of 2.8 times from the end of 1971, for a total expansion of 4.5 times since the end of 1970. By August 1973, the private sector share of bank system credit had fallen to 14 percent. The money supply grew 576 percent from the end of 1971 through August 1973, for a total expansion of 1,345 percent relative to December 1970.

#### 5. The Foreign Sector

##### a. Exchange Rate Policy

168. The deteriorating balance of payments and dwindling reserves led the Government to abandon its pledge to maintain the exchange rate, and the escudo was devalued in December 1971. Despite further nominal devaluations in August 1972, May 1973, and August 1973, the exchange rate lagged significantly behind the accelerating domestic inflation, and the escudo appreciated in real terms to its highest level in history (Table II.8).

Table II.8: CHILE - AVERAGE ANNUAL EXCHANGE RATES, 1970-73

(Escudos per US dollar)

Year	Nominal Exchange Rate <u>a/</u>	Ratio-Domestic to International Prices <u>b/</u>	Real Exchange Rate (1969 escudos per US\$) (1) ÷ (2)
1970	11.83	1.218	9.7
1971	13.47	1.568	8.6
1972	21.87	3.523	6.2
1973 Jan.-Sept.	37.56	11.077	3.4

a/ Weighted average of legal exchange rates. Data for 1970-1972 are taken from Behrman, op. cit.; 1973 calculation uses the average banker's rate.

b/ (1969=100). The Chilean consumer price index (IBRD adjusted) is taken as a proxy for domestic prices. The international price index applied is a weighted average of the CIF index of prices of developed country manufactured exports and the IBRD price indices for agricultural exports and 34 commodities.

Source: J. Behrman, op. cit.; Central Bank of Chile; National Statistical Institute; and mission estimates

169. The December 1971 adjustment also marked the return to multiple exchange rates for imports. 1/ The rate applied to food and fuel oil imports remained unchanged at E<sup>0</sup>12.21 to the dollar, while the rate applied to raw materials and government transactions rose to E<sup>0</sup>15.80 per dollar, capital goods and spare parts to E<sup>0</sup>19.00, and consumer goods defined as sumptuary traded at E<sup>0</sup>25.00 per dollar. The August 1972 devaluation raised food and fuel imports to E<sup>0</sup>20 per dollar with the other categories stretched out to a top rate of E<sup>0</sup>80 per dollar for luxuries. The May 1973 adjustment expanded the range from E<sup>0</sup>20 to E<sup>0</sup>240, and the August 1973 adjustment created a rate

1/ Foreign exchange operations in Chile were conducted through two legal markets: the bankers' market, which handled all trade-related receipts and payments, Government transactions, and certain private capital movements; and the brokers' market where most nontrade-related invisibles, private remittances, etc. were transacted. At the beginning of 1971, a multiple rate system already existed, in effect, in the brokers' market by virtue of differential taxes applied to transactions there.

spectrum with E<sup>0</sup>25 for food and raw materials, now combined into a single category at one end, and a rate of E<sup>0</sup>300 for certain luxury goods at the other. 1/

170. The adjustment of August 1972 also introduced multiple exchange rates on exports, ranging from E<sup>0</sup>20 to the dollar for mining exports excluding iron, to E<sup>0</sup>30 per dollar for certain industrial exports. The range was successively widened over time, and devaluation was somewhat more rapid than in the case of imports. By August 1973, export rates ranged from E<sup>0</sup>45-300 to the dollar, copper in particular receiving the lower rate. One important consequence of this differential was to reduce the flow of copper profits and taxes to the Treasury, shifting them instead to the Central Bank where they were used directly to subsidize food and other imports.

b. Other Exchange Restrictions

171. Many of the trade restrictions long in use in Chile, but simplified or reduced during the Frei Administration, were reintroduced after 1971. The 10,000 percent prior deposit requirement continued to be used as a device to shift control over imports to the public sector, but waivers were allowed when the administrative capacities of the pertinent agencies became strained. Mandatory delays for import cover were reinstated and lengthened over the period. In 1972, the Government began comprehensive import budgeting, in which annual allocations were assigned by product and sector and "indicative" budgets were drawn up for each importing enterprise. These budgets were modified with changing priorities and forecasts of exchange availability, and were effected via the import registration process managed by the Central Bank.

c. The Balance of Payments

172. The average copper price declined further to US48.6¢ per lb in 1972, a real decline of 11 percent relative to 1971, before rebounding strongly to 80.9¢ in 1973. 2/ The average through the first nine months of the year was 74.7¢ per lb. The value of copper exports thus declined US\$83 million, or 12 percent, in 1972 but rose by \$438 million (71 percent) in 1973 to go over US\$1 billion for the first time in Chilean history. Non-copper exports also declined in 1972 and then regained part of the loss in 1973, as seen in Table II.9.

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1/ In July 1973, the brokers' market was formally integrated into the bankers' market, with dollar exchange rates ranging by August from E<sup>0</sup>140 to E<sup>0</sup>895.

2/ Appendix II, Table 8.6.

Table II.9 - CHILE - SUMMARY OF MERCHANDISE TRADE, 1966-73

(Millions of US dollars)

	Average 1966-70	1971	1972	1973
<u>Exports</u>	<u>987</u>	<u>997</u>	<u>847</u>	<u>1,311</u>
Copper	740	702	618	1,056
Other mining	118	116	105	127
Industrial	103	140	103	103
Agricultural	26	39	21	25
<u>Imports</u>	<u>846</u>	<u>1,015</u>	<u>1,103</u>	<u>1,447</u>
Consumer goods	127	178	299	314
Food	(53)	(89)	(180)	(180)
Other	(74)	(89)	(118)	(134)
Intermediate goods	477	589	618	890
Food	(105)	(104)	(158)	(336)
Fuels	(29)	(57)	(64)	(71)
Other	(343)	(428)	(396)	(482)
Capital goods	241	248	186	243
Merchandise Trade Balance	141	-18	-255	-137

Source: Appendix II, Tables 3.2 and 3.4

173. Imports continued to grow in nominal terms, rising 9 percent in 1972 and 31 percent in 1973. Food imports again led the expansion, rising 76 percent in 1972 and 53 percent in 1973. Total food import costs in 1973 were 3.7 times what they had been in 1970 and 3.3 times the 1965-69 average.

174. Prices were rising rapidly in international markets, however, and a somewhat different picture of imports emerges when deflation is made for world inflation (Table II.10). <sup>1/</sup> Total imports in real terms grew little from 1970 to 1973, but there was a major shift in the pattern of imports toward food to the detriment of capital goods and nonfuel raw material. By 1973, food imports, measured in 1970 prices, accounted for more than one-third of total imports as compared to only 14 percent three years earlier. At the

<sup>1/</sup> No index of Chilean import prices is available. The international commodity price indices used here as deflators are listed in the footnote to Table II.10.

same time, the share of capital goods in the total fell from 29 percent to 17 percent. Reflected clearly in these data are the change in the structure of demand between consumption and investment and the supply bottlenecks appearing by 1972 in the productive sectors of the economy. Also reflected, of course, is the massive subsidy provided to food imports by the multiple exchange rate system. The leveling of real food imports in 1973, in the face of a major decline in domestic production, would seem to confirm the large drop in real wages described above.

Table II.10: CHILE - REAL IMPORTS BY TYPE, 1970-73

(Millions of US dollars at 1970 prices) a/

	1970	1971	1972	1973
<u>Consumer goods</u>	<u>150.1</u>	<u>176.2</u>	<u>275.8</u>	<u>212.0</u>
Food	53.9	93.8	177.1	119.3
Other	96.2	82.4	98.7	92.7
<u>Intermediate goods</u>	<u>529.6</u>	<u>577.5</u>	<u>560.8</u>	<u>582.2</u>
Food	84.7	110.0	155.1	222.8
Fuel	28.5	43.0	42.5	34.2
Other	416.4	424.5	363.2	325.2
<u>Capital goods</u>	<u>276.2</u>	<u>228.6</u>	<u>154.8</u>	<u>168.3</u>
Total	956.0	982.3	991.4	962.5

a/ Food products are deflated by IBRD food price index; capital goods and other consumer goods by the index of manufactured goods prices; fuel by the petroleum price index; and other intermediate goods by an average of the manufactured goods index and index of 34 commodities.

Source: Table II.9 and mission estimates

175. Merchandise imports exceeded exports by US\$255 million in 1972. Adding non-factor services, the resource balance showed a deficit of US\$351 million, a net deterioration of \$260.5 million compared to 1971 and \$446 million relative to 1970. Despite a sharp reduction of interest payments abroad, the current account deficit reached US\$405 million, equivalent to more than 6 percent of the 1972 GDP. The increase in copper revenues in 1973 more than covered the higher cost of imports and interest on the debt, and the resource and current account deficits were reduced to US\$91 million and \$288 million, respectively.

176. The capital account improved markedly in 1972 and 1973, as loans from the socialist countries and Latin American countries replaced Chile's traditional credit sources. A rescheduling agreement was reached with private U.S. banks in early 1972, and later in the year member nations of the Paris Club agreed to reschedule debt service falling due between November 1971 and the end of 1972. Later negotiations would become necessary to reschedule 1973, 1974, and 1975 service payments as well, but these were not completed until after the change of government in September 1973. During this period of prolonged negotiations, Chile resumed debt service at the reduced levels negotiated with those countries and private entities with which bilateral accords had been reached, but service remained suspended to Chile's major creditor, the United States, whose various public lending agencies held more than half of the outstanding debt and with whom a bilateral agreement was stymied by the issue of compensation to the expropriated mining companies. The net impact on the flow of resources stemming from public medium- and long-term credits is shown in Table II.11.

Table II.11: RESOURCE FLOWS BETWEEN CHILE AND FOREIGN LENDERS, 1970-73

(Millions of US dollars)

	1970	1971	1972	1973
A. Commitments	342.9	277.1	359.6	328.4
B. Disbursements	397.3	190.5	257.5	315.8
C. Repayments	<u>-163.4</u>	<u>-161.8</u>	<u>-71.1</u>	<u>-119.9</u>
D. Net disbursements (B-C)	233.9	28.7	186.3	195.9
E. Interest	<u>-77.9</u>	<u>-80.4</u>	<u>-26.5</u>	<u>-36.7</u>
F. Net resource Flow (D-E)	156.0	-51.7	159.8	159.2

Source: Appendix II, Table 4.1

177. As a result of the capital account improvement, the overall balance of payments improved relative to 1971 but remained heavily in deficit. By the end of 1973, the reserve loss since 1970 exceeded US\$640 million and the net reserve position was more than \$230 million negative. The evolution of the balance of payments over the entire period is summarized in Table II.12.

Table II.12: CHILE - SUMMARY BALANCE OF PAYMENTS AND INTERNATIONAL RESERVES, 1970-73

(Millions of US dollars)

	1970	1971	1972	1973
Balance of Goods and Non-factor Services	95	-90	-351	-191
Net Factor Payments	-199	-119	-59	-110
Net Transfers	<u>2</u>	<u>4</u>	<u>5</u>	<u>13</u>
Current Account Balance	-103	-205	-405	-288
Net Disbursements of Public Medium- and Long-Term Loans <u>a/</u>	215	102	216	242
Other Capital Transactions and Errors and Omissions, net	<u>- 2</u>	<u>-197</u>	<u>-40</u>	<u>-66</u>
Change in Net Reserves	113	-300	-229	-112
Net Reserves, end of year	409	109	-120	-231
Gross Reserves, end of year	502	298	251	378
(Months of CIF imports)	(6.3)	(3.2)	(2.7)	(3.1)

a/ Figure differs from that in Table II.11 because of differences in debt classifications. (See Tables 3.1a and 3.1b in Appendix II.)

Source: Appendix II, Tables 3.1a and 3.7

## 6. Structural Transformation

### a. Expansion of the Social Property Area

178. The bill proposed by the Government in October 1971 that would have limited expropriations to enterprises with assets exceeding E<sup>0</sup>14 million (as of the end of 1969), was rejected by Congress. The Christian Democrats countered by offering a constitutional amendment that would have required that all transfers of private firms to the social property or mixed areas of the economy be authorized by a specific act of Congress. It would further have required that requisitions of enterprises under the 1932 Law be authorized only when the supply interruption was the demonstrated fault of the firm's ownership or management and that such requisitions be subject to court appeal. All other interventions would be for a maximum period of 90 days, renewable for an additional 90 days.



179. The Christian Democratic proposal, passed by Congress in February 1972, was unacceptable to the Executive, and attempts to work out a compromise list of expropriable industries failed. The issue evolved into a major political confrontation over the vote necessary to override a presidential veto of a constitutional amendment, while the substantive question was left hanging unresolved. 1/ In the meantime, requisitions and interventions continued, with some 40 or more enterprises taken over during the massive strike of October 1972 led by truckers, shopkeepers, and professionals. By the middle of November, the Allende Government had added 119 enterprises to the social area of the economy with an additional 41 enterprises at various stages of state acquisition. 2/

180. In January 1973, the Government submitted a bill to Congress calling for the expropriation with compensation of 90 monopolistic or strategic enterprises and the establishment of a special commission to study and regularize the situations of firms that had been intervened or requisitioned. The possibility thereby raised that some firms might be returned to their owners was met with strong opposition by some of the groups within the UP coalition. In April, the long simmering constitutional issue was brought to a head when the Government overruled a decision by the Controller General of the Republic that the previous requisitioning of 43 enterprises had been illegal and that all such requisitions were, in any event, temporary. 3/ Also in April, the Government submitted to Congress a revised list of 93 enterprises to be expropriated and requested authorization for the permanent takeover of all firms intervened or requisitioned before April 30. In response, the Congress formally rejected by majority vote the Executive veto of the Christian Democratic amendment.

181. On June 29, in the wake of an aborted military revolt, worker occupations led to the takeover of 244 enterprises in a single day. 4/ The Government indicated its intention to return most of these firms to their owners once agreements could be negotiated between the owners and the workers. Nevertheless, negotiations between President Allende and the head of the Christian Democratic Party at the end of July to expedite that

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1/ While the Opposition parties lacked the two-thirds vote clearly required to override the veto of ordinary legislation, the Law was vague regarding whether two-thirds or a simple majority was needed in the case of a constitutional amendment. This confrontation is described in detail in Paul E. Sigmund, The Overthrow of Allende and the Politics of Chile, 1964-1976, University of Pittsburgh Press, Pittsburgh, 1977.

2/ Presentation of Finance Minister Orlando Millas Correa to the Mixed Budgetary Commission of Congress, November 15, 1972.

3/ Under Chilean law, a decision by the Controller General could be overruled by a Decree of Insistence signed by all members of the Cabinet.

4/ Sigmund, op. cit.

process, as well as resolve other outstanding issues including the constitutional amendment defining the social property area, ended in impasse. That impasse was resolved only by the September 11 change of government.

b. The Agrarian Reform <sup>1/</sup>

182. The rate of land expropriation continued to accelerate in 1972. A total of 4,409 farms covering 6.4 million ha were expropriated by the Allende Government. By the end of the period, 296 CERAs and 76 CEPROs had been established, encompassing an estimated 50,000 families. Land ownership remained in state hands, however; no new titles being distributed during the Allende years.

Table II.13: CHILE - PROGRESS OF LAND EXPROPRIATIONS, 1965-73

(Thousands of hectares)

Year	No. of Farms	Area
1965-1970 (Total)	<u>1,400</u>	<u>3,557</u>
1971	1,374	2,027
1972	2,189	3,013
1973	<u>836</u>	<u>833</u>
Subtotal 1971-73	4,409	6,409
Total 1965-73	5,809	9,966

Source: Internal Bank working document, Annex I, Table 23

183. Combined with the land expropriated under Frei, a total of almost 10 million ha, almost half of Chile's total agricultural land, was taken. Moreover, the expropriations were concentrated among the richest lands in the country, more than 60 percent of irrigated land being transferred to the State for eventual distribution to peasant farmers and landless workers. Even at its most turbulent, the reform was carried out with remarkably little violence and destruction of property. The uncertainties and investment disincentives ultimately created, however, led to serious decapitalization and the precipitous decline in production suffered in 1972 and 1973.

184. The 1967 Agrarian Reform Law had significantly reduced the attractiveness of land as an investment apart from its productive exploitation, while offering security against expropriation to the landowner whose holdings

<sup>1/</sup> Further information and details on the Chilean agrarian reform process is available in an internal Bank document.

were within the 80 BIH limit, and with respect to an expropriated landowner's legal reserve, so long as the farm was operated efficiently. The marked acceleration of the growth of agricultural output that occurred in the mid-1960s suggests that indeed the reform, along with improved sectoral terms of trade, led to more efficient land use and an increased application of modern inputs. 1/

185. This positive stimulus was seriously affected, however, by the public statements and accelerated expropriations of the Allende Government which threw into question the security of property rights of farms of less than 80 BIH and of the legal reserves. Some officials indicated that the upper limit of landholdings would eventually be lowered to 40 BIH, or even 20 BIH. 2/ Similar uncertainty was created for the asentados with the cessation of land-titling. Labor and other inputs--the latter heavily subsidized by the State--were increasingly concentrated on the peasants' individual garden plots, which in 1971 accounted for at least 13 percent of cropland in the reformed sector. The lack of wage incentives to devote effort to the collectively farmed lands, already apparent under Frei, was intensified by the growing disparity between official and black market prices. Finally, it should be noted that under neither administration did the agrarian reform per se provide significant benefits to the poorest members of Chile's rural labor force. Only around 12 percent of agricultural labor received land, and with preference being given to those previously attached to the expropriated estates, the indigenous communities, unattached day laborers, and minifundistas remained largely unaffected.

## 7. Summary

186. The elastic supply conditions, that had given leeway to the Government's expansionary and redistributive policies in 1971, were by 1972 exhausted. The Government was not able, however, to stem the demand pressures it had set in motion. As a consequence, inflation accelerated, supply shortages stifled production, and the real income gains achieved in 1971 were eroded away and, indeed, reversed. The economic decline was exacerbated by a drop in world copper prices in 1971 and 1972, by the withdrawal of international credits in 1971 and by the increasing tension and turmoil that characterized the domestic political situation.

187. The disenchantment of Chile's traditional lenders and the growing internal conflict were in part, of course, caused by, as well as contributors to, the economic difficulties. Moreover, although no confident "might-have-been" judgments can be made regarding Chile's political evolution, it seems

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1/ See note, page 53.

2/ Meanwhile, a political confrontation similar to that described above regarding industrial expropriations was created between Congress and Executive when the Christian Democrats submitted a constitutional amendment to establish the nonexpropriability of farms below 40 BIH.

clear that the economic constraints posed by the fallen copper price and reduced credit could have been managed without major damage to the economy or to the Government's social and economic objectives. Viewed from the opposite direction, even had copper prices and capital flows remained at or above their former levels throughout the period of the UP Government, the economy could not have withstood for very long the strains placed upon it by the massive fiscal deficits, exploding money supply, appreciating exchange rate, consumption subsidies and gross price distortions that followed from the Government's own policies.

188. On September 11, 1973, a military coup de etat toppled the Government of President Allende. Political parties were proscribed, the Congress closed, and all subsequent legislation has been by decree. The new Government proclaimed its intention not only to restore economic stability and normalize relations with foreign creditors, but also to reverse the approach to economic development that Chile had pursued for four decades, of which the UP policies were seen as an exaggerated extension.

## CHAPTER III

### THE ECONOMY SINCE SEPTEMBER 1973

#### A. MACROECONOMIC OVERVIEW

##### 1. Introduction

189. The military junta that assumed control of the government by a coup d'etat in September 1973 faced an extremely difficult economic situation. Inflation exceeded 20 percent per month (an annual rate of about 1,000 percent); production and employment were falling; the nation was unable to service its foreign debt; international reserves were negative; the central government and public sector enterprises were operating at enormous deficits; and the ownership and management of hundreds of the country's most important private enterprises were in disarray as government interventors were removed from their posts in the midst of the political upheaval, just as their private sector predecessors had been a short time earlier. Chile depended heavily on imported oil, the price of which was now rising rapidly. On the other hand, the new Government had the advantage of a high and still rising world copper price and the indicated willingness of Chile's major traditional lenders to resume operations and to reach a rapid agreement for the rescheduling of service payments due in 1973 and 1974.

190. Among the actions taken during the first few months of the Pinochet Government were: the freeing of many prices and the massive adjustment of public enterprise tariffs and other remaining controlled prices; devaluation and simplification of the exchange rate and reinstatement of a crawling peg; a large new wage and family supplement adjustment, including the unification of the white-collar and blue-collar minimum wages and family allowances; the annullment of interventions and requisitions and the initiation of the process of returning socialized enterprises to the private sector; a substantial increase in taxes; the cessation of land expropriations; and the opening of negotiations for the rescheduling of the external debt, a standby agreement with the IMF, and the settlement of the outstanding expropriation claims of foreign investors. The above policy measures were expanded and reinforced over time evolving, inter alia, into major reforms of the international trade regime, tax system, public sector budgetary process, financial system, social welfare programs, and the organization of reformed sector farmers.

##### 2. The Short-Term Context

191. The economy rebounded in 1974, after the declines of the two previous years. GDP rose 5.6 percent in real terms, but growth was very uneven among sectors, as shown in Table III.1. In response to improved price incentives, increased public works spending, and stabilization of the political situation, recovery was particularly strong in agriculture, mining and construction. Industrial output remained depressed, however, reflecting

the continued weakness of private sector demand as well as the considerable disorganization associated with the transfer of expropriated and intervened assets back to private ownership and management. Investment demand continued to account for a small proportion of GDP (Table III.2), despite the rise in public works activity. 1/

192. Employment also stagnated in 1974, and the unemployment rate rose as labor force participation returned to pre-1972 levels. At the same time, little progress was made in bringing down the rate of inflation, which totaled 376 percent for the year as compared to 405 percent in 1973. 2/ Despite rapid import growth, the balance of payments improved, buoyed by the high copper price and increased mine output, the strong growth of non-copper exports, and the return of foreign and domestic capital. By the second half of the year, however, the copper price was falling sharply, and international lenders had once again begun to withhold their support.

193. These factors contributed to deteriorating public confidence as 1975 opened, and inflation began to accelerate, again exceeding 20 percent per month. Moreover, by the end of the first quarter, the economy clearly faced a serious balance of payments crisis. Between 1974 and 1975, the fall in the world demand for copper represented for Chile a loss in foreign exchange earnings from that source of more than US\$825 million. In addition, 1975 saw a net outflow of more than US\$200 million to Chile's foreign lenders. 3/ Combined, these two events signified a decline in the capacity to import equivalent to about 12.5 percent of the 1974 GDP and 46.5 percent of 1974 exports. With no international reserves to buffer the impact, there was no alternative to a sharp contraction of the economy.

194. In preference to the reestablishment of economic controls and a unilateral moratorium on foreign debt service payments, the Government introduced a severe austerity program relying on orthodox monetary and fiscal policies and devaluation of the exchange rate. Public sector expenditures were drastically cut back, taxes were increased, and credit was tightened. These policies have been widely criticized for having caused the steep recession that followed. While one may argue the relative merits of different approaches to managing the crisis, however, it is clear that the massive foreign exchange constraint made recession inevitable, whatever

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1/ As indicated in Chapter II, Chilean national accounts data must be treated with great caution because of the largely unmeasured price distortions and structural changes of the past several years. The numbers presented here must thus be taken only as indicating orders of magnitude (see the Note on Chilean Economic Statistics, Appendix I).

2/ IBRD adjusted CPI. Annual inflation rates, unless otherwise indicated, are for the twelve-month period ending December 31.

3/ Net service of medium- and long-term loans to the public sector or guaranteed by the public sector. (See Table III.10.)

Table III.1: CHILE - YEAR-TO-YEAR CHANGES IN REAL GDP BY SECTORS, 1974-1977

(Percent)

Sectors	1974	1975	1976	1977	Total % Change 1973-77
Agriculture	16.7	3.8	2.6	14.1	41.9
Mining	15.9	-5.0	14.5	2.0	28.8
Manufacturing	0.9	-27.4	6.8	12.2	-12.2
Construction	20.0	-31.0	-18.8	3.5	-30.4
Commerce	2.5	-15.2	1.2	17.9	3.8
Other	<u>4.1</u>	<u>-0.4</u>	<u>3.5</u>	<u>3.0</u>	<u>10.5</u>
Total GDP	5.7	-11.3	4.1	8.6	6.0

Source: Appendix II, Table 2.2a

Table III.2: AGGREGATE SAVINGS AND INVESTMENT RATIOS, 1973-76

(Percent of GDP)

	1973	1974	1975	1976
Gross domestic investment	13.9	13.5	6.3	5.4
Fixed investment	(13.3)	(12.4)	(10.1)	(8.7)
Change in inventories	(0.6)	(1.1)	(-3.8)	(-3.3)
Resource balance	-1.8	0.4	-3.5	4.0
Exports	(12.7)	(16.9)	(19.7)	(20.8)
Imports	(-14.5)	(-16.5)	(-23.2)	(-16.8)
Gross domestic savings	12.1	13.9	2.8	9.4
Net factor incomes abroad	+0.7	+1.1	+2.7	+2.5
Gross national savings	11.4	12.8	+0.1	6.9

Source: Appendix II, Table 2.5a

the policies adopted. Although inflation was not greatly affected in the short-run, the program did succeed in reducing imports to a financeable level, enabling Chile to service its large external obligations.

195. Nevertheless, the social costs of the enforced austerity were extremely high in terms of lost production and employment, as the Chilean economy suffered its worst recession since the 1930s. Although agricultural output continued its recovery, industrial production fell 27 percent from the 1974 level, construction was down 31 percent, and real GDP overall declined more than 11 percent. Taking into account the deterioration of Chile's international terms of trade and the increase of net factor payments abroad, the real gross national income is estimated to have fallen 17.4 percent, or almost 19 percent in per capita terms. Open unemployment rose to as high as 20 percent of the labor force of Greater Santiago.

196. Austerity continued into 1976, the recession bottoming out during the first quarter of that year. A partial recovery of the copper price and record copper output, the sustained rapid expansion of non-copper exports, substantial capital repatriation and the growth of suppliers credits and foreign loans to the private sector eased the foreign exchange constraint and permitted a cautious relaxation of austerity measures in the second half of the year. Manufacturing value-added rose 7 percent, with the greatest gains shown by the consumer nondurables and intermediate goods sectors. The production of consumer durable goods, on the other hand, slipped further during the year, possibly reflecting the incipient effects of the tariff reduction program. The weakest sector was construction, where value-added declined another 19 percent as a result of further reductions in public works expenditures and the insolvency of the savings and loan system (SINAP). Inflation for the year totaled 174 percent, half the rate of the previous year. Finally, despite the protracted weakness of the world copper market and the continued net withdrawal of resources by international lenders, Chile was able in 1976 to meet its full debt service obligations without rescheduling for the first time since 1970. At the same time, net international reserves increased US\$455 million. Nevertheless, the Government continued to exercise considerable demand restraint in view of the still negative level of net foreign reserves, heavy debt service payments, continuing uncertainties regarding the copper market, and volatile inflationary expectations.

197. Recovery accelerated vigorously in 1977, however, as growing aggregate demand reflected the improvement of real wages and salaries. An excellent harvest raised agricultural value-added 14 percent over the level of 1976, while value-added in manufacturing grew 12 percent, and in commerce 18 percent. On the other hand, construction remained severely depressed with a real growth rate of only 3.5 percent during the year. Overall, the GDP is estimated to have grown 8.6 percent, bringing it back to approximately the 1974 level. In per capita terms, output was now roughly equivalent to the level of 1968, suggesting that the shocks Chile had endured since 1970 had, in a global sense, cost the nation a full decade of economic growth. Inflation



in 1977 was reduced to 64 percent, and it was halved again in 1978. Also, by 1977 the overall budget of the public sector as a whole was in surplus. The external current account balance deteriorated in the face of a further decline of copper prices and large jump in imports, but this was more than offset by Chile's markedly improved access to foreign private bank loans and suppliers credits.

198. In summary, the severe shock engendered by the 1975 foreign exchange crisis had been weathered. In the meantime, the Government persevered in the institution of its policy reforms, setting in motion a major restructuring of the Chilean economy. The remainder of this chapter will detail further the evolution of the macroeconomic situation since September 1973 and the major policy changes introduced. Later chapters and annexes will examine events at the sectoral level and explore future prospects and policy issues. Among the most apparent immediate concerns are the continuing high level of unemployment and low rate of investment, solutions to both of which are crucial to the success of the Government's development strategy.

## B. THE FOREIGN SECTOR

199. Between 1973 and 1977 Chile's heavy debt and the precarious state of its foreign reserves represented the primary constraint with which the authorities had to contend. In 1978 the nature of the external situation changed dramatically as demonstrated by large net capital inflows and large reserve accumulations. The policy reforms instituted with regard to international trade not only contributed to this changed environment, they have had profound implications for the country's economic future.

### 1. Foreign Sector Policies

200. In marked contrast to the policies of previous administrations, the Pinochet Government has embarked on a vigorous program of trade liberalization based upon the proposition that essentially unhindered trade flows will lead to a more efficient allocation of Chile's resources and result in faster growth, higher employment, reduced inflation, and more diversified and dynamic exports. Tariffs have been drastically lowered and nontariff trade barriers largely eliminated. In a parallel fashion, the exchange rate has been sharply devalued and unified, its primary role now being that of leading toward the medium- and long-term equilibrium of the balance of payments. Moreover, the Government views foreign investment as a primary means of acquiring the capital and technology essential to development and has substantially relaxed restrictions on its activities in order to attract larger inflows.

#### a. The Exchange Rate

201. On September 30, shortly after the change of government, the peso was devalued from an average of about E<sup>0</sup>85 per U.S. dollar to E<sup>0</sup>280 per dollar

on all trade transactions except the export of copper. 1/ A differential exchange rate was maintained on copper earnings, the rate set initially at E<sup>0</sup>110 to the dollar. With regard to the import of food and raw materials, which had previously received a preferred rate of E<sup>0</sup>25 to the dollar, the adjustment amounted to a devaluation of more than 1,000 percent. The Government reinstated a crawling peg in October, and by December had approximately reestablished the relationship between the exchange rate and the domestic price level prevailing in 1969. Taking into account the rapid worldwide inflation that had occurred in the interim, however, the measures taken during the last quarter of 1973 resulted in a substantial real devaluation of the peso, relative even to the pre-Allende period, as shown in Table III.3.

Table III.3: CHILE - AVERAGE ANNUAL EXCHANGE RATES, 1969 AND 1973-78

(Escudos per US dollar)

<u>Year</u>	<u>Nominal Exchange Rate</u> a/	<u>Ratio-Domestic to International Prices</u> b/	<u>Real Exchange Rate (1969 E<sup>0</sup> per US\$)</u>
1969	9.04	1.00	9.0
1973 (Jan.-Sept.)	37.56	11.08	3.4
1973 (Oct.-Dec.)	304.41	18.64	16.3
1974	831.00	47.71	17.4
1975	4,903	220.51	22.2
1976	13,052	648.85	20.1
1977	21,540	1,075.65	20.0
1978	31,670	1,387.89	22.8

a/ The 1969 rate is a weighted average of legal exchange rates (see Table I.11). From 1973 on, the average bankers' rate is used.

b/ See note to Table II.8.

Source: Same as Table II.8

202. The real exchange rate was devalued slowly through 1974 as world inflation continued and the crawling peg moved in line with the domestic

1/ A separate brokers' market was also restored with a rate of E<sup>0</sup>850=US\$1, but transactions there were limited to tourism and minor invisibles.

price level. <sup>1/</sup> With the worsening balance of payments situation, the devaluation of the peso was accelerated in 1975, reaching a nadir in January 1976. A substantial portion of the resource surplus obtained by the 1976 import austerity was used to increase net international reserves, to minus US\$100 million. This inflow of foreign exchange during the year raised concerns regarding the growth of the money supply, while at the same time providing the authorities an opportunity to achieve a significant breakthrough in the battle against inflation. Thus, the peso was formally revalued 11 percent in July 1976 and again in March 1977, the crawling peg continuing in each case from the newly appreciated level. As a consequence, the peso appreciated in real terms during 1976 and maintained the same real level through 1977. The real exchange rate was devalued again in 1978 providing added incentive to the growth of non-copper exports.

203. In mid-1976, at the time of the first revaluation, the Government began the month-by-month publication in advance of programmed daily exchange rate adjustments, each month's total devaluation being based on the previous month's rise in the cost of living. Then, in February 1978, the authorities presented the daily rates for the entire year, the programmed nominal devaluation being at once a prediction of the full year's inflation and a calculated attempt to influence producer and consumer expectations so as to fulfill the prophecy. This procedure was repeated in early 1979.

b. Import Restrictions

(i) Tariff Policy

204. At the time of the change of government, the average nominal tariff stood at 94 percent of CIF value, and some 683 of the 5,125 customs categories were taxed 200 percent or more. Nevertheless, given the heavy use of nontariff trade barriers and the fact that two-thirds or more of imports were by mid-1973 under direct control of the public sector, the agencies of which were exempted from the payment of tariff duties, the tariff had become largely irrelevant as a policy tool.

205. Beginning in March of 1974, the Pinochet Government launched a program of tariff reductions whose stages are summarized in Table III.4. In December 1977, the Government initiated a new tariff reduction program intended to achieve a 10 percent across-the-board duty by the middle of 1979. The major exception to these reductions was the automotive industry which continued to be protected with tax rates of 115 percent of CIF import value for passenger cars and 80 percent for trucks. In April of 1979 the Government announced its decision to reduce substantially automotive tariffs over a five-year period. Chile now has the lowest tariff rates of any developing country.

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<sup>1/</sup> The gap between the bankers' rate and brokers' rate was gradually eliminated, and in mid-1974 the differential copper rate was discontinued. The bankers' and brokers' rates finally became identical in August 1975, and the brokers' market formally ceased to exist in June 1977.

Table III.4: CHILE - AVERAGE AND MAXIMUM NOMINAL TARIFF LEVELS, 1973-1979

(Percent of CIF value)

Date of Adjustment	Average Tariff	Maximum Tariff <sup>a/</sup>
1973: As of December 31	94	More than 500
1974: March 1	90	200
March 27	80	160
June 5	67	140
1975: January 16	52	120
August 13	44	90
1976: February 9	38	70
June 7	33	60
December 22	27	60
1977: January 8	24	50
April 30	22	50
August 29	20	35
December	16	25
1978: March	15	20
June	14	20
December	12	15
1979: June	10	10

<sup>a/</sup> Some exceptions were specified to the maximum tariff levels beginning with August 13, 1975. The most important of these is for automobiles which have continued to be taxed at 115 percent but will be reduced drastically by 1983.

Source: Central Bank

(ii) Nontariff Barriers

206. The lowering of tariffs has been accompanied by the steady elimination of nontariff import restrictions. The firm-by-firm budgeting of imports was abolished before the end of 1973. Use of the 10,000 percent prior deposit requirement, which had been the major trade-limiting device employed by the Allende Government, was first reduced by the liberal granting of waivers and then effectively eliminated as automatic exemptions from the requirement were declared for all but a few items. By 1977, only used motor vehicles remained subject to prior deposit. Similarly, the mandatory waiting period for foreign exchange cover was shortened and then discontinued altogether in 1976. Also in 1976, the long-existing list of permitted imports was dropped and a later list of prohibited imports reduced to virtually nil. 1/

c. Export Policy

207. Consistent with its general policy of assigning the role of price determination and resource allocation to the marketplace, the Government has not offered major subsidies or special incentives to exporters. Instead the improved environment for exports relative to earlier periods has come from the rationalization of the exchange rate, the lowering of import restrictions, and the elimination of certain administrative and bureaucratic obstacles to exportation. In March 1974 the large tax drawbacks provided by the Allende Government were reduced to zero. Since the introduction in 1975 of the value-added tax in place of a sales tax, however, refunds have been granted for the VAT taxes paid on inputs destined for export. Also in 1977, regulations were effected that enable exporters to obtain rebates of import duties paid on inputs to export products. This privilege was made retroactive to January 1, 1975. 2/ Finally, all export prohibitions and controls have been eliminated, although the government reserves the power to impose restrictions in the event of domestic shortages.

d. Other Trade and Exchange Measures

208. Other measures intended to reduce distortions in the allocation of resources and to liberalize and simplify the management of foreign exchange have included the renewed subjection of public enterprises and agencies to the same import duties and restrictions as the private sector, the public sector's progressive divestment of commercial enterprises, the gradual reduction of the special import preferences applied to particular regions and industries, the raising of quantitative limits on such invisibles as

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1/ By April 1979 only three import items were prohibited.

2/ The statute authorizing this rebate was enacted in 1970, but no mechanism had been established for its implementation.

travel expenses and student remittances, the widening of commercial bank authority to act in the foreign exchange market, and the reappearance of private exchange dealers. The freeing of foreign exchange controls with respect to all current account transactions was symbolized in June 1977 by Chile's formal adherence to Article VIII of the IMF Charter.

e. The Treatment of Foreign Capital

209. From its inception, the Pinochet Government has indicated its desire to restore Chile's attractiveness to foreign direct private investment, in explicit recognition of the medium-term need for substantial capital inflows to supplement the domestic savings effort and to help meet the heavy external debt service burden. Thus the Government moved quickly to negotiate outstanding expropriation claims, achieving settlement of virtually all of them by the end of 1974. 1/

210. In July 1974, a new Foreign Investment Statute, Decree No. 600, was promulgated with the expressed purpose of stimulating the inflow of capital and technology. While the new Statute guaranteed that foreign investors would generally receive the same treatment as national investors without discrimination, a number of important elements, including profit remittances, required transfer of shares and management control over time to domestic investors, sectors open to investment, access to local financing, etc. remained subject to Decision 24 of the Andean Pact of which Chile was still a signatory. 2/ Decree No. 600 gave the Committee on Foreign Investment substantial leeway to negotiate specific tax treatment or other incentives and guarantees on a case-by-case basis. Unlike the prior investment regime, however, application to the Committee was made the only legitimate route for the entry of direct foreign investment.

211. Between October 1974, when it effectively began its work, and August 1978, some 319 projects totaling US\$2.5 billion were approved by the Foreign Investment Committee. Only one fifth of this amount had actually entered the country, however. The disappointing results were, in part, attributable to the difficult and uncertain economic situation as well as, perhaps, lingering doubts regarding domestic political stability. Also important, in the authorities' view, were the continuing disincentives created by adherence to Decision 24 and the bureaucratic delay, uncertainty, and inherent arbitrariness created by the somewhat loosely regulated case-by-case contract negotiations conducted by the Foreign Investment Committee.

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1/ At the beginning of 1975, compensation obligations represented 14 percent of outstanding public medium- and long-term external debt.

2/ Chile's determination to liberalize trade and its treatment of foreign capital came increasingly into conflict with other member nations of the Andean Pact, and Chile formally withdrew from the Pact in October 1976.

212. Thus, a rewritten Decree No. 600 was issued in March 1977. 1/ With Chile's formal withdrawal from the Andean Pact in October 1976, the provisions of Decision 24 no longer applied. Under the new Statute the only limit placed on capital repatriation is that it may not begin within three years of its entry. There is no mandatory fade-out requirement and no limit on the level of profit remittances. The treatment of capital repatriations and profit remittances cannot be less favorable than that applied to the acquisition of exchange cover for general imports. National treatment is guaranteed to foreign investors with the single exception that the State may limit the foreign enterprise's access to domestic credit. Moreover, the foreign investor can elect either to be taxed 49.5 percent of profits, that rate guaranteed for ten years, or to be subjected to the same tax regime applied to domestic investors as it may be modified over time. 2/ Moreover, the indirect taxes and import duties affecting the foreign investment are guaranteed not to change between the effective date of the contract and the time the investment is actually realized.

213. In addition to the above, the Committee itself was streamlined and its procedures simplified. The full Committee is now required to approve only projects in excess of US\$5 million, unless they occur in sectors normally reserved to the State, public utilities, or the communications media, or are being undertaken by a foreign public sector institution. Other projects may simply be approved by the Executive Secretary of the Committee with the prior concurrence of the Minister of Economy. 3/ More significantly, the revised Statute does not define the Committee process as the only legitimate route of entry for foreign investments. Thus foreign capital may also be registered under Articles 14 and 16 of the Law of Foreign Exchange, which are regulated and administered by the Central Bank. 4/

## 2. Foreign Sector Performance

### a. Exports

#### (i) Copper

214. A primary rationale offered for many of Chile's economic policies in the decades following the Depression was the need to diversify the economy and

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1/ The revision was approved by Decree No. 1748 of March 11, 1977, but the Statute continues to be designated as Decree No. 600.

2/ Those who opt for the guaranteed rate retain a one-time-only right to shift to the general tax code.

3/ Of the projects approved by the end of 1976, a third were valued at less than US\$100,000.

4/ Foreign investments related to nuclear energy--e.g., uranium mining--or petroleum are contracted by the Chilean Nuclear Energy Commission and the National Petroleum Enterprise, respectively, but the prior approval of the Committee on Foreign Investments is required.

reduce its vulnerability to the market fluctuations of a single export commodity. Although these policies did succeed in reducing the relative importance of foreign trade in the national income, they also tended to inhibit the development of new export potential. Consequently, in the last half of the 1960s and early 1970s copper continued to account for 70-80 percent of foreign exchange earnings, and mining generally for 85-90 percent. Figure III.1 and Table III.5 trace the course of the world copper price since 1971. From its 1971-72 low, the copper price rose steadily in nominal terms through 1973 and the first quarter of 1974. After reaching an average price of US\$1.38 per lb in April 1974, the copper price plummeted to an average US\$.58 in December, and then fluctuated around a slowly declining trend through 1975 to reach an average of US\$.52 in December of that year. The price then recovered through the first semester of 1976, reaching \$.75 per lb. in July, before again falling back. In real terms, the average price of copper in 1975 was the lowest in more than two decades. Following the small recovery in 1976, the real price fell still lower in 1977 and 1978. The average real price for the entire five-year period 1974-78 was 40 percent below that of the three years 1971-73. <sup>1/</sup>

Table III.5: CHILE - AVERAGE PRICE OF COPPER, <sup>a/</sup> 1971-1978  
(US cents per lb)

Year	Current Price	Constant 1975 Cents <sup>b/</sup>
1971	49.3	101.0
1972	48.6	91.0
1973	80.9	115.4
1974	93.4	96.0
1975	56.1	56.1
1976	63.5	59.9
1977	59.4	48.5
1978	61.9	46.5

<sup>a/</sup> Spot price of electrolytic wirebar, London Metal Exchange.

<sup>b/</sup> Deflation by IBRD index of Chilean import prices.

Source: Appendix II, Tables 8.6 and 9.8

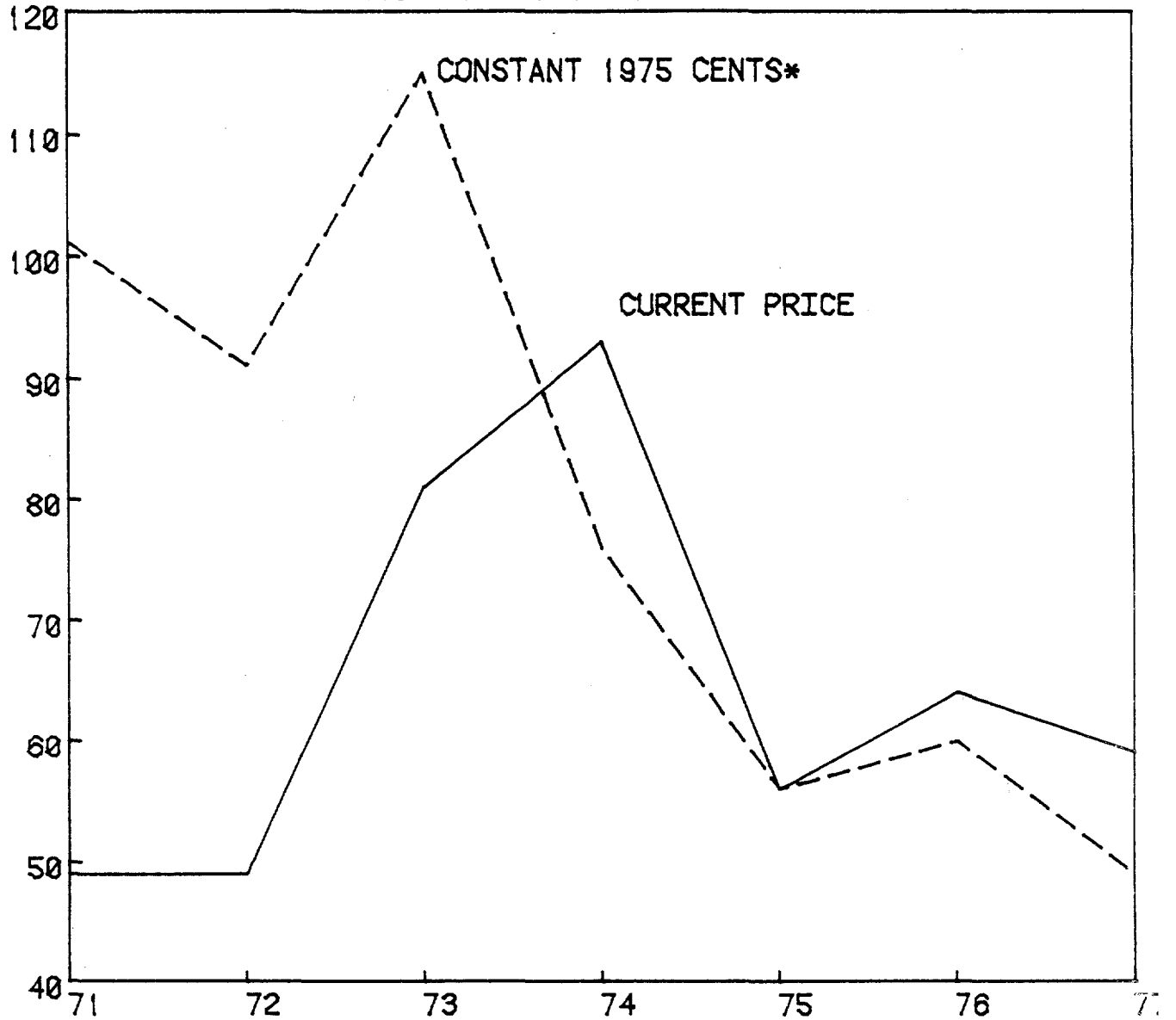
215. Mine output during the 1971-73 period was beset by the loss of managerial and technical personnel, labor unrest, transport strikes, shortages of imported spare parts, and unforeseen technical problems in the opening of new capacity. As a consequence, despite the large investment made

<sup>1/</sup> Deflation is by the IBRD index of Chilean import prices; Appendix II, Table 9.8.



FIGURE III.1

CHILE  
AVERAGE PRICE OF COPPER  
(US CENTS PER POUND)



Source: Appendix II, Table 9.8

\* Deflated by Index of Chilean Import Prices

under the Frei Chileanization program, which included the opening of the Andina and Exotica mines, production fell far short of targeted levels. Output rose sharply in late 1973 and in 1974, however. In 1975 the Exotica mine was shut down because of high operating costs and in conformance with the agreement of CIPEC member countries to reduce output. Even though Exotica remained closed, output from the Gran Minería expanded strongly in 1976, total copper production exceeding 1 million mt for the first time in history. Output rose still further in 1977, declining only slightly in 1978.

Table III.6: CHILE - COPPER PRODUCTION, 1970-1978

(Thousands of metric tons)

Year	Gran Minería	Small and Medium Mines	Total
1970	540	152	692
1971	571	137	708
1972	593	124	717
1973	615	120	735
1974	763	139	902
1975	682	146	828
1976	847	158	1,005
1977	897	159	1,056
1978	882	167	1,049

Source: Appendix II, Table 8.1

216. The net effect of these price and output changes was a substantial increase of copper revenues in 1973 and 1974, and a precipitous decline in 1975. A partial recovery of revenues occurred in 1976 but then tapered off again in 1977 (Table III.7). In terms of real purchasing power, the copper revenues received in 1973-74 were 26 percent above the 1971-72 average. In 1975, however, real copper revenues declined 50 percent in real terms; the US\$826 million loss in current prices was equivalent to about 10 percent of the previous year's GDP; when the rise in import prices is added, the terms of trade effect equalled about 12 percent of GDP <sup>1/</sup>. Despite record levels of output, depressed world prices left real copper earnings in 1976-78 well below the level of 1971-72.

<sup>1/</sup> Chile's terms of trade loss was the worst among a 120-country sample studied by the World Bank.

Table III.7: CHILE - COPPER EXPORTS, 1971-1978

(Millions of US dollars)

Year	Current Prices	Constant 1975 Dollars <u>a/</u>
1971	702	1,439
1972	618	1,157
1973	1,056	1,506
1974	1,716	1,764
1975	890	890
1976	1,246	1,175
1977	1,187	971
1978 <u>b/</u>	1,202	903

a/ Deflation by IBRD Index of Chilean import prices.

b/ Provisional.

Source: Appendix II, Tables 3.2 and 9.8

(ii) Other Exports

217. Despite the generally sluggish world economy, non-copper exports grew rapidly after 1973 as a result of the Government's exchange rate policy and the weakness of domestic sales. The response to the devaluation of the peso was immediate as indicated in Table III.8. Non-copper exports doubled in value from 1973 to 1974; industrial exports alone experienced a three-fold increase. From 1974 to 1977 industrial exports doubled again, while agricultural exports almost tripled in value. Nineteen seventy eight was another good year and non-copper exports grew 10 percent in real terms; for the first time in recent history copper receipts were less than half of Chile's merchandise export receipts. By 1978, the share of industrial exports in the total had risen to 31 percent, compared with only 8 percent in 1973. Agricultural exports over the same period rose from 2 percent to 8 percent of the total. Chilean products were shipped to 90 different countries in 1977, double the 1973 number. Several of the major growth exports are shown in Table III.9.

Table III.8: CHILE - NON-COPPER EXPORTS, 1971-1978

(Millions of US dollars)

Year	Other Mining	Agricultural <u>a/</u>	Industrial	Total	Constant 1975 Dollars <u>b/</u>
1971	116	39	140	295	605
1972	105	21	103	229	429
1973	127	25	103	255	364
1974	157	57	308	523	538
1975	185	86	391	662	662
1976	197	119	520	836	789
1977	216	160	628	1,003	820
1978 <u>p/</u>	221	204	781	1,206	906
% Change 1973-78:	(74)	(716)	(658)	(373)	(149)

a/ Includes primary forest and fisheries products.

b/ Deflation by IBRD index of Chilean import prices.

p/ Provisional.

Source: Appendix II, Tables 3.2 and 9.8

Table III.9: CHILE - SELECTED NON-COPPER EXPORTS, 1970, 1973 AND 1977

(Millions of US dollars)

	1970	1973	1977 <u>p/</u>
<b>Agricultural:</b>			
Fresh fruit	11.8	14.0	63.6
Beans, onions and garlic	7.0	4.8	30.7
Wool	6.4	0.0	15.0
<b>Manufactures:</b>			
Fishmeal	15.5	13.6	86.5
Frozen shellfish	6.2	1.8	26.2
Sawn pinewood	3.7	2.5	54.6
Other wood products	5.4	2.1	15.8
Paper and pulp	31.5	29.8	134.4
Chemicals and petrochemicals	7.3	4.6	77.9
Basic metals	23.5	28.3	103.2

p/ Provisional.

Source: Appendix II, Table 3.2

b. External Debt and Capital Flows

(i) Public Medium- and Long-Term Capital

218. Chile's balance of payments crisis and accumulated arrearages had led to the virtual suspension of debt service payments in 1973, and less than a third of the service falling due in that year was actually paid. 1/ As a consequence, more than US\$830 million in amortization and interest payments, equivalent to 37 percent of merchandise exports, was due in 1974, a third of which had been carried over from the previous year. In March 1974 members of the Paris Club agreed to reschedule 80 percent of payments falling due in 1973 and 1974 on specified official suppliers' credits and bilateral loans, excluding all obligations that had previously been rescheduled. Thus, the effective debt service ratio for 1974 was reduced to 12.4 percent, slightly higher than the previous year. Although debt service due in 1975 was somewhat less than in 1974, the sharp decline in exports brought the potential debt service ratio to 48 percent, and the Paris Club again agreed to a rescheduling. With fewer credits eligible for rescheduling, however, the effective debt burden in 1975 remained at 32.7 percent. The improving balance of payments situation in 1976 enabled Chile to meet its full debt service obligations without rescheduling for the first time in five years, even though the debt service ratio equalled 36.5 percent of its merchandise export receipts. The renewed depression of the copper price caused this effort to be magnified in 1977 with public debt service rising to 38.9 percent of merchandise exports, but Chile again met its debt obligations without rescheduling. The situation changed substantially in 1978. Net foreign capital inflows reached US\$1.3 billion, an increase of a billion dollars compared to 1977. Chile's creditworthiness was no longer in doubt despite continued high debt service obligations.

219. Table III.10 reviews the flow of resources between the Chilean public sector and foreign lenders from 1973 to 1977. Commitments and gross disbursements rose sharply in late 1973 and in 1974 as multilateral lending resumed, and suppliers' credits and bilateral loans from the market economies again became available. Lending by socialist countries, on the other hand, was suspended. The increased disbursements were partially offset by higher debt service payments, but the nominal net resource flow in 1974 was still 87 percent above the level of 1972. 2/

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1/ Negotiations in 1972 had already resulted in the rescheduling of service payments due between November 1971 and December 1972.

2/ Deflated by the estimated index of Chilean import prices, however, the real net resource transfer in 1974 was only 3 percent above 1972, the remainder having been consumed by world inflation.

Table III.10: RESOURCE FLOWS BETWEEN CHILE AND FOREIGN LENDERS, 1973-1977

(Millions of US dollars)

	1973	1974	1975	1976	1977
A. Commitments	328.4	748.1	403.5	483.2	960.0
B. Disbursements	315.8	539.5	287.4	432.7	569.8
C. Repayments	<u>-119.9</u>	<u>-198.9</u>	<u>-344.9</u>	<u>-548.3</u>	<u>-650.5</u>
D. Net disbursements (B-C)	195.9	340.6	-57.5	-115.6	-80.7
E. Interest	-36.7	-79.1	-156.6	-208.9	-201.3
F. Net resource flow (D-E)	159.2	261.6	-214.0	-324.5	-282.0

Source: Appendix II, Table 4.1

220. The picture changed abruptly in 1975, as foreign lenders were discouraged by Chile's deteriorating balance of payments situation, project pipelines were exhausted, and external political attitudes hardened towards the Pinochet Government. New commitments and gross disbursements fell by almost half compared to the previous year. The only positive movement was a small increase in the lending of private banks. At the same time, debt service payments rose 80 percent, as Chile faced the "hump" created by previous reschedulings and compensation payments owed expropriated foreign investors. Consequently, the international lenders withdrew US\$214 million in foreign exchange in 1975, contributing significantly to the foreign exchange crisis and the resultant economic contraction. This net withdrawal of resources rose to US\$324 million in 1976 and imposed a lingering constraint on the pace and timing of economic recovery. Bilateral lenders accounted for most of the drain (including the service on prior reschedulings). Loans to the public sector from private financial institutions increased, however, with new commitments totaling US\$120 million in 1976. This growth accelerated in 1977 reaching US\$826 million in new commitments. Private banks accounted for 86 percent of total loan commitments in 1977, as compared to less than 20 percent, on average, over the previous decade.

(ii) Private Capital Flows

221. Although net private short-term capital flows were heavily negative in 1974, more than US\$112 million of foreign exchange was sold to the Central Bank by private individuals, indicating substantial capital repatriation. This flow increased in subsequent years, along with a large expansion of foreign financial credits to the private sector. Thus private capital movements showed positive net flows of US\$277 million, US\$319 million, and US\$381 million in the three years 1975-77, more than offsetting the net drain imposed by lenders to the public sector. By 1978 net private capital flows exceeded US\$900 million.

222. The entry of direct investment capital under the aegis of Decree Law 600 was disappointingly low through 1978, despite the large backlog of projects approved by the Committee on Foreign Investments. Some of the funds entering under Articles 14 and 15 of the Law of Foreign Exchange may also have been used to finance direct investment activities, but the expectation is that most of these inflows have been financial in nature and the Central Bank continues to classify them as short-term capital movements. 1/ They have been attracted, in part, by the large interest differential between the international and domestic financial markets. The first major direct investment project to be consummated was the purchase in early 1978 of La Disputada copper mine by Exxon Corporation for US\$107 million. Subsequent decisions to expand the mine's capacity could bring Exxon's eventual investment to more than US\$1 billion. 2/

223. Table III.11 shows the distribution of the direct investments approved by the Committee on Foreign Investments as of August 1978. Some 90 percent of the US\$2.5 billion of approved project monies is destined for the mining sector; the Government estimates that about US\$0.5 billion had entered the country by the end of 1978. Included in the approved investments are two additional copper mining ventures with projected capital inputs over the next several years totaling US\$850 million if the exploratory work underway and world market conditions prove favorable. In addition, the Government entered into an oil exploration agreement with Atlantic-Richfield, and foreign interests acquired shares in several previously nationalized industries, including tire manufacturing and automobile assembly.

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1/ The rapid buildup of reserves during 1976 caused the Central Bank to impose a two-year minimum average maturity on Article 14 inflows.

2/ See Chapter IV.

Table III.11: CHILE - APPROVED FOREIGN DIRECT INVESTMENT PROJECTS BY SECTOR,  
1974 - AUGUST 1978

(Millions of US dollars)

Sector	Value	Percent
Mining	2,233.1	89.5
Industry	168.3	6.7
Services	64.4	2.7
Energy and Fuel	12.6	.5
Transport	10.2	.4
Agriculture	2.9	.1
Construction	2.8	.1
Total <u>a/</u>	2,494.3	100.0

a/ Several other projects totaling US\$136 million were approved but appear to have been dropped.

Source: Committee on Foreign Investments

c. Imports

224. From 1973 through 1977 the low copper price, lack of international reserves, net withdrawal of public medium- and long-term capital, and a heavy debt burden restricted the capacity to import and placed a severe upper limit on the level of economic activity. As summarized in Table III.12, imports in nominal terms rose sharply in 1974, but the increase was attributable entirely to the inflation to world prices. 1/ The actual cost of petroleum imports, for example, rose almost five-fold, while the increase in constant 1970 prices was 32 percent. Food imports were reduced in both nominal and real terms--13 percent and 42 percent, respectively--as domestic production rebounded and the adjustment of the exchange rate greatly increased the price of imported foodstuffs. Some growth in real terms occurred in the import of industrial raw materials and intermediate goods, as enterprises acted to replenish depleted inventories, but the demand for capital goods remained weak in the face of high levels of unutilized industrial capacity, the time lag required to recover and assess intervened assets and reorganize technical and managerial staffs, and continuing economic and political uncertainties.

1/ The unavailability of an import price index for Chile necessarily makes tentative any discussion of real values. An explanation of the method of estimation used here is found in the note to Table II.10.



Table III.12: CHILE - IMPORTS BY TYPE OF GOOD, 1973-1978

(Millions of US dollars)

Type of Good	1973	1974	1975	1976 <u>p/</u>	1977 <u>p/</u>	1978 <u>p/</u>
(Current prices)						
Food <u>a/</u>	512	446	361	342	331	458
Consumer goods (Non-food)	139	116	117	101	341	413
Intermediate goods	553	1,173	904	846	1,106	1,331
of which (Fuels and lubricants)	(71)	(345)	(252)	(338)	(407)	(-)
Capital goods	<u>243</u>	<u>281</u>	<u>325</u>	<u>367</u>	<u>466</u>	<u>688</u>
Total	1,447	2,016	1,707	1,656	2,244	2,890
(1970 prices) <u>b/</u>						
Food <u>a/</u>	318	187	191	153	106	174
Consumer goods (Non-food)	97	64	56	48	147	154
Intermediate goods	362	472	378	289	342	394
of which (Fuels and lubricants)	(34)	(45)	(31)	(38)	(42)	(-)
Capital goods	<u>168</u>	<u>155</u>	<u>156</u>	<u>173</u>	<u>201</u>	<u>257</u>
Total	945	878	781	663	796	979

a/ Includes both intermediate and final consumer goods.

b/ For explanation of deflators, see note to Table II.10.

p/ Provisional.

Source: Central Bank of Chile

225. The strong growth of non-copper exports in 1975 was not sufficient to offset the disastrous decline of copper revenues and sharply increased debt service. There was no alternative to a significant reduction of the import bill, and the decline in imports from 1974 to 1976 totaled 18 percent and 24 percent in nominal and real terms, respectively. The combination of rising economic activity, appreciation of the peso, large pent-up demand for consumer durables, low business inventories, and the reduction of tariffs resulted in the rapid import growth in 1977. The growth of consumer goods imports was particularly rapid, as rising purchasing power and lowered trade barriers brought many foreign goods into the market for the first time. As relatively high real growth continued and as external financing became more available, imports grew at a very rapid 23 percent in real terms in 1978. Food imports led the way with a 64 percent increase. Non-food imports have surpassed the pre-recession real levels. At the same time, the increase in capital goods imports reflects the improving investment opportunities and the reaching of capacity limitations in many export industries.

d. The Balance of Payments

226. Table III.13 summarizes the international accounts since 1973. The strong growth of both copper and non-copper exports in 1974 resulted in a reduction in the current account deficit by about US\$100 million. The continued outflow of private capital, however, kept the overall balance in deficit.

227. Despite the Government's austerity measures and reduced imports in 1975, the drop in copper receipts and substantial increase in interest payments caused the current account deficit to soar to US\$491 million, or about 6 percent of that year's severely depressed GDP. Even though the abrupt reversal of capital flows from the public sector was more than compensated by the still more dramatic reversal of private capital movements, the overall deficit reached US\$274 million, and net international reserves at the end of the year were negative by \$551 million.

228. The recovery of export revenues and further decline of imports produced a US\$663 million improvement of the resource balance in 1976 and resulted in the first surplus on current account since 1956. The inflow of capital to the private sector also quickened, and net reserves grew by US\$455 million. This progress continued into 1977, and, for a brief period during the second quarter, net international reserves became positive for the first time since 1971. Although rapid import growth produced another large current account deficit, equivalent to about 3-1/2 percent of GDP, the deficit was covered by the growing capital account surplus, and reserves for 1977 as a whole showed little change from the previous year. In 1978 the increase in the growth of imports and the increase in net factor payments more than offset the 10 percent real increase in non-copper exports. As a result the current account deficit reached US\$730 million the largest deficit in at least a decade. However, this was again more than offset by the very substantial net capital inflows of US\$1.3 billion. By year-end international reserves had grown by \$617 million.

e. Borrowings from the IMF

229. Chile's long history of balance of payments difficulties has made it a frequent and heavy user of IMF credit facilities. The Allende Government made two drawings totaling SDR 79 million from the compensatory finance facility in 1971 and 1972. In January 1974, the Pinochet Government negotiated an SDR 79 million standby credit, the twelfth such agreement Chile had reached with the Fund since the latter's inception. Another SDR 79 million standby was signed in March 1975, but only SDR 20 million were drawn as the greater-than-expected shortfall in copper earnings resulted in rates of credit expansion to the government and reserve losses in excess of the stipulated second tranche targets. With the stabilization measures taking hold, however, the Fund authorized additional credits under the 1975 oil facility, from which Chile drew SDR 79.8 million in November 1975 and SDR 45.4 million in April 1976. Finally, an SDR 79 million compensatory finance facility credit was also approved in 1976. In the light of Chile's improved balance of payments prospects since then and the heavy obligation already incurred to the Fund, no further drawings have been made. By the end of 1978 Chile had repaid virtually all Fund standby credits.

Table III.13: CHILE - SUMMARY BALANCE OF PAYMENTS AND INTERNATIONAL RESERVES, 1973-1978  
(Millions of US dollars)

	1973	1974	1975	1976 <sup>p/</sup>	1977 <sup>p/</sup>	1978 <sup>p/</sup>
1. Resource Balance	-191	58	-304	446	-87	-324
2. Net Factor Payments	-110	-185	-284	-326	-362	-463
3. Net Transfers	<u>13</u>	<u>11</u>	<u>10</u>	<u>28</u>	<u>50</u>	<u>57</u>
4. Current Account Balance	-288	-116	-578	148	-399	-730
5. Foreign Direct Investment, net	-4	-17	-4	+7	+30	+187
6. Net Disbursements of Public Medium- and Long-Term Loans	-8	-89	-180	-114	-138	574
7. Private Medium- and Long-Term Loans, net	-1	31	102	166	174	640
8. Other Capital Transactions and Errors and Omissions, net	<u>189</u>	<u>145</u>	<u>385</u>	<u>248</u>	<u>326</u>	<u>-54</u>
9. Change in Reserves	-112	-45	-275	455	-7	+617
10. Net Reserves, end of year	-231	-276	-551	-96	-103	+514

p/ Provisional.

Source: Appendix II, Table 3.1a

C. MACROECONOMIC POLICY

1. Public Finance

230. Upon assuming power in September 1973, the Pinochet Government faced the immediate need to bring public sector spending under control and to increase revenues. It was also determined, as a longer-term objective, to reduce the size of the public sector consistent with the overall strategy of shifting responsibility for most resource allocation decisions to the private marketplace. Thus, new tax measures were introduced and rates increased, and massive upward adjustments were applied to the prices charged by public enterprises. The overall deficit of the central government was reduced to about 7 percent of GDP in 1974 but remained a significant source of inflationary pressure until introduction of the 1975 austerity program. Since mid-1975, the central government budget has shown a slight surplus, and operating deficits have been eliminated from all but two of the important public enterprises. By April 1976, general government employment had been cut back some 30 percent from the levels of September 1973. <sup>1/</sup> Meanwhile, the State has returned to its owners, sold, or dissolved all but about 30 of the enterprises formerly under its control. When the divestiture program is complete only some 20-25 enterprises are likely to remain in the public sector.

231. The noteworthy turnaround in the financial situation of the public sector was accompanied by a severe tightening of budgetary and administrative controls over public sector expenditures, including improved accounting and reporting systems. Since 1975, the Minister of Finance has been accorded super-ministerial powers with final authority over virtually all spending and financing decisions throughout the public sector. Important to the exercise of this power was the action taken in June 1975 to limit the Central Bank's lending authority to the commercial banks, the central government, and other financial institutions. This measure barred the state enterprises and other public sector institutions from easy access to credit, in marked contrast to the previous regime under which overdrafts at the Central Bank had become more important than budgetary transfers.

232. The overall budget and its means of financing is now determined by a Monetary Council chaired by the Minister of Finance and composed also of the Minister of Economy, the Minister-Director of the National Planning Office (ODEPLAN), the President of the Central Bank, and a representative of the President of the Republic. Personnel limits as well as peso and foreign currency spending levels are allocated to each ministry and decentralized agency. The resource use of the public enterprises is controlled through three administrative levels beginning with CORFO, which remains the holding company for most state enterprises, and passing successively through the

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<sup>1/</sup> Note that the same limitation of coverage indicated in footnote on page 77 applies here.

company for most state enterprises, and passing successively through the Ministries of Economy and Finance. 1/ The enterprises are subject to specific limits on personnel and investments as well as access to foreign and domestic credit. New projects may not be initiated until formally approved, and the enterprises must provide the authorities with quarterly budgets, monthly sales and cost information, and statements of sources and uses of funds, project progress reports, and personnel and remuneration levels.

a. The Central Government Budget

233. Table III.14 summarizes the operations of the central government since 1973 and illustrates the extraordinary effort undertaken to improve fiscal performance on both the tax and expenditure sides of the budget. The current account deficit, which by itself was equivalent to about 12 percent of the 1973 GDP, was eliminated in 1974 and a surplus achieved for the first time since 1970. The overall deficit was cut by more than half in real terms in 1974. By 1975, an overall surplus had been achieved for only the second time in the past 25 years. 2/ A small overall surplus was sustained through 1977.

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1/ A decision to form a new holding company for state enterprises and to return CORFO to its original specialized role as a development banking institution has been pending for some time, but no action has yet been taken.

2/ The government's own presentation of the fiscal accounts continue to show a sizeable deficit as a consequence of the Chilean practice of treating debt amortization payments "above the line" as either current or capital expenditures. This report follows the more conventional practice of including amortization payments below the line as a net financing item. It should also be noted that the statistical deflation of nominal expenditure and revenue flows through this period, as in the case of the prior one, is made tenuous by the lack of specialized price indices in the face of rapidly changing relative prices. Moreover, with inflation rates as high and variable as those experienced in Chile since 1970, the intra-year timing of expenditure flows and revenues becomes crucial to understanding the real magnitudes involved. Month-by-month deflation might generate significantly different real changes from those shown above on the basis of annual averages.

Table III.14: CHILE - CENTRAL GOVERNMENT REVENUE AND EXPENDITURES, 1973-1977  
(Millions of pesos at December 1969 prices) a/

	1973	1974	1975	1976	1977 <u>p/</u>
Current Revenues <u>b/</u>	9.9	19.3	18.6	20.0	22.0
Current Expenditures	<u>18.6</u> <u>d/</u>	<u>16.9</u>	<u>14.4</u>	<u>15.8</u>	<u>19.0</u>
Current Balance	- 8.6	2.4	4.2	4.2	3.0
Capital Expenditures <u>c/</u>	<u>3.2</u>	<u>8.5</u>	<u>3.9</u>	<u>2.8</u>	<u>2.8</u>
Overall Balance	-11.8	-6.1	+0.3	+1.5	+0.2

a/ Nominal data for 1973 are deflated by an average of the official and IBRD adjusted CPIs; deflation thereafter is by the IBRD adjusted CPI.

b/ Includes nontax current revenues.

c/ Net of capital revenues and excluding debt amortization.

d/ Includes expenditures financed directly by the banking system.

p/ Provisional.

Source: Appendix II, Table 5.2

(i) Expenditures

234. Government spending continued to grow rapidly in nominal terms, rising more than 5-1/2 times from 1973 to 1974. A major element in this increase was the Government's effort to partially restore and maintain employee purchasing power through a series of large wage adjustments. These increases continued to be eroded by inflation, however, and current expenditures in real terms fell 9 percent. 1/ Capital expenditures more than doubled in real terms, however, as the Government tried to compensate for the low investment levels of earlier years and to slow the rise in unemployment. The greatest percentage increase was experienced by interest on the public debt which rose ten-fold in real terms. In total, real expenditures in 1974 were 15 percent above the level of 1973.

1/ Detail can be found in Appendix II, Table 5.2. The 1973 figure for current expenditures includes 7.5 million pesos (at December 1969 prices) which were financed directly by the banking system.

235. The strict austerity measures introduced in April 1975 resulted in a 28 percent reduction in the total real spending of the central government. Capital outlays were drastically reduced, net investment falling 54 percent from 1974. With respect to current outlays, personnel expenditures were reduced only marginally, as the reduction of total wage and salary payments was offset by increased social security and family allowance contributions. Current real transfers to other public sector institutions were cut 40 percent reflecting improvement in the financial status of, and the increased fiscal discipline being exerted on, the state enterprises. Interest payments on the public debt, on the other hand, rose about 78 percent in real terms.

236. The austerity program continued into 1976 with an additional 2 percent real increase in central government expenditures, composed of a 10 percent increase in current spending and a 28 percent reduction in investment. Current transfers to the rest of the public sector were reduced another 23 percent, and the only item experiencing a significant increase was transfers to the private sector composed chiefly of employment subsidies and welfare payments related to the recession, rebates of the value-added tax to exporters, and subsidies paid under the forestation program. In 1977, total central government expenditures are estimated to have risen about 17 percent in real terms, as the relaxation of the foreign exchange constraint and marked deceleration of inflation allowed large real increases in the wages of public employees and transfers. For the third straight year there was an overall surplus in the central government accounts.

(ii) Taxes

237. The reduction of central government expenditures was accompanied by vigorous efforts to increase tax collections. Among the measures taken in late 1973 and during 1974 were the revaluation for tax purposes of agricultural and nonagricultural real estate, by factors of 30 and 10, respectively; increased tax rates on property, sales, and income; the full indexation of tax arrearages with more severe penalties for evasion; broadened coverage of the tax prepayment system along with higher rates and one-time collection of a tax on corporate net worth. Tax receipts were also increased significantly as a consequence of the elimination of the black market, the shift of import activity back to the private sector and abolishment of the tariff exemption granted public agencies, and improved tax administration. Most important was the return of copper taxes; in 1973 the fisc had received no receipts from copper.

238. The results of this effort are summarized in Table III.15. Tax collections in 1974 rose a remarkable 62 percent in real terms, while GDP increased only 5.6 percent. Excluding direct tax revenues from the copper sector, total collections rose 47 percent, composed of a 51 percent increase in direct taxes and a 45 percent increase in indirect taxes.

Table III.15: CHILE - TAX REVENUES, 1973-1977

(Thousands of pesos of December 1969) a/

	1973	1974	1975	1976	1977 <u>p/</u>
Direct Taxes	3,400	6,683	7,023	8,163	7,735
Taxes on copper	(-)	(1,562)	(1,793)	(3,046)	(2,602)
Non-copper taxes	(3,400)	(5,121)	(5,230)	(5,117)	(5,133)
Indirect Taxes	<u>7,082</u>	<u>10,250</u>	<u>10,720</u>	<u>12,422</u>	<u>14,819</u>
Total	10,483	16,933	17,743	20,585	22,553
(Total non-copper taxes)	(10,483)	(15,371)	(15,950)	(17,539)	(19,951)

a/ For explanation of deflator, see Table III.14.

p/ Provisional.

Source: Appendix II, Table 5.8

239. On December 31, 1974, a major tax reform law was put into effect. Its main features included the institution of a 20 percent value-added tax (VAT) in place of the long-standing cascading sales tax; 1/ the introduction of a tax on undistributed corporate earnings, which previously had escaped taxation; the elimination of taxes on capital gains; the unification of the tax base and rate schedules, thereby abolishing a large number of special rates, exemptions and loopholes; and the extension of indexing to the valuation of all business assets and liabilities. 2/ In addition, the assessed values of agricultural and nonagricultural properties were again raised--this time by factors of 3 and 4, respectively--and income tax rates were also raised

1/ The cascading sales tax had been replaced briefly earlier in the year by a production tax, which was in turn abolished in favor of the value-added tax.

2/ The new system's distributive effects are alluded to later in this chapter and discussed further in an internal working document of the World Bank.



again, as were a number of other taxes including road tolls and petroleum excises. With the introduction of the austerity program in April 1975, an additional 10 percent surtax was placed on income and property taxes and on the excise taxes applied to luxury goods, and exemptions to the VAT were eliminated on all but a few basic commodities. 1/

240. As a result of these measures and the normal lag of revenues collected on the 1974 tax base, real non-copper tax collections increased 3.8 percent in 1975, despite an 11 percent decline in the GDP. 2/ Tax revenues rose from 17.8 percent of GDP in 1974 to 20.4 percent in 1975. Total real tax collections rose 16 percent in 1976, the increase coming as a consequence of improved copper earnings and the growth of VAT and production revenues generated by the rising level of economic activity, along with the indexation of taxes while in the hands of private fiscal agents, and a speedup of payments schedules. On the other hand, direct noncopper tax revenues fell, reflecting the lagged impact of the recession, the lowering of personal and corporate income tax rates and the reduction of the surtaxes imposed in 1975, as the Government acted to reduce gradually the heavy tax burden imposed by the austerity program. Import taxes also fell because of reduced imports and lower tariff rates.

241. The accelerating economic recovery in 1977 boosted tax revenues, excluding copper, by 10 percent in real terms. Non-copper direct taxes rose 14 percent despite further reductions of tax rates and increased personal exemption levels. Indirect taxes grew 19 percent on the strength of the increased volume of transactions, rising imports, and the elimination in January of all remaining exemptions to the VAT.

b. The Public Enterprises

242. The financial situation of the major public enterprises deteriorated badly during the 1971-73 period as a consequence of the rapid expansion of their payrolls and the freezing of their prices. The resultant deficits were financed by the Central Bank, either directly or indirectly via transfers from the central government or from the banking system. While the CPI (IBRD adjusted) rose seven-fold from mid-1972 to mid-1973, public enterprise tariffs were held constant or permitted only small increases. Consequently, as shown in Table III.16, the prices charged by the state steel company declined in real terms by 80 percent over the period; electric company rates lost 90 percent of their real value; the rate structures of the coal and telephone companies each lost more than 50 percent; and the real price of petroleum sales fell 79 percent despite rising international oil prices.

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1/ The exemption remained until early 1977 for milk, wheat and wheat flour, bread, fresh fruits and vegetables, books and magazines.

2/ The increase shown for copper tax revenues in Table III.15 is misleading on two counts. In the first place, the differential exchange rate applied to copper exports was not eliminated until the middle of 1974. Moreover, copper receipts in dollars actually fell from 1974 to 1975, the increase in real peso terms being the result of exchange rate adjustment.

Table III.16: CHILE - REAL PRICE INDEX FOR SELECTED PUBLIC ENTERPRISES, 1972-1976 a/

(December 1974 = 100)

Year/Month	CAP (Steel)	ENACAR (Coal)	ENAP (Petroleum)	ENDESA (Elect.)	CHILECTRA (Elect.)	CTC (Telephone)
1972: First semester	99	206	43	128	128	213
Second semester	43	104	22	65	72	194
1973: March	20	48	20	30	31	94
June	23	95	10	15	16	50
September	20	99	9	13	14	106
December	74	66	62	54	54	158
1974: March	70	90	97	72	71	98
June	79	94	105	75	61	90
September	124	85	106	113	112	110
December	100	100	100	100	100	100
1975: March	119	90	107	116	112	91
June	121	95	127	116	79	83
September	105	77	127	135	130	86
December	88	69	108	166	140	97
1976: March	118	78	117	155	131	97
June	113	73	99	163	134	99
September	100	64	88	156	129	91
December	113	78	99	164	181	92

a/ Deflated by IBRD adjusted CPI.

Source: Appendix II, Table 5.21

243. Shortly after assuming power, the Pinochet Government acted to adjust public enterprise prices in an effort to eliminate the massive deficits and restore realistic market signals. Petroleum prices were raised eleven-fold in nominal terms, steel and electricity prices six-fold, and telephone rates were more than doubled. Subsequent adjustments have been frequent and generally have at least kept up with the overall rate of inflation. By 1978 petroleum and steel prices were freed, and are now subject to import competition. A major exception is the coal company (ENACAR) where price increases have been restrained by large production surpluses and Government reluctance for social reasons to reduce employment; ENACAR is now paying high severance pay and attempting to retrain redundant workers. Most public enterprises producing goods and services have covered their operating costs since 1974, although central government transfers have continued to be necessary in

some cases to cover debt service and new investments. 1/ Beginning in 1976, the consolidated operating balance of the public enterprises has shown a surplus equivalent to almost 2 percent of GDP, and the overall balance, including investment, has been approximately zero.

244. Enterprise budgets are now expected to yield a net profit, the proceeds of which are transferred to the Treasury. Conceptually, investment resources are allocated not as a function of each enterprise's retained earnings and borrowing power--i.e. as an internal decision of the individual enterprise--but as a consequence of investment priorities established for the public sector as a whole. This includes the copper corporation (CODELCO), which is required to deliver all foreign exchange proceeds to the Central Bank, receiving back only that amount needed to cover centrally budgeted operating costs, investments, and debt service. 2/

245. As in the case of the central government, some of the improvement in the financial situation of the enterprises has come through personnel reductions (see Appendix II, Table 5.22). A large part of the improvement, of course, is attributable to the divestiture of many of the enterprises acquired or intervened by the UP Government. Many, if not most of these enterprises, were operating at substantial losses, and a condition of their return to the original owners was that the latter assume all accumulated debts and waive any damage claims against the government. Finally, the enterprises shared in the general austerity and shortage of foreign exchange, and investment levels were deeply cut. In the case of CODELCO, the mission found that it was failing to invest sums equal to depreciation of existing capital stock.

246. Although the Government has moved rapidly to reduce the role of the State in the economy while shifting increasing responsibility to the private sector for directing the allocation of resources, it is necessary to keep in perspective the enormous continuing importance of the remaining state enterprises. Of Chile's 100 largest nonfinancial enterprises, according to book value, the companies in which the State owns 50 percent or more of the shares at the end of 1976 accounted for 79 percent of total assets and 81 percent of net worth. 3/ The State controls all of the top ten enterprises and 20 of the top 25. By their very size as well as for economic and political reasons, the largest of these enterprises--which include CODELCO, ENDESA, CHILECTRA, CAP, ENAP, and so on--will remain in the public sector within any foreseeable future and thus set a limit to the feasible reduction of the State's direct role in the economy. In short, the State is and will continue to be responsible for a significant fraction of the national

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1/ The state nitrate and coal companies (SOQUIMICH and ENACAR) and the national airline (LAN) continued to receive operating subsidies in 1977. The state railroad received budget support to cover pension payments from its retirement fund and external debt service. The port authority (EMPORCHI), shipping company (EMPREMAR), urban bus company (ETC), and LAN also received transfers to cover debt service.

2/ The operations of CODELCO are discussed further in Chapter IV.

3/ Colocadora Nacional de Valores, Informe Economico, No. 18, September 1977. For a complete listing, see Appendix II, Table 8.25.

patrimony. The proper management and growth of that patrimony will necessarily continue to require that a considerable fraction of the nation's resources be allocated via the decision-making mechanisms of the public sector.

## 2. Monetary Policy

247. As discussed in Chapters I and II, monetary policy was for decades virtually nonexistent as an independent tool of macroeconomic policy. Central Bank reserve creation and credit expansion were functions largely of the public sector deficit. Moreover, during the 1971-73 period, control over the deficit progressively deteriorated as government agencies and enterprises skirted the budgetary process and borrowed freely from the Central Bank, either directly or through captive commercial banks. In the initial months after the military assumed control of the government, the precarious financial situation of the banks themselves, as well as the administrative difficulties and confusion arising during their transition back to private ownership, provided a weak institutional base for the control of monetary aggregates. Furthermore, inflationary expectations had by 1973 greatly reduced the public's willingness to hold money balances, rendering monetary policy at best a blunt instrument for influencing the level of aggregate demand.

248. The Government thus faced, in effect, the task of reconstructing the financial system, establishing the Central Bank's control over the monetary aggregates, in coordination with the reforms simultaneously occurring in fiscal management and foreign exchange policies, and facilitating the system's performance in allocating financial resources in a manner consistent with the free market orientation of the new economic strategy. Among the measures taken were:

- (1) The progressive raising and ultimate elimination of the legal ceiling on interest rates;
- (2) The legalization and exemption from income taxation of monetary correction clauses for all financial obligations with greater than one-year maturities, 1/ later shortened to a daily basis;
- (3) The nationalization of the Central Bank, establishment of its policy-making authority over all institutions receiving deposits from the public, and prohibition of its lending to entities other than the central government, commercial banks, and other financial institutions;
- (4) The subjection of finance companies and other private financial institutions to the supervisory authority of the Superintendency of Banks, renamed the Superintendency of Banks and Financial Institutions;

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1/ Formally, any compensation for loss of purchasing power was legally treated as interest and thus subject to the ceiling. Exceptions were made only for SINAP, BECH, and the Central Bank, each of which operated under its own special legislation.

- (5) The strengthening of the Finance Minister's control over virtually all important economic policy variables through creation of a Monetary Council with full responsibility for determining policy in the areas of money, credit, interest rates, debt, capital market activity, foreign exchange, tariffs and other trade matters, and veto power over all loans to the central government;
- (6) The issuance by the Treasury and the Central Bank of indexed securities in an effort to dampen monetary expansion and provide noninflationary financing for the fiscal deficit; 1/
- (7) The move toward multipurpose financial institutions, via the relaxation of restrictions on the types of operations that the various heretofore highly specialized financial institutions may undertake, in order to increase competition, and take advantage of potential scale economies; 2/
- (8) The sale back to the private sector of most of the banking shares acquired by the State during the Allende Government; 3/
- (9) The elimination of quantitative credit limits on commercial bank lending operations; and finally,
- (10) The progressive elimination of special credit lines from the Central Bank.

249. These structural reforms are intended to establish a competitive financial system in which the allocation of resources is determined by the forces of supply and demand as reflected by the rate of interest. The government retains responsibility for setting and enforcing the overall rules

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1/ After 1976, when the peso fiscal deficit was eliminated, this form of financing was discontinued. The restoration of public confidence has also permitted several of the public enterprises to issue their own securities on the open market, thus avoiding further reliance on budgetary transfers or Central Bank credits. Among the enterprises successfully issuing commercial paper or debentures have been CAP, IANSA and LAN.

2/ Thus commercial banks are now authorized to lend for housing and to open savings and investment departments for other long-term operations and development banks are allowed to finance working capital and mortgages.

3/ The Decree, promulgated in December 1974, prohibited the State from owning commercial bank shares and defined procedures by which existing holdings were to be disposed of by the end of 1977. Subsequent delays, however, and the repossession of one bank already divested because of irregularities in the new management have caused the final date to be extended to 1980.

of the game and for regulating in a nondiscriminatory fashion the total supply of credit in the interest of macroeconomic growth and stability; most specific quantitative and qualitative controls have been eliminated. The reforms undertaken so far have produced a relatively well developed financial structure, although some serious problems still remain. The difficulty of this transformation was magnified by the severe liquidity constraints placed on both the banks and the productive sectors of the economy by the heavy debts and high inflation rates inherited from the past and the severe austerity program and economic recession through which the economy has had simultaneously to pass. Some pieces of the reform, particularly those having to do with the long end of the financial system--i.e., the capital market--remain to be worked out as the authorities were necessarily preoccupied with the policy demands of the short term.

a. Money and Credit

250. The major tools of Chilean monetary policy traditionally were the power to fix the reserve requirement on commercial bank deposits, to set quantitative limits on credit expansion on a bank-by-bank basis, to rediscount commercial bank loans, and to fix interest rates. Years of inflation had virtually destroyed the marketability of government securities, thus precluding the development of open market operations. The remaining tools were largely meaningless so long as the Central Bank was required to finance the deficits of the public sector.

251. As the fiscal deficit has been reduced and the focus of credit has shifted to the private sector, monetary policy has taken on greater significance. Since 1973, quantitative and selective credit controls were progressively relaxed, although the initial maintenance of high reserve requirements kept credit expansion closely tied to the rediscount policy and selective credit lines of the Central Bank. The increasing sales of public debt instruments have served to absorb liquidity, but there still is no effective open market operation, in the sense of a secondary market where the Central Bank could purchase and sell securities in sufficient volume to effect desired changes in the money supply. The monetary authorities do not believe that it would be desirable, at the present time, to use a secondary market for this purpose. Moreover, the bulk of these securities were initially bought by the social security institutions or by commercial banks as part of a mandatory

"technical" reserve requirement, and are thus better viewed as an adjunct to reserve policy. 1/

252. The freeing of prices and the Government's efforts to maintain employment and restore purchasing power led to a rapid expansion of money and credit during the last quarter of 1973,  $M_1$  more than doubling in nominal terms (Table III.17). Velocity evidently declined, however, with the resolution of political uncertainties. Credit to the public sector continued to fuel monetary expansion during 1974 (see Table III.18), but at a significantly reduced rate. Most notable was the lower credit requirement of the public enterprises, as total banking system credit to the public sector outside the central government contracted for the first time since 1970. On the other hand, growth of credit to the private sector was extremely rapid, and overall the net domestic assets of the banking system grew some 85 percent relative to the stock of money and quasi-money existing at the end of 1973. 2/

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1/ The major public debt instruments in use are:

1. Discountable Treasury Bills (Pagares Descontables de Tesoreria). Negotiable short-term paper of 35-91 day maturities issued daily. Until May 1976, the rate of discount was determined at auction; since then, the daily rate has been determined immediately prior to sale by the Treasurer on the basis of market conditions.
2. Readjustable Savings Certificates (CARs). Nonnegotiable securities issued by Central Bank, indexed, with maturities of more than one year, and a 7 percent rate of interest.
3. Central Bank Bills (Pagares del Banco Central). Thirty-day renewable paper issued by the Central Bank to financial institutions to hold as part of their technical reserves. Interest rate fixed periodically by the Central Bank.
4. Certificates of Financial Savings (CAFs). Three-month bearer paper issued by the Central Bank with a floating interest rate determined at auction.
5. Certificates of Foreign Exchange Cover (CEPACs). Zero-interest bearer paper issued by Central Bank, denominated in U.S. dollars, with two-year maturity, for application only to imports or other foreign exchange transactions.

2/ The exact percentage change is affected by the choice of exchange rate applied to assets and liabilities. Given the rapid inflation and large exchange rate adjustments occurring during the period, the calculation is necessarily somewhat arbitrary and should be taken only as an order of magnitude. Quarterly calculations are offered for subsequent years, thereby reducing the exchange rate problem, but at the cost of introducing some seasonal distortions resulting, for example, from the periodicity of public debt amortization. Finally, while the percent changes relative to the existing base of liquid financial assets appears very large, account should be taken of the extremely small size to which that base had shrunk in real terms.

Table III.17: CHILE - GROWTH OF MONEY SUPPLY BY QUARTERS, 1973(IV)-1978

(Percent)

Year/Quarter	Current Pesos		Pesos of December 1969	
	Change During Quarter	Change From Year Earlier	Change During Quarter	Change From Year Earlier
1973 ( IV)	107.8	419.0	34.9	2.8
1974 ( I)	24.1	376.2	-4.4	-15.1
( II)	23.3	341.7	-18.4	2.4
( III)	35.1	330.1	-3.2	-18.3
( IV)	42.9	195.4	2.8	-37.9
1975 ( I)	32.9	216.4	-17.4	-32.9
( II)	23.8	217.7	-26.3	-39.2
( III)	43.4	237.2	10.1	-30.9
( IV)	51.3	257.2	20.5	-19.1
1976 ( I)	23.9	233.0	-10.3	-12.1
( II)	21.4	226.6	-12.0	5.8
( III)	28.2	192.0	3.7	-1.3
( IV)	50.0	189.4	28.8	5.6
1977 ( I)	27.4	197.5	7.2	26.1
( II)	11.4	173.0	-0.7	42.1
( III)	15.5	145.8	3.6	42.3
( IV)	30.2	113.5	18.6	30.8
1978 ( I)	22.6	105.4	14.3	39.4
( II)	1.9	87.9	-4.6	34.0
( III)	n.a.	n.a.	n.a.	n.a.
( IV)	n.a.	65.0	n.a.	26.6

Source: Appendix II, Table 6.2

Given the very high commercial bank reserve requirements in effect, the expansion had to be funded primarily by the Central Bank, either directly or indirectly through rediscounts, refinancing, and tolerance of reserve deficiencies. <sup>1/</sup> The nominal money supply grew almost three-fold. Nevertheless, the expansion of money lagged far behind the rate of inflation as

<sup>1/</sup> On January 1, 1974, the reserve requirement on demand deposits was raised to 80 percent of the average daily deposit levels of December 1973, plus a marginal requirement equal to 95 percent of increments from that base. On October 1, 1974, the base reserve requirement was raised to 100 percent of the average daily deposits of September with a marginal requirement of 80 percent. The interest rate charged on reserve deficiencies was also increased sharply--to 25 percent--and collected monthly. However, to soften the contractionary effect, the banks were given until March 1975 to complete a phased elimination of their reserve deficits. (The evolution of reserve requirements over time, by financial institution and type of liability, is given in Appendix II, Table 6.7).



Table III.18: CHILE - BANKING SYSTEM CREDIT EXPANSION IN RELATION TO SUPPLY OF MONEY AND QUASI-MONEY AT BEGINNING OF PERIOD, 1973(IV) - 1977

(Percent)

Period	Private Sector	P U B L I C S E C T O R							Net Domestic Assets <u>d/</u>
		Central Govern-ment	Decentral. Agencies <u>a/</u>	Public Enterprises <u>b/</u>	CODELCO	SINAP	Other <u>c/</u>	Total	
1973: 4th Quarter	20.5	16.1	-16.6	23.2	-1.9	-	-	20.8	55.6
1974: Year	46.0	19.9	- 6.0	4.0	-1.9	<u>e/</u>	<u>f/</u>	16.1	85.1
1975: 1st Quarter <u>g/</u>	6.5	23.9	-10.1	6.2	2.5	3.7	1.0	27.5	25.5
2nd "	12.4	-4.8	- 3.5	-2.2	-2.6	4.0	1.8	-7.4	12.8
3rd "	6.9	0.6	- 2.6	-3.6	-1.4	4.4	13.4	10.9	11.9
4th "	14.3	13.3	- 4.9	-3.9	3.5	4.9	2.4	15.3	32.3
1976: 1st "	7.8	7.6	- 3.7	6.0	1.4	4.2	-0.0	15.5	8.4
2nd "	13.9	3.0	1.7	2.7	-3.7	6.5	-3.2	7.0	15.4
3rd "	17.2	1.4	- 3.1	1.8	-0.5	9.2	1.0	9.8	1.3
4th "	19.5	8.9	- 0.8	-2.5	-2.0	5.7	0.0	9.3	34.5
1977: 1st "	22.3	12.2	- 2.8	-0.2	0.9	12.3	-1.7	20.6	22.1

a/ Includes social security system, and municipalities.

b/ Excluding CODELCO.

c/ Consists primarily of import credits financed from abroad and interest on foreign currency obligations.

d/ Includes also net unclassified assets, interbank float, official capital and surplus, and revaluation accounts.

e/ Included in decentralized agencies.

f/ Included in public enterprises.

g/ In January 1975, the central government assumed substantial outstanding debts of the decentralized agencies and public enterprises to the banking system.

Source: Appendix II, Table 6.1

the demand for real money balances declined. Inflationary expectations, as evidenced by increasing velocity, seemed to worsen as the year progressed. The stock of quasi-money increased slightly less rapidly than  $M_1$ , reflecting in part the growing relative attractiveness of alternative financial instruments outside the banking system.

253. With declining copper revenues, the expansion of credit to the public sector accelerated in the last quarter of 1974 and the first quarter of 1975, and the nominal money supply rose 43 percent and 33 percent, respectively, in the two periods. 1/ Another growing source of monetary expansion was the substantial Central Bank financing of withdrawals from the Savings and Loan System (SINAP), as depositors became increasingly concerned about its solvency, and the freeing of interest rates and the extended use of indexing made other financial instruments more attractive.

254. The expansion of credit slowed sharply through the first three quarters of 1975 with the virtual elimination of the public sector deficit. An effort was made to slow the net withdrawal of funds from SINAP by freeing it from interest rate controls on non-indexed deposits and credits of less than one-year maturity 2/ and authorizing it to issue indexed notes of greater than one-year maturity. While some new funds were thus attracted to the System, other measures further reduced the attractiveness of its major existing instrument, the Readjustable Mortgage Security (VHR), and the net withdrawals, financed by Central Bank credits, accelerated. 3/ Meanwhile, the growth of bank credit to the private sector was constrained by higher reserve requirements, and quantitative restrictions on the growth of bank loan portfolios. Other measures introduced in an effort to reduce liquidity included: the freeing of interest charged by commercial banks on local currency loans of less than one year; the extension of reserve requirements to all nonbank financial institutions; increasing the minimum holding period of an interest-bearing asset from four to thirty days; authorizing commercial banks to accept term deposits; and raising the maximum size of State Bank term savings accounts eligible for monetary correction as well as the rate of interest paid on such accounts.

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1/ The rapid increase in credit shown to the central government is somewhat deceptive, reflecting in part the assumption of debt obligations of the decentralized agencies and public enterprises.

2/ SINAP had been authorized since October 1974 to engage in short-term operations, but interest rates had been fixed too low to be competitive with the private finance companies.

3/ In an attempt to slow the withdrawal of VHRs from the SINAP, existing holdings were partially frozen in June 1975, each depositor being allowed the option of withdrawing a maximum equivalent to US\$100 per month per account or of converting the VHRs into negotiable five-year Readjustable Mortgage Bonds (BHRs). This conversion option was terminated in December 1975 and replaced with the option to convert VHRs into a special issue of Central Bank Readjustable Savings Certificates (CARs) having phased maturities of 1 to 15 years. In retrospect, it appears that the uncertainty and further loss of confidence in SINAP and its savings instruments caused by these measures may have served to accelerate the net outflows from the system.

255. Despite these efforts, the nominal money supply rose by more than 250 percent during 1975. Instead of the public sector deficit, the major source of expansion over the course of the year had become foreign exchange operations resulting from increased capital repatriation and short-term inflows as well as the growth of non-copper exports and depressed imports, all converted at a sharply higher (in pesos terms) rate of exchange. Nevertheless,  $M_1$  again contracted in real terms and had become equivalent to less than 4 percent of the GDP. There was a notable decline in velocity during the second half of the year, as the austerity program was seen to be taking hold and inflation decelerating.

256. An important turning point in monetary policy occurred in 1976. The elimination of the public sector deficit had greatly reduced the latter's credit demands, except for foreign debt service, thereby permitting a significant relaxation of constraints on lending to the private sector. At the same time, the sharp reduction in the rate of inflation was reflected in the decline in inflationary expectations, and the resultant steady increase in the demand for real money balances permitted the authorities to move toward gradual restoration of more normal levels of liquidity in the economy. Consequently, quantitative credit controls were ended in May 1976, and a progressive reduction of reserve requirements was initiated during the second half of the year and continued through 1977.

257. Meanwhile, the major source of reserve money creation had become the rapid buildup of international reserves which grew US\$455 million over the course of the year, with surpluses on both current and capital accounts. Concerned with the monetary effects of this rate of reserve growth, and seeing the possibility of striking an important blow against inflationary expectations, the Government twice appreciated the peso--in July 1976 and March 1977--and slowed its crawl. In addition, a two-year minimum maturity was placed on foreign capital entering under Article 14 of the Foreign Exchange Law, and such inflows, when brought through commercial banks, were made subject to the ordinary reserve requirements on foreign currency deposits. These funds continued to flow in in large amounts, however, as the appreciating peso made the large nominal interest rate differential between the domestic and international financial markets even more attractive in real terms.

258. Central Bank rediscount lines were also expanded in 1976. Nevertheless, the strong growth of banking system deposits and the reduction in reserve requirements, along with the diminution of public sector demands, resulted in a significant shift of lending activity from the Central Bank to the private commercial banks. <sup>1/</sup> During 1976, the Central Bank accounted for about one-third of total credit expansion as compared to 85 percent in 1975.

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<sup>1/</sup> Part of the growth of reserves in the banking system, particularly late in the year, resulted from the withdrawal of deposits from the private finance companies where confidence had been shaken by a number of bankruptcies and cases of management irregularities.

259. The money supply has been growing rapidly in real terms since the middle of 1976, with the authorities attempting to walk the fine line between providing the liquidity needs of a recovering economy in the throes of a major structural transformation and the re-ignition of inflationary expectations among a populace that closely monitors and has become highly sensitized to changes in financial indicators. Superimposed on this short-term management effort have been a series of measures designed to modify the structure of the financial system itself, making it more capable of responding efficiently to market forces, on the one hand, and more sensitive to the over-all regulatory powers of the monetary authorities, on the other. Inevitably, there have been some conflicts between short-term and long-term objectives. The difficulty is perhaps most dramatically illustrated by the very high interest rates that have prevailed at a time when a major long-term priority is to stimulate investment.

b. Interest Rates

260. The maximum legal interest rate during the second half of 1973 was 60 percent per annum, with taxes and other charges bringing the actual nominal cost to the borrower up to about 90 percent. As in previous periods, therefore, those enterprises with access to regulated credit enjoyed negative real interest rates. The large majority of private firms, however, undoubtedly had to rely on internally generated funds or on inter-enterprise credits transacted through the "informal" financial market, perhaps through the intermediation of private finance companies or other unregulated brokers. With their larger retained earnings and superior access to foreign loans as well as subsidized domestic credit, the system generally favored the larger enterprises. At the same time, the dependence on internally generated funds for both working capital and investment resulted in low dividend payouts and probably acted to inhibit development of the stock market.

261. In March 1974, the maximum legal interest rate was raised to 90 percent, and then raised again in May to 200 percent. In real terms, however, bank lending rates remained negative. Also in May 1974, interest rate ceilings were raised entirely from the loans of nonbank financial institutions, stimulating the entry of many new finance companies into the market and permitting them to attract funds away from both the commercial banks and the savings and loan associations. Finally, interest rates throughout the system were effectively freed from controls in May 1975.

262. Tables 6.9-6.10 in Appendix II and Figure III.2 trace the evolution since 1974 of short-term (thirty-day) interest rates paid to depositors and charged to nonagricultural borrowers by commercial banks, finance companies and savings and loan associations (AAPs). <sup>1/</sup> With the freeing of interest rates, the nominal cost of bank borrowing shot up from 9.6 percent per month in April 1975 to 19.0 percent in May, reaching 21.2 percent in July. Of course, on an annual basis the rate for July, for example, exceeded 900 percent.

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<sup>1/</sup> Farmers with access to the banking system generally enjoyed somewhat lower interest rates as a result of preferential discount rates at Central Bank.

At the same time, the monthly rate of inflation declined sharply, so that the tightness of credit and the lag in inflationary expectations resulted in extremely high real rates of interest averaging more than 7 percent per month for thirty-day money during the final six months of the year. Depositors for the same period received an average of just under 2 percent per month in real terms, indicating a gross spread between deposits and loans of 5-1/2 percent. The Central Bank attempted to apply some downward pressure on interest rates by "suggesting" in October 1975 that nominal savings account interest be limited to 8 percent per month. The moral suasion was more rigorously enforced upon commercial banks than other intermediaries and resulted in a sudden flow of deposits from the former to the latter. In December, the suggestion was withdrawn, and the Government has since resisted pressures to intervene directly in the determination of interest rates.

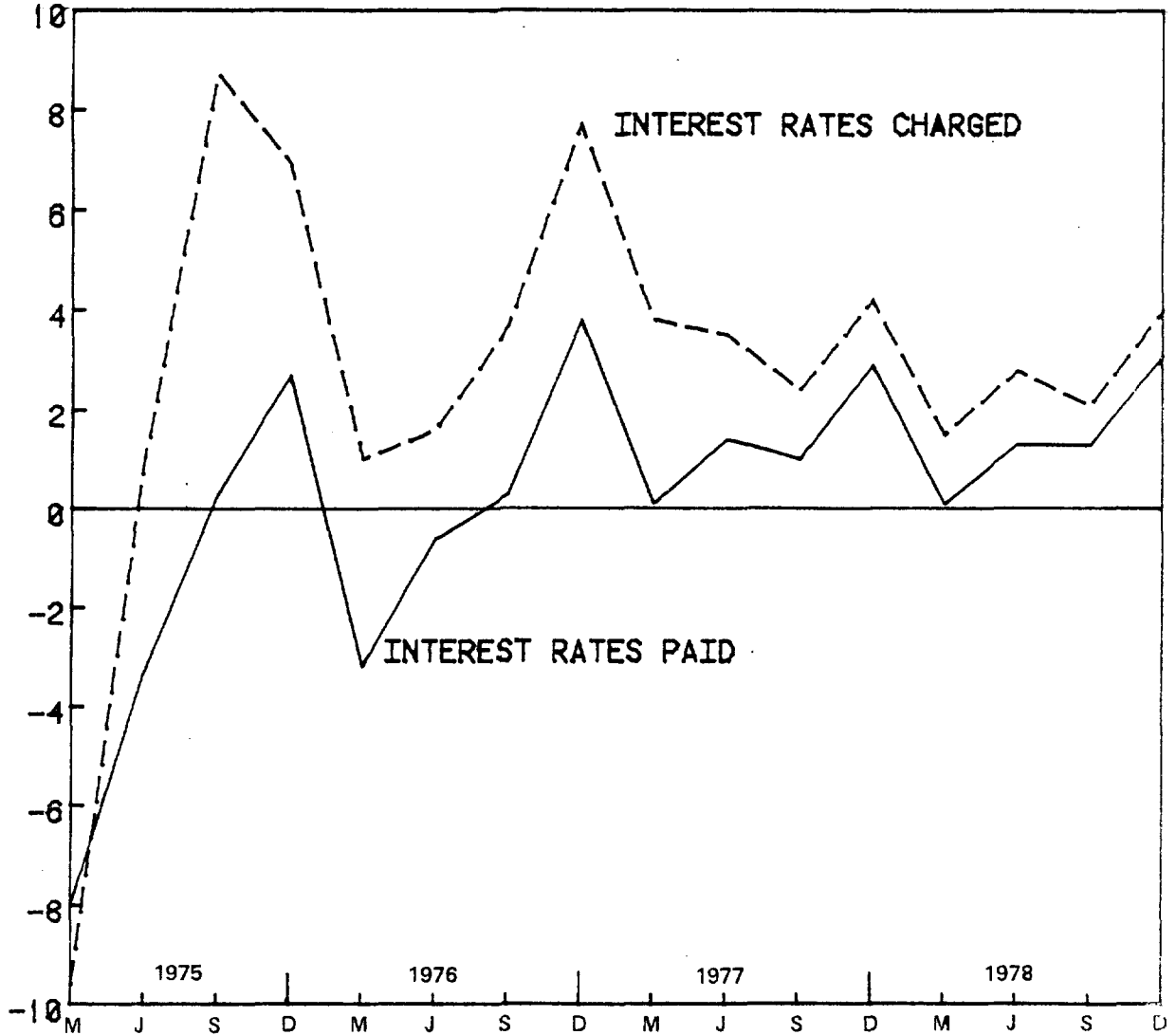
263. Short-term interest rates changed very little in nominal terms during the first semester of 1976, the real borrowing rate averaging 2.9 percent per month for commercial banks, 3.4 percent for loans from the savings and loan institutions, and 3.7 percent from the finance companies. Deposit rates had become slightly negative in real terms in the case of commercial banks and slightly positive for the nonbank institutions, indicating a still very substantial gross monthly spread of 3-4 percent.

264. In addition to the accelerated expansion of credit begun during the second half of 1976, a number of measures were taken that were expected indirectly to affect short-term interest rates. In May, the Central Bank began to pay interest on commercial bank reserves. That, along with the subsequent lowering of reserve requirements, was intended to reduce banking costs and permit a decline in the gross spread. The revaluation of the peso in July 1976 also had a major impact on inflationary expectations and increased the demand for money and quasi-money. At the same time, the minimum maturity that could be indexed was lowered from one year to 90 days in order to neutralize inflationary expectations, reduce interest rates for that maturity range, and encourage the growth of longer-termed deposits. Also during the second quarter, the AAPs, finance companies and, later, banks were authorized to act as brokers in intermediating commercial paper without incurring a contingent liability or additional reserve obligation. This was intended to increase the flow of credit and improve bank profitability, while at the same time attracting activity away from the largely unregulated and financially precarious informal financial sector. Average nominal interest rates on deposits did fall in response to these measures, but by less than the rate of inflation. Still slower was the reduction of the interest rate on bank loans, which averaged more than 5.5 percent per month in real terms in the second semester of 1976. The gross nominal spread rose from 2.5 percent in June to 4.1 percent in December and 4.6 percent during the first two months of 1977. Since February 1977 the gross spread has shown a strong downward trend reaching nine-tenths of a percent in December 1978.

265. Somewhat greater success was achieved by the second revaluation in March 1977. Coupled with further reductions of the reserve requirement, increased interest earned on reserves, and a strong growth of bank time deposits, the bank lending rate began to fall more rapidly than the rate of change of the consumer price index. As a result, the real monthly interest

FIGURE III.2

SHORT-TERM ( THIRTY-DAY ) REAL INTEREST RATES PAID TO DEPOSITORS AND CHARGED TO NONAGRICULTURAL BORROWERS BY COMMERCIAL BANKS 1975-1978



Source: Appendix II, Tables 6.9 and 6.10

rate of thirty-day bank credits fell from 8.4 percent in November 1976 to 2.4 percent by September 1977, the gross spread in the latter months having fallen to 1.4 percent. Interest rates rose again sharply during the final quarter of 1977. Short-term real interest rates charged in 1978, while still considered high, were consistently lower than rates recorded for the corresponding months in 1977. In spite of these variations, the average real rate has been slowly falling since the second semester of 1975. The corresponding average monthly rates for 1976 through 1978 are as follows: 4.24, 3.85 and 3.00 percent. On an annual basis these rates were 65, 57 and 43 percent, respectively.

266. In view of the extraordinarily high interest rates prevailing in Chile since their freeing in mid-1975, it is not surprising that it has constituted a major national issue. To begin with, there is considerable disagreement and surprisingly little hard information regarding the interest rates actually being paid by the majority of enterprises. The short-term credits for which data are systematically available represent only a fraction of total credit, and, it is further argued, the rates being reported are those charged at the margin and are significantly higher than the terms offered prime customers. One widely cited study, carried out in late 1976, reported that many large and medium firms were mixing credits from a variety of sources with a weighted average annual real interest rate of 25 percent. 1/

267. Nevertheless, mission interviews with a large number of enterprises suggest that this study significantly underestimated the costs of borrowing in Chile, even for those enterprises that had a relatively high degree of access to foreign loans. The average annual real cost of short-term, local currency bank credit during the last quarter of 1976 appears to have been around 64 percent, rather than the 55 percent used in the cited study, and lower rates would not have been available from the nonbank institutions. Interest on indexed loans averaged about 12 percent. The cost of foreign credit to the borrower indicated in the study does not apparently include the charge for the required local bank guarantee, which amounted to about 5 percent during the relevant period. Finally, it does not appear that foreign credits, even for the largest enterprises, would have exceeded 40 percent of the total. Application of these corrections generates an estimated average real interest rate of more than 37 percent, and this must be viewed as indicative only for Chile's larger corporations. Smaller enterprises in late 1976 were probably

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1/ The calculation was made as follows: One-third of total credit was estimated to come from the short-term financial market at an average annual real interest of 55 percent; another 16 percent from official lending agencies and development banks, or credit lines discountable at the Central Bank, with indexed interest rates averaging 11 percent; and finally, 52 percent from foreign loans at an average interest rate of 10 percent.

paying something between 50 and 80 percent per year in real terms for their financing. 1/

268. Throughout the period studied, real short-term interest rates have very substantially exceeded the rates attached to indexed long-term securities. A number of factors have contributed to this phenomenon. One has been the strength and intransigence of inflationary expectations which have persistently lagged behind the declines in the actual rate of price increase. Another has been the small demand for long-term financing because of the large unutilized capacity existing in many sectors of the economy; the uncertainties presented by the drastically altered international trade regime; and the severe short-term financial bind created by the economic recession, the prior buildup of inventories in 1974, the heavy debts inherited from the past, and the sudden appearance of positive real interest rates. Finally, one cannot entirely rule out the possibility of at least tacit collusion among the relatively limited number of financial institutions.

269. The high average real interest rate calculated above is, in large part, the result of the concentration of operations at the short end of the market. Real interest charged on indexed long-term transactions does not appear grossly out of line with the likely opportunity cost of capital in Chile presently. The point is, of course, somewhat circular, inasmuch as the unusually high short-term interest rate has tended to attract loanable funds to that end of the market. Through 1976, however, the high interest rate probably did not represent an important impediment to long-term investment. More significant, in the mission's judgment, were the general uncertainties created by the difficult macroeconomic situation through which Chile was passing and the unknown microeconomic implications of the truly major policy reforms which had been invoked. 2/

270. Nevertheless, with economic recovery now well underway, the persistence of such high short-term interest rates inhibits the development of a capital market and makes it difficult to achieve the level of investment required to complete the structural transition intended by the Government's economic program and to set the basis for accelerated long-term growth. Moreover, similar to what occurred in the past, so constricted a financial system gives clear financial advantage to those enterprises with access to foreign funds, those which can draw upon large retained earnings--either their own or from other members of the conglomerate family--and those with corporate ties to banks, development companies, and other financial intermediaries.

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1/ The very large gap between foreign and domestic interest rates was maintained by a number of factors including the two-year minimum maturity required of financial inflows, the limit of 100 percent of capital and reserves placed on commercial bank guarantee authority, the credit ceilings imposed by foreign lenders, and the imperfect information existing on both sides of the market. Nevertheless, very substantial funds did flow in in response to the interest rate differential. So attractive was the arbitrage opportunity that several enterprises confided to the mission that they were willing to import goods for resale at little or no (even negative) profit in order to acquire the accompanying trade credits that could be turned over in the domestic money market.

2/ Indeed, the immediate reason for authorizing the development banks to enter short-term operations was reportedly the difficulty they were having in placing long-term funds.



A number of important enterprises in Chile combine all of these advantages and thus enjoy a significant competitive edge not necessarily related to productive efficiency 1/.

271. The further reduction of the interest rate and the development of the domestic capital market are thus urgent policy objectives. Progress is made difficult, however, by the low absolute base of domestic savings (Table III.2) and loanable funds from which the economy is only just emerging. The high burden of foreign debt and low reserves will continue to weigh heavily for several more years, and the problem has obviously not been lightened by the large net withdrawal of resources in recent years by the bilateral and multilateral lending institutions.

c. Selective Credit

272. The heavy use of selective credit represented one of the few economic policy elements which would appear to be inconsistent with the Government's general market-oriented approach to resource allocation. As noted above, high reserve requirements and the lack of a base for open market operations left the rediscount window as the major Central Bank vehicle for affecting the flow of credit to the private sector. 2/ Although the rate of interest on rediscounts has been progressively raised, these credits continued to be subsidized to some degree through most of the period studied.

273. Rediscounting facilities during 1976 and 1977 were available for industrial investment; agricultural investment, rehabilitation, and working capital; assistance to small potato farmers and wheat growers hurt by the 1975 drought; special credits to small farmers (those with holdings below 12 basic irrigated hectares); reforestation; housing; exports; and some transitory credits to public enterprises. In some of these programs, the Central Bank

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1/ New regulations placed on the operations of finance companies in February 1977 to strengthen their operations and restore public confidence also have the unfortunate side effect of inhibiting the access to credit of small and medium firms. Under the regulations only the paper of state enterprises or other enterprises with capital and reserves equal to or exceeding 60,000 development units (about US\$1 million) may be intermediated without a commercial bank guarantee. More recently, the previous requirement that development banks maintain at least 10 percent of their portfolios in credits to small enterprises was removed.

2/ Formally, there are three mechanisms through which the Central Bank funnels credit into the banking system: (1) rediscounting, which involves the actual transfer of a credit document from the commercial bank to the Central Bank; (2) refinancing, which is, in effect, a Central Bank loan to the commercial bank to cover the reserve deficiencies created by specified types of credits; and (3) lines of credit, authorizations granted by the Central Bank to commercial banks or public sector institutions to use funds for a specified purpose, generally up to a predetermined amount. All such operations have been referred to here simply as rediscounts.

acted as wholesaler of credits or credit lines provided by (or guaranteed by) foreign official lenders. By 1978 rediscounting facilities were available only for reforestation and housing.

274. Until 1978 when the practice was ended, the discounts on investment credits were indexed and granted initially for a period of 180 days but could be renewed repeatedly, at the option of the primary lender, for up to five years. The rediscount rate was determined through a monthly bidding process among the eligible intermediaries for the global amounts the Central Bank made available. 1/ Short-term credits for agriculture were divided into two rediscounting facilities, one offering 50 percent refinancing of production credits to all farmers, and the other providing 100 percent refinancing only for farmers whose holdings did not exceed 12 basic irrigated hectares. The rediscount rate charged on both facilities in 1977 was a highly subsidized 5.5 percent on the indexed principal. 2/

#### D. EMPLOYMENT 3/

##### 1. Aggregate Experience

275. As shown in Table III.19 total employment in Greater Santiago declined slightly over the course of 1974, the gains in output coming largely as a consequence of improved productivity. The normal growth of the labor

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1/ The only limitation was that the monthly amount offered may not exceed one percent of the prior month's total private money supply ( $M^1$ ). The bid interest rate held only for the initial 180-day period. The rediscount rate for subsequent renewal periods was determined as the average rate in the auction held one month prior to each renewal.

2/ At the end of 1977, the Government announced that no special rediscount facility would be offered for agriculture generally during the next crop year. The reduction in reserve requirements is expected to enable the commercial banks, including the State Bank, to meet the ordinary needs of the sector out of their own resources. Farmers would continue to be eligible for credit lines for exports and for capital goods imports.

3/ The discussion of employment depends on the quarterly labor force surveys of the Greater Santiago metropolitan area carried out by the University of Chile (Tables 1.15-1.20 in Appendix II). Because of an apparent but unexplained discontinuity in the data between the surveys of June and December 1977--there was no September survey in that year--no simple comparison can be made of the results reported prior to and subsequent to that gap. The major problems concern a sudden jump in the reported population of the survey area and a sharp increase in the calculated rate of labor force participation. Other discontinuities are evident in the sectoral and occupational distribution of employment. These problems, along with certain reservations regarding a similar labor force survey conducted by INE, are discussed in the appended Note on Chilean Economic Statistics. The evolution of employment is also described in greater detail in an internal working document of the World Bank.

Table III.19: CHILE - QUARTERLY CHANGES IN EMPLOYMENT LABOR FORCE AND THE RATE OF UNEMPLOYMENT IN GREATER SANTIAGO, 1973(IV)-1978 a/

(Percent)

	Change in Employment	Change in Labor Force	Unemployment as percent of Labor Force
1974 ( I )	-2.4	-	9.2
( II )	-0.8	0.4	10.3
( III )	2.5	1.4	9.4
( IV )	-0.2	0.2	9.7
1975 ( I )	-3.8	0.2	13.3
( II )	-3.5	-0.3	16.1
( III )	-0.9	-0.3	16.6
( IV )	2.1	4.7	18.7
1976 ( I )	-	1.4	19.8
( II )	5.0	2.7	18.0
( III )	-0.3	-3.1	15.7
( IV )	4.5	2.0	13.6
1977 ( I )	1.2	1.4	13.9
( II )	3.4	2.4	13.0
( III )	0.4	0.2	12.8
( IV )	-0.1	0.3	13.2
1978 ( I )	1.3	3.1	14.7
( II )	3.0	0.7	12.8
( III )	1.6	2.8	13.7

a/ Survey taken during last month in quarter.

Source: Appendix II, Table 1.15

force thus brought the rate of unemployment up to a 9-10 percent range for the entire year. The sharp contraction of economic activity in 1975 inevitably affected the labor market. Nevertheless, the decline in average annual employment, 5.4 percent, was less than half the rate of decline of output. 1/ The peak-to-trough decline in total employment, from December 1974 to September 1975, measured 8.1 percent and was accompanied by substantial withdrawals from the labor force as inferred by the fall in the participation rate.

276. Although absolute employment began to recover during the fourth quarter of 1975, the participation rate also rebounded. Consequently, unemployment continued to mount, reaching a high of 19.8 percent of the Santiago labor force in March 1976. An increase in the participation rate would normally be expected to accompany economic recovery, but the size of the reaction shown in the surveys seems greater than justified by the modest improvement in employment that occurred. A disaggregation of the data by sex shows that the male participation rate fell and remained depressed until the recovery of employment had already been underway for six months. The female participation rate, on the other hand, held fairly steady through 1975

1/ Comprising the averages of the four quarterly surveys in each year. It is also likely that the rate of output decline in Greater Santiago exceeded the nationwide drop of 11.3 percent.

and then increased sharply during the first three quarters of 1976. 1/ Rather than a positive sign, therefore, the jump in labor force participation probably reflected the entry of secondary family members, primarily women, to seek employment in order to replace the earnings lost by the unemployed principal breadwinner. In the twelve months following the employment trough of September 1975, male employment rose only 6.7 percent as compared to a 24.4 percent growth in the number of women employed. The rapid expansion of the female labor force also raised the female unemployment rate above that for males, reversing the historical tendency.

277. With the exception of a slight dip in September 1976, employment grew steadily after September 1975 until the fourth quarter of 1977. With the labor force also growing, the rate of unemployment was reduced to 13 percent by June 1977 and has fluctuated around that level in the surveys published since. Although average total employment in 1977 was 8.5 percent, or more than 92,000 jobs, higher than the similar figure for 1976, the unemployment rate at the end of 1977 was only marginally better than a year earlier. In 1978 average total employment increased again, this time by 5 percent, but the unemployment rate grew 0.7 percentage points, reaching 13.9 percent by year's end. The unusual nature of the period being studied makes it impossible to predict what the "normal" participation rate will prove to be. Moreover, the cyclical flows of labor into Greater Santiago from the countryside and from smaller towns and cities make the data difficult to interpret. Nevertheless, the present participation rate is still well below those recorded in the late 1960s. It is therefore reasonable to expect that further expansion of employment opportunities will be accompanied by increased labor force participation, thus slowing reductions in the unemployment rate in the medium term. 2/

## 2. Major Sectors and Occupational Categories 3/

278. As in the case of output, the evolution of employment has varied widely among economic sectors and job categories. Consistent with past history, construction has suffered the highest rates of unemployment, reaching almost 40 percent of the experienced labor force at its peak in March 1976. After rising in 1974, absolute employment in the sector fell 43 percent

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1/ Disaggregations by sex are taken from the INE survey.

2/ The above discussion has not made reference to a group of persons identified in the University of Chile survey as not working or actively seeking work but desiring employment (see Appendix II, Table 1.15). In some months of the survey this group has outnumbered those conventionally defined as unemployed. These data are difficult to interpret, however, since no indication is given of what conditions would have to be met before such persons would in fact be available for work. Furthermore, individual responses are likely to be very sensitive to the manner in which the question is posed. While the large numbers of persons so categorized suggest the considerable scope that exists for growth of the labor force participation rate, the numbers are not likely to be so large or to suffer the extreme short-run volatility indicated in the survey.

3/ Employment changes in agriculture and mining are not discussed here, because they are not statistically significant in Greater Santiago, and nationwide data are not available.

during 1975. While employment in the sector has grown significantly since, it remains well below the record levels of 1974. Meanwhile, new entrants to the sectoral labor force have kept the unemployment rate fluctuating between one-fourth and one-third of experienced workers available for work.

279. Because of its relative importance in the Santiago labor market and its sensitivity to the level of aggregate economic activity, manufacturing accounted for the largest absolute peak-to-trough decline in employment, laying off a net 76,000 workers between December 1973 and September 1975. The sectoral unemployment rate peaked at 18.1 percent in March 1976. Since then, improvement has been relatively slow. By December 1977, 61,000 of the above-mentioned 76,000 jobs had been regained, and the unemployment rate for experienced workers was just above 12 percent.

280. The combined personal and community services sectors suffered a peak-to-trough loss of 39,000 jobs during the recession but have more than offset this in absolute terms, gaining 78,000 jobs through December 1977. Nevertheless, new entrants to the labor force have held the unemployment rate of service workers substantially above the pre-recession level. Employment in the government and finance sector suffered the least in both absolute and relative terms and now stands at an all-time high level despite Government efforts to pare down the state bureaucracy.

281. Manual workers have felt the incidence of unemployment more severely than any other category of worker classified by job status. The unemployment rate among manual workers, which has typically been more than twice the rate suffered by white-collar employees, reached a peak of over 23 percent in June 1976. In absolute terms, blue-collar employment fell 21 percent, or 70,000 jobs, from March 1974 to its nadir in September 1975. It has since recovered fairly vigorously, however, and now exceeds the former record employment level of 1974. With new entrants swelling the labor force to take some of those jobs, however, the blue-collar unemployment rate is still above 15 percent.

282. The deterioration in wage and salaried employment was not accompanied at first by the increase in the number of the self-employed that might have been expected to absorb some portion of the displaced workers. Instead the number of persons reported as self-employed was in a fairly steady downward trend from December 1973 through the first quarter of 1977; since then it has resumed positive growth. 1/

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1/ There may, in fact, have been an increase in the importance of self-employment during the economic crisis despite the failure of the statistics to record it. For labor force reporting purpose, some individuals who have lost their jobs may be considered by their family members, as well as by themselves, to be unemployed, even though they have solicited and performed some remunerated work in a self-employed capacity. Since they are not employed in their customary status, they view and report themselves as unemployed. We would be inclined to believe that some greater measure of such irregular self-employment has escaped the survey enumerators and that, as a result, the number of self-employed workers has been understated. If so, the rate of unemployment, as defined for the purposes of the survey, has been overstated.

### 3. Government Measures to Deal with Unemployment

283. The Government responded to the deepening employment crisis with a series of measures, mostly of a temporary nature, designed either to mitigate the effects of unemployment or to stimulate increases in employment. Among the principal measures adopted have been the Minimum Employment Program (Programa de Empleo Minimo - PEM), a program of wage subsidies to stimulate employment, reform of unemployment insurance, and an expanded manpower and training program.

#### a. The Minimum Employment Program

284. PEM is designed to provide temporary jobs for unemployed heads of households, with preference given to heads of large families. The program, financed by the central government, is administered by local municipal governments which, in order to qualify for PEM financing, must plan and propose public or other work projects in which eligible persons would be employed. In addition to serving as an employer of last resort, PEM has also served as a vehicle for upgrading skills of the unemployed to improve their future absorption into regular jobs. The rate of remuneration under the program has amounted to approximately 75 percent of the monthly ingreso minimo, but a PEM participant is not eligible for many of the other social benefits to which an employed worker or an unemployed worker covered by unemployment insurance is commonly entitled, such as family and maternity allowances. However, some of the participants receive supplementary food rations financed by AID. 1/

285. PEM was initiated in March 1975 and by year-end employed approximately 125,000 workers. 2/ By the end of 1976, participation had reached almost a quarter million, or almost 7 percent of the labor force. Despite the continuing high level of unemployment, PEM enrollments declined to about 118,000 workers in December 1978. The overwhelming proportion of participants are men; only 15,000 women were reported enrolled early in 1977. 3/ The distribution of PEM slots has tended to favor the nonmetropolitan regions of the country. While Santiago accounted for around 39 percent of the national labor force, for example, it received only one-fourth of the PEM positions created in 1976.

286. The total cost of the program, including wages paid and the expense of non-labor inputs but excluding the cost of the food distribution, rose from US\$34.8 million in 1975 to an estimated US\$84 million in 1977. The 1976 level of expenditures--US\$79.4 million--represented about 51 percent of municipal budgets. The authorities have indicated that the PEM will be continued so long as unemployment rates remain high, and may be extended indefinitely in areas of chronic labor surplus.

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1/ Some 250,000 rations were expected to be delivered monthly to 50,000 workers during 1977.

2/ PEM enrollees are counted as employed in the labor force surveys.

3/ Monthly enrollment levels, benefit levels, and total expenditures are presented in Appendix II, Table 1.21.

287. A limited amount of training, including the provision of basic educational skills, the upgrading of artisan and agricultural skills, and creation of forestry skills, has been included in the program in some localities. Training has also been offered in tailoring, pipefitting, electricity, painting, carpentry, and other skilled trades. Some 28,000 workers are reported to have received training under the program during 1977, and an additional 40,000 were planned for 1978. A new program has also been introduced in 1978 to provide credit to graduates of PEM training for the basic tools required to exercise their acquired crafts.

b. Wage Subsidies

288. The wage subsidy program was adopted in 1975 to provide a stimulus to the employment of labor. On May 28, 1977, the Law was extended for an additional year with minor modifications. Under the program, a subsidy is paid equal to one-half of the ingreso minimo for each worker hired over and above the number employed as of the end of a base month (currently March 31, 1977). 1/ All employers are eligible to participate in the program with the exception of the public sector or firms in which public ownership exceeds 30 percent. The subsidy is roughly equivalent to the payroll tax on a worker hired at the minimum income level and is viewed as a means of offsetting the heavy payroll tax burden and thereby encouraging more labor-intensive techniques of production. While the Law is viewed as a temporary measure and has been extended on an annual basis, a number of officials indicated the desirability of continuing it until the social security reform has been completed and payroll taxes have been reduced significantly below current levels. 2/ According to ODEPLAN, an average of 23,000 workers per month were being subsidized at the end of 1976. The number had risen to 37,400 by June 1977, and to 42,000 in December. More than 40 percent of the subsidized positions were in the Santiago metropolitan area, and almost 90 percent of the total were blue-collar jobs.

c. Unemployment Insurance

289. In 1974, the Government undertook a sweeping reform of the unemployment insurance program, including the manual work force within a true insurance scheme for the first time. 2/ While the reform constitutes a major improvement in the protection manual workers enjoy against losses of income through unemployment, the number of workers who qualified for benefits represented as few as one-seventh or one-eighth of those reported as unemployed in 1976.

d. Special Training Program

290. Finally, as of January 1977, a new statute took effect under which private employers are eligible for income tax credits of up to one percent of the enterprises' taxable payrolls (for social security purposes) for the costs

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1/ The initial reference month was March 1975. For new firms established subsequent to the reference date, the subsidy is paid for additional workers hired after the firm has been in existence for six months.

2/ Details of the unemployment reform and the proposed social security reform are available in an internal Bank working document.

of providing special training programs to their workers. <sup>1/</sup> The programs may be offered by the enterprise itself or by contracted third parties. In either event, the program must be approved by the National Training and Employment Service (SENCE) of the Ministry of Labor, which is responsible for administration of the Statute. For purposes of the Statute, the word "worker" includes persons who work in their own enterprises, thus opening the program to small-scale entrepreneurs and artisans. In addition, SENCE provides training scholarships for unemployed workers, both experienced and seeking jobs for the first time. During 1977, more than 300 enterprises took advantage of the tax credit to provide training to some 55,000 of their workers. The vast majority of these were located in the Santiago metropolitan area. An additional 40,000 persons received training under SENCE scholarships. Of these, 24,000 were from the agricultural, forestry, and fishery sectors, and another 12,000 came from the Minimum Employment Program.

291. Postscript: In April 1978, President Pinochet instructed the National Planning Office to prepare a package of legal actions to eliminate rigidities in the labor market and to promote employment. Among the measures reportedly under study are: the elimination or steep reduction of the payroll tax for social security, substituting instead revenues derived from general taxation; permitting the gradual reduction in real terms of the minimum wage and its elimination for persons under age 23 or over age 65; and lowering the prospective difficulties and costs of dismissing workers hired in the future while retaining the existing rules and acquired rights of the present work force.

#### E. PRICES

292. Feedback from the massive price corrections of late 1973; sharply higher prices for oil, wheat, fertilizers and other major imports; the continued government deficit; and powerful inflationary expectations reflected in the extraordinarily high velocity of money combined to disappoint hopes for a rapid dampening of inflation in 1974. By year end, the consumer price index (CPI) had risen 376 percent. After a significant decline in monthly inflation rates during the last two months of 1974 (Table III.20), the CPI began again to accelerate through the first quarter of 1975, contributing to the perceived urgency of the austerity program. As a consequence of the latter, the average monthly inflation rate was cut by more than half during the second semester of the year, despite substantial real devaluation of the peso. Nevertheless, the price rise for the year still totaled 341 percent.

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<sup>1/</sup> The Statute for Training and Employment was first passed in May 1976, but subsequent modifications delayed its entry into effect until 1977.



Table III.20: CHILE - MONTHLY CHANGES IN OFFICIAL  
CONSUMER PRICE INDEX, 1974-78

(Percent)

	1974	1975	1976	1977	1978
January	14.1	13.9	10.5	5.9	1.8
February	24.5	16.5	10.1	5.8	2.4
March	14.2	21.2	13.5	6.1	2.9
April	15.3	20.8	11.9	4.7	2.6
May	8.7	16.0	9.8	3.8	2.1
June	20.8	19.8	12.3	3.3	2.0
July	11.5	9.3	8.9	3.9	2.5
August	10.9	8.9	5.5	3.4	2.8
September	12.8	9.2	7.6	3.7	2.9
October	18.9	8.4	6.7	4.2	1.9
November	9.7	8.2	3.8	2.2	1.3
December	6.5	7.1	5.1	3.1	1.5

Source: Appendix II, Table 9.3c

293. Inflation during the first quarter of 1976, although down considerably from the same period the year before, remained stubbornly at a level above that of the second semester of 1975 despite the painful economic contraction that had been suffered. It was in that context that the Government announced in June an 11 percent revaluation of the peso relative to the dollar. With international reserves growing rapidly during the first half of the year, the authorities were willing to risk some deterioration of the balance of payments through the rest of 1976 in the hope of achieving a significant downward shift of inflationary expectations. The increased value of the peso would lower the cost of imported goods, affecting the CPI directly and indirectly through the imposition of greater competitive pressures on domestic producers. The encouragement of imports was also expected to dampen the growth of the money supply.<sup>1/</sup> As a result, the monthly inflation rate during the last half of 1976 averaged 6.3 percent as compared to 11.3 percent during the first half. Inflation for the entire year totaled 174 percent, almost half the rate of the previous year.

294. The peso was again revalued in March 1977, and, with the velocity of money finally falling, inflation for the year was reduced to 63 percent. This progress continued into 1978; consumer prices during the first four months rose only 10 percent, compared to 24.5 percent during the same months of 1977, and inflation for the entire year totaling 30 percent.

<sup>1/</sup> International reserves continued to grow, however.

## F. WORKER COMPENSATION

### 1. Wages, Salaries and Cash Benefits

295. As seen in earlier chapters, the course of average worker compensation has frequently moved independently of government policy initiatives. This section will briefly outline wage policy since September 1973, reflected through legally mandated wage adjustments, and review the available data regarding the evolution of actual average wages and salaries. For a more detailed discussion, see note, page 53.

#### a. September 1973-1974

296. Chapter II showed that the very large gains in real wages and salaries achieved during 1971, as a key element of the Allende Government's income redistribution program, were not sustained in the accelerating inflation that followed. By September 1973, real wage and salary levels had fallen well below the pre-Allende levels. Among the first policy decisions faced by the Pinochet Government concerned the wage and salary adjustment that had been scheduled for October. Its initial inclination was apparently to call for a temporary freeze until an overall stabilization program could be fashioned. The unexpectedly large price increases that followed the removal of controls, however, forced earlier action. A minimum payment for all workers of E<sup>0</sup>36,000 was decreed for the last three months of 1973 (i.e., an average of E<sup>0</sup>12,000 per month), and family allowances were equalized for blue-collar and white-collar workers and raised to E<sup>0</sup>900 per dependent per month. <sup>1/</sup> In addition, a new benefit, a monthly transportation allowance of E<sup>0</sup>720 per worker, was introduced; a bonus equivalent to the wages earned during the previous April was to be paid each worker in November and December; and a Christmas bonus of up to E<sup>0</sup>10,000 was made payable in December.

297. In January 1974, the white-collar and blue-collar minima were officially replaced by a single minimum monthly pay rate, the ingreso minimo (minimum income), and its level was raised 50 percent above the minimum pay rate established during the previous quarter. The family allowance, also equalized for all workers, was adjusted an additional 100 percent. At the same time, the Government announced its intention to maintain worker remuneration levels generally in 1974 at the average real level of 1973. Toward that end, all wages, salaries, and cash fringe benefits were adjusted upward to five times the nominal levels of January 1973. Further across-the-board adjustments were declared in May, July, October, and December. Higher proportional adjustments were generally granted lower paid workers. Irregular

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<sup>1/</sup> The prescribed monthly minimum payment was approximately 3.9 and 3.7 times the nominal legal compensation rates for blue-collar and white-collar workers, respectively, established by the previous adjustment in March 1973. The new family allowance represented almost a four-fold increase for blue-collar workers and a doubling of the prevailing allowance for white-collar workers (see Appendix II, Tables 9.16 and 9.18).

bonuses and advances were also decreed during most months, so that either a general wage adjustment, bonus or advance, was declared in every month of 1974 except August.

298. These actions raised the legally mandated purchasing power of a blue-collar worker earning the minimum wage and receiving family allowances for 3.5 dependents to a level approximating that averaged by a similar worker during 1971 (Table III.21). 1/ The equalization of minimum pay rates and family allowances was of considerably less benefit to white-collar workers, however, and although the adjustment and bonuses significantly improved their situations relative to the first half of 1973, the legal real receipts of the lowest paid workers in this category were still some 25-30 percent below the levels of 1970-72.

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1/ For explanation of the range of real receipts shown, see Chapter II. The caveats expressed there regarding the reliability of wage and price data apply throughout. (See also the Note on Chilean Economic Statistics, Appendix I.)

Table III.21: CHILE - INDEX OF REAL RECEIPTS OF MINIMUM-INCOME  
BLUE-COLLAR AND WHITE-COLLAR WORKERS, 1970-1977 /a

(Average 1970 = 100)

Year/Quarter	Blue-Collar	White-Collar
1970 (average)	100	100
1971 (average)	137-141	108-110
1972 (average)	115-130	80-91
1973 (I-III)	58-91	38-59
IV	155-137	78-70
1974 I	145-137	74-70
II	143-135	72-68
III	147-139	75-70
IV	144-136	73-69
1975 I	124-118	63-60
II	117-110	59-56
III	126-119	64-60
IV	126-119	64-60
1976 I	123-116	62-59
II	129-122	65-62
III	135-127	68-64
IV	157-148	79-75
1977 I	154-146	78-74
II	148-140	75-71
III	158-149	80-76
IV	173-163	87-83

/a Refers to worker earning minimum wage, family allowance for 3.5 dependents, transportation allowance, and other cash bonuses decreed during period.

Source: Appendix II, Tables 9.17a, 9.17b, 9.19a and 9.19b

299. Table III.22 shows the progression of average real wages and salaries as reported in INE's quarterly surveys. As before, there was some divergence from official policy directions. While significant improvement is evident relative to the lows reached in 1973, average real wages and salaries in 1974 remained some 25-30 percent below the levels of 1970. White-collar workers, on average, made larger real gains and suffered less income variance than did manual workers despite the opposite tendencies suggested by the official wage and salary adjustments. On the surface, it would appear from the differences between average and minimum wages and salaries that there occurred a significant narrowing of pay differentials among blue-collar workers, at the same time that scales were stretching out in the case of white-collar workers.

The latter result may simply reflect a relative concentration of growing unemployment at the lower-skilled end of the white-collar ranks. A possible explanation of slower average wage growth in the skilled trades may have been the curbing of union collective bargaining power which, combined with large minimum wage adjustments, produced a significant compression of blue-collar wage differentials.

Table III.22: CHILE - INDEX OF AVERAGE REAL WAGES AND SALARIES, 1970-78

(Average 1970 = 100)

Year/Month	Wages	Salaries
1970 (average)	100	100
1971 (average)	118-119	119-120
1972 (average)	100-113	94-106
1973 (January-July)	61-94	52-80
(October)	52-40	39-30
1974 January	86-81	77-73
April	67-64	64-60
July	80-75	77-72
October	71-67	73-69
1975 January	73-69	79-75
April	67-63	69-65
July	69-65	76-71
October	71-67	73-69
1976 January	73-69	75-71
April	73-69	74-70
July	78-74	77-73
October	85-80	82-78
1977 January	92-87	92-87
April	95-90	95-90
July	103-97	106-100
October	96-91	97-91
1978 January	106-100	107-101
April	109-103	110-104
July	116-110	115-109
October	113-107	110-104

Source: Appendix II, Table 9.21

b. The 1975 Recession

300. The October 1974 pay increase introduced automatic wage indexing by which adjustments would be made quarterly by the full amount of the change in the CPI during the second, third and fourth months prior to the adjustment. <sup>1/</sup>

<sup>1/</sup> In other words, the adjustment decreed in March 1975 was equal to the inflation of the preceding November through January, and so on. As a means of transition to the new system, the October 1974 adjustment was based upon the inflation of July and August, and the December adjustment was similarly based on September and October price changes.

With inflation accelerating in early 1975, however, the adjustment formula failed to prevent further erosion of real compensation levels. Consequently, despite additional bonuses, the June 1975 adjustment left the real receipts of the minimum income worker some 8 percent below the level of June 1974. Voluntary or negotiated pay adjustments apparently exceeded the mandatory adjustments in the case of white-collar workers, inasmuch as average real salaries through the July sampling were some 3 percent higher than during the same period in 1974. Average real wages, on the other hand, had fallen 10 percent.

301. As part of its austerity program, the Government modified the wage adjustment formula, beginning with the September 1975 adjustment. The new mechanism was to compensate for the three months ending in the month of adjustment. Thus, the September increase was to equal the sum of price changes occurring in July, August, and September. With the inflation rate for September, of course, not yet known, it was estimated in advance at one-half the August rate, with any shortfall to be made up at the time of the next quarterly adjustment. The new formula shortened the lag of wage adjustments behind price changes and thus offered greater protection against the erosion of subsequent wage hikes, but its immediate impact was a substantial reduction of the real increment being mandated. The sharp decline that occurred in monthly inflation rates during the second half of the year resulted in a September wage adjustment of 24 percent under the new formula, when adherence to the old formula would have required a 52 percent increment. 1/

302. Inasmuch as actual inflation since the June adjustment totaled almost 43 percent, September's legal increment left real wages conforming to the formula about 13 percent below the June level. This plateau was maintained by the December adjustment, part of which was to compensate for the underestimation of September's inflation included in the prior adjustment. Thus, for the year 1975 as a whole, although larger proportional adjustments and bonuses were granted to the lowest-paid members of the labor force, average monthly real minimum receipts fell about 13 percent relative to 1974. Nevertheless, there is again evidence that actual wage and salary adjustments exceeded legal increases. The indices of average wages and salaries in October 1975 were both at the identical levels of those a year earlier. The respective averages of the four quarterly observations for the entire year show white-collar salaries slightly above 1974, while blue-collar wages slipped 8 percent.

c. Recovery

303. Wage policy in 1976 remained essentially unchanged from that of the previous year. The formula for adjusting wages was applied in the same fashion on a trimestral basis. For the first time since the end of 1973, however, there occurred a significant and sustained improvement in real

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1/ The relevant 1975 monthly inflation rates were as follows: May - 16.0; June - 19.8; July - 9.3; August - 8.9. Under the original formula, the adjustment would have compensated for the cumulative inflation of May through July.

remunerations, as a consequence of the deceleration of the rate of inflation. Thus adjustments based on prior months' price rises were less than fully eroded before being lifted again by the next adjustment. For the year as a whole, combined wages and salaries showed an increase on the order of 7 percent. <sup>1/</sup> Nevertheless, at the end of 1976 average real wages and salaries remained some 15-20 percent below the average level of 1970.

304. As inflation continued to wind down, the Government decided to lengthen gradually the intervals between wage adjustments. Thus, only three adjustments were decreed in 1977, in the months of March, July and December. Otherwise, the formula based on previous inflation rates remained the same. The rapid deceleration of the rate of price rises in 1977 resulted in important further gains in real compensation. Average real wages and salaries for the year were about 25 percent above the average level of 1976, remaining only slightly below the level of 1970. <sup>2/</sup> During 1978 wages and salaries grew by 7 percent in real terms and exceeded the average level of 1970.

## 2. Social Security

305. The social security system, which covers about 70 percent of the Chilean labor force, and its proposed reform are discussed in detail in an internal working document of the World Bank. Suffice it to note here that the system has evolved in an extremely fragmented fashion, with 35 different social security institutions administering more than 200 different funds. Coverage, benefits, and contribution levels have varied considerably from one fund to another.

306. In general, the benefits include: an extensive system of socialized medicine administered by the National Health Service (SNS); social assistance transfer payments, mainly in the form of family allowances; several forms of protection against risk of temporary or permanent interruptions of income, such as unemployment, illness, maternity, and work-connected injuries; and pensions for permanent interruptions of income due to old age or physical disability. Under the present Government, unemployment insurance has been extended to manual workers and other formerly excluded white-collar employees, and old-age pensions have been introduced for individuals not previously eligible under the provisions of any existing pension fund. Recent changes in the benefit structure have included unification of the family allowance provisions of the different funds into a single mechanism with uniform benefits for all covered workers.

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<sup>1/</sup> This estimate, based on the four survey results, probably understates the actual extent of improvement, inasmuch as purchasing power was better maintained during the intervening months than was true in 1975. An alternate estimate of the gain in 1976 over 1975, based on UC's interpolated wage and salary index, shows an increase of 11.6 percent (Comentarios sobre la situación economica, 2<sup>o</sup> Semestre, 1976).

<sup>2/</sup> For reasons similar to those of the previous note, UC calculates the 1977 average to have been 30 percent above that of 1976 (Comentarios..., 2<sup>o</sup> Semestre, 1977).

307. Provision of so wide a range of contingencies and income supplements has been costly, rising from 14 percent of national income in 1959, to 24 percent in 1971, before tapering off to about 17 percent in 1975, the last year for which data are available. Inevitably, the expansion of benefits and the extension of coverage to the lower-income, higher-risk members of the labor force caused the system to depart from its initial principle of full funding, and benefits are paid primarily out of the current employer and employee contributions and transfers from the public treasury. Social concerns, manifested in the form of loans at very negative real interest rates, historically contributed to the erosion of the system's real asset base, thus further increasing dependence on current payroll taxes and government subsidies.

308. The social security system has long been recognized to suffer serious deficiencies, and its reform has been studied and restudied repeatedly for at least twenty years. Vested interests have made serious reform difficult, however, even by governments which, in principle, have favored it. The current authorities are committed to a fundamental restructuring and reform of the social security system. While some modifications have already been introduced, such as raising and standardizing the retirement age to 65 for men and 60 for women, the future form of the system is still the subject of intense discussion within the government and the private sector at large.

309. Over the years, there has been a gradual but steady lowering of the minimum age and length-of-service requirements to qualify for a social security pension. At the same time, pensions are indexed, and a pensioner may continue working in another job without penalty. <sup>1/</sup> Partly in response to these privileges, the ratio of pensioners to active contributors to the system rose from 10 percent in 1955 to 31 percent by 1975. (Over the same period, the ratio of the total population over age 65 to the 15-65 age group rose only from 7.3 percent to 8.6 percent.) Early retirement has thus been one reason behind the observed secular decline in the labor force participation rate.

310. Also contributing to the desire of converting as early as possible from contributor to beneficiary status is the low perceived value of benefits relative to the payroll levies made on the workers' behalf. Even with benefit improvements mandated over time and their financing with state subsidies, there has been a substantial loss, in an actuarial sense, in the value of funds collected for pensions and other purposes. The expected value of future benefits has been reduced further by the uncertainties induced by administrative inefficiency. Applications for benefits are subject to long processing delays, and considerable effort must be expended to push them through the administrative apparatus.

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<sup>1/</sup> Some public sector retirees have the right to pensiones perseguidoras which are indexed according to the salaries of active workers in their former jobs. Theoretically, therefore, they are not only protected against price increases but also share the productivity gains of the active labor force.



311. The low evaluation of the system's benefits in comparison with its cost has at least two important consequences. The first and most obvious is that it encourages the evasion of payroll taxes. Both employers and workers gain by understating earnings and sharing the saved taxes. 1/ Thus wages and salaries are commonly converted into "bonuses" or fringe benefits which are subject to lower rates of social security taxation. A second consequence of the disparity between cost and perceived value is that the funds paid in become equivalent to a tax on labor services, and the resultant increase in the cost of labor thus encourages the substitution of other inputs. 2/

312. Although the social security payroll tax has been progressively lowered over the past two years, the rate to private sector employers still averaged about 40 percent of the taxable payroll in 1977, with an additional 9 percent paid by the employee. This is one of the highest payroll tax rates in the world and, as the authorities themselves point out, represents an important continuing inhibition on the growth to employment.

#### G. THE DISTRIBUTION OF INCOME

313. The freeing of prices and interest rates, devaluation of the exchange rate, lowering of tariffs, and other major reforms introduced by the Pinochet Government have important implications for the distribution of income. At the same time, much attention has been given to the distribution of the burden of the severe austerity experienced in 1975 and 1976. Unfortunately, the scant data base and the complexity of the policy interactions involved make it almost

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1/ Evasion is also encouraged by the fact that actual benefits are unrelated to the level of earnings reported over most of the working lifetime of a contributor. Pensions paid by EMPART, the major fund serving private sector, white-collar workers, depend only on the salary of the last five years before retirement. For public sector workers, only the last three years matter. Some earnings must be regularly reported, however, and the taxes paid thereon, in order to keep certain benefits, such as health care and unemployment insurance, up-to-date.

2/ If the present value of the anticipated benefits were perceived as equal to the cost, incidence of the employers' payments to the fund could eventually be shifted back to labor, and the total cost of labor to the employer would be no higher than in the absence of social security. Where benefits are valued less than their cost, however, the difference cannot be shifted back to labor and thus becomes, in effect, a tax on labor services. (Evidence that this phenomenon has historically occurred in Chile may be found in: Peter Gregory, Industrial Wages in Chile, Cornell University, Ithaca, New York, 1967.) Moreover, where the backward shift is also impeded by minimum wage legislation, it is the lowest paid workers who are most likely to see reduced job opportunities in the covered sectors resulting from the payroll tax. Workers thus displaced must compete for jobs putting downward pressure on wages in the non-covered sectors.

impossible to reach any conclusions with confidence. 1/ Thus, only a few general observations are offered here. 2/

1. The Costs of Austerity

314. As noted above, per capita GNP fell 19 percent in 1975, and unemployment reached almost 20 percent of the labor force of Greater Santiago. It is difficult to imagine many winners in such a situation. Clearly, the greatest hardships were borne by the unemployed who were already concentrated among the lowest income strata. Although some new government programs were undertaken to assist them, the resources available did not begin to match the magnitude of the problem. Total employment fell 5 percent, but for workers who retained their jobs, real wages and the total wage bill declined by relatively less than the national income. Thus, labor's share increased, albeit of a significantly reduced pie. The relative improvement of agricultural prices and the continuous growth of output suggests a substantial shift of income during this period toward the agrarian sector, but there are no firm data to indicate how it was distributed within the sector. The squeeze placed on middle- and upper-income groups generally is illustrated by the real increase in taxes on income and property that occurred despite the fall in output. In relative terms, it is perhaps these groups whose net incomes suffered the most from the austerity program per se, but, of course, their living standards were better protected by the ability to draw upon previous accumulations of wealth.

315. Given the magnitude of the crisis faced and the resource constraints that strapped the system, one views the Chilean situation in 1975 with a profound sense of helplessness. There were, perhaps, additional measures that might have been taken to shift more resources toward reduction of the worst suffering, but it is difficult to visualize a major change in the picture without considerably more outside assistance than the international community was evidently prepared to offer.

2. The Impact of the Basic Reforms

a. Price Policies

316. For at least four decades, the Chilean economy was increasingly overlaid with special subsidies, tax exemptions, price controls, etc., intended to benefit one group or another. Subsidies frequently were created to offset the damage done to production incentives by price controls. The Frei and Allende Governments progressively widened access to preferential treatment to lower-income groups previously left out, while perhaps reducing the advantages available, either legally or extralegally, to at least some of the better-off groups.

317. Price controls to prevent rising wages and salaries from being passed forward to the consumer were a key element in the Allende Government's strategy for shifting the profits of industrialists to the workers and holding down the cost of wage goods to the lower-income groups. Although the prices of wage

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1/ The last empirical study of income distribution in Chile was carried out in 1968.

2/ A more extensive discussion of this topic can be found in a Bank internal working paper.

goods were legally controlled at levels well below their market value, an increasing proportion of their output found its way to the black market. Given the rapid shifts taking place in relative prices as well as the varying proportions in which different goods traded at official and black market prices, it is virtually impossible to untangle the net redistributive consequences. Indeed, the experience of individuals both as buyers and sellers of goods and services varied so widely that no sectoral, functional or income category can be treated uniformly as net gainers or losers in the competition for income shares. To the extent that an individual had access to wage goods, credit, imports, etc., at controlled prices, and was able to sell his own product on the free market, he realized significant gains in real income. In the contrary case, the opposite was true.

318. Immediately following its coming to power the Pinochet Administration began to eliminate the complicated and the contradictory system of administered prices and subsidies that had grown up over the previous four decades. The same difficulties which inhibit the analysis of the net distributive effects of their existence make it impossible to be certain about the total impact of their removal. Once again, each individual was affected differently depending on the access he or she previously enjoyed to goods and services at subsidized prices, as well as on the weight of each item in the family's budget.

319. The complexity of discerning the total impact may be illustrated by the difficulty involved even with individual items. The removal in 1977, after more than 40 years, of the price controls on bread affected all Chileans in some degree. Inasmuch as bread accounts for a larger proportion of low-income family budgets than of higher-income budgets, the elimination of the subsidy at that moment clearly fell relatively more heavily on the poor. During the 1971-73 period, however, bread had become increasingly scarce at official prices, as sales shifted to the black market. Some consumers, principally in the industrial neighborhoods around Santiago, received direct distributions from government agencies and thus continued to enjoy the subsidy. Other families with means were able to acquire bread and other commodities in the black market, thereby foregoing the subsidy; while a third large group, probably including middle class, the poorer, least-organized members of society, and the populations of outlying cities and towns where the government's administrative control was weakest, made do with a substantially reduced bread ration or none at all. Relative to that situation, then, it is not possible to make confident assertions regarding the impact of the bread subsidy and its removal on any of the conventional population aggregates.

320. Similarly the dramatic increase that occurred in the real prices of agricultural goods, coupled with the recovery of output, indicates a considerable shift of income shares in favor of the farm sector. At the same time, however, farm input prices, including credit, were also freed and have risen greatly. Consequently, the net result varies among individual farmers depending on their respective prior access to controlled-price purchases and black market sales. Before 1965, it was clearly the larger farmers who benefitted most from the administered price and subsidy system. Access to subsidies was opened to the land reform beneficiaries during the 1965-1973 period, and they have undoubtedly been hurt by their elimination. Most minifundistas and tenant farmers, on the other hand, remained at the end of the subsidy line historically and have probably benefitted from the recently improved prices of the goods they market.

321. Another impact of the freeing of prices was the sharp explosion of wholesale relative to consumer prices, suggesting a substantial squeeze on the earnings of retail merchants. The freeing of interest rates has been highly beneficial to a small number of Chileans with accumulated savings or with foreign borrowing capacity, who have been able to lend their funds out at the extraordinary short-term interest rates prevailing since 1975. This redistribution has occurred largely within the middle- and upper-income groups, however, and can probably best be characterized as a shift of income from the industrial and commercial sectors to the financial sector. On the other hand, individual interests frequently overlap these sectors. Some merchants and industrialists also evidently realized capital gains on inventories, particularly of imported goods, accumulated during 1974 even though these were ultimately carried at very high interest cost. Large capital gains have also accrued to individuals who acquired stock shares and real estate at the panic prices many such properties were offered at during the early 1970s. One clear group of early gainers were those predominantly middle- and upper-income individuals holding accounts in the savings and loan system (SINAP). 1/

322. Finally, while the freeing of the prices of bread, milk and other "basic" commodities may on balance have been regressive from a distributive standpoint, the many other subsidies and controls that have been removed had clearly been benefitting primarily the middle- and upper-income groups. It was the latter who were the principal users of subsidized electric power, gasoline, credit, or capital goods. Indeed, to the extent that such subsidies encouraged the substitution of capital for labor, the resultant loss of jobs and absolute income was concentrated among lower-income groups.

b. Compensation Policies

323. Detailed breakdowns are not available of changes in the earnings distribution within the wage and salary categories. Consequently, only some tentative inferences are possible. Pay differentials among white-collar workers appear to have narrowed since September 1973, the receipts of a minimum-income worker growing proportionally more than average salaries. The compression of the salary structure occurred entirely in the last quarter of 1973 and early 1974; it has since been widening slowly as average salaries have recovered more rapidly than the minimum. Despite the moratorium on union wage bargaining, employers apparently granted salary increases greater than authorized by the quarterly legal adjustments. Similarly, the equalization of the minimum pay rate and family allowances of manual and white-collar workers very significantly raised the incomes of the former and greatly compressed the distribution of wages among blue-collar workers generally. Although average wages have grown somewhat more rapidly than the minimum since then, the narrowing of wage differentials relative to September 1973, and even to 1970, remains great. The fact that unemployment has probably been concentrated at the low-skill levels enforces the conclusion that blue-collar

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1/ The formula used to compute the readjustment of savings for inflation for 1973 through July 1974 was erroneously based on the arithmetic average rate of inflation rather than on the geometric rate and consequently yielded an adjustment well above the rate of inflation. The adjustment formula has since been corrected.

differentials (among those with jobs) have very significantly narrowed. Thus, a greater degree of equality has probably been realized in recent years within the manual work force. But since the skilled manual workers only earned about twice as much as unskilled workers in the late 1960s, the gains of the unskilled would seem to have come, in part at least, at the expense of those who are only a little better off in the socioeconomic scale of the society as a whole. Whether the squeeze that has occurred in occupational wage differentials will be permanent cannot be determined. It is likely that as the economy revives, an expanding demand for relatively scarce skilled workers will tend to pull their wages up faster than those of the unskilled, thus at least partially restoring the earlier earnings differentials.

324. The unification of the minimum wage and family allowance systems and the introduction of a transportation allowance by the Pinochet Government also resulted in a substantial improvement of low-paid blue-collar workers relative to those at the bottom of the white-collar pay schedule. By the first quarter of 1977, the real minimum receipts of a manual worker were some 50 percent above the average legal minimum prevailing in 1970. Although equal now in absolute terms to the blue-collar minimum, the real minimum legal receipts of a white-collar worker remained 20 percent below the level provided him in 1970. Meanwhile, average salaries, which had been more depressed than wages during the previous period, recovered more rapidly after September 1973 and by the end of 1975 had roughly re-established the differentials existing in 1970. These data may understate the actual widening of pay rate differentials, however, to the extent that the statistical increase of average blue-collar salaries may simply reflect the higher concentration of unemployment among the low-pay members of the blue-collar labor force. In any event, while employed blue-collar recipients of the minimum income have improved their positions relative to white-collar workers, blue-collar workers as a class do not appear to have done so. Average remunerations paid blue-collar and white-collar workers have grown apace since 1975.

325. Finally, one cannot ignore the possible impact that the rapid improvement in the real minimum wage that began in 1970 has had on the employment of low-skilled workers. Although the serious deterioration in the employment picture in recent years is attributable primarily to the economic depression, the legal support given to minimum wages and benefits may also have played an inhibiting role in the case of unskilled, blue-collar employment.

326. In summary, it is difficult to draw clear-cut conclusions about the redistributive impact of wage policies within the working class. The only statement that can be made with any degree of confidence is that employed, manual, minimum-wage recipients have improved their position relative to any other broad grouping of wage or salary earners. To be weighed against that, however, is some unknown loss of employment opportunities at the minimum-wage and a subsequent diversion of workers into either unemployment or less remunerative jobs.

327. Just as minimum wage policies alone are likely to be an imperfect instrument for achieving lasting shifts in income within the wage and salary group, wage policy is not likely to be particularly effective over the long run as an instrument for effecting important shifts among the factors of

production, in the absence of other measures taken simultaneously. 1/ As seen in Chapter II, the rapid increases in real compensations effected in 1971 caused a sharp increase in the functional share of national income accruing to wages and salaries from an average of just under 50 percent in the late 1960s to 62 percent in 1971. The subsequent decline in the labor share was just as sudden, however, as the price control mechanism broke down and increases in remunerations fell behind the rapid rise in prices. The labor share is estimated to have fallen to 46 percent in 1973, and to 43 percent in 1974. 2/ The changes in real wages, employment, and GDP in 1975 would seem to indicate a rise in the relative share of labor in 1975 as compared to 1974. The situation deteriorated in absolute terms, both real wages and employment falling, but the contraction of total output exceeded by a considerable margin

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1/ Several important caveats are required when discussing the wage share data from the national income accounts. The first is the already noted unreliability of the national income accounts themselves under the weight of all the enormous statistical problems of the past decade. Second, the division of income into labor and non-labor incomes is misleading, inasmuch as the latter includes the earnings of all self-employed persons in unincorporated enterprises. Many, if not most, such persons in Chile are better identified both economically and socially with the working classes. The labor share of national income, moreover, cannot be treated as synonymous to the share of the "poor," inasmuch as it includes relatively high income workers, both blue-collar and white-collar, and excludes the earnings of many of the very poor, ranging from self-employed street vendors to minifundistas. Finally, the shares are calculated before taxes and include the employers' payments to the social security funds.

2/ It may be noted that the trend portrayed in the national income accounts is at variance with the wage trends outlined in this report. In 1972, the sharp decline shown above for real wages, in the face of a virtually constant national product, should have produced a decline in the income share going to remunerations; the small increase in employment in 1972 would not have sufficed to offset the drop in real wages. Yet the national income accounts show the share to be rising. With the large recovery in real wages indicated for 1974 (when deflated by the IBRD adjusted CPI), constant employment, and a 5.7 percent increase in GDP, the wage share would have been expected to rise. Instead, the national income accounts record a fall. The problem may arise in part from an underestimation of inflation during 1972-73. It will be recalled that the official CPI reports most of the inflation, and hence the deterioration of real wages, to have occurred after the freeing of prices in the last quarter of 1973. Part of the difficulty could also lie with the IBRD deflator which may understate the effectiveness of price controls, at least for many workers, through 1972 and early 1973. Thus, the course of the wage share reported by ODEPLAN is more consistent with the real wage series derived by deflating by the UC price index. Nevertheless, it is likely that the wage and salary share of national income was, in fact, declining by 1972, with a downward path somewhat less abrupt than calculated by ODEPLAN.

the decline in the wage bill. Both real wages and employment rose faster than GDP in 1976 and 1977 and may have increased the labor share of national income to about the proportion which prevailed during the late 1960s. 1/

328. Finally, the social security system has long been marked by the discriminatory treatment of manual workers who constitute the lowest paid group covered by the system. Both the range of benefits provided as well as the level of benefits were traditionally far less generous for this group, despite the efforts of successive governments to reduce or eliminate the inequity. At the same time, the payroll tax method of financing the system tends to be regressive, assuming that the employer share is shifted either backward to labor or forward to the consumer. Major beneficiaries were those members of the various institutions who were able to borrow from the funds at terms that were heavily subsidized by remaining members and by taxpayers generally. Nevertheless, an analysis of the distribution of the benefits and costs of social security in 1969--specifically, the pension, family allowance, health and housing provisions of the three major institutions--suggests that the net result was slightly more progressive than the pre-tax distribution of the economy as a whole. 2/ In net terms, the lower-income groups received a greater share of total benefits than they paid of total costs, the reverse was true for the highest income groups, and the middle brackets approximately broke even.

329. Given the obvious regressiveness of the inter-institution benefit structure, the slight progressiveness that occurs for the social security system as a whole apparently results from redistribution within the respective institutions. Obscured by this analysis, however, is the redistribution that occurs between the covered and noncovered populations by reducing employment opportunities in covered occupations and thus creating unemployment and downward pressure on the wages of the excluded workers. In addition, the substantial transfers made to the social security institutions by the government must be financed through some combination of taxation, inflation, and the reduction in the quantity or quality of other government programs and services. In each case, unaffiliated workers and their families bear part of the burden without compensating benefits. Since the unaffiliated are predominantly low-pay, self-employed workers (peasant farmers, street vendors, etc.) and blue-collar workers in small enterprises, these indirect effects are undoubtedly highly regressive.

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1/ These estimates are very tentative and are based on wage movements in a limited sector of the economy. These movements have been paralleled by wages in other sectors and among the low-income, self-employed in the recent past, but it is risky to assume that this is always the case. Similarly, the estimates of employment changes emerge from the UC survey of Greater Santiago and may not be representative of what has occurred in other areas of the country. Finally, since intertemporal comparisons of the share of national income flowing to wage earners are affected by structural changes in the status of the labor force, it is hazardous to assume a past ratio of remunerations to national income as being in some sense "normal."

2/ Alejandro Foxley, Eduardo Aninat, and Jose Arellano, "What Does Social Security Do to Incomes?" World Employment Working Paper (WEP 2-23/WP42, I.L.O., Geneva, July 1976. The study is described in Vol. II, Annex III.

330. Reforms introduced since 1973, including the equalization of family allowances, have reduced considerably some of the discriminatory features of the past. Other recent measures have included the introduction of unemployment insurance for manual workers and the maintenance of other benefits (e.g., family allowances, access to health services, etc.) during the period of insured unemployment; the provision of old-age pensions to persons not covered by any of the existing social security schemes; and the recent extension to self-employed workers of insurance against occupational accidents and disease. As a consequence of these changes, the lowest wage-earning groups have gained both relatively and absolutely. The real value of the family allowance to blue-collar workers in 1976 averaged about 15 percent above the 1970 level. The losers in both a relative and an absolute sense have been the white-collar workers who have seen the value of their family allowances shrink by half relative to 1970 levels. In addition, it is largely this latter group that has lost access to the large subsidies previously afforded those individuals able to secure loans from their institutions at negative real interest rates. There have been no compensating increases in benefits or coverages for white-collar workers.

c. Tax Policy

331. Any discussion of Chilean tax policy must discriminate between the collection policies and policies designed to finance public outlays. While only the former are discussed here, the latter policies of the Government have probably had a distinct effect on "tax" incidence, since the Pinochet Government has virtually ended the heretofore regressive inflation "tax" stemming from deficit financing. That said, the primary objectives of recent tax reform measures have been to minimize the distortions in resource allocation introduced by tax considerations, to eliminate the horizontal inequities introduced by the large number of special exemptions and preferences, to improve the administration of tax collection, and to protect the tax base from erosion by inflation. Tax treatment was historically differentiated not only by functional income sources (i.e., labor, capital, professional, etc.), but also by sector and subsector (i.e., small industry), and by form of business organization (proprietorship, cooperative, corporation, etc.), giving rise to considerable inequities in the tax burdens of persons with the same total income. Moreover, only certain incomes were subject to withholding or estimated tax submissions through the course of the tax year. Those not so subject, of course, benefitted from the constant erosion of the tax liability's real value as the price level rose, as well as by the greater opportunities for evasion. As a consequence of the 1975 reform, the tax treatment of different incomes has been made more uniform; the coverage of the tax prepayment system has been widened; a large number of exemptions have been eliminated; and the tax base has been broadened to include undistributed corporate profits, previously left untaxed. In addition, the property tax was massively adjusted for past erosion due to inflation, and since mid-1975 the revaluation has been made automatic in accordance with changes in the CPI. Similarly, the values of automotive vehicles were updated for purposes of the annual license fees.

332. The net effect of these modifications has undoubtedly been an improvement in the horizontal equity of the tax system--i.e., equal treatment of equal incomes--and probably an increase in the direct tax system's overall



progressivity as well. The latter follows from the fact that the higher income groups most benefitted in the past from special tax regimes, payment lags in the face of inflation, and the exclusion of undistributed corporate profits. Several other modifications of the income tax provide offsetting benefits to the higher-income groups. In particular, the tax rate on corporate and other business incomes has been reduced, and the former taxes on capital gains and net wealth were eliminated. Moreover, monetary correction was extended to all business assets and liabilities in contrast to the former tax law which only permitted the full revaluation of fixed assets.

333. Measures reducing business income taxes are regressive only to the extent that these taxes are not shifted forward to the consumer in the form of higher prices. If, however, as is widely believed, the ultimate incidence rests on consumers rather than on the owners of capital, the distributive effects of these tax changes are less certain. The elimination of the tax on capital gains, on the other hand, clearly reduces the progressiveness of the tax structure. Nevertheless, this tax has always been difficult to assess and collect in Chile and because of heavy evasion was never a significant contributor to total tax revenues. Thus, in the absence of administrative measures to improve the reporting and auditing of capital gains incomes, the elimination of this tax has little practical impact on the distribution of the tax burden. Less easily defended, in the mission's judgment, was the elimination of the wealth tax which, in addition to offering a useful tool for income redistribution, provided a means for capturing income accumulations that may continue to escape taxation at other levels. The Government considers these measures desirable for improving the incentives to save and invest. The long-term impact on income distribution will depend on the extent to which economic growth is thereby encouraged and the manner in which its fruits are distributed through the product and factor markets.

334. The most important reforms in the system of indirect taxation since 1973 were the substitution of a value-added tax (VAT) for the previous cascading sales tax, <sup>1/</sup> and the dramatic reduction of import duties in an effort both to lower and to equalize the levels of effective protection provided domestic producers. At the same time, a large number of special exemptions from both taxes available to particular producers or consumers depending on sector, region, etc., have been eliminated. Finally, the tax on credit transactions was greatly reduced. The principal objective of all these changes was to eliminate distortions in resource allocation induced by the previous tax system, thus promoting greater efficiency and more rapid economic growth.

335. Many elements of the former system of indirect taxes, such as the preferential treatment accorded capital goods, served to worsen the distribution of income. The complexity of the system encouraged both evasion and corruption as well as very high administrative costs, all of which must have had significantly regressive distributive implications. The strong financial incentives that the cascading sales tax offered to the vertical integration

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<sup>1/</sup> In addition to the VAT, a number of goods defined as luxuries continue to carry complementary excise taxes. This tax, generally 20 percent, is presently applied inter alia to jewels, furs, air conditioners, cameras, phonographs, etc., and thus falls predominately on high- and medium-income consumers.

of enterprises, combined with the high levels of effective protection provided by the tariff system, created extensive opportunities to earn monopoly rents that in practice accrued to the most powerful and best organized groups in the society. Looking to the future, the reforms that have been effected will make domestic markets more competitive and force producers to become more efficient. The beneficiaries will be consumers generally.

336. While, when the elimination of the inflation "tax" is remembered, the financing of governmental outlays is obviously now more progressive, the immediate impact on income distribution of the reforms of the tax collection system appears to have been regressive in spite of their important economic benefits. This conclusion, necessarily tentative, is based on the observation that many of the exemptions and preferential rates granted under the old sales tax and customs duty systems were aimed at the goods consumed in larger proportions by the lower income groups: e.g., food and clothing. In recognition of this objective, the VAT introduced in March 1975 continued to exempt bread, wheat, flour, milk and other basic food items, and school supplies. This exemption was rescinded in 1977, however, on the grounds that such exceptions to general coverage created problems of definition and inevitably complicated the problems of tax administration, as well as impeding the efficient allocation of resources. A special wage adjustment inversely related to income was decreed to compensate low-income families for this increase in taxes. Although the improved pay may have effectively offset the regressive impact on low-income employed workers, the extension of the VAT added to the already severe economic problems of the large number of unemployed. Whatever favorable consequences it offered from a longer-term perspective, this measure might better have been delayed pending more propitious general economic conditions.

337. At the same time that the 1975 reform enhanced the horizontal equity and increased the neutrality of the tax system with respect to the allocation of resources, it also greatly increased the effective tax burden on the economy as a whole. At the time of enactment of the major tax reform legislation in March 1975, this increased tax burden was an intended part of the stabilization program. As the need for austerity diminished, and the Government gradually shifted policy emphasis toward the stimulation of economic recovery, it began to lower tax rates. The reductions thus far have concentrated on corporate and personal income tax rates in an effort to stimulate investment spending and to increase the demand for goods. The value-added tax, on the other hand, has been maintained at the rate of 20 percent--the highest in the hemisphere--and its coverage extended as described above. As a consequence, the tax structure has been shifting toward increasing reliance on indirect taxation. The role of property taxes has faded steadily since the mid-1960s, with the exception of large jumps in 1971 and 1974. Although taxes on real estate have risen significantly since 1973, this growth has been offset by the elimination of the wealth tax.

338. To some extent, however, this observation is deceptive. The major relative growth of indirect revenues over the past three years has occurred in import duties, partly because of the repeal of the tax-exempt status formerly enjoyed by the public enterprises. It thus represents a transfer within the public sector rather than an increased burden on the private

sector. 1/ Moreover, these revenues have grown as a consequence of trade liberalization, including greatly reduced tariff rates. They thus reflect an increased availability of goods at competitive prices in the local markets. Therefore, the net distributive impact depends inter alia on the distribution among Chilean consumers of the real income gains generated by this increased competition and the impact on the monopoly rents previously earned by Chilean producers.

d. Social Expenditures

339. A large fraction of the growth of public expenditures over the past four decades was devoted to programs having explicitly distributive objectives. While primarily intended to improve the living standards and economic opportunities of the lower-income groups, the implicit subsidies provided by these programs were, for the most part, made freely available to all. The present policy is that the prices of goods and services in general should be determined in the marketplace by the forces of supply and demand. The Government explicitly recognizes, however, that the subsidization (or taxation) of some goods and services is justified on economic or social grounds, including purely distributive objectives. In these cases, however, the Government is seeking mechanisms to limit the subsidization of social services to persons who demonstrably need them, and to increasingly require that those with the ability to pay, do so. This policy, which is expected to reduce the pressure on the government budget, improve the efficiency of resource allocation, and increase the resources available to meet the problems of the truly poor, is being progressively applied to such long-subsidized activities as public higher and secondary education, public medical services, school lunch and milk distribution programs, and housing. 2/

340. The principle of the new approach is sound. A large proportion of past subsidy programs, financed to a considerable extent by inflation, went to the benefit of the middle-income groups while dealing very inefficiently with the relief of poverty. Whether the present attack on poverty will succeed, however, remains to be demonstrated. If successfully implemented, the reforms could result in a significant shift in income distribution in favor of the urban, lower income groups. The proposed redistribution of resources, however, would be made difficult under the best of conditions by the established expectations of the traditional client groups. The objective has been made even more difficult in recent years by the austerity program and the Government's parallel determination to reduce the overall size of the public sector. Although expenditures for social programs have fallen proportionately less than the budget as a whole since 1973, and as a proportion of total central government expenditures are equivalent to the high level of

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1/ On the other hand, this increased cost to the public enterprises is presumably passed on to the consumer in the form of higher charges for the goods and services produced by these enterprises--electricity, gasoline, steel, etc.

2/ These programs, along with the highly innovative work being done in the field of nutrition, are described at length in Vol. II, Annex III.

1972, in real absolute terms they are significantly below the levels of 1971-1973 (Table III.23). Consequently, funding and personnel levels for a number of priority programs--e.g. public health service and the the school lunch program--are far short of what is needed to meet the needs of the truly poor. Moreover, the problem of rural poverty has barely been addressed.

341. The authorities recognize that the resources devoted to these programs must be expanded if their stated goals are to be attained. As the general economic recovery continues and growth resumes, those resources will become available and the Government will have an opportunity to demonstrate that efficient resource allocation and accelerated growth can be made consistent with a more equitable income distribution and the elimination of absolute poverty. An operational problem that remains to be solved concerns the proper identification of the target population. Countries have found the means test notoriously difficult to apply fairly, and care must be taken that the tightening of eligibility criteria not become a vehicle for increased bureaucracy, arbitrary administration, and undue invasion of personal privacy.

#### H. SUMMARY OBSERVATIONS

342. Under extraordinarily unfavorable circumstances the Chilean authorities have engineered an economic turnaround without precedent in the history of Chile. When the military took power in September 1973, inflation had reached an annualized rate of around 1,000 percent, net international reserves were negative, the foreign debt in arrears, and production was declining for the second consecutive year. The deficit of the central government alone exceeded 20 percent of the GDP, the money supply was out of control, the financial system in shambles, and the exchange rate grossly overvalued. High copper prices and increased resource flows from foreign lenders helped to sustain a mild recovery in 1974, but both sources of support collapsed in 1975 with a combined resource loss to the economy equivalent to about 12.5 percent of the 1974 GDP. Since that time, the copper price has remained at its lowest level, in real terms, in more than two decades, while foreign official lenders have been substantial net extractors of resources from the economy.

343. Confronted with these facts, the Government in 1975 introduced a harsh austerity program amid other long-term policy reforms which together have made it possible to reduce significantly the economy's dependence on copper through the expansion of other exports; to meet fully the nation's heavy foreign debt service obligations, while simultaneously replenishing international reserves; to bring inflation back down to Chile's long-term average; to restore a system of rational price relationships; and establish the basis for a pattern of future growth consistent with Chile's international comparative advantage. The only significant source of external official support for this achievement has been the International Monetary Fund.

344. It would be hard to overstate the enormous material sacrifice endured by the Chilean people through this period. The loss of real income and employment brought severe and widespread hardship, particularly for the urban unemployed who lacked a cushion of accumulated savings to fall back on. Arguably,

Table III.23 CHILE - CENTRAL GOVERNMENT EXPENDITURES FOR SOCIAL PROGRAMS, 1965-1977

(Millions of 1976 US dollars)

Sector	1965-69 Average	1970	1971	1972	1973	1974	1975	1976 (Estimate)	1977 (Budget)
Health	139.4	154.2	211.6	247.8	237.2	190.7	133.4	135.4	153.2
Education	281.9	362.0	473.2	524.2	354.9	381.3	289.1	320.7	371.0
Housing	133.7	108.6	229.0	228.3	229.9	172.8	70.0	72.7	90.4
Child assistance	0.3 <sup>a/</sup>	0.7	0.6	0.8	0.7	4.1	3.4	8.7	8.5
Social assistance and labor	6.9	7.8	8.4	10.6	5.3	5.1	5.1	8.2	12.8
Social subsidies	0.8 <sup>a/</sup>	1.9	1.5	0.8	0.3	2.0	8.9	6.4	7.5
Minimum employment program	-	-	-	-	-	-	34.8	79.4	112.9
Total	562.8	635.2	924.2	1,012.6	828.5	756.1	544.7	631.5	756.0
Percent of total expenditure (excl. debt service)	32.2	28.9	33.5	34.3	21.6	27.6	29.4	33.5	34.5

<sup>a/</sup> Included only in 1968 and 1969, with expenditures of US\$640,000 and US\$689,000, respectively.

<sup>b/</sup> Included only in 1968 and 1969, with expenditures of US\$2.3 million and 1.5 million, respectively.

Source: Appendix II, Table 5.6

better economic management in late 1973 and in 1974, including a more gradual relaxation of price controls in an effort to influence expectations, and a more cautious restimulation of the economy in view of the precarious debt and reserve situation, might have reduced somewhat the system's vulnerability to the balance of payments crisis of 1975. It might also have been possible, through the selective use of price controls, import controls, etc., to alleviate some of the impact of the crisis on production and employment and to divert some additional resources to the relief of the greatest hardships. Finally, it may be asserted that the Government could have acted sooner and more aggressively to restimulate the economy in 1976 in view of the buildup of international reserves that occurred during the year as well as the evidence of declining inflationary expectations.

345. In evaluating such criticisms, however, it should first be recognized that one is arguing essentially over degree and timing. Given the disastrous decline in the capacity to import and the hostility of foreign official lenders, a major recession could not have been avoided. <sup>1/</sup> Moreover, economic expectations were highly volatile in the face of the extreme uncertainties that characterized this period, and assumptions about the likely responses to alternative policy measures are necessarily speculative and matters of intuitive judgment. Finally, in the Government's view, Chilean history of the past four decades had demonstrated that the successful implantation of its long-term policy reforms depended heavily on its giving clear, consistent, and unwavering policy signals from the outset. The potential long-term cost of deviation were viewed as too great relative to the possible short-term gains, if any.

346. The mission further notes that some observers have erroneously, in our judgment, attributed the social costs of the 1975-76 recession to the rapid implementation of the trade liberalization policy. This analysis is hard to support in view of the drastic decline in imports, as well as domestic sales, in those years. The primary responsibility lies instead with the severe foreign exchange constraint which forced the decline in imports. On the other hand, increased competition from imports does now constrain the pace of recovery of output and employment in certain sectors of the economy, as the system attempts to adjust to the new economic strategy. Some of the sectoral implications are examined in the following chapter.

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<sup>1/</sup> Even a moratorium on external debt payments would have been of limited short-run usefulness, since it probably would have blocked the recovery of private capital flows.

CHAPTER IV

THE MAJOR SECTORS

A. INTRODUCTION

347. As described in Chapter I, the exchange rate, tariff and price control policies enforced in the four decades following the world depression of the 1930s exerted a significant bias in favor of domestic manufacturing, while discriminating against investments in mining and agriculture. These same policies concomitantly stimulated the growth of a powerful and sophisticated urban middle class, including organized labor and a large government bureaucracy, which generated heavy demands for public services. The reversal of these policies since September 1973 is inevitably having a profound impact on the distribution of production and employment both among and within sectors.

348. Specific sectoral data problems are alluded to in the sections that follow. <sup>1/</sup> With regard to the recession, it was noted in Chapter III that the reduction of imports required by the austerity program served to delay the competitive repercussions of trade liberalization. At the same time, however, the fall in domestic demand exacerbated the already difficult financial situation of many enterprises and heightened business uncertainties, thus delaying the investments necessary to meet the anticipated onrush of international competition and to exploit the export opportunities being opened.

349. Several product groups, such as fresh fruits and forest-based industries, are already clearly identified as offering potential for rapid growth under the new economic strategy, and the requisite investments are going forward; others, such as sophisticated electronics goods, can be expected to disappear from domestic production. The greatest problems for public policy and private investment decision are found in the vast gray area where the tariff protection, credit subsidies, etc. of the past permitted many otherwise potentially competitive industries to develop and thrive without great concern for productive or administrative efficiency. Now, after years of inadequate investment and technological progress, many of these industries will be able to survive only if the necessary steps toward modernization are taken in time.

350. With few exceptions the Government is allowing private investment decisions to be guided by the unimpeded signals of the marketplace, eschewing the use of subsidies or other incentives, either general or specific. This, coupled with the Government's determination to reduce the size of the public sector, means the success of the economic strategy rests heavily on the largely untested entrepreneurship of Chile's private sector.

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<sup>1/</sup> See also the Note on Chilean Economic Statistics, Appendix I.

351. Table IV.1 reviews the changing distribution of real GDP among sectors since 1965. While other factors, both economic and political have been superimposed on the behavior of the various sectors, the structure of production shows signs of responding since 1973 to the trade liberalization. Evidence of some of the shifts occurring within sectors is presented in the sections that follow.

Table IV.1: CHILE - DISTRIBUTION OF GDP BY SECTORS, 1965-1977

(Percent)

Sectors	1965	1970	1973	1974	1977
(Constant Prices of 1965)					
Agriculture <u>a/</u>	9.5	9.0	6.9	8.4	10.1
Mining	9.4	9.0	6.6	10.7	11.8
Manufacturing	24.4	24.0	26.1	23.7	20.6
Construction	5.3	4.6	3.6	4.5	2.6
Commerce	20.0	20.6	20.7	20.3	20.4
Other	<u>31.4</u>	<u>31.9</u>	<u>36.0</u>	<u>32.5</u>	<u>34.4</u>
Total GDP	100.0	100.0	100.0	100.0	100.0

a/ Includes forestry and fishing.

Source: Appendix II, Table 2.2

## B. AGRICULTURE 1/

### 1. Geographical and Historical Overview

352. With a north-south dimension of almost 4,300 km, and extremes of altitude along its narrow width ranging to almost 7,000 m above sea level, Chile shows wide variations of climate and soils. Annual mean temperatures and rainfall run from 19.5° C and less than one mm at Arica in the northern desert to less than 7° C and almost 5,000 mm in the far south. Of its total land area of 75.7 million ha, 2/ about one-fourth is considered suitable for cultivation, livestock or forestry. Some 4.6 million ha are classified as arable, and about 1.2 million ha are presently irrigated. 3/ The arable land

1/ A fuller discussion of the evolution of the agricultural sector is available in an internal Bank working document.

2/ Excluding territory claimed by Chile in Antarctica.

3/ An additional 0.7 million ha are served by canals, but irrigation is only intermittent because of the scarcity of water.



is concentrated in Central Chile, bordered by the Provinces of Aconcagua on the north and Llanquihue in the south. The soils and climate of the Central Valley, which runs north and south from Santiago, have often been compared in their richness with those of California.

353. Approximately 1.6 million ha were under crops in 1974, distributed as follows (thousand ha): 1/

14 Major Field Crops	1,300
Wheat	(630)
Other grains	(300)
Beans	( 95)
Potatoes	( 85)
Oilseeds	( 65)
Sugar beet	( 55)
Other	( 70)
Orchard Crops	60
Wine Grapes	110
Other	190

Wheat, although evidencing a slow secular decline over the past couple of decades, remains by far the major field crop in terms of area planted, gross value of output, and number of farmers. The gross value of total farm production, including animal products, is distributed roughly as follows (percent): 2/

Field Crops	24
Wheat	( 9)
Other	(15)
Orchard Crops	10
Wine Grapes	13
Garden Fruits and Vegetables	10
Livestock Products	43
Beef	(18)
Milk	( 8)
Other	(17)

354. While contributing only about 10 percent of GDP, agriculture still occupies about one-fifth of the national labor force. Census data show an absolute decline of about 100,000 persons in the economically active agricultural population between 1960 and 1970.

355. During the Nineteenth Century, Chile was an important net exporter of wheat and other agricultural products. In this century, however, production has failed to keep pace with the growth of demand, and as of 1977 Chile had been a net importer of agricultural products in all years since the Great Depression. As a consequence, food and raw material imports represented a heavy charge

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1/ For detail, see Tables 7.2, 7.5 and 7.6 in Appendix II.

2/ See Appendix II, Table 7.1

against the balance of payments, and the inelastic supply of foodstuffs provided one source of constant inflationary pressure.

356. Historically, farmland in Chile represented an attractive economic investment quite apart from its latent agricultural potential. In the context of chronic high inflation rates, land offered a low-risk store of value with which few other assets could compete. <sup>1/</sup> In addition, while the market price of agricultural land outpaced the general cost-of-living, assessed values for tax purposes declined in real terms. An effective average tax rate of about one-half of one percent of the land's commercial value provided little stimulus to its productive exploitation. Such favorable treatment did, however, attract a substantial demand for agricultural land by urban-based businessmen, professionals, and corporations seeking a safe, remunerative outlet for their surplus funds. Furthermore, land ownership per se provided the collateral required for heavily subsidized agricultural credits and, hence, access to other inputs, consumption goods, or opportunities for financial gain.

357. At the same time, efforts to enhance productivity were discouraged by price controls and discriminatory exchange rate and tariff treatment intended to subsidize the cost of food to the growing urban work force. Various governments attempted to stimulate agricultural output by offsetting these disincentives with subsidies for credit and fertilizer purchases, tariff exemptions for imported farm machinery, etc. Such policies achieved some success in inducing the application of modern inputs, but at least until 1965 the benefits accrued mostly to the larger landowners. The smaller farm owners and tenants generally lacked access to the subsidies, particularly credit, at the same time that their earnings were depressed by the controlled prices at which they sold their products. Moreover, the subsidization of other inputs, coupled with well-intentioned increases in the agricultural minimum wage and other protective labor legislation, had the perverse effect of encouraging the substitution of capital for labor to the detriment of rural employment.

358. The first comprehensive land reform law was enacted by the Alessandri Administration in 1962. Large-scale expropriation and redistribution did not begin, however, until inauguration of the Frei Government in 1965. The process was greatly facilitated by a 1967 Constitutional amendment and new agrarian reform law which both broadened the State's expropriatory powers and reduced its cost. Thus, during the 1965-70 period, a total of 1,410 estates, covering 4.1 million ha, or 20 percent of Chile's agricultural

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<sup>1/</sup> There were no financial assets offering monetary correction prior to 1960. Foreign exchange was a widely used inflation hedge but was made risky by virtue of legal restrictions placed on it. The thin market for, and low dividend return on, stock shares ruled them out as a prudent investment for risk avoiders. Commodity stockpiling was another absorber of investible funds but was subject to the vagaries of international markets and foreign exchange policies.

land, were expropriated. <sup>1/</sup> The pace of land reform accelerated again during the Allende Government. With tensions rising in the rural sector, expropriations frequently spilled over the legal boundaries defined by the 1967 Law. In many cases, land seizures by the workers themselves provoked expropriation on the grounds that such was necessary to restore and maintain order. <sup>2/</sup> A total of 4,399 estates, covering 5.9 million ha, were expropriated from 1971 through 1973, or about triple the annual rate of takeover of the previous period. Some 296 peasant cooperatives and 76 state farms were organized on the expropriated lands. An estimated 50,000 families were affected.

359. Thus, a total of almost 10 million ha of agricultural land was expropriated between 1965 and 1973. The magnitude of the restructuring of land ownership may be appreciated in the following percentages of land availabilities affected:

	<u>Expropriated Land as Percent of Total</u>
<u>Arable land</u>	48
Irrigated	61
Dry	44
<u>Nonarable land</u>	49
<u>Total Agricultural Land</u>	49

In short, a decade of reform had transferred almost half of Chile's arable land and more than 60 percent of irrigated land to the State for distribution to heretofore landless workers. Preference in settling the land was given to the permanent work force of the former estate. Largely unaffected were the traditional minifundistas.

360. The Frei and Allende Governments also greatly expanded the flow of credit and other assistance to small farmers, especially land reform beneficiaries. The overall policy approaches adopted by the two governments, however, were fundamentally different in ways which crucially affected sector performance. Specifically, the Frei Government took simultaneous steps to improve the relative prices of agricultural goods, while also providing assurances to existing landowners that efficiently operated farms of up to

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<sup>1/</sup> The enumeration of expropriations by presidential periods varies somewhat from one source to another, largely as a consequence of differences in the beginning and termination dates used and the attribution of land acquisitions in process. The data used here are taken from AID, Chile's Agrarian Reform (mimeo.), Santiago, 1977.

<sup>2/</sup> There were 1,278 reported land seizures in 1971, compared with 192 in 1970 and 148 in 1969.

80 basic irrigated hectares (BIH) were secure from expropriation. 1/ Owners of larger units were entitled to retain a "legal reserve" of up to 80 BIH, again contingent upon its efficient exploitation. In contrast, the Allende Government's price control policy severely depressed the real prices of farm products, and investment incentives were increasingly undermined by illegal land seizures and the expropriation of farm and legal reserves below the 80-BIH size limit. 2/

361. Different approaches were also taken to the organization of the reformed sector. Under Frei, expropriations were carried out on a farm-by-farm basis, and land recipients were organized into cooperative settlements or asentamientos conforming generally to the borders of the original estate. The asentamiento was conceived to be a transitional stage of organization by means of which the beneficiaries (asentados), in partnership with CORA, would accumulate capital, and acquire technical skills and managerial experience. After three years, extendable to five with the approval of the President of the Republic, land titles would be assigned on either an individual, cooperative, or mixed ownership basis to be determined by a vote of the asentados. Between 1965 and 1970, more than 900 asentamientos, containing an estimated 20-30,000 families, were formed. Of these, 109 asentamientos completed the transition period before the end of the Frei Administration, 95 opting for cooperative titling and 14 for mixed ownership.

362. The Allende Government, on the other hand, administered the expropriation and settlement process on an area-wide basis in order to achieve greater control over sectoral planning and to take advantage of presumed scale economies. Regional cooperative organizations were formed to exercise administrative and financial control over the asentamientos, and large-scale operations (in terms of capital requirements), such as livestock, forestry and vineyards, were organized as state farms. Although a total of 4,399 farms were expropriated from 1971 through 1973, encompassing an estimated 50,000 beneficiary families, no land titles were awarded by CORA during these years.

363. The impact of these differences is reflected in the summary of plantings and production in Table IV.2. With improved price incentives, the threat of expropriation in the event of poor exploitation, but secure property

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1/ The BIH is legally defined by the 1967 Land Reform Law as a unit of land equivalent to one hectare of first quality, irrigated land in the Maipo Valley (central Chile). One innovation of the 1967 Law was to add size per se to the list of expropriation criteria. As part of its preparatory work, the Agrarian Reform Corporation (CORA) carried out a nationwide survey in 1965, assigning BIH conversion coefficients to each zone and sub-zone on the basis of climate, roads, and distances to markets, as well as the inherent productivity of the soil.

2/ Although the Law remained unchanged, Government officials indicated their intention to eventually reduce the limit to 40 BIH, or even 20 BIH. The question of expropriable farm size, along with other elements of land reform policy, were matters of open dispute within the Unidad Popular coalition, and the inability to resolve them contributed to the uncertainty.

rights (at least up to 80 BIH) in the case of efficient operation, the production of field crops grew at an average annual rate of 5.0 percent from 1965 to 1970, as compared to 2.3 percent per year over the previous decade.

Table IV.2: CHILE - AGRICULTURE: AREA PLANTED AND PRODUCTION,  
CROP YEARS 1965/66-1972/73

(1964/65=100)

	1965/66-1968/69				
	Average	1969/70	1970/71	1971/72	1972/73
Area Planted (field crops)	100	100	101	103	82
Field Crop Production	115	128	134	121	87
Livestock Production	122	131	128	126	125

Source: Appendix II, Tables 7.2a, 7.3a, and 7.8

Livestock output rose to 5.5 percent annually from a historical growth rate of less than 2 percent. <sup>1/</sup> The 1970/71 crop year saw a record harvest, and, despite the acceleration of the land reform, plantings were increased--though offset by declining yields--in 1971/72. <sup>2/</sup> By the following crop year, however, deteriorating prices, growing political turmoil, land invasions, and the disruption of transport channels had led to a 21 percent reduction of the area planted to field crops and a 28 percent decline in output. Wheat production alone fell 37 percent to half the level of 1970/71. Livestock production stagnated over the period, falling by 1972/73 about 5 percent below 1969/70.

364. Chile's average balance of trade in agricultural products and processed foods deteriorated from 1965 to 1967, but then improved through 1970 (Table IV.3). In 1970, the import of agricultural commodities and processed foods was approximately equal in real terms to the 1960-64 average, while real exports of those goods had risen more than 40 percent. The real deficit had been reduced to the lowest level in more than a decade. The rapid expansion of aggregate demand, redistribution of income, and lower real food prices achieved in 1971, however, resulted in a sharp increase in the demand for food which could only be partly met out of the bumper 1970/71 harvest. Food and agricultural imports consequently jumped 38 percent in real

<sup>1/</sup> The 1965-70 performance is made more remarkable by the fact that two of the years were affected by Chile's worst drought in a century.

<sup>2/</sup> In Chile, annual crops are generally planted during the last quarter of the calendar year with harvest occurring in the first semester of the following year.

terms. Demand continued to increase in 1972, and, with production now falling, world commodity prices rising, and the multiple exchange rate system grossly subsidizing food and agricultural imports, the latter grew an additional 60 percent in real terms and 71 percent in nominal terms. By 1973, the deficit from agriculture and processed food trade absorbed 36.5 percent of total merchandise export earnings as compared to 7.6 percent in 1970. 1/

Table IV.3: CHILE - EXPORTS AND IMPORTS OF AGRICULTURAL PRODUCTS AND PROCESSED FOODS AS PROPORTION OF MERCHANDISE EXPORTS, 1965 AND 1970-73 a/

(Percent)

	Exports FOB	Imports CIF	Balance
1965	6.0	-20.4	-14.4
1970	5.6	-13.2	- 7.6
1971	8.0	-20.0	-12.0
1972	6.0	-40.3	-34.4
1973	3.6	-40.1	-36.5

a/ Includes fisheries products but excludes forest products.

Source: Appendix II, Tables 7.13 and 7.14

## 2. Agricultural Policies since September 1973

365. Agriculture's poor performance in the post-Depression decades cannot be attributed to indifference on the part of the public authorities. During this period, a large and complex bureaucracy was created to administer the various overlapping programs of price controls, subsidies, credit, tariff preferences, marketing, technical assistance, research, irrigation, roads, rural education and health, colonization, and land redistribution. By November 1970, 27 independent agencies formally constituted the Public Agricultural Sector. During the Allende Government, the payroll of the Ministry of Agriculture alone grew from fewer than 11,000 employees to more than 27,000.

366. This accumulation of administrative controls and state responsibilities has been almost totally reversed since September 1973. Consistent with the Government's general economic strategy, prices have been freed, most subsidies and preferences (tax, exchange rate, etc.) eliminated, tariffs reduced, and responsibility for many formerly public sector activities, such as warehousing, marketing, agro-industry, and technical assistance, have been progressively shifted to the private sector. Expropriations were immediately halted, land deemed to have been taken illegally has been restored to its original owners, and the government concentrated on assigning titles to approximately 45,000 land reform beneficiaries.

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1/ Merchandise exports in 1973 were 18 percent higher than in 1970.

367. The combined impacts of land redistribution, exchange rate rationalization, and the elimination of long-standing incentive-stifling government controls lays the basis for a more efficient exploitation of Chile's substantial agricultural potential. Nevertheless, as in other sectors, there are significant problems of structural adaptation to the new economic strategy, complicated, too, by the short-run difficulties through which the economy has recently passed.

a. Price Policy

368. Agricultural prices have been progressively freed since 1973, while unification and devaluation of the exchange rate, the reduction of tariffs, and the elimination of export controls have brought domestic prices increasingly into line with international prices. By 1977, only three commodities--wheat, sugar beets and rapeseeds--remained subject to formal market intervention. Price determination for all other agricultural commodities is left to the free market with no restrictions on imports or exports. In the case of the three items mentioned, intervention took the form of a price band of plus-or-minus 10 percent around a target price fixed in U.S. dollars. The market price is allowed to fluctuate freely within the band. The floor price is protected by adjustable customs duties and guaranteed government purchases, while the ceiling is to be enforced, if necessary, by export controls and direct price administration. The bands are to be widened over time, and eventually eliminated, in accordance with a preannounced schedule, and a futures market is being encouraged to stabilize expectations. Input prices have also been freed, and most subsidies, including tax, tariff, and exchange rate preferences, eliminated. Responsibility for the marketing and distribution of agricultural inputs has gradually been shifted from state institutions, particularly the State Bank (BECH), to the private sector.

369. The lack of consistent time series data on farm input prices restricts the analysis of the profitability of farm operations in recent years. The impact has undoubtedly varied widely depending on the degree of access each farmer formerly enjoyed to subsidized inputs and credit and the degree of control the State could exercise over his sales. An idea of overall trends may be gleaned from Table IV.4, which traces the purchasing power of the wholesale price of domestic agricultural goods in the aggregate, real producer prices, and the relative price to the producer of farm output and selected fertilizers. The deflated index of crop prices received by the producer rose about 4 percent from 1965 to 1970, continued to rise in 1971, but then fell sharply over the next two years as price adjustments lagged behind the general inflation and import prices were subsidized by the exchange rate regime. <sup>1/</sup> The freeing of prices and adjustment of the exchange rate after 1973 has resulted in a sharp improvement in the farm sector's general purchasing power. The agricultural wholesale price

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<sup>1/</sup> The actual deterioration of agriculture's terms of trade is probably exaggerated in these figures, however, as some unknown proportion of farm output was sold in the black market during 1972/73 at substantially higher prices and some farmers were able to satisfy some fraction of their consumption demand at official prices.

index followed a parallel course with the suggestion, in comparison with the producer price index, of some widening of commercial margins over the late '60s, a sharp narrowing in 1971, and a return to 1965 margins by 1974 before contracting again in 1976. <sup>1/</sup>

Table IV.4: CHILE - INDICATORS OF AGRICULTURE'S TERMS OF TRADE, 1965-1977

(1965 = 100)

	1965	1970	1971	1972	1973	1974	1975	1976	1977
1. Wholesale agricultural prices deflated by CPI <u>a/</u>	100	109	101	86	84	142	199	221	206
2. Crop prices to producer deflated by CPI <u>a/</u>	100	104	108	83	88	142	198	250	210
3. Fertilizer prices deflated by producer price index (line 2)									
a. Sodium crystal	100	118	84	53	196	234	128	79	88
b. Potassium 14%	100	139	99	62	210	254	169	110	110
c. Urea <u>b/</u>	-	83	62	-	88	194	162	75	76

a/ IBRD adjusted.

b/ 1967 = 100.

Source: Internal Bank working document, Annex I, Tables 13 and 14

370. After rising across the second half of the 1960s, fertilizer prices fell relative to depressed farm output prices in 1971 and 1972 as a result of direct subsidization and a preferential exchange rate which steadily appreciated in real terms. The freeing of prices, elimination of subsidies, and devaluation of the peso in late 1973 coincided with an abrupt increase in the world price of fertilizers and dramatically raised their cost to Chilean

<sup>1/</sup> No firm conclusions regarding wholesale margins are possible from these data, however, because of the different composition of the two price indices. The evolution of producer prices of major farm commodities is given in Appendix II, Tables 7.15 - 7.17a.



farmers. 1/ This price increase, combined with the tightness of credit, resulted in a sharp decline in fertilizer consumption in 1974 and 1975. 2/ The relative price of fertilizers fell in 1976, however, providing renewed stimulus to their application.

b. Credit Policy

371. As shown in Chapter I, real credit to the private sector, including agriculture, grew little through the 1950s and early 1960s, as monetary expansion was fueled primarily by Central Bank financing of the public sector deficit. Credit to agriculture was provided largely by the commercial banking system, with the State Bank (BECH) the major lender. Interest rates were negative in real terms, and access depended heavily on the size of the borrower's assets. The operations of the private commercial banks fell in real terms from 1965 to 1970. 3/ Overall real credits to agriculture doubled, however, the growth led by the lending of BECH and CORA to the reformed sector. Credit expanded further in 1971 but then began to decline rapidly in real terms through 1975, eroded first by accelerating inflation and then by the austerity measures introduced in the later year. By 1975, real agricultural credit had fallen 38 percent relative to 1970 and 49 percent relative to 1971. Although credit to agriculture increased strongly in 1976, it remained below the real levels of the late 1960s.

372. Since 1973, major responsibility for agricultural credit has been shifting back toward the private commercial banks, the latter's real operations growing almost six-fold from 1973 to 1976, and their relative share rising from 4.5 percent to 20.7 percent of total institutional lending to the sector (Table IV.5). Much of this credit expansion was financed through the rediscount window of the Central Bank, whose selective credit programs gave strong preference to agriculture throughout this period. During the 1976/77 crop year, 100 percent rediscounting was available on credits for specified crops, fertilizer purchases, the refinancing of the previous season's loans to wheat farmers, and investment loans of up to five-year maturities.

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1/ The world price of a metric ton of urea, for example, rose from an average US\$59 in 1972 to US\$95 in 1973 and US\$316 in 1974.

2/ The problem was prolonged by the pricing policy of the State Bank (BECH), which having imported large quantities of fertilizer in late 1974, at the height of the market, attempted to minimize its losses by holding the domestic price up even after the world market situation had substantially eased. (Data on fertilizer use are provided in Appendix II, Table 7.9.)

3/ See Appendix II, Table 7.12.

Table IV.5: CHILE - AGRICULTURAL CREDIT AND DISTRIBUTION BY TYPE AND LENDING INSTITUTION, 1970-1976

	1970	1973	1974	1975	1976
Total Ag. Credit ('000 pesos of Dec. 1969)	<u>1,751.1</u>	<u>1,260.0</u>	<u>1,148.6</u>	<u>1,086.0</u>	<u>1,570.4</u>
Production credit	1,519.4	1,122.0	996.2	905.1	1,174.4
Investment credit	231.7	138.0	152.3	180.5	396.0
Distribution by Lending Institution (Percent)					
State Bank (BECH)	51.7	85.7	66.1	69.9	59.5
Private commercial banks	13.7	4.5	5.2	8.9	20.7
Central Bank	7.6	0.2	-	-	-
CORA	14.4	3.0	0.9	-	-
INDAP	3.0	5.4	9.7	8.6	6.4
CORFO	4.5	0.3	7.0	4.7	4.4
IANS/COMARSA	4.5	0.8	11.1	5.5	3.0
IFICOOP	<u>0.6</u>	<u>0.2</u>	<u>0.0</u>	<u>2.4</u>	<u>6.0</u>
Total	100.0	100.0	100.0	100.0	100.0

Source: Appendix II, Table 7.12

373. The interest rate to the farmer was market-determined, but averaged somewhat below the 4-8 percent per month of prevailing real short-term interest rates during this period, in reflection of the Central Bank's preferential discount terms. Such high borrowing costs were a great shock to farmers accustomed to heavily subsidized credit and undoubtedly retarded investment activity in agriculture. It may be noted, however, that such interest rates were not unknown to the large majority of small farmers, who, lacking access to the institutional lenders, had historically relied on local moneylenders, storekeepers, itinerant traders, etc. for financing. <sup>1/</sup>

<sup>1/</sup> A survey of 200 farmers in central Chile in the 1960s reported interest rates from such noninstitutional sources ranging from 18 to 360 percent in real terms, not including such common cost-increasing devices as interest prepayment, undervaluation of repayments in kind, mandatory labor services, and the monopolistic pricing of the purchases being financed. (Charles T. Nisbet, "Interest Rates and Imperfect Competition in the Informal Credit Market of Rural Chile," Economic Development and Cultural Change, Vol. 16, No. 1, October 1967). On the other hand, no information is currently available regarding how lending rates in the informal market have been affected by the increased costs of formal credit.

374. Rediscount policies were modified for the 1977/78 crop year. Crop restrictions were removed, and a general rediscount line was opened for all farmers equivalent to 50 percent of the initial loan. The rediscount rate was set at 6 percent per annum fully indexed to the CPI, and the interest rate to the final borrower was not to exceed 16 percent on the indexed principal. (The rediscount rate charged by the Central Bank on nonagricultural credits was 12 percent). An additional credit line provided 100 percent rediscounting of production credits to small farmers, defined as landowners of less than 12 BIH. These loans were discountable at an indexed rate of 5.5 percent, and the real interest rate ceiling to the borrower was 9 percent.

375. No special rediscount facilities were to be provided for the 1978/79 crop year. The substantial reduction that had occurred in the required reserve ratios of the commercial banks was expected, along with the monies made available by INDAP, CORFO, IFICOOP, etc., to enable them to meet the credit demands of the sector out of their own resources.

c. Technical Assistance

376. Even though Chile long enjoyed one of the best financed and staffed extension programs among the developing countries, it was frequently criticized for the poor quality of its services to farmers. Typically, 90 percent or more of government agricultural technicians and professionals were to be found in Santiago or other provincial capitals, rather than among the farmers. The Agriculture and Livestock Service (SAG), the Agrarian Reform Training and Research Institute (ICIRA), and the Agricultural Development Institute (INDAP), are the chief public sector institutions providing technical and extension services to agriculture. The first two agencies combined currently employ about 450 technicians, who are working almost exclusively in the reformed sector. The assistance being provided is mostly nontechnical--e.g. the preparation of credit applications and related farm plans, and the formation of cooperatives. The mission was advised by the agencies themselves that they are inadequately staffed to provide assistance in cultural practices--tillage, planting, irrigation, etc.

377. The Government has recently instituted a program whereby the bulk of technical assistance services to agriculture is to be provided by private consultants with a portion of the fees directly subsidized by the State. Under the new system, individual farmers contract for a package of technical services, including farm planning, operational assistance, and post-harvest evaluation. Farmers owning between 5 and 15 BIH are eligible to receive a government payment order covering 70 percent of the cost of the package, estimated to total about US\$180. Farmers with holdings of less than 5 BIH may also participate in the subsidy program if their cash flows permit payment for private technical assistance services. Otherwise they will continue to be served via the supervised credit operations of the Agricultural Development Institute (INDAP). The Government expected to incorporate some 10,000 farmers into the program during its initial year of operation with between 30,000 and 40,000 participating over its anticipated five-year life.

d. Irrigation and Water Use

378. Approximately 1.8 million ha, or 39 percent of arable land, is served by irrigation canals. About 1.2 million ha of this land can depend on

an adequate water supply, with some 85 percent security, throughout the irrigation season. For the rest of the system, irrigation is intermittent because of water scarcity.

379. Historically, government emphasis has been placed on construction of major works, with little attention paid to related on-farm development, regulation of water flows, rational water pricing and ultimate utilization of scarce water resources. As a result, capital has been wasted by unnecessary parallel canal building by individual farmers; lands are subject to frequent flood damage and canals to the accumulation of silt, gravel and rocks; and existing water supplies are wasted by, for example, limiting irrigation to daytime hours while providing no storage facilities to capture evening and weekend flows. 1/

380. Among the factors contributing to poor water use have been the chronic lack of coordination among the many public sector agencies responsible for its various aspects; the failure to institute a rational water pricing system; and more recently, the process of land reform and parcelization which fragmented the ownership of existing works and weakened the already imperfect mechanisms existing for on-farm distribution and control. Around 60 percent of irrigated land is now in the reformed sector, and many of the beneficiaries presently lack the technical knowledge and experience to manage these water resources efficiently and the capital to carry out the necessary on-farm development.

381. Successive governments tried unsuccessfully to establish a coordinating mechanism for irrigation-related activities and policies. In 1975, the present Government created the National Irrigation Commission (CNR) to undertake project planning on the national and regional levels and to direct the activities of the various state agencies involved one way or another in the design, construction, and use of irrigation works. It remains to be seen whether this latest organizational innovation will succeed where its predecessors have failed. The mission noted that the emphasis of sector officials continues to be on the construction of major works to bring new lands under irrigation, rather than on the measures needed to improve the efficiency of water use in the existing system.

e. Consolidation of the Land Reform

382. No further expropriations have occurred since September 1973, and expropriations which were in process at the time of the change of regime were cancelled. The Government has focussed its efforts instead on assigning titles to reform beneficiaries and to completing the litigation of alleged irregularities in the expropriations carried out during the two previous

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1/ An IBRD/FAO study in 1952 estimated that the elimination of such waste would make possible at least a 20 percent expansion of land under irrigation with the water supplies and major infrastructure then existing. Water use does not appear to have improved markedly in the interim.

administrations. 1/ The legal authority for land expropriation provided by the 1967 Agrarian Reform Law was formally repealed in June 1978 by Decree Law No. 2247. This action, in effect, removed the 80 BIH upper limit on land holdings as well as the ban on corporate land ownership, thus leaving the disciplining of inefficient land use to the marketplace. That discipline was strengthened by the massive readjustment of land valuations for tax assessment purposes that occurred in late 1973 and in 1974. Since that time, assessed values have been indexed to the CPI.

383. CORA, with the help of local consulting firms, began in 1974 to divide up the asentamientos and remaining eligible, unassigned land for distribution as individual, family-sized parcels. Parcel size was determined by the requirement that each farm be able to earn a net return of US\$1,200 (later raised to \$1,500) before amortization of land. This was known as one Agricultural Family Unit (UAF). Titling was preceded by detailed soil surveys, preparation of cadastral maps, and the selection of beneficiaries. By March 1978, CORA had distributed 34,726 individual farm titles, and another 2,170 farm units had been approved for distribution. CORA had also received requests from 196 of the 207 cooperatives that had previously been titled to re-divide the land on an individual farm basis. Another 8-9,000 family farms will be created by this process.

384. In contrast to the Frei and Allende Governments, the current administration has favored individually-owned family farms, a model which appears to be preferred also by the majority of land recipients. Preference in titling is given to asentados on the estates being divided, who had in turn been drawn largely from the permanent workers of the former landlord. 2/

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1/ As explained above, the 1967 Law had provided security against expropriation to efficiently operated farms of 80 BIH or less. Also specifically designated as non-expropriable were nonprofit experimental farms, vertically integrated vineyards, and natural forests or plantations with no suitable alternative land uses.

2/ A recent survey of 181 former asentamientos found that 82 percent of the 3,178 families receiving titles were from the estates being parceled. On the other hand, the number of asentados (4,123) exceeded the number of parcels distributed, and 1,509 families from the estates did not receive land there, either because they were disqualified by the criteria being applied, or because sufficient land was not available. Of those not receiving land in their own former asentamiento and for whom information is available, 117 families were assigned land from another estate. Most of the rest remained in the area as wage labor. A breakdown of the 18 percent of families from outside the sampled estates who received titles there shows that 67 percent had been asentados elsewhere, 15 percent had held administrative positions on the estate, and 12 percent were sharecroppers or farm laborers. (ICIRA, Análisis de la situación de los Asignatarios de Tierras a diciembre de 1976 (2º diagnóstico), Santiago, November 1977. The ICIRA sample is described in Appendix II, Table 7.18.

The land is priced slightly below the present market value with a 30-year mortgage at 6 percent interest (fully indexed) and two years of grace. 1/

385. In the course of land division and distribution, the cooperative responsible for the asentamiento being parceled 2/ is required to settle its outstanding debts to CORA for credit, machinery, and other inputs. In the absence of cash to settle these obligations, CORA has been repossessing the cooperatively-owned physical assets--machinery, livestock, fertilizer inventories, etc.--giving title recipients a first option on their subsequent purchase. Although CORA has offered special credit for this purpose the new landowners have, in many cases, not taken advantage of it, and the assets have been sold at public auction. Cooperative debts remaining after this liquidation process become the pro-rated liability of the individual titleholders.

386. At the same time that more than 3 million ha of reformed sector land had been divided and assigned to individual peasant families by early 1978, 2.8 million ha, or 28 percent of the total expropriated, was restored to its original owners. Former landowners alleging irregularities in the expropriation of their lands were allowed until July 1974 to present their claims. The claims were generally based on the contention that the farm was below the 80-BIH size standard established by law, or that the owner had not been allowed to retain the reserve to which he was entitled. By February 1978 almost all claims had been adjudicated, and 1,519 farms were restored intact to their original owners, along with the partial return of 2,158 farms. In many cases, landowners agreed to accept the return of a part of their former holdings as full compensation for expropriation of the entire fundo. The average size of the farms returned in their entirety approximates 85 BIH, while the partial farms returned have averaged 50 BIH. 3/

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1/ Annual mortgage payments for persons receiving titles before the end of 1975 were expressed in terms of fixed quantities of wheat or corn with no interest specified. Beginning in 1976, the liability is expressed in cash with the terms described above. Earlier land recipients have the once-only option of switching from the original to the new system.

2/ The asentamientos organized under the Frei Government were administered by a transitional partnership between CORA and the peasant cooperative, known as an Agricultural Society of Agrarian Reform (SARA). These continued to operate at the estate level during the Allende Government, which also created regional cooperative organizations, known as Agrarian Reform Centers (CERAs), as well as state farms referred to as Centers of Production (CEPROs).

3/ Returned properties include some forest lands and vineyards which were legally exempted from expropriation regardless of size.

387. As of February 1978, CORA still retained 2.5 million ha of land, principally grazing and forest land of doubtful agricultural quality. <sup>1/</sup> Disposition of these lands was a subject of considerable debate, inasmuch as the investments necessary to make them productive were argued to exceed the resources of small farmers and involve important economies of scale. In June 1978, the Government decreed that in disposing of these properties CORA would give preference to the asentados living on them to buy either as individuals or in voluntary associations. The price was to be set by CORA at not less than the tax assessment value, and the terms of sale were 10 percent down, the balance over 15 years with 2 years of grace, and interest at 6 percent per year indexed. It was not clear how many asentados would be able to organize and amass the resources necessary to meet the terms of purchase, and properties not taken by them were eventually to be auctioned off to the private sector.

388. Table IV.6 reviews the disposition of expropriated land through February 1978. While less than a third of the total land expropriated, measured in physical hectares, had been distributed to reformed sector farmers, this land was of relatively high agricultural quality and represented more than half of the expropriated land in terms of BIH. <sup>2/</sup> By the same criterion, the land returned to original owners appears to have been of somewhat lesser quality, and the land still held by CORA distinctly less suitable for agriculture (at least of an intensive sort).

389. To summarize, the Government's program for completion of the land reform was to have been essentially accomplished before the end of 1978. By that time approximately 45,000 farm titles should have been assigned to land covering more than 3 million ha. Thus, the responsibility of cultivating some of Chile's best agricultural lands has been placed in the hands of new small farmers who, if successful, could help to ameliorate the gross disparities of wealth, income, and political power that historically characterized the rural sector, as well as contribute to the growth and stability of the nation's economy. Given the heavy debts inherited from the past, however, including their own technological backwardness and lack of entrepreneurial experience, and the additional difficulties imposed by the economy-wide austerity of 1975-76, the success of the reformed sector will not be easily achieved.

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<sup>1/</sup> Another 866,000 ha, designated as CORA reserves, consists of hills, schools, churches, farmhouses, and other undistributed portions and improvements of expropriated estates. These are being gradually auctioned off with preference usually given to former owners or to contiguous reform sector titleholders. Some 670,000 ha had been transferred to other public sector institutions, including the Armed Forces and the State Forestry Corporation (CONAF).

<sup>2/</sup> The BIH indicator probably overstates somewhat the quality of reformed sector land inasmuch as the BIH/physical hectare coefficient was assigned to an entire fundo. Thus, when the original owner presumably retained the best land within the fundo for his 80 BIH reserve, the asentamiento was accordingly left with a BIH of lower average quality.

Table IV.6: CHILE - DISPOSITION OF EXPROPRIATED LAND (THROUGH FEBRUARY 1978)

Disposition	Physical Hectares ( '000)	Percent	Basic Irrigated Hectares ( '000)	Percent
<u>Total expropriated</u>	<u>9,965.9</u>	<u>100.0</u>	<u>895.7</u>	<u>100.0</u>
Assigned to reform sector farmers	3,097.8	31.1	458.0	51.1
Returned to original owner	2,833.0	28.4	237.5	26.5
Transferred to other public sector institutions	671.3	6.7	20.2	2.3
Still held by CORA	3,363.8	33.8	180.0	20.1
CORA reserve	( 865.8)	( 8.7)	( 36.2)	( 4.0)
Forest and dry lands	(2,498.0)	(25.1)	(143.8)	(16.1)

Source: CORA; mission estimates

### 3. Agricultural Performance since 1973

#### a. Output

390. In response to improved price incentives and security of property, agriculture was the one sector to exhibit continuous growth between 1973 and 1977. Sectoral value-added is estimated to have increased at an average annual real rate of 9 percent from the depressed level of 1973, and in 1977 stood about 16 percent above 1971. The planting of wheat and other grains and field crops expanded rapidly with the improved price incentives that followed the 1973 change of government. Available data suggest that aggregate field crop output grew at an average annual rate of about 15 percent from 1972/73 to 1976/77 (see Table IV.7). In the latter year production stood about 13 percent above the previous record level of 1970/71.



Table IV.7: CHILE - AREA PLANTED AND PRODUCTION, CROP YEARS 1972/73-1977/78

(1964/65=100)

	1972/73	1973/74	1974/75	1975/76	1976/78	1977/78
Area Planted (Field crops)	82	93	99	104	103	95
Field Crop Production	87	108	117	123	152	n.a.
Livestock Production	125	135	130	125	n.a.	n.a.

Sources: Appendix II, Tables 7.2a, 7.3a, and 7.8

391. Since the 1975/76 crop year, however, plantings of wheat, oats, rapeseeds, and sugar beets have been reduced significantly as falling world prices were brought increasingly to bear on the domestic market. Sugar beet production alone is estimated to have declined 62 percent as a result of reduced plantings in 1977/78, and the weighted output index for the 14 major crops was down 30 percent. Weather was an important factor in parts of the country, but the major reason for the declines appears to be the uncertainties created by falling world prices, the high cost of credit, and the withdrawal of government purchase guarantees. To some extent, these declines have been offset by a significant shift in land use away from the traditional field crops in favor of more land- and labor-intensive orchard and garden crops in response, at least in part, to the improved export opportunities awakened by trade liberalization and exchange rate adjustment. There is no systematic collection of production or marketing data with regard to these commodities, however, so the net result on agricultural production is unknown. <sup>1/</sup>

b. Foreign Trade

392. The liberalization of trade since 1973 is described in Chapter III. The combined effect of the devaluation of the peso, the freeing of agricultural prices, the domestic austerity program, and the reestablishment of political stability and security of property in the countryside has been a seven-fold expansion of food and agricultural exports from 1973 to 1977

<sup>1/</sup> Planting and production estimates over the past decade have been based largely on the 1965 agricultural census. In view of the enormous changes that have occurred since 1965 in the delimitation, ownership, and use of agricultural land, information from samples blown up on the basis of that census are of doubtful reliability. An agricultural census was carried out during 1976 and is being processed. Until its results are available, one can only speculate regarding the net impact that agrarian reform and the new economic strategy have had and are having on the distribution and utilization of Chile's agricultural resources.

(Table IV.8). Over the same period, imports were reduced by 35 percent, in nominal terms, and the deficit cut from the US\$478 million, or 36.5 percent of total merchandise exports, suffered in 1973, to less than US\$5 million, 0.2 percent of merchandise exports, in 1977. The deficit grew in 1978, as the poor domestic harvest necessitated a substantial increase in grain imports, but it was not expected to exceed 2 percent of merchandise exports.

Table IV.8: TRADE IN AGRICULTURAL PRODUCTS AND PROCESSED FOODS AS PROPORTION OF MERCHANDISE EXPORTS, 1973-1977

(Percent)

Year	Exports FOB	Imports CIF	Balance
1973	3.6	-40.1	-36.5
1974	5.0	-20.0	-15.0
1975	12.3	-23.5	-11.3
1976	11.3	-16.0	- 4.6
1977 <u>p/</u>	15.4	-15.7	- 0.2

p/ Preliminary.

Source: Appendix II, Tables 7.13 and 7.14

c. Economic Status of Small Farmers

393. There is little information regarding how well the 45,000 reformed sector farmers and the approximately 182,000 traditional minifundistas, who represent roughly 12 percent and 42 percent, respectively, of the farm population, have fared amid the general sectoral growth. 1/ The following observations are drawn from the limited survey data available. 2/

1/ The seeming inconsistency between the number of families and population percentage figures cited is explained by the larger average family sizes found in the reformed sector.

2/ Data on the reformed sector are taken from ICIRA, op. cit.; observations regarding the traditional minifundistas are based largely on American Technical Assistance Corporation (ATAC), Survey of Small Farmers in the Central Irrigated Agricultural Region of Chile: Agricultural Year 1974/75, Santiago, April 1976. Both surveys are described in greater detail in an internal working document of the World Bank.

(i) The Reformed Sector

394. The survey of reformed sector farmers drawn upon here was carried out in December 1976. The tendencies reported were, of course, heavily influenced by general macroeconomic policies and the overall state of the economy. No data are provided in the study regarding volume or value of output. Although the great majority (86 percent) of sampled beneficiaries professed to being better-off since receiving their titles, the reasons given were predominantly subjective (e.g. greater independence) rather than economic. Evidence was given, however, of increasing intensity of land use among individual farm operators, a shift toward garden crops in particular and away from wheat and pasture. Moreover, of the sampled farmers who had possession of their land through at least one harvest, two-thirds had marketed more than half of their product, indicating a strong commercial, as opposed to subsistence, orientation.

395. Not all parcels in the sampled estates, however, were still being worked by the original title assignees. The survey estimated that during the 1976/77 crop year, 83 percent of parcels were being farmed by the original assignee, 7 percent had been let to sharecroppers, 1 percent rented, 4 percent sold, 2 percent abandoned and 3 percent not yet assigned. The high proportion of sharecropping contracts was particularly striking inasmuch as such arrangements were still illegal at the time of the survey. Since their authorization by CORA in May 1977, the use of third-party arrangements has probably increased. 1/ The primary reason given by assignees for selling or letting their land was economic difficulty.

396. A high proportion of sampled farmers reported the use of fertilizers, pesticides, and commercial seeds during the 1976/77 crop year. 2/ Interestingly, in most cases the inputs were bought individually; in fewer than a third of the cases were cooperatives or other farmer organizations used as intermediaries. The level of employment has apparently increased over time. Although the labor was supplied primarily by the titleholders' own families, more parcels were found to be employing outside wage labor, as well, compared to a similar survey conducted two years earlier. The apparent tendency toward

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1/ As a countermeasure to land sales, the Government promulgated Decree Law No. 1,600 in November 1976, requiring that any reformed sector land transfer occurring within three years of assignment be approved by CORA. Buyers from outside the reformed sector must make immediate cash payment for the full debt owed to CORA, while insiders may assume the original mortgage with the amortization period halved. In the judgment of the surveyors and many observers, sharecropping contracts were frequently being used to mask a de facto sale of land to non-reformed sector buyers, enabling the later to assume the subsidized CORA mortgage. The Government has indicated that such agreements are legally unenforceable and that their perpetrators would be severely penalized.

2/ Among grain producers, for example, 82 percent of individual farmers applied fertilizer; 76 percent used pesticides; and commercial (presumably improved) seeds were used by 62 percent.

greater labor intensity, as well as land intensity, in production is consistent with the above-noted shift in land use, but results also from the reduced stock of capital available to the new titleholders as compared to the earlier asentamientos (see below). It might also be noted that the survey found a considerably higher average number of persons over age 15 resident on each parcel (4.3) than reported as permanently employed (2.2). This suggests the continued existence of a significant degree of underemployment during much of the year, even though the number of titled families is well below the number of asentados originally attached to the estate.

397. As previously noted, the parcelization process has involved the dissolution of the SARAs and the liquidation of their respective debts to CORA, BECH and other agencies. The satisfaction of these obligations has frequently required sale of all or part of the cooperatives' assets. These assets have in some instances been bought by reform beneficiaries themselves. Thus 20 percent of sampled beneficiaries were found to possess some farm machinery, and half (including the former) had animal-powered equipment. At the other extreme, however, 20 percent had virtually no physical equipment at all. Moreover, a breakdown of farmers by the number of crop years they have held their parcels suggests a reduction over time of the use of machinery and an increased use of animal-powered equipment. 1/ The experience of individually-owned animals is similar to that of machinery. Individual holdings of production animals increased with the distribution of SARA assets but diminished after the first year on the land. Lack of money was the major reason cited for reducing stock. The average holdings of work animals has continued to grow over time, however, providing further evidence of the apparent substitution of animal power for mechanical power.

398. Despite the general tightness of credit in the economy, more than 90 percent of the survey respondents claimed to have obtained all the credit they had sought during the 1976/77 crop year. 2/ Only 3 percent of those who applied for credit received none. It is not clear how this response should be interpreted, however, inasmuch as the major overall problem cited by reform beneficiaries later in the survey was lack of money. This was also the primary reason given for the reduction of livestock. The most likely explanation is

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1/ Although the overall level of mechanization among title recipients may have declined, it is greater than implied by the data on individual ownership: while only 20 percent of individual operators owned their own machinery, 52 percent still had access to cooperatively-owned machinery, and (an overlapping) 53 percent contracted machinery from outside.

2/ Some 31 percent of the sample responded that they had not sought credit, in the majority of cases because they did not need it. Only 14 percent cited the high cost of borrowing as a reason for not seeking credit. In a survey of small farmers of the Central Valley carried out in May 1975, a similar proportion of reformed sector respondents had received credit during the crop year just ending, but only 61 percent affirmed that the amount received was sufficient (ATAC, op. cit.).

that virtually all credit was for short-term purposes--operations and family support--and the shortage referred to was of long-term investment credit 1/

399. Only one-third of titleholders in the survey reported having received technical assistance during the crop year. Moreover, this response appears to represent an overestimate in view of the confusion of many of the persons interviewed regarding what constitutes technical assistance. Further, of those who responded affirmatively, more than 40 percent had received four or fewer visits, a level of frequency not considered likely to have a lasting impact. The farmers best served were those specializing in industrial crops--sugar beets and oilseeds--indicating the important role played by agro-industries in this respect.

400. Finally, the low degree of farmer organization was evidenced by the predominance of individual on-farm sales to itinerant merchants among the alternative modes of product commercialization. In more than 80 percent of the cases, marketing was done individually. Off-farm sales or sales through cooperatives, modes in which the farmer might enjoy a more favorable competitive position, were important only in the marketing of fruit. Agro-industries dominated the purchase of grains and industrial crops.

(ii) Minifundistas 2/

401. With the agrarian reform giving preference in land distribution to the permanent labor force of the expropriated estates, the structural changes that occurred have had little impact on the traditional minifundistas. The credit and technical assistance efforts that accompanied the reform program were also directed largely to the reformed sector itself. That differential treatment has apparently continued. A study carried out in the Central Valley at the end of the 1974/75 crop year found that only 27 percent of the minifundistas sampled had received credit during the season as compared to 89 percent of reformed sector farmers. The comparable ratios for technical assistance were 22 percent and 72 percent. 3/

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1/ Another explanation may be the reformed sector farmers' lack of experience with institutional credit and a resultant ignorance or reluctance to apply for it. The general level of sophistication in this regard is illustrated by the fact that one-third of the sampled farmers had no idea of the terms of their mortgage obligation to CORA, and another third had only a partial knowledge. Almost three-fourths of the titleholders did not know when the first payment was due.

2/ The definition of minifundia varies from one source and place to another. In general, it is a small plot of relatively poor quality land which, at prevailing levels of technology, land-use patterns, availability of infrastructure, etc. provides a family little more than subsistence income. Many minifundistas, therefore, rent or sharecrop land in addition to their own, and/or supplement their incomes working as either rural or urban wage laborers or via small-scale mining, fishing, and other artisan activities. Many probably do not regard farming as their primary occupation.

3/ ATAC, op. cit.

402. Even though the minifundistas, by the survey's definition, operated on less than 5 BIH, land per se for most of them was not identified as the primary constraint on output. Large proportions of their arable holdings were found to be uncultivated, particularly in the Central-South region, for lack of credit and appropriate technology. Lack of credit and technical assistance also limited the shift of land use toward more intensive cultivation. Although minifundista incomes generally were below those of reformed sector farmers, 1/ they tended to be better educated and possess more physical capital, along with greater managerial experience. They also evidenced a remarkably high degree of commercialization, selling, on average, 82 percent of their output. The study cited, however, was carried out in the relatively rich Central Valley, near the domestic market center as well as to contact points with international commerce. A nationwide study of minifundia would undoubtedly disclose a greater incidence of subsistence farming. In any event, existing land holdings offer most minifundistas only limited long-term income-earning possibilities, and eventually their futures must lie outside agriculture.

#### 4. Summary and Mission Observations

403. For much of the present century, the growth of Chilean agriculture was retarded by an institutional and policy framework that encouraged the ownership of land as a low-risk hedge against inflation and an entree to both social status and other opportunities for financial gain--e.g. subsidized credit--while at the same time discouraging its productive exploitation. Between 1965 and 1973, half of the nation's agricultural land was expropriated by the State for redistribution primarily to those who previously had worked it as hired labor. Upon assuming power, the present Government halted the expropriation process and began the task of distributing individual land titles to reform beneficiaries. At the completion of that process in 1978, about one-third of the total land expropriated (half, if measured in qualitative BIH units) was to have been distributed. In this fashion, some 45,000 former farm workers will have taken ownership, via the reform process, of a substantial proportion of Chile's best agricultural land. At the same time, many of the long-existing constraints on agricultural incentives have been eliminated. The freeing of prices and devaluation of the peso have resulted in sharp improvement in the sector's terms of trade and contributed to a strong growth of agricultural exports. The motivation to use land resources productively has been further strengthened by the substantial increase in the level of land taxation and its systematic adjustment for inflation.

404. The mission believes that these changes in structure and policy have laid the basis for a more rapid and efficient long-term growth of agricultural output and income, enabling Chilean agriculture to become in the near future a net earner of foreign exchange after decades of rising deficits. Adjustment to these changes and exploitation of the investment possibilities opened up have been complicated, however, by the period of severe austerity

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1/ The minifundistas surveyed, moreover, earned, on average, 19 percent of their incomes from off-farm sources.

through which the economy as a whole has simultaneously had to pass and by the uncertainties engendered by the removal of price supports. Commercial farmers have generally responded well to the improved incentives and should be able to take good advantage of future growth opportunities as export possibilities expand, the domestic market recovers, and credit and other inputs become more abundantly available. Moreover, a solid institutional structure exists to service their needs for credit and technical services. The prospects for the small farmer, however, both inside and outside the reformed sector, are less secure.

405. The few surveys that have been done indicate a healthy tendency toward the more intensive use of both land and labor in the reformed sector. Moreover, reform beneficiaries have demonstrated a high propensity to use modern inputs, despite the removal of subsidies, and a high level of commercialization. On the other hand, output is constrained by serious undercapitalization, medium- and long-term financing is extremely scarce, the institutional supports previously provided both by cooperatives and by government agencies have been weakened, and a rising proportion of the titled parcels are reportedly being sold or otherwise transferred to persons from outside the reformed sector.

406. Many Chileans favor the removal of all restrictions on the transfer of reformed sector land. Action has already been taken to eliminate the 80-BIH standard for maximum landholdings as well as the prohibition on corporate land ownership. The arguments favoring the annulment of these impediments to land concentration are based primarily on the assumption that agriculture offers significant economies of scale in the use of machinery and the application of modern technology. In Chile, however, the scarce resource is land, and the productive employment of labor has long been a paramount social problem. Moreover, the high yields possible from labor-intensive agriculture have been amply demonstrated elsewhere, particularly with respect to those crops for which Chile enjoys an apparent comparative advantage.

407. Given the current low state of technology in the reformed sector, the lack of entrepreneurial experience and poor education of most beneficiaries, and the small farmers' difficult access to credit and modern inputs, it is likely that reopening the sector to large-scale, corporate farming might at this time result in short-term gains in output. These gains might be extremely costly, however, in terms of long-term efficiency as well as social destabilization. Eventually the relative efficiencies in Chile of small-scale and large-scale farming can be put to the test of the marketplace. Until the reform sector farmer has been given an adequate opportunity to establish himself, however, such a step would, in the mission's judgment, be premature. 1/

408. To complete the transition process successfully, the new titleholders will need improved access to credit, particularly investment credit, and to technical assistance. Credit and technical assistance effectively

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1/ The demand for reformed sector land is apparent. One out of every four beneficiaries in the ICIRA sample (op. cit.) reported he had received offers from merchants and other farmers.

delivered would also make possible a significant increase in minifundia output despite the small size and poor quality of their holdings. An effort is also needed to strengthen institutional mechanisms for marketing, water management, and other cooperative functions. While progressively freeing the agricultural economy, the Government has reiterated its continuing obligation to facilitate the development of the reformed sector. It also recognizes as a continuing government responsibility, and has given high national priority to, a concerted attack on extreme poverty in the rural areas as well as other sectors of the economy. However, because of the priority attention understandably given over the past four years to short-run policy problems, the desire to complete the restructuring of the sector so that property rights could be stabilized, and the frequent turnover of policy-level personnel in the Ministry of Agriculture, a coherent strategy for achieving the above objectives has been slow to develop.

409. Neither the small-farm subsector nor agriculture as a whole could have been exempted, of course, from the overriding constraints placed upon the economy by its balance of payments situation and the requirements of economic stability. As these constraints have eased over the past year, credit availabilities have been increasing. Nevertheless, so long as traditional lending criteria are applied, the market alone is unlikely to meet the requirements of the small-farm sector, particularly the need for investment financing. Lack of adequate credit limits the small farmer's ability to bring all his land under cultivation and to make the desired shift to more intensive land use. With the exception of the State Bank, the commercial banking system thus far lacks the infrastructure (branch offices, etc.), the experience and expertise to operate effectively in this field. Small farmers often lack the collateral normally demanded by commercial bankers. 1/ Still to be overcome is the lack of borrowing experience and ignorance of financial management suffered by the farmers themselves. 2/

410. The World Bank is collaborating with the Government in seeking to facilitate the flow of credit to small-farm agriculture. In addition to improving and expanding these programs, the mission also recommends a once-and-for-all forgiveness of the still outstanding debts to the Government of the liquidated SARA's and those to be liquidated. 3/ The large-scale debt delinquencies, incurred under and tolerated by previous governments, undoubtedly resulted

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- 1/ Until the end of 1978, when it ceased to exist, CORA acted as guarantor of mainly short-term loans to the reformed sector. There is no further need for a guarantor since land values have increased substantially, allowing farmers to use their new found equity as collateral for bank loans.
  - 2/ Outstanding CORA mortgages have been cancelled, clear title passed to reformed sector farmers and the debt converted into a general obligation owed to the Treasury. Reformed sector farmers are thus able to mortgage their lands to the commercial banks as loan collateral.
  - 3/ For the sake of equity, payments already made on these debts by land reform beneficiaries may be credited toward amortization of the mortgages on their land.



in gross misallocations of resources, and it is important to establish respect for the debt contract. Nevertheless, given the very difficult economic and political context of recent years, and the responsibility of CORA and other public sector agencies for much of the mismanagement that occurred at the SARA level, it seems unduly harsh to pass the resultant debts on to the individual asentados. Given, moreover, the large social interest in the success of the reformed sector farmers, there would seem to be a strong case for wiping the slate clean and allowing them to go forward on the basis of their own individual talents and efforts.

411. Especially urgent is the need for technical assistance. The mission is not familiar with other countries where a program similar to the Government's effort to privatize agricultural extension services has been tried. While the subsidies proposed for the family farmer may be generous, many land reform beneficiaries will need to be educated from the beginning regarding its utility to them. It is illustrative in this regard that more than 40 percent of the land recipients surveyed by ICIRA said they had not sought technical assistance because they saw no need for it. <sup>1/</sup> A significant effort must also be made to disseminate the results of research and field trials in the use of new seeds, fertilizers, etc., if the consultants themselves are to be properly equipped to induce improvements in on-farm productivity. Given these continuing requirements for technical services from the public sector, the necessarily experimental nature of the new subsidy program, and the large turnover of personnel that has occurred in the agricultural agencies during the past several years, an assessment is urgently needed of the organization and staffing requirements of SAG, ICIRA, and INDAP to avoid past inefficiencies and to assure that the extension work vital to the success of the present sector strategy will be performed.

412. One area in which technical assistance historically has been seriously deficient is that of water resource management. With some 60 percent of irrigated land now in the reformed sector, the need for such on-farm assistance has become critical. The mission found the responsible agencies to be inadequately staffed to perform this function. Moreover, although some progress has been made to improve coordination among the several agencies involved in the design, construction, and utilization of irrigation systems, the emphasis of sector officials continues to be on the building of facilities for the irrigation of new lands. Bringing additional lands under irrigation, if properly carried out, can increase output in the long term, but has little or no effect on near-term output. With the exception of four projects that have been studied for years, major design and construction components required for these new lands will involve a lengthy gestation period. Meanwhile, the rationalization and upgrading of existing irrigation facilities can take place more rapidly and at lower capital cost, and can contribute significantly to near-term output. This effort is particularly needed in the reformed sector where the re-division of the land into individual farm units has created the necessity of adapting previously in-

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<sup>1/</sup> In the earlier survey of smallholders in the Central Valley, including both reform beneficiaries and traditional minifundistas, only half indicated they wanted technical assistance, even though 72 percent reported they were currently receiving it (ATAC, op. cit.).

stalled infrastructure. Finally, the mission urges the speedy rationalization of water pricing. Despite the existing legal mandate and the Government's efforts to achieve rational pricing in other areas of the economy, water-use charges remain too low to motivate efficient water use.

### C. THE FOREST SECTOR 1/

#### 1. Forest Resources

413. Chile's extensive forest resources are concentrated in the South-Central section of the country, extending from the Province of Santiago to Llanquihue. Although there are some 6 million ha of high-valued native forests, difficult location and uneconomic past exploitation limit their near-term potential. Instead, the sector's economic prospects in this century depend primarily on the rapidly expanding plantations of long-fiber radiata pine.

414. In 1974, Chile began an ambitious forestation program based largely on radiata pine. The total area under plantation of all kinds increased from an estimated 345,700 ha in 1971 to around 580,000 ha by the end of 1976, and is expected to approximate one million ha by the mid-1980s. The annual rate of planting has risen more than four-fold since 1970 (Table IV.9). Primary responsibility for planning and administering the public sector's forestry activities is the National Forestry Corporation (CONAF), created in 1972. Until mid-1978, CONAF was itself directly engaged in large-scale planting activity; that role is now to be assumed entirely by the private sector.

Table IV.9: CHILE - AREA PLANTED ANNUALLY, 1970-1976

(Thousand hectares)

	1970	1971	1972	1973	1974	1975	1976
Private	16.5	11.4	6.3	2.9	21.1	38.5	53.6
CONAF	<u>6.9</u>	<u>16.6</u>	<u>24.8</u>	<u>27.4</u>	<u>35.2</u>	<u>44.1</u>	<u>54.1</u>
Total area planted	<u>23.4</u>	<u>28.0</u>	<u>31.0</u>	<u>30.3</u>	<u>56.2</u>	<u>82.6</u>	<u>107.7</u>
Replanted	-	5.1	7.8	6.8	11.2	12.0	20.0
Total	<u>23.4</u>	<u>33.1</u>	<u>38.8</u>	<u>37.1</u>	<u>67.4</u>	<u>94.6</u>	<u>127.7</u>

Source: CONAF

1/ The present status and future prospects of the forest sector are treated in greater detail in an internal working document of the World Bank.

415. Forestation is one of the few economic activities still receiving state subsidies in marked contrast to the Government's general policy of leaving resource allocation decisions to the free market. Under the 1974 Forestry Law, the State provides a one-time reimbursement for 75 percent of the direct costs of planting new land, excluding the cost of the land itself. This subsidy is payable only for afforestation of lands otherwise unsuitable for agriculture, and only new plantations, rather than plantations re-established after cutting, are eligible. Chile's integrated pulp and paper companies have thus far accounted for most of the private plantings. Most of the plantation area is situated in the IVth and Vth Regions, encompassing all the Provinces from O'Higgins and Colchagua south to Chiloe and centered in the hinterlands of Concepcion.

416. The relatively low cost of forest land and of labor give Chile a marked cost advantage in the establishment of plantations. It was estimated in 1976 that the cost of developing a hectare of radiata pine in Chile, including land preparation, planting and maintenance, averaged about US\$120 (before subsidy), as compared to similar costs of US\$600-800 per ha in Argentina and Brazil. Growth rates of radiata pine in Chile are also excellent: the average annual increment for the country as a whole is about 20 m<sup>3</sup> of wood per ha. On a 20-year rotation, this implies an average yield of roughly 400 m<sup>3</sup> per ha, equal to average yields reported in New Zealand and substantially above those in Argentina, Brazil, or North America for similar rotation periods. Moreover, the Chilean yields are recorded for unmanaged stands of pine and could be improved by more intensive management techniques.

417. Despite the high priority accorded to forest sector development, no reliable, up-to-date information exists regarding the volume, quality and age-class distribution of the wood currently available in the plantations. Regional inventories have been carried out intermittently since 1962, but no mechanism exists for consolidating these data or for regularly updating them. The projections utilized in this report start from a 1976 base which itself had to be derived from inventory data for different provinces and different years, each projected forward to 1976 and then consolidated.

418. While these projections are therefore subject to a considerable margin of error, their implications are clear and significant. It is conservatively estimated that slightly less than 6 million m<sup>3</sup> of pine wood were available in 1976. Because of the low planting rates of the 1960s, however, wood availability will be seriously constrained and may decline through the early 1980s. As the stands planted in the 1970s come to maturity, beginning in the late 1980s, the supply of pine wood will recover and then increase very rapidly. By the late 1990s, potential wood supplies are likely to be 3-1/2 to 4-1/2 times the present level (Table IV. 10).

419. This projection is believed to be conservative, assuming a rate of net planting in the next few years (70,000 ha) below that achieved since

1974, and no increase in plantation yield. At the same time, the growth of wood availability is likely to be somewhat smoother than suggested in Table IV.10, inasmuch as recent wood use has been below the indicated 1976 potential, thus pushing availabilities forward in time. Similarly, a program of thinning existing stands would make available additional volumes of small-sized material, thereby easing the resource constraint through the early 1980s.

Table IV.10: CHILE - PROJECTED AVAILABILITY OF PINUS RADIATA, a/ 1976-2000

	1976	1981	1986	1991	1996- 2000
<u>Low Projection: b/</u>					
Plantation area (1,000 ha)	412.0	683.8	975.4	1,252.6	1,385.0
Annual Wood Availability (million cubic meters)	5.9	4.3	5.4	17.0	27.6
<u>High Projection: c/</u>					
Plantation area (1,000 ha)	440.6	662.1	948.3	1,167.5	1,247.0
Annual Wood Availability (million cubic meters)	9.9	4.8	10.1	21.2	27.6

- a/ Includes only plantations of Pinus radiata and excludes roads, ravines, and other plantation areas which are unsuitable for planting. The projection of available wood supply assumes an average yield of 400 m<sup>3</sup>/ha.
- b/ Assumes all stands in the 15-20 year age class and older at the beginning of a 5-year period are cut during the ensuing five years.
- c/ Same assumption as b/ with additional assumption that 40 percent of the stands in the 10-15 years age class at the beginning of a 5-year period are cut.

## 2. Forest Industries

420. Sawmilling and pulp and paper are the major wood-using industries in Chile, absorbing about 50 percent and 40 percent, respectively, of pine roundwood. The production of wood panels -- fiberboard, particle board, plywood and veneers -- is also growing but presently accounts for only about 2 percent of wood consumption.

421. There are more than 1,000 sawmills, but most are small and poorly equipped, and many operate only part of the year. Of the 300-400 sawmills operating in the native forests, less than a dozen are industrial-sized units producing more than 40 m<sup>3</sup> per day. Similarly, only about 15 of the 600-700 pine mills are of industrial size. The industry generally is inefficient, with log recovery estimated at no more than 50 percent. 1/

422. Even though much of the existing capital stock in sawmills is rundown and/or obsolete, capacity has not been a constraint on output. 2/ Production was stagnant over the second half of the 1960s but has grown at a average annual rate of about 5.3 percent since 1970, following the swings in the national economy but with the additional impetus since 1973 of rapid export growth. At the same time, wood use has shifted markedly away from native varieties and toward radiata pine, reflecting changing raw materials supplies. 3/ The mission estimates that current mill capacity is consistent with the wood availability projected over the next decade, although investments are needed in modernizing existing facilities to reduce the excessive waste of raw material and to improve product quality. Depending on world demand patterns, major investments in new milling capacity will be required by the late 1980s.

423. Most of the pulp produced in Chile is chemical pulp from long-fibered softwood, for which radiata pine provides about 95 percent of the raw material. The industry also produces various grades of paper and paperboard, including writing and printing paper, newsprint, kraft paper, liner board, cardboard, box board and computer punch cards. The sector is dominated by four large, integrated companies whose operations extend from plantation management to the production of pulp and, in two cases, paper.

424. Some 450,000 mt of pulp were produced in 1976, a level equivalent to about 80 percent of estimated industrial capacity. Output had more than doubled over the preceding decade, the major impetus coming from exports (Table IV.11). Pulp exports rose almost seven-fold from 1965 through 1969. After a period of stagnation from 1970 through 1973, real export growth resumed vigorously, the volume expanding almost 2 1/2 times from 1973 to 1976. By the latter year, exports accounted for more than half of total pulp production.

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1/ Some of the larger mills use the wood residue -- cutoffs, sawdust, etc.-- as fuel for their boilers. In addition 65,000 mt of sawdust is being burned annually in special furnaces for industrial purposes and the heating of buildings. Wood chips are also sold to pulp manufacturers.

2/ ODEPA estimated installed capacity in 1974 at 3.3 million m<sup>3</sup>, as compared to production of only 1.5 million m<sup>3</sup>.

3/ See Appendix II, Table 7.29.

Table IV.11: CHILE - INDICES OF PHYSICAL PRODUCTION AND EXPORTS OF WOOD PULP, 1965-1976

(1970 = 100)

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Year	Production	Volume of Exports	Export Value	Export Share of Output (%)
1965	61	17	49	19.1
1970	100	100	100	32.3
1973	108	92	127	27.8
1976 <u>p/</u>	138	224	538	52.4

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p/ Preliminary.

Source: Appendix II, Tables 7.30 and 7.32

425. Table IV.12 traces the output and export of paper and paperboard products. In contrast with pulp, most of the growth of paper output in the late 1960s was directed to the domestic market. Most of this expansion was concentrated among the cheaper grades of paper and paperboard.

Table IV.12: CHILE - INDICES OF PHYSICAL PRODUCTION AND EXPORT OF PAPER AND PAPERBOARD, 1965-1976

(1970 = 100)

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Year	Production	Volume of Exports	Export Value	Export Share of Output (%)
1965	71	64	82	30.8
1970	100	100	100	36.8
1973	96	45	56	17.3
1976 <u>p/</u>	104	110	345	38.7

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p/ Preliminary.

Source: Appendix II, Tables 7.31 and 7.32

Domestic paper consumption continued to grow through 1972 and remained high in 1973, the decline in production resulting entirely from the halving of exports. While domestic paper use has since fallen back to the level of the late 1960s, exports have provided the vehicle for increased production. By 1976, almost 40 percent of paper output was exported, newsprint accounting for about 80 percent of the total.

426. According to estimates provided the mission, Chile's present capacity permits the output of some 620,000 mt of pulp and 310,000 mt of paper and paperboard per year, with the industry as a whole currently operating at between 80 and 90 percent of capacity. Present investment plans appear consistent with the constrained wood availabilities projected through the mid-1980s, but major new investments will be necessary if the forest resources coming on stream by the latter part of that decade are to be fully exploited.

### 3. Forest Product Exports

427. Although the domestic market may be expected to recover and expand, the success of the massive forestation program launched in 1974 clearly depends on exports. The recent growth of wood-based exports is summarized in Table IV.13. Increased industrial capacity and an improved and stable real exchange rate resulted in a four-fold expansion of forest exports over the decade of the '60s, reaching a theretofore record high of US\$42 million in 1970 and 1971. By that time, sawnwood and pulp and paper accounted for about one-third of manufactured exports and about 4 percent of total exports.

Table IV.13: CHILE - FOREST PRODUCT EXPORTS, 1970-1977

(Millions of US dollars)

	1970	1971	1972	1973	1974	1975	1976	1977
Sawnwood and panels	8.9	7.0	3.0	4.6	13.1	25.2	29.3	70.4
Pulp	16.4	17.0	17.4	20.8	78.0	57.9	88.3	85.5
Paper	9.6	8.4	5.0	5.4	25.2	25.8	33.1	33.6
Cardboard	5.4	5.3	4.4	3.6	7.1	7.0	8.9	9.8
Other	1.4	4.8	1.8	2.0	3.6	7.7	3.7	3.9
Total	41.7	42.5	31.6	36.4	127.0	125.6	163.3	203.2

Source: Appendix II, Table 7.32

428. After being constrained in 1972 and 1973 by the increasing overvaluation of the escudo and domestic transport bottlenecks, export growth has been very rapid. Sawwood and wood panel exports exceeded US\$70 million in 1977, more than 15 times the level of 1973. The most vigorous export growth has occurred in the products of radiata pine, which now account for 78 percent of total sawwood and panel exports, as compared with 42 percent in 1970. The exports of pine sawwood and panels in 1977 were 22 times the level achieved in 1973. Argentina has traditionally been the major importer of Chilean sawwood, but there has been considerable growth in the past three years in the amounts shipped to Venezuela, Europe and Arab countries. At the same time, the combination of high world prices, depressed domestic demand, and the improved exchange rate policy resulted in an almost four-fold increase of pulp and paper exports from 1973 to 1974. In 1977, Chilean pulp and paper exports totaled US\$129 million, compared to \$30 million in 1970. Shipments have gone primarily to other Latin American countries, the major buyers being Argentina, Brazil and Peru.

429. Export expansion for the next 5-10 years will be constrained by the availability of wood, the expected growth of domestic demand, the need for rehabilitation and modernization of existing sawmills, and capacity limitation on the production of pulp and paper. The longer-term world market prospects for softwood products have not been well studied but a few general observations can be made.

430. To Chile's disadvantage, major plantation programs are currently being carried out in several other countries which either compete with or have been important customers of Chile. Among the latter, Brazil is expected to be a large exporter of wood products by the end of the century, and Argentina will be approximately self-sufficient. As potential competitors, New Zealand and Australia enjoy significant locational advantages with respect to the growing Asian market, while Brazil is better located to serve Europe. 1/ Adding to real locational disadvantages for Chile is the practice of other countries of subsidizing at least the higher value-added levels of wood product exports.

431. On the other hand, relatively cheap land and labor and rapid tree growth provide Chile with an important competitive advantage in the production of the raw material. Moreover, increasing supply constraints are expected by the late 1980s to reduce North America's share of world softwood exports, thus accelerating the growth opportunities for other potential suppliers. Chile's higher ocean transport costs are also partially offset by the nearness of the forests to the sea and the resultant lower cost of overland transport. The key question thus appears to be whether the requisite industrial and infrastructural investments and improved forest management techniques will be forthcoming to hold production costs low enough to maintain Chile's competitiveness despite higher freight costs. If the response is positive, forest-based products will be making a major contribution to export revenues well before the end of the century. On the basis of very simplistic assumptions, 2/ and the projections made here of wood availabilities,

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1/ Large exportable surpluses may also become available to the Asian market from the USSR.

2/ See Appendix II, Table 7.33.



Chile's forest exports could range conservatively between US\$665 million and \$1,020 million (at 1976 prices) by 1996.

432. With regard to specific products, market prospects appear to favor the two ends of the value-added spectrum--i.e. sawlogs and pulp and paper. Demand for sawnwood is expected to grow less than 2 percent per year, limited in part by protective restrictions in the developed countries. The annual growth of demand for pulp and paper is projected at about 4-5 percent with a relative undersupply of soft pulpwoods anticipated if the present proportions of hard to soft woods were maintained in pulp making. 1/ Moreover, while major importers have historically preferred to import wood chips for their own pulp mills, this tendency is likely to change under the combined pressures of antipollution legislation and the significantly lower costs of transporting pulp as compared to chips.

433. Using average labor-output coefficients supplied by CONAF, the mission made a rough projection of labor demand in the plantation sector. 2/ Based on these figures, employment on the plantations would be expected to peak at around 60,000 persons in 1981, after which the rate of establishment of new plantations is assumed to taper off. However, the fall in the demand for seasonal labor related to the planting program is partly offset over time by the creation of permanent jobs in established plantation operations.

#### 4. Mission Observations

434. Having provided the initial impetus, via direct planting and subsidies, toward a major expansion of Chile's forest resources, the Government now intends that the entrepreneurial responsibility be carried forward by the private sector. Given the enormous contribution that forestry and forest-based industries can make to the economy, however, and the magnitude of the public and private investments that will have to be made if that potential is to be realized, there is an urgent need for a comprehensive inventory of existing forest resources and a carefully studied sectoral development program. Moreover, in view of the sizeable externalities involved, as well as the importance of sustaining Chile's comparative advantage in the sector, a vigorous program is called for in the development, dissemination, and supervision of proper forest management techniques. The latter is particularly important in view of the risks inevitably attached to monocultural plantation development. Although no serious problems of disease or pest infestation have been reported in Chile's pine forests, vigilance must continuously be exercised against the threat of epidemic.

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1/ Recent technological changes have increased the range of use of short-fiber hardwoods in pulp making, and further relative price movements could spur additional innovations in this direction.

2/ The details of assumptions and results are contained in an internal Bank working document.

D. FISHERIES

435. Chile's fishing industry is the second largest, in terms of total catch, in Latin America. Nevertheless, despite more than 4,000 km of coastline, Chile's long-standing assertion of a 200-mile limit, and generous government incentives, fishing makes only a modest contribution to the national economy. Fishing per se and the processing of the catch contribute an estimated 3 percent of GDP and provide employment to about 30,000 persons, or less than one percent of the labor force.

436. A major expansion of the fisheries sector occurred over the first half of the 1960s, given impetus by substantial tax incentives. Under Decree Law No. 266 of April 1960 and its extensions, fisheries were exempted from most transfer taxes, and import and value-added taxes on its inputs; pay preferential port charges; and are forgiven 90 percent of the tax on real property and 90 percent of taxes on that part of their incomes distributed to their workers. 1/ Moreover, other industries may defer payment of the global complementary tax on their profits by investing them in fisheries activities. In order to qualify for the above benefits, a firm must pledge to reinvest at least 15 percent of its profits in the fisheries sector for a period of 10 years.

437. Growth continued but at a lower rate over the second half of the decade, and the total catch reached a high of almost 1.5 million mt in 1971 (Table IV.14). After a steep decline in 1972 and 1973, total catch recovered to a level of 1.3 million mt through 1976. 2/ The major fish species, by volume of catch, are the anchoveta, jack mackerel, and sardine. Harvests of the latter two species have grown fairly steadily over the period, while supplies of the anchoveta are much less stable and the catch is currently less than half the levels achieved in the late 1960s. 3/ Most of the variation in tonnage through 1973 is explained by the disappearance of the anchoveta, while the growth since 1973 is distributed across a broad range of fish species.

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1/ The benefits conceded by Decree Law No. 266 were originally to expire at the end of 1973. They have been regularly extended, however, most recently in January 1978.

2/ Comparable figures for other countries show a 1976 catch of (million mt):

Argentina	0.3	Japan	10.6	USSR	10.1
Brazil	0.9	Mexico	0.6		
Canada	1.1	Peru	4.3		
Ecuador	0.2	USA	3.0		

(Data from FAO, Yearbook of Fishery Statistics.)

3/ See Appendix II, Table 7.34.

Table IV.14: CHILE - ANNUAL CATCH OF FISH AND OTHER SEAFOOD, 1955-1976

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Years	Thousand mt of live wt equivalent
1955-59 (ave.)	223
1960-64 (ave.)	666
1965-69 (ave.)	1,127
1970	1,209
1971	1,506
1972	818
1973	691
1974	1,158
1975	930
1976	1,264

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Source: Appendix II, Table 7.34

438. The major fishing region is found along the coasts of the northern third of the country. The bulk of the catch from this region, consisting of the three species mentioned above, is processed into fishmeal. Much of the fleet and industrial installations are relatively modern and efficient. Hake, tuna, and other varieties which are commonly frozen or canned for human consumption are found off the central and southern coasts as are the mollusks and crustaceans. Operations in those regions are mostly at the artisan level of size and sophistication.

439. Some 80 percent or more of total annual landings are reduced into flour or oil, a large proportion of which is exported. Less than 10 percent is marketed fresh. The latter share is limited by poor distribution infrastructure, from on-board handling to refrigeration at the retail outlets, and by the low status given fish as a human food, particularly among the lower-income groups. Poor handling and sanitary control have also limited the growth of quality canned or frozen products for exports. The average unit export value is thus reduced when the catch must be converted instead to fishmeal.

440. Nevertheless, fisheries exports have grown rapidly over the past four years, reaching US\$128 million in 1977 (Table IV.15). Fishmeal continues to account for about two-thirds of the total export value, although exports of canned and frozen fish have increased apace. Fisheries production contributed 13 percent of non-copper export earnings and 6 percent of total exports in 1977.

Table IV.15: CHILE - FISHERIES EXPORTS, 1960-1977

(Millions of US dollars)

Years	Fishmeal	Other	Total
1960-64 (ave.)	7.5	2.3	9.8
1965-69 (ave.)	16.7	7.2	23.9
1970	15.5	10.4	25.9
1971	28.5	12.4	40.9
1972	18.0	8.7	26.7
1973	13.6	7.7	21.3
1974	35.2	16.5	51.7
1975	25.3	21.8	47.1
1976	61.1	29.6	90.7
1977	86.5	41.4	127.9

Source: Appendix II, Table 7.35

441. Without a systematic resource survey, the potential offered by the Chilean fisheries sector for further development is only vaguely known. It is generally believed that the resources of the north coast, which account for around two-thirds of total catch (by weight), are being exploited at or near their biologically sustainable maximum. Opportunities in that region, therefore, lie primarily in improved efficiency of operations. Along other sections of the coast, however, particularly in the south, significantly greater fish catches are thought possible if the necessary investments are made in modern fishing vessels, processing plants, and communication and transport infrastructure.

442. Investments in fishing are regarded as especially risky in the absence of either a reliable resource survey or a mechanism for planning and regulating resource use. This is so, in part, because the level of one enterprises' fishing affects the region's fish population and, hence, the costs of all other enterprises which depend on those waters. Moreover, investments are needed currently on several fronts from fishing boats to port handling equipment to sanitary marketing facilities.

443. While attributing the major developmental role to the private sector, the Government recognizes the unique nature of the fishing industry and accepts responsibility for its planning and promotion. <sup>1/</sup> In order to provide better coordination and planning of public sector activities affecting fisheries, the Government in late 1976 created the Subsecretariat of Fisheries in the Ministry of Economy. A year later, however, the enabling

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<sup>1/</sup> See ODEPLAN, Estrategia Nacional de Desarrollo Economico y Social: Politicas de Largo Plazo, Santiago, September 1977, pp. 88-90.

legislation that would permit the agency's staffing had still not been promulgated. A long-awaited reform of the National Fisheries Law, which dates from 1931, has also been delayed. In lieu of a new fisheries law, the incentives provided by D.L. No. 266 (para. 436) have repeatedly been extended on a temporary basis. The resulting uncertainty may be further inhibiting investment.

444. Not treated in the above discussion is the still unknown potential presented by the vast supplies of krill found in Antarctic waters. Krill is a small, shrimp-like crustacean, rich in protein and vitamin A and the principal food source for most of the region's sea life. Various estimates of its sustainable annual catch range as high as 200 million mt. <sup>1/</sup> Research into its processing and marketability is being undertaken by the Institute for Fisheries Development (IFOP), an agency of CORFO, which has already test-marketed various forms of the product -- e.g. sticks fried and frozen for later reheating, and krill powder for use as a soup additive. The results of these tests are not yet available.

445. In summary, substantial economic returns are achievable from the more efficient utilization of the present fishing levels--e.g. through the freezing or canning of sardines and mackerel for human consumption rather than their reduction into fishmeal for animal feed. In addition, a significant expansion of fishing and the harvesting of shellfish appears possible off the central and southern coasts. To realize this potential, however, large investments are required in resource and marketing studies, modern vessels, transport and storage facilities, and processing plants. Important to the realization of these investments is the speedy firming up of the legal and institutional framework to implement the Government's intended role in the sector. Finally, assessment of the potentially enormous contribution that krill might make to the sector must await the results of on-going research in Chile and elsewhere regarding the economics of its exploitation.

#### E. THE MINING SECTOR

446. Mining, particularly of copper and nitrates, was the major engine by which Chile had catapulted by the early 1900s into the middle class of world economies, but its protracted dependence on the sector also made Chile highly vulnerable to the vagaries of world commodity markets. Successive governments have attempted by various means to maximize Chile's share of the revenues flowing from mining and to increase that flow over time, while diverting the resources thus generated to the development of other sectors of the economy and to growing levels of consumption and social services.

447. Since 1965, mining output (at constant prices of 1965) has grown at an average annual rate of about 4.3 percent, as compared to 2.4 percent for the economy as a whole. Nevertheless, in 1977, a year of historically

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<sup>1/</sup> By comparison, the entire world catch of fish and other seafood was estimated at 73.5 million mt in 1976.

low real prices for Chile's mineral production, mining accounted for only an estimated 5 percent of GDP in current prices. It still contributed, however, 64 percent of merchandise exports. Despite the sector's importance as a generator of foreign exchange and investible resources for the rest of the economy, mining provides less than 3 percent of total employment. Table IV.16 summarizes the importance of Chile's mining sector to world minerals supplies. <sup>1/</sup> The following discussion concentrates on the copper subsector; the prospects of other minerals are treated only briefly.

Table IV.16: CHILE'S SHARE OF WORLD MINING OUTPUT AND RESERVES

(Percent)

	<u>Production</u>		<u>Reserves</u>	
	<u>(1974-75 average)</u>		<u>(1975)</u>	
	Share	Rank	Share	Rank
Copper	12	2	19	2
Selenium	1	9	19	2
Molybdenum	9	4	14	4
Vanadium	3	4	1	4
Iron ore	1	14	1	..
Silver	2	7	1	..
Iodine	20	2	14	2
Nitrate	<u>a/</u>		<u>a/</u>	

<sup>a/</sup> Although reserves of naturally occurring nitrates are limited to the Atacama desert of northern Chile, other occurrences are known. However, industrially produced nitrates ("fixed nitrogen") compete with naturally occurring nitrates, and there is no possibility of depleting elemental nitrogen in the atmosphere.

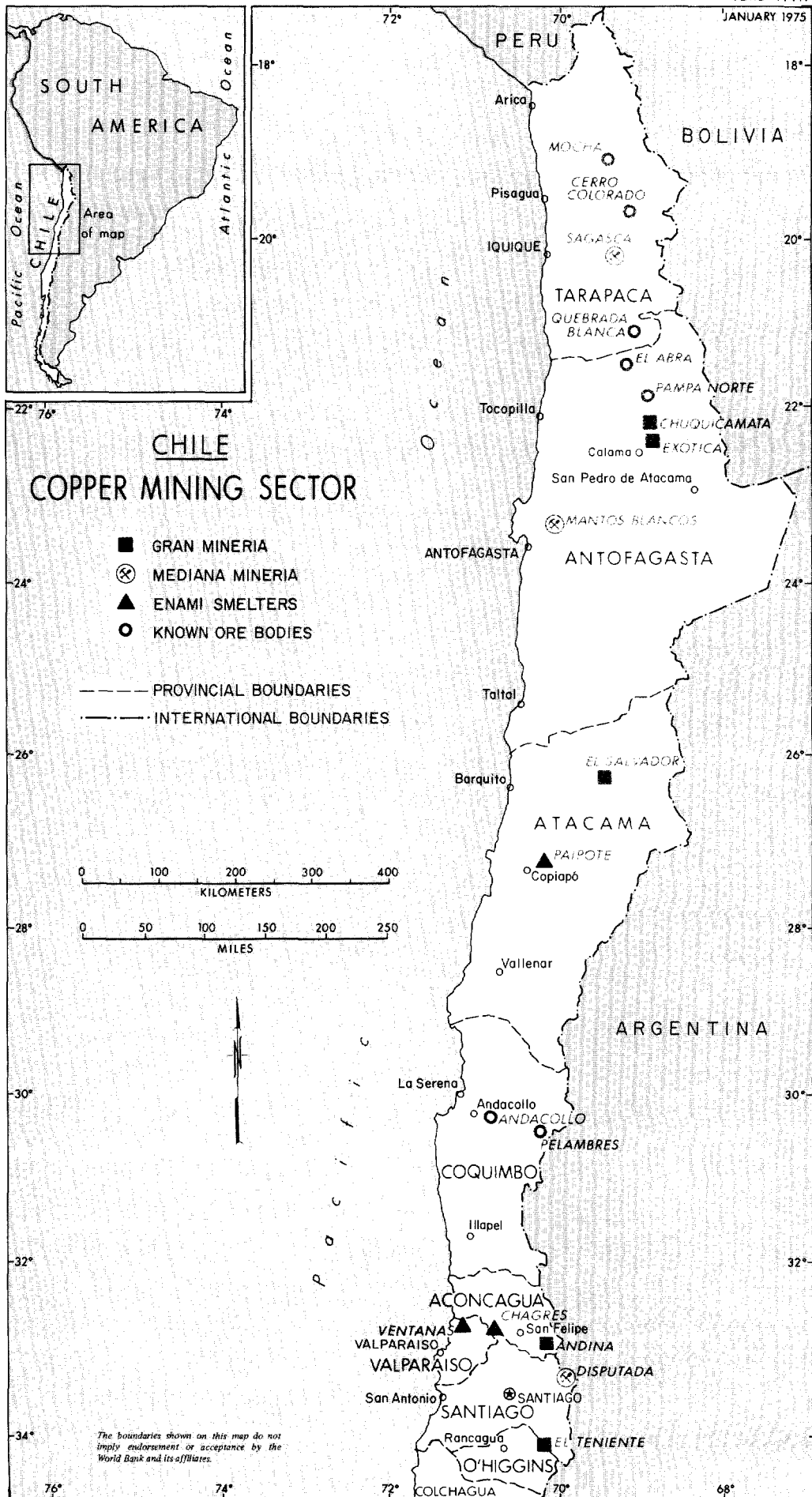
Source: U.S. Bureau of Mines, Commodity Data Summaries

1. Copper <sup>2/</sup>

448. Chile's major copper mines are located in the northern half of the country as shown by the map on the following page. Copper mining operations have traditionally been divided for legal purposes into three groups: large (Gran Minería), defined as mines with annual output of at least 75,000 mt;

<sup>1/</sup> Chile's share of copper production shown here is slightly below that indicated in Appendix II, Table 8.1, because the latter makes no estimate of production in the centrally-planned economies.

<sup>2/</sup> An extended discussion of the sector's structure, organization, technology, marketing procedures, etc. may be found in IBRD Report No. 602a-CH of January 7, 1976.



The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.





medium Mediana Minería), mines whose output is less than 75,000 mt but whose total capital exceeds the equivalent of 70 annual "vital salaries" (sueldos vitales); 1/ and small (Pequena Minería), mining properties with total capital below the above amount. The companies constituting these three groups have historically been subjected to different regulations, tax codes and state supervisory institutions.

a. Large Mining

449. The large mines--Chuquicamata, El Teniente, El Salvador, Andina, and Exotica--generally account for 82 - 84 percent of annual output. 2/ All were previously owned by private U.S. companies and were nationalized by the Chilean Government in 1971. Ownership and management were assumed by the State Copper Corporation (CODELCO), which thereby became the largest single producer of copper outside the USSR. Two of the mines, Chuquicamata and El Teniente, are respectively the largest open-pit and largest underground copper mines in the world and together account for more than 80 percent of Gran Minería output. 3/

450. Under the Chileanization Agreements signed in 1967 between the Government and the then foreign-owned companies of the Gran Minería (see Chapter I, paras. 41-44), total annual copper output was to exceed one million mt by 1971. The Gran Minería, including two new mines--Andina and Exotica--was to provide 872,000 mt of the total. An estimated US\$760 million was invested in the expansion program, of which US\$650 million was for the large mines. Nevertheless, the disruption of the technical and managerial staffs caused by nationalization, coupled with a variety of technical problems, labor unrest, transport strikes, poor equipment maintenance, and the shortage of spare parts, kept output well below the targeted levels through 1973 (Table IV.17). With management stabilized, labor productivity restored, and spare parts again available, output volume rose 23 percent in 1974. Production fell 8 percent in 1975 as a consequence of bottlenecks encountered in Chuquicamata and the shutdown of Exotica. The ores of the latter turned out to be more complex chemically than anticipated at its opening, with consequently higher processing costs. The steep drop in the world copper price in 1975, along with the production cutback agreed to by the members of the International Council of Copper-Exporting Countries (CIPEC), thus led to its closing. In 1976 and 1977, however, copper production went over the one million mt level for the first time in history, and did so with Exotica closed.

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1/ The sueldo vital is explained in Chapter I.

2/ See Appendix II, Table 8.1. Although technically falling below the 75,000 mt annual output, Exotica and Andina are considered part of the Gran Minería.

3/ Production by mine is given in Appendix II, Table 8.2.

Table IV.17: CHILE - COPPER PRODUCTION, 1966-1977

(Thousands of metric tons)

Year	Large Mines	Medium and Small Mines	Total
1966	525	100	625
1970	541	151	692
1971	571	137	708
1972	593	124	717
1973	615	120	735
1974	763	139	902
1975	682	146	828
1976	847	158	1,005
1977			1,056

Source: Appendix II, Table 8.1

451. Earlier chapters reviewed the evolution of world copper prices, Chilean exports, and the domestic economy's retained share of the value of copper output. Notable, in addition to the prior discussion, is the rising share of total output refined in Chile since the early 1960s, thus contributing toward a growing unit export value and higher retained share. This trend is summarized in Table IV.18.

Table IV.18: CHILE - DISTRIBUTION OF COPPER PRODUCTION BY TYPE, 1961-1977

(Percent)

Years	Refined		Other	Total
	Electrolytic	Fire		
1961-1964 (avg.)	33	1	66	100
1965-1969 (avg.)	51	1	48	100
1970	54	4	42	100
1971	53	4	43	100
1972	61	3	36	100
1973	53	3	44	100
1974	57	3	40	100
1975	62	3	35	100
1976	60	2	38	100
1977		64	36	100

Source: Appendix II, Table 8.3

452. Unlike the nitrate industry before it, copper has never been a major source of employment. After reaching a war-time high of about 25,000 workers in 1943, employment in the Gran Minería fell to less than 15,000 by 1955. As described in Chapter I, this was a period of low investment when, moreover, the use of local inputs was discouraged by the discriminatory exchange rate policy. Employment increased fairly steadily thereafter, however, in the wake first of the Nuevo Trato (Chapter I, para. 38) and then the Chileanization program. Table IV.19 summarizes the growth of employment and output per worker in the large mines since 1961. Labor productivity declined steadily through 1974, after which increased output and a reduced labor force restored the average productivity levels of 1961-63.

Table IV.19: CHILE - EMPLOYMENT AND LABOR PRODUCTIVITY IN THE LARGE COPPER MINING SECTOR, 1952-1977

Years	Employment	Average Output per Worker <u>a/</u> (Metric Tons)
1952-54	16,077	
1955-57	16,812	
1958-60	17,517	
1961-63	18,198	27.5
1964-66	19,100	26.7
1967-69	21,700	24.2
1970	23,697	23.5
1971	26,127	22.8
1972	29,169	21.7
1973	31,484	20.3
1974	32,902	19.5
1975	31,597	23.2
1976	31,157	21.6
1977 (Feb.)	30,987	27.4

a/ Average annual output of fine copper per person employed. This is only a rough indicator of productivity, unadjusted for effects of work stoppages, etc. Also, in view of changing ore grades output per worker would be better measured at the various stages of production: for instance, productivity at the mines should be measured in total ore volume handled rather than in terms of fine copper.

Source: Appendix II, Table 8.11

453. In 1976, the Government reorganized the State Copper Corporation, renamed the National Copper Corporation (CODELCO), and created the Chilean Copper Commission as an overall policy-making, planning, and supervisory body for the sector. CODELCO is an integrated state enterprise responsible for

the operation and management of the five large mines as well as the refining and marketing of their output. The chairman of CODELCO's Board of Directors is the Minister of Mines, and it is administered by an executive vice president appointed by the President of the Republic.

454. CODELCO's senior management is endowed with extensive technical and executive experience. However, the exodus of large numbers of foreign and national engineers that followed expropriation weakened the middle- and lower-management positions. The average practical experience of the engineering staff at the Chuquicamata and Salvador operations in 1977, for example, was less than five years, and there is still a shortage of qualified mining engineers. 1/ That operations have been maintained satisfactorily with significant production increases reflects the high-quality of the engineers emerging from the Chilean university system. Moreover, although corroborative data are difficult to develop, it is generally believed that Chile's large mines are probably the lowest cost copper producers in the world as a result of the high average grade of its ores and the abundance of by-products such as molybdenum. The average operating costs of CODELCO mines were estimated in 1977 at just over US47¢/lb, ranging from a low of 41¢/lb at Chuquicamata to 68¢/lb at El Salvador (Exotica is not included), compared to an estimated world average of about US65¢/lb. 2/

455. The shortage of professional experience is most acutely felt in production planning and control, investment planning, project preparation and evaluation, and research and development. Deficiencies also exist in financial planning, cost accounting and internal controls. The inadequacies of the present planning department are in part inherited from the practices of the former foreign owners of the mining operations. Investment planning and project preparation were generally carried out in the head offices of the parent companies with little participation by the operating engineers and managers in the field. Problems of coordination among the various branches of the enterprise are complicated by the lack of uniformity in the organizational structures of the producing divisions, each having inherited a different organization and different procedures from its former owners. CODELCO, conscious of these deficiencies, has initiated an extensive reorganization of internal procedures. While not yet completed in 1977, the program had already resulted in an important reduction of production costs and significant adjustments of accounting practices.

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1/ The El Teniente and Andina mines suffered relatively less because of the greater experience of the El Teniente staff, on the one hand, and the support the Andina operation continued to receive from Cerro Corporation, on the other.

2/ This apparent advantage would be reduced if depreciation charges were fully adjusted to reflect the replacement value of CODELCO assets, but even so, it is believed that Chile's large mines would continue to enjoy a relative cost advantage vis-a-vis most other producers. Recent IBRD estimates suggest the following average cash operating costs, per lb of copper, excluding depreciation and financial charges, during 1977 (US cents/lb):

Chile - 40	New Guinea - 54	Canada - 58	Mexico - 65
Peru - 49	Zaire - 55	Zambia - 59	

456. As part of the general public sector budgetary reform (see Chapter III), CODELCO's budget has been brought under the control of the Ministry of Finance. The annual budget is based on a projected average copper price and fixes the amount of taxes and dividends to be paid to the Treasury as well as the levels of current and capital spending. Revenues generated by a higher-than-projected copper price are automatically transferred to the Treasury, while shortfalls must be made up by CODELCO through external borrowing, the latter operation also requiring approval of the Minister of Finance. Thus CODELCO's operations are integrated, at least procedurally, into the general resource allocation decisions of the public sector. This mechanism could provide the Government with a means of insulating the domestic economy somewhat from the impact of copper price fluctuations, if, for example, "windfall" proceeds were allocated to a reserve account held abroad.

b. Small and Medium Mines

457. The small mining industry is concentrated primarily in the north of the country and consists of primitive operations typically employing between one and fifty persons. Roughly 10,000 miners are employed full- or part-time in the sector. In the most common form of organization, the miner, in effect, "sharecrops" the mine, paying the owner a stipulated percentage of the output. The more substantial medium-scale mining sector accounts for about 9 percent of total copper production, while employing around 4,000 persons. It consists principally of six companies, the two largest of which --Disputada and Mantos Blancos--account for about half the sector total. A controlling interest in the shares of Disputada was purchased by the State from French investors in 1971; in 1978 it was sold to the Exxon Corporation, which has also purchased most of the outstanding privately held shares. Mantos Blancos is also controlled by foreign capital, while the remaining enterprises in the sector are mostly Chilean-owned.

458. Responsibility for the promotion of the small- and medium- mining sector has, since 1960, belonged to the National Mining Company (ENAMI), a state-owned enterprise attached to the Ministry of Mines. Most of the sector's ores are bought by ENAMI for smelting, refining and marketing. ENAMI also provides credit and technical assistance to the small miner. As is the case of CODELCO, ENAMI suffered a loss of qualified engineering staff in the wake of the nationalization of the large copper companies and the political turmoil that followed. A further loss of staff was experienced after September 1973, some of it to CODELCO as a consequence of wage disparities between the two state enterprises.

459. In addition to its mineral purchasing agencies, ENAMI owns eight treatment plants, two smelting operations (one at Paipote and a modern conventional smelter at Ventanas), and one refinery (also at Ventanas). Until recently, it also held equity in several medium-sized operations, but under the present Government has been divesting itself of these assets, including its shares in Disputada. As a result, ENAMI's traditionally weak financial position has improved considerably. Efforts to improve operational efficiency have also had success, and further improvement is expected to result from the modernization of installations at Paipote and Ventanas.

c. Potential for Expansion

460. According to recent CODELCO figures, Chile's proven reserves total more than 7.4 billion mt of ore. With an average copper content estimated at 1.1 percent, this ore would yield 81 million mt of fine copper, or about 80 years of production at current rates. In addition to this are hypothetical reserves of 10.8 billion mt of ore of estimated average copper content of 0.5 percent; i.e. a potential yield of 54 million mt of fine copper. Finally, it is estimated that another 4-5 million mt of fine copper could be recovered from existing tailings and slag heaps. The bulk of copper reserves is found at the existing large mines.

461. Thus Chile's reserves are extensive, of relatively high grade, and well located for low-cost exploitation. The reserves located at existing large mines may be developed at roughly half the cost per incremental unit of output and in shorter time than is possible in new or less developed mines. The major development responsibility thus falls to CODELCO. Foreign investment may develop new mines or expand mines currently outside the Gran Minería. Eventual investment of more than US\$1 billion is expected in the development of Disputada by Exxon. Other foreign investments approved by the Government, but not yet realized, include a US\$500 million project to develop Quebrada Blanca, US\$350 million for the development of Andacollo, and US\$100 million to mine copper, gold, and silver at El Indio. It is not certain how soon these projects are likely to be undertaken, however.

462. Public investment in mining is presently insufficient. The large mines, with the exception of Exotica, are operating at or near full capacity output. In view of falling average ore grades and the normal depreciation of equipment, the mission estimates that an average investment level of around US\$130 million per year is necessary simply to maintain present production levels through 1985. A modest expansion program to raise capacity to the level of about 1.1 million mt in 1980 and to 1.3 million mt by 1985 would require additional annual investments on the order of US\$240 million. In contrast, CODELCO's investment budget for 1976 and 1977 called for expenditures of US\$100 million and \$150 million, respectively, the amount in the first year barely covering depreciation in the large mines. 1/

463. The low investment levels of recent years are consistent with the general austerity and heavy foreign debt burden toward whose service copper earnings have had to be diverted. Moreover, in view of its size and relative attractiveness to foreign investors and lenders, copper will for many years serve as a major source of capital for the other sectors of the economy. The mission's concern in this regard emanates from the seeming lack of an overall policy or plan integrating the continued development of the copper sector itself--which still represents a sector of major comparative advantage for Chile and a source of high future returns--into

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1/ Indeed, in view of what appears to be a significant undervaluation of CODELCO assets in terms of replacement costs, the allocated investment probably fell short of maintaining productive capacity.

an overall public sector budget for the allocation of CODELCO earnings. Among the questions that need answering, for example, is whether the Government intends the major increments to capacity to be achieved through foreign investments in new mines, because of the sector's relative attractiveness to foreign investors, even though the costs of incremental capacity are likely to be much less in the existing CODELCO mines. To what extent is CODELCO, because of its superior borrowing capacity, to be used indirectly as a channel for funds to the rest of the public sector--i.e. borrowing abroad to finance its investments, while transferring its profits to the Treasury? Tied to the answers to these questions are decisions regarding the need to raise CODELCO's managerial capacity for efficiently carrying out an expansion program. To some extent the existing management gap can be filled through the use of outside technical assistance and subcontracting. Any major expansion, however, say over 5 percent per year, may require more intensive use of foreign technical and managerial inputs.

464. The rapid growth of world copper supply capacity through the first half of the 1970s, and the slow growth of industrial country demand in the second half, resulted in a build-up of surplus stocks and a sharp decline in price. The underlying supply-demand imbalance is not expected to be resolved before the early 1980s, with the growth of demand picking up somewhat, while many potential investments in new capacity are postponed. <sup>1/</sup> By then, however, a strong upward movement in prices is expected in view of the large gap now existing between the market price and the price necessary to induce the opening of new productive capacity. Inasmuch as Chile may be the only country whose mines earned a profit at the 1977 price, it stands to gain significantly from the anticipated future increases.

465. To summarize, the size, quality, and relatively low exploitation costs of its copper reserves indicate that for the rest of this century and beyond Chile will continue to be an important source of the world's copper. By the same token, even as the growth and diversification of the domestic economy proceeds, copper will continue to be an important engine of that growth and source of investible resources to the other sectors. To take full advantage of the opportunities, major investments will be required. Part of this investment is expected to come from the reopening of the sector to foreign capital. The location of existing reserves, however, requires that a large part of the expansion occur in the existing state-owned mines. It is thus essential that greater attention be given to the careful design of a sectoral investment program and to assuring that CODELCO possess the technical and administrative competence necessary to manage its realization.

## 2. Other Non-Fuel Minerals

### a. Iron Ore

466. Iron ore runs a distant second to copper as Chile's most valuable mineral product. Proven reserves total around 900 million mt at some 100 mining sites around the country, with additional probable reserves of about

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<sup>1/</sup> See IBRD Report No. 814/78, Price Prospects for Major Primary Commodities, June 1978.

2 billion mt. Chile is the third largest producer of iron ore in South America, behind Brazil and Venezuela, with a productive capacity now estimated at about 15 million mt per year. Actual production runs far below that level, however, peaking in 1968 at almost 12 million mt. <sup>1/</sup> Facing weak demand in both domestic and international markets, production totaled only 7.8 million mt in 1977. The sector employs directly about 5,000 workers.

467. State activity in iron mining began in 1942 with the creation of the state-owned Pacific Steel Company (CAP) charged with finding, acquiring and exploiting iron mines and other domestic resources necessary to the development of the national steel industry. With the nationalization of the major privately owned mines in 1971, CAP took control of about 96 percent of sectoral production.

468. Most of Chile's iron ore is exported, about 85 percent of the total going to Japan. Exports in 1977 totaled US\$82 million, or 4 percent of total exports (Table IV.20). Chilean exports suffer a locational disadvantage vis-a-vis other producer countries, and Chilean ores also contain a high level of impurities. In March 1978, production was inaugurated at a US\$250 million pelletizing plant, which is expected to produce 3.3 million mt annually of pellets of 65 percent iron with impurity levels of only .03 percent sulphur and 0.5 percent phosphorus. As part of the agreement for the plant's financing, CAP contracted to supply the bulk of the output, 3.25 million mt per year during a ten-year period, to the Japanese steel industry. The plant therefore has an assured market and by upgrading the product should significantly increase the value of iron exports over the next several years. The major question regarding its profitability results from the high cost of fuel, the plant being designed prior to the jump in the price of petroleum.

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<sup>1/</sup> See Appendix II, Table 8.12



Table IV.20: CHILE - IRON ORE EXPORTS, 1960-1977

(Millions of US dollars)

Years	Current Prices	Constant Prices <u>a/</u>
1960-64 (ave.)	52.6	72.2
1965-69 (ave.)	71.9	118.9
1970	66.7	99.1
1971	69.1	115.7
1972	56.6	100.0
1973	72.0	95.1
1974	72.3	86.0
1975	89.9	89.9
1976	86.3	89.1
1977	81.5	85.3

a/ Constant prices of 1975 (deflated by index of Brazilian iron ore exports (65%), CIF North Sea ports).

Source: Central Bank; IBRD

b. Molybdenum and Other By-Products of Copper

469. Molybdenum, gold and silver, have traditionally been recovered as by-products of copper, and their output has thus been a function of copper production. Recent investments in facilities to recover molybdenum at the Rio Blanco mine and increased production at Chuquicamata have already resulted in substantial output growth. 1/ Further increases are projected for the next five years. Molybdenum exports totaled US\$54 million in 1977 with other copper by-products contributing an additional \$23 million. It is expected that the price of molybdenum will remain stable and that demand will increase along with the consumption of high-strength steel alloys. The production of other copper by-products (uranium, selenium) appears possible, and respective studies are underway.

c. Nitrate and Iodine

470. In terms of employment (8,000 workers), the production of nitrate and iodine is still more important than iron ore production despite work force reductions via attrition. Nitrate production has continued its secular decline, while the state-owned mines remain open at a substantial loss. The Government

1/ See Appendix II, Table 8.12.

views the implied subsidy as a social expenditure justified by the lack of alternative job opportunities in the mining areas. Meanwhile, research and exploratory efforts are underway to increase the recovery of by-products, particularly lithium and boric acid, and to lower the costs of production by increasing potassium yields and making more efficient use of solar energy. Costs are expected to remain above that of synthetic substitutes, however, and the mines are not expected to be profitable in the foreseeable future. Exports of nitrates and iodine totaled US\$40 million in 1977.

F. FUELS AND ENERGY

471. Table IV.21 summarizes the sources and uses of commercialized energy in Chile. 1/ Some 60 percent of energy consumption is supplied by oil, three-fourths of which is imported. As a consequence of the jump in world oil prices, oil constitutes Chile's largest single import, the share of fuel in total imports rising from 5 percent in 1973 to 20 percent currently. Energy demand generally is higher and more oriented toward industrial fuels in Chile than in other countries at similar levels of development because of the importance in the economy of copper and other energy-intensive minerals industries.

Table IV. 21: CHILE - ENERGY CONSUMPTION BY SOURCES AND SECTORAL USE, 1975

(Percent) a/

Supply		Consuming Sector	
Oil	60	Transportation	26
Gas	1	Mining and minerals industries	30
Coal	13	Other industry	19
Hydro	<u>25</u>	Household, commercial and public services	<u>26</u>
	100		100

a/ Percent of total when converted to barrels of oil equivalent.

Source: Appendix II, Table 8.26

1/ A more detailed energy balance is presented in Appendix II, Table 8.26.

472. Large, untapped energy resources provide Chile with a number of options for reducing its dependence on imported oil. Increased exploitation of domestic natural gas and coal reserves appear the most promising of these. Oil and hydroelectric production can also be expanded, while demand growth could be slowed somewhat by appropriate conservation measures. A major impediment to the employment of domestic energy resources, however, is their concentration at the southern end of the country, far from the consuming central and northern regions and inaccessible to overland transport, except through Argentina.

473. Its direct ownership of essentially all of the country's primary commercial energy suppliers, as well as some of the largest energy consumers, in addition to its normal tax and regulatory powers, gives the Government a unique perspective and wide range of tools for the design and execution of a national energy policy. Nevertheless, a mechanism for planning and coordinating energy development has been slow to take shape, and the exploration and research efforts needed to properly evaluate alternatives have been neglected. In recognition of this need, the Government in June 1978 created the National Energy Commission, composed of the Ministers of Mining, Economy, Finance, and National Defense, the Director of ODEPLAN, and the Chief of the President's General Staff. The Commission will have a small technical secretariat responsible for contracting the necessary studies.

1. Oil

474. Chile's known oil reserves are concentrated in the southern-most Province of Magallanes, where sporadic exploration was begun by private interests shortly after the turn of the century. Private efforts failed to discover commercial oil and gas deposits, however, and in 1928 the Ministry of Mines began its own exploratory drilling. In 1932, the State assumed full control over the petroleum sector, and responsibility for exploration and development shifted to CORFO following its creation in 1939. The feasibility of commercial production was first established at Cerro Manantiales on Tierra del Fuego, just south of the first narrows of the Straits of Magellan, and output began four years later.

475. The National Petroleum Company (ENAP) was created in 1950, as a subsidiary of CORFO, with a monopoly over the exploration and production of oil and gas. With no refining facilities in Chile, imported refined products were sold through the retail outlets of national and international oil companies. Following construction of refining facilities by ENAP, beginning with a simple plant at Manantiales in 1952 and then with complete refineries in central Chile at Concon in 1955 and Concepcion in 1967, the Government imposed controls on the import of refined products and permitted only ENAP to produce and/or import crude oil. ENAP sells refined petroleum products in bulk to large consumers and to the retailers. The Government controls prices on both bulk and retail sales. Current refinery capacity is only about 70 percent utilized and is deemed sufficient to meet domestic demand into the mid-1980s.

a. Production

476. Commercial production of petroleum is obtained from a single sandstone reservoir horizon occurring at a depth of around 5,700 feet (1,700 meters) in the vicinity of the eastern part of the Straits of Magellan, and deeper to the northwest, west and southwest. 1/ Measured in energy units, it contains about 75 percent natural gas and 25 percent oil. Sand deposition is somewhat irregular and frequently missing over the higher parts of the producing structures, giving rise to a relatively high proportion of dry holes in development drilling.

477. Through the end of 1976, a cumulative total of 1,701 wells had been drilled, of which 632 were classified as oil wells, 254 as gas wells, and 815 were dry. Many of the oil wells have been depleted and shut in. Cumulative production of crude oil and natural gas liquids since the first commercial production in 1949 until the end of 1976 totaled 35.6 million m<sup>3</sup> (224 million barrels). Considerable natural gas is also produced and cryogenically processed to extract natural gasoline, propane and butane. Part of the stripped gas is used as fuel in the processing plants and field camps, part is sold, part is flared and approximately half is compressed and reinjected in the reservoirs for lack of a market. Of the producing wells, roughly two-thirds produce naturally, and one-third are producing with gas-lift. 2/ Oil production per well has averaged only 11 m<sup>3</sup> (69 barrels) per day since 1949.

478. Oil production from the currently developed fields has been falling at an average annual rate of about 9 percent since 1971, as the flow from newly drilled wells in the depleting reservoir does not fully compensate for the natural decline in the rate of extraction from older wells (Table IV. 22). In an effort to reverse the downward trend, ENAP has continued exploration and development activities, expanding them to include offshore drilling in the Straits of Magellan. The oil and gas deposits of Magallanes Province have been known for some time to extend beneath the waters of the eastern part of the Straits. The scale of recoverable reserves there is estimated to be of the same order of magnitude as those already discovered on land on both sides of the Straits, i.e., around 32 million m<sup>3</sup> of crude oil and condensate and 100 billion ft<sup>3</sup> of natural gas. 3/ Numerous wells located along the north coast have been drilled at an angle in order to reach deposits as far as 3 km from shore.

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1/ The same horizon contains productive reservoirs in the adjacent part of Argentina.

2/ Gas-lift is a system of production whereby high pressure gas introduced into the well from the surface is used to lift the oil out of the well. It is a substitute for a mechanical pump.

3/ This figure apparently does not include possible reserves of oil and gas which may occur beneath the tidal flats of the Bahia Lomas on the southern side of the Straits. This area has not yet been surveyed because of the difficulties involved in operating in an area of this type. Bahia Lomas could ultimately add a further 10 percent to the total reserves of the area.

Table IV.22: CHILE - PRODUCTION AND IMPORTS OF CRUDE OIL, 1950-1977

(Thousands of cubic meters)

Year	Domestic Production	Imports	Import Share of Total Consumption (%)
1950	100	-	0
1960	1,150	588	34
1965	2,020	782	28
1970	1,976	2,326	54
1971	2,048	3,845	65
1972	1,991	4,256	68
1973	1,817	3,641	67
1974	1,599	4,769	75
1975	1,422	3,146	69
1976	1,331	4,016	75
1977	1,132	4,794 <u>e/</u>	81 <u>e/</u>

e/ Estimate.

Source: ENAP; mission estimates

b. Exploration

479. In 1971 the UNDP assisted ENAP in making a marine seismic survey of the Straits which clearly showed numerous promising structures beneath the sea-bed. Prior to the oil price rise of 1973, development did not appear economically feasible because of the high cost of offshore drilling and delivery and the relatively low productivity of the oil wells. The latter has not usually exceeded 80 m<sup>3</sup> (500 barrels) per day initial producing rate, with an anticipated cumulative production of around 50,000 m<sup>3</sup> of crude oil (315,000 barrels). This oil at 1977 import parity, however, was worth roughly US\$3 million, compared with a cost for development wells estimated at around US\$1 million each.

480. As a result of the changed economic prospects for offshore production brought about by higher oil prices, ENAP leased a jack-up marine drilling rig in 1976 on a three-year contract, and began drilling offshore from the Posesion and Daniel East fields in August 1976. As of October 1977, 23 offshore wells had been drilled, of which 15 had found gas or oil. The last of these drillings (Ostion) was estimated to be capable of producing 500 m<sup>3</sup> per day. All of these exploratory wells are temporarily locked in for lack of surface production facilities, 1/ but the results are sufficiently promising to justify a development program.

1/ This type of appraisal drilling is normal practice in offshore development.

481. Construction of the first offshore oil production platform, a small platform designed for nine producing wells to be drilled by the leased jack-up rig, was begun in Punta Arenas in April 1977. It is expected to be completed and in production by late 1978. Construction of a second platform was to have begun in August 1977. Subsequently, ENAP hopes to install and complete three production platforms per year, with a total offshore development program of some 300 oil wells to be drilled over a 12-year period. Special construction facilities for fabricating production platforms are being located near Punta Arenas.

482. The results of the Ostion drilling referred to above led to the optimistic expectation that by 1983 Chile might be able to supply 40 percent of its crude oil requirements, as compared to the current level of about 20 percent. These estimates were based on the results of a single test well, however, and must be taken as highly tentative. Moreover, oil produced from beneath the Magellan Straits will not be cheap. Estimates provided to the mission suggest a production cost of around US\$7 per barrel for new offshore oil, to which must be added almost US\$1 per barrel for transport to the consuming areas of the country. Nevertheless, this is still only about half the cost of imported oil of the same quality.

483. In addition to the oil and gas deposits beneath the eastern part of the Straits of Magellan, exploration has been moving on land west and north-west into the Magellan Basin and has resulted in the discovery of a gas/condensate field producing from the same reservoir as the older fields, but at a depth of 3,000 meters (10,000 feet). In the deepest part of the basin, near Punta Arenas, exploration is being renewed after many years -- it was in this area that petroleum exploration commenced in Chile nearly 70 years ago. This effort, however, will require deep and difficult drilling.

484. ENAP has also explored for oil in three other areas of Chile. In 1961 and 1962, a total of nine wells were drilled in the extreme north of the country without encountering indications of petroleum. In 1964, ENAP commenced exploration on the Arauco peninsula, where a noncommercial gas find was encountered. An additional six wells were drilled offshore from this area in 1972, resulting in another non-commercial gas discovery. Wells revealing noncommercial gas have also been drilled in the southern part of the Central Valley near Osorno. Exploration of this area is still in progress. The geology of the rest of Chile is generally unfavorable for the formation of oil and gas, and the prospects of significant discoveries, except in the Magellan Basin and on the southern part of the continental shelf, must be regarded as poor. A possible exception is the southern extension of the Central Valley around Osorno-Puerto Montt.

c. Foreign Participation

485. Besides pursuing its own exploration and development program, ENAP has sought to engage the expertise and risk capital of foreign oil companies in areas where there is some indication that oil and/or gas may be present but involving technological requirements, costs and exploration risks too high for ENAP. This reversal of the long-standing policy of reserving oil exploration and development to the State was mandated by Decree Law No. 1,089 of July 1975,

which authorized operating contracts with private enterprises, domestic or foreign. A subsequent decree (No. 1,820 of September 1977) allows the President of the Republic to grant a variety of tax incentives in the context of such contracts. Seven areas were opened for foreign participation. Most of these are offshore, either in the deeper western part of the Magellan Basin or on the continental shelf west of the mountains forming the western margin of the continent. This area is notorious for its bad weather conditions and, consequently, is bound to be a high-risk, high-cost exploration area.

486. The first such contract was signed between ENAP and a foreign partnership composed of Atlantic Richfield and Amerada Hess in December 1977. The concession area consists of 8.9 million ha of the continental shelf in an offshore area south of Puerto Montt. The contractors are committed to investing a minimum of US\$11 million during a five-year exploration period while taking the full capital risks of exploration and development. In the event that oil is discovered, it is reported that under the negotiated tax and royalty package the foreign enterprises would receive approximately 48 percent of income, and the remaining 52 percent would flow to ENAP and the Government of Chile.

#### d. Domestic Price Policy

487. The prices of petroleum products have long been controlled by the State. From 1971 to 1973, price adjustments lagged well behind the general CPI, and ENAP had to rely increasingly on Central Bank credit to finance its growing operating deficits and capital outlays. The present Government has relied mainly on price incentives to encourage the overall conservation of energy and the substitution of other fuels for oil. By June of 1974, the general level of oil product prices had been adjusted to reflect the new world market price of crude oil. However, the internal prices of different fuels relative to each other do not represent the pattern of international prices; for example, the price of fuel oil has been kept high in order to cross-subsidize the sale of household fuels at prices lower than the international level. The Government intends to reduce these distortions, raising the prices of kerosene and LPG and reducing the price for fuel oil.

488. To summarize, the development of offshore oil and gas fields in the Straits of Magellan and the other programs underway may be expected to increase both reserves and domestic oil production in the medium term, but it remains to be seen whether the increase will be sufficient to raise substantially the percentage contribution of domestic production to total petroleum consumption. ENAP's projections of demand, domestic production, and imports of oil products and LPG (made prior to the Ostion drilling) are shown in Appendix II, Table 8.35.

## 2. Gas

489. In energy terms, the Magallanes reservoirs contain three to five times as much natural gas as oil. Reserves are estimated at 75-100 billion m<sup>3</sup>. Production has been flat at the level of 7-8 billion m<sup>3</sup> over the past decade (Table IV.23). Two alternatives have been considered by the Government for commercializing these natural gas resources. The first of these, a fertilizer (ammonia/urea) plant which would have produced primarily for export, was

rejected as uneconomic. The alternative now being pursued calls for liquification of the gas and its shipment in specialized refrigerated tankers. Central and northern Chile were initially considered the likely markets, but cost calculations showed that the delivered gas there would be more expensive than imported fuel oil. The United States is now viewed as the most likely market.

Table IV.23: CHILE - PRODUCTION OF NATURAL GAS, 1969-1977

(Millions of cubic meters)

Year	Output
1969	7,470
1970	7,628
1971	7,986
1972	8,073
1973	7,376
1974	7,042
1975	7,097
1976	7,035
1977	6,719

Source: ENAP

490. A subsidiary of ENAP, Gas de Chile, was created to organize planning and financing for the LNG project, and, in October 1978, an operating consortium was formed between ENAP, COPEC (a private Chilean oil distributor), Atlantic Richfield and the Air Products and Chemicals Corporation. According to existing plans, the plant would liquify around 250 million ft<sup>3</sup> (7 million m<sup>3</sup>) of gas per day and cost about US\$400 million. Production is projected to begin in 1984, but actual implementation of the investment agreement is contingent upon receipt of the necessary import approvals from the U.S. and arrangement of the financing. If the investment goes forward, an additional US\$70 million would be needed for well-head processing of the gas and the pipelines to carry it to the liquefaction plant. The estimated cost of the ships that would be required to carry the LNG to the United States is US\$520 million. Thus the total investment is estimated at about US\$1 billion. 1/ If the LNG were sold at the highest price thus far permitted by U.S. authorities for imports of Algerian LNG, 2/ US\$2.20/million btu, the gross revenues would be about US\$200 million per year, or 20 percent of the initial investment with no allowance made for depreciation, operating expenses, or any financial return on the natural gas production.

1/ The cost figures cited are close to those reported for LNG projects elsewhere in 1976. A terminal and regasification plant could be expected to cost an additional US\$100-150 million.

2/ Petroleum Economist, Oct. 1977, p. 386.



491. It must be noted that Algeria has two major advantages over Chile in the export of LNG to the United States. First, Algiers is 3,437 sea miles from Boston, while Punta Arenas is 5,871 from Los Angeles, and 7,002 from Baltimore. Secondly, Algeria has the revenue from over a million barrels per day of oil exports to help finance the heavy investments required for LNG exports. Although it is not impossible that the proposed LNG project could generate a profit, the net return to Chile per unit of gas used is likely to be low, and, in the mission's judgment, alternative markets accessible by pipeline should be seriously considered.

492. The market for natural gas in the Santiago-Valparaiso area is estimated to be less than 2 million m<sup>3</sup> per day, growing to about 3 million m<sup>3</sup> per day by 1985, still less than half the amount that would be disposed of through the LNG project. By comparison, Argentina consumed over 22 million m<sup>3</sup> per day in 1976, of which 5.2 were imported (mostly from Bolivia), and could probably use much more if the price were competitive with imported oil. Argentine consumption is expected to exceed 40 million m<sup>3</sup> per day by 1986. 1/

493. Considerations of market size, distance, and the massive glacier which stretches from the Argentine border to the ocean would make the building of a pipeline through Chilean territory to connect the gas fields of Magallanes to potential markets in central Chile excessively expensive. On engineering-economic grounds, the obvious route would be through Argentina, especially since most of the pipeline required has already been built. An even lower cost possibility would be an exchange agreement in which Chile sold gas to Argentina in the south and bought gas from fields in western Argentina. Proposals of this type may currently be viewed unacceptable by both countries for political and national security reasons. However, a careful study might well show that the savings to be derived by routing gas through, or swapping it with, Argentina would more than repay the cost of maintaining "insurance" against supply interruptions in the form of a dual-fuel (oil and gas) capability in important gas-using industries and a stock of fuel oil kept on hand to cover the readjustment period that would be needed to reopen supply channels for imported oil. Such measures would be costly, but so is the continued use of imported oil.

### 3. Coal

494. More than 90 percent of Chile's coal production is concentrated in the central part of the country. About two-thirds of total production is from the Lota-Schwager mine complex, which extends under the sea from the coast just south of Concepcion. These mines may be approaching the limits of their economic life, however, and the area itself holds only about 5-10 percent of total coal reserves. Like gas and oil, the greatest part of Chile's coal reserves, about 70 percent, is located in Magallanes Province where exploitation and demand are minimal. A further 20-30 percent is located in the Osorno-Chiloe area, where production and consumption again are negligible. In both these areas the coal is of a sub-bituminous type with a relatively high moisture and ash content which add to the cost of transportation. Much of the Magallanes coal, on the other hand, occurs close to the surface and near to deep water bodies with access to the ocean.

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1/ IDB News Release 77/77, dated Oct. 27, 1977.

495. Chilean coal producers, in common with coal mining the world over, went through lean times in competition with cheap oil during the twenty years before 1973. Their difficulties were increased by the costly social obligations mandated by successive governments with regard to the mine workers. Ultimately, only the Lota and Schwager mines were left in the Concepcion area. These merged in 1963, and later, along with all other major coal mines in Chile, were nationalized and incorporated into the National Coal Company (ENACAR). ENACAR has ever since been a financial liability to the government, maintained largely as a subsidy to the 15,000 miners located in the Concepcion area.

496. The exploitation of coal deposits in the Concepcion area began before the turn of the century, and production before 1914 exceeded one million tons annually. The Magallanes coal deposits were also exploited at an early date to supply steamships using the Straits of Magellan before the opening of the Panama Canal, and also for local consumption. Production there went into decline after the opening of the Panama Canal, but revived to around 0.5 million tons annually during the Second World War, when it was exported to Buenos Aires for use as fuel in power stations. Production for local consumption continued on a limited scale until natural gas became available in Punta Arenas in 1971. Since then, Magallanes production has been minimal. Total coal production hit a peak of 2.3 million gross tons in 1955, declining irregularly thereafter (Table IV.24). Output currently runs about 1.3 million mt per year.

Table IV.24: CHILE - GROSS PRODUCTION OF COAL, 1940-1977

(Thousands of metric tons)

Year	Production	Percent of Consumption <u>a/</u>
1940	1,933	91
1950	2,217	100
1955	2,305	97
1960	1,471	80
1965	1,727	96
1970	1,510	76
1971	1,616	82
1972	1,457	88
1973	1,390	88
1974	1,520	92
1975	1,515	117
1976	1,300	92
1977 <u>p/</u>	1,310	68

a/ Consumption is calculated as output plus imports, less exports and additions to stocks. The large fluctuation in consumption during 1974-77 reflects the successive accumulation and decumulation of stocks during the recession and subsequent recovery.

p/ Provisional.

Source: ENACAR

497. The coals of Magallanes are of poorer quality than those of Concepcion-Arauco, but the reserves are far greater. Moreover, the deposits are close to deep-water channels, and an appreciable proportion of the reserves could be strip-mined. A determined effort is needed to block out the reserves by modern techniques, including the use of geophysical surveys. Simultaneously with this, pilot-scale mining and beneficiation operations are required to determine how best to upgrade the coals and control their tendency to spontaneous combustion.

498. The most interesting of the Magallanes coal deposits are those on Isla Riesco. The only cost estimate available, US\$7-8/ton at mine mouth, is that of a Japanese firm which attempted in 1975 to obtain a development contract to mine and ship coal to Japan. Treatment, handling and shipping costs would, of course, add to the cost of coal delivered in central or northern Chile. The cost of shipping coal from Lota to Chanaral (about one-fourth the length of the country) was reported in 1977 to be US\$11.70 per ton. This referred to ships with a capacity of only 15,000 tons, but larger ships can easily navigate to Isla Riesco at lower unit cost. The delivered price at which this coal would be on a par with imported fuel oil on a straight cost basis is about US\$30/ton. Using modern strip-mining techniques and larger ships, the mission suspects the cost of Magallanes coal delivered to central Chile should be well below this figure.

499. While coal mined in Magallanes may be exportable, the most obvious markets would be domestic. For this market to exist, industrial and utility fuel handling and using facilities would need to be altered to accommodate coal. As owner of many, if not most, of these facilities, the Government itself is in a strong position to implement the required conversion. Finally, if coal mines are developed in Magallanes, it may also make sense to locate a mineral processing center there, thus reducing transport costs for part of the coal. The raw materials could be brought south on the return trips of ships carrying coal north, and the finished product would be closer to export markets around the South Atlantic and Pacific.

500. Responsibility for the exploration of the Magallanes coal deposits currently lies with CORFO rather than with ENACAR. CORFO, however, lacks the managerial, technical and financial capacity to carry the work out properly. Consideration of alternative arrangements should take into account that ENAP possesses much of the equipment and expertise needed to block out the coal reserves and had efficiently carried out exploratory work on these reserves before responsibility was transferred to CORFO. Moreover, the apparently most attractive deposits could be strip-mined, while ENACAR's experience is with underground operations. On the other hand, ENAP has thus far tended to take a narrow view of the Magallanes coal deposits, viewing them as raw material for synthetic fuel production once the area's oil reserves are depleted. The existence of ENAP's US\$50,000 a day offshore drilling rig, backed up by modern, computerized, data-processing technology, side-by-side with large, easily accessible, and largely ignored coal reserves, is one example of the need for sector-wide planning and improved inter-agency coordination in the energy sector that led the Government to create a National Energy Commission in 1978.

#### 4. Hydroelectric Power

501. The electric power sector is made up of three groups of firms. 1/ First, there are mining and industrial firms which generate electricity for their own use and may also buy and sell power to the public utility. They account for about 30 percent of total electricity production, mostly in isolated areas. Second, there are a number of municipal and regional distributors which produce as well as distribute electricity. The largest of these is the Chilean Electric Company (CHILECTRA), which serves Santiago and Valparaiso. The Government (through CORFO) obtained a controlling interest in CHILECTRA in 1970. The largest producer, however, is the National Energy Company (ENDESA), a state-owned corporation created in 1944 with the primary responsibility for bulk power generation and transmission. ENDESA is also responsible for rural electrification and provides retail service in some areas.

502. Hydroelectricity is Chile's most important domestic source of energy, if measured in terms of the amount of fuel necessary to generate the same amount of electricity in a thermal plant. Ninety eight percent of hydroelectric production in 1975 came from sites in central Chile; 85 percent from plants belonging to ENDESA. Chile also has substantial unexploited hydroelectric resources. Among the projects slated for execution during the next several years are a 300 MW facility at Antuco, whose construction is already well advanced, a plant at Colbun-Machicura whose first-stage capacity would reach 500 MW, and another at Neltume of 450 MW capacity. These projects, including generating plants and transmission lines are projected to cost about US\$1.1 billion (1977 prices) over the coming decade.

503. Because of their importance in the consumer price index, the adjustment of electric power tariffs is a politically difficult decision, and ENDESA has never earned the 10 percent rate of return on its capital authorized by law. 2/ The lag of tariffs behind the general rate of inflation became particularly severe in the 1971-73 period (Table IV.25). During 1972, for example, no tariff increases were authorized despite a more than three-fold rise in the CPI over the course of the year. By 1973, ENDESA, along with other public enterprises was operating at a substantial deficit.

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1/ For more details on this sector, see IBRD Report 788a-CH, December 1976.  
2/ Its best financial performance occurred in 1970, when the rate of return was about 6 percent.

Table IV.25: CHILE - INDEX OF AVERAGE ELECTRIC POWER TARIFFS (ENDESA),  
1969-1978 a/

(Average 1969 = 100)

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Year	Nominal Tariff	Deflated <u>b/</u>
1969	100	100
1970	146	110
1971	154	86
1972	178	41
1973	353	14
1974	5,642	52
1975	40,634	79
1976	143,930	90
1977	290,173	94
1978	420,000	104

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a/ Average tariffs are calculated as revenues divided by sales (GWh).

b/ Deflated by IBRD adjusted CPI.

Source: ENDESA

504. The present Government massively adjusted power rates beginning in late 1973, and has eliminated the discounts formerly allowed other public sector users. Rates are now adjusted monthly. In real terms average power tariffs are at about the levels of 1969-70 and further real increases are being undertaken.

#### 5. Other Energy Sources

##### a. Nuclear

505. A 600 MW nuclear plant is proposed to enter into operation in 1987, but a decision was still pending at the time of the mission's visit regarding the type of reactor, its location, and the means of financing. Chile has substantial uranium reserves and is negotiating with foreign firms for their exploitation. Responsibility for nuclear development resides with the Chilean Nuclear Energy Commission. The UNDP has funded a number of technical studies related to the sector, and Chilean staff are being trained in Argentina, Brazil, France and the Federal Republic of Germany.

##### b. Geothermal

506. The geothermal resources of Chile should be considerable, given its geological location, but so far only two areas in the north of the country have been investigated. A geothermal field has been developed with UNDP assistance

at El Tatio in the mountains about 150 km from the Chuquicamata copper mine, to which it could supply energy if generating equipment were installed. However, the ratio of dry holes to producing wells is high, and total steam capacity is small compared with the energy requirements of Chuquicamata. Another area has been discovered further north, at Puchuldiza, but development is less advanced. A further area which merits investigation is the vicinity of Santiago, where the existence of hot springs indicates the possibility of finding geothermally-heated water which might be used in a district heating system. If successful, such a project could result in considerable energy savings and environmental benefits. Geothermal development so far has been carried out by CORFO, but it has not been very active. ENAP has the necessary managerial and technical skill to carry on the geothermal program and would probably be a more effective agent for its development.

c. Liquified Petroleum Gas

507. ENAP has two projects planned to avoid a shortage of LPG, which, according to their demand and production forecasts, would begin in 1979 or 1980. One project is a US\$80 million plant to produce LPG from naptha, and the second is for increased storage capacity to permit adjustment to seasonal demand variations. The expansion contemplated is 24,000 tons, about 5 percent of 1980 demand as projected by ENAP. At the time of the mission, the Ministry of Economy was withholding permission for these projects, maintaining they were not needed to meet current demands and that future demand would be limited by price increases. The assumption of only a 6 percent per year growth of demand, however, roughly equal to the expected growth of GDP, results in a higher projected demand than suggested by ENAP. 1/

508. The closest substitutes for LPG are natural gas, electricity and kerosene. Natural gas is at present not available to consumers outside of Magallanes Province. Electricity is widely available but roughly four times as expensive per unit energy delivered at residential rates, and the shifting of demand from LPG to electricity would probably raise both investment requirements and the fuel import bill. Kerosene is a technically poor substitute for LPG in terms of convenience, safety, and the intensity of the heat and light it produces in household appliances. In sum, it would be very difficult, in the mission's judgment, to retard the growth in demand for LPG in a sustained period of economic growth such as that predicted. Thus, investment in facilities required to handle LPG will be needed to avoid shortages, unless natural gas can be brought into the Santiago area within a reasonable time.

6. Summary and Mission Observations

509. Imported crude oil is a major source of energy to the Chilean economy and now accounts for 20 percent of total merchandise imports. Although the domestic oil reserves being developed in the Straits of Magellan will reduce somewhat the proportion of imports in total oil consumption--currently about 80 percent--other additional measures will be necessary to reduce the

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1/ Demand projections and their underlying assumptions are presented in Appendix II, Table 8.33.

import burden. The most promising alternatives are those offered by Chile's extensive reserves of coal and natural gas. Development of these resources is made difficult, however, by their location in the extreme south of the country, far from the major domestic markets.

510. Despite the Government's extraordinary influence over the sector, by virtue of its monopoly of energy sources and ownership of the largest energy users, a coherent energy policy has been slow to develop, and little coordination has been exercised over the activities of the responsible agencies and enterprises. As with other public sector activities, moreover, the resources available for energy research, exploration and evaluation have been severely squeezed in the fiscal austerity imposed since 1975. In order to better coordinate energy policies and programs, the Government established a National Energy Commission in June 1978. The Ministers of Finance, Economy, Planning, Defense, and Mining, as well as a representative of the Presidency, are represented on the Commission. The Commission began operations in September 1978 with an initial staff of four; it expects, however, to raise its technical staff to a level of about 30 experts. Desirous of avoiding duplication, it has restricted its operations so far to accumulating historic information on energy uses, sources, and prices and consolidating and reviewing all energy legislation. It has also provided the Government with advice on short-term policy issues as well as reviews of energy feasibility studies. The Commission has the authority to intervene in all the large investment decisions of public energy corporations. For the future, therefore, it plans to prepare energy demand forecasts and (using inputs from public energy entities) possible sector supply programs to establish the basis for advisory interventions. A number of matters merit the National Energy Commission's early attention.

a. Natural Gas Development

511. The disposition of the large natural gas reserves in Magallanes Province needs to be reviewed. In view of the low rate of return likely to accrue to Chile from the enormous investments currently being contemplated in the liquification of the gas for possible shipment to the United States, the mission recommends that detailed consideration be given to an alternative development approach consisting of: (i) an exchange of Magallanes gas with Argentina for Argentine gas that is better located to serve the market of central Chile; (ii) sale to Argentina of gas produced in excess of Chilean demand; and (iii) maintenance of fuel oil stocks and dual-fired equipment that would allow a quick return to the use of oil should gas supplies be interrupted. While such an accord presents obvious political difficulties for both countries, the economic returns could be very high.

b. Magallanes Coal Development

512. A detailed assessment is required of the large coal deposits of Magallanes, in conjunction with consideration of the future of ENACAR

operations in central Chile, an analysis of the possibilities and costs of substituting coal and gas for oil in both industry and electric power generation, and the possibility of developing energy-intensive export industries in Magallanes. Even though Magallanes coal is of low quality, its location along deep-water channels and accessibility to strip-mining should make possible its delivery to Chile's industrial and power plants at a cost well below that of imported fuel oil. The decisions necessary to substitute coal or gas from Magallanes for oil in northern or southern Chile are interdependent and require that the plans for resource development be closely coordinated. In addition to the obvious point that coal and gas are substitutes for each other as well as for oil, scale economies in gas pipelines and coal handling facilities suggest the desirability of certain market-allocation decisions. Other things being equal, transportation and air quality considerations would seem to make the Santiago region the designated market for gas, while the more isolated copper complexes of northern Chile and coastal power plants would be coal's most natural markets. A reasonable approximation to the optimal conversion pattern needs to be worked out simultaneously with investigations of the prospects for gas and coal supply.

513. On the basis of crude assumptions regarding the rate of conversion to natural gas, the mission estimates that its domestic market could total about 3 million m<sup>3</sup> per day by 1985, and the implied substitution for imported oil would represent a saving of some US\$130 million annually (1975 prices). In addition, annual savings of US\$97 million would be possible by substituting some 3.4 million tons of Magallanes coal (or 2.0 million tons of coal from central Chile). <sup>1/</sup> To reach these output levels, however, substantial new investments are required, including the opening of new mines.

514. Alternatively, if the coal, gas, and hydro resources of southern Chile are found to be extensive enough, their location along an important international maritime route uniting the Atlantic and Pacific Oceans may offer interesting possibilities for the processing of imported raw materials for re-export.

c. LPG Expansion

515. Mission projections suggest that unless natural gas can be made available to Santiago in the next several years, significant shortages will appear in the supplies of LPG. In addition, the substitution of fuels other than natural gas for residential use is likely to be both more costly and technically less satisfactory than LPG. New investments are thus called for in LPG production and storage facilities.

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<sup>1/</sup> The latter estimate does not include the separately projected coal use of the electric utilities or that deriving from a simple assumption of maintaining constant consumption rations. Coal use from these sources would approximately double the production levels suggested above.



## F. INDUSTRY

### 1. Historical Background

516. As described in Chapter I, Chile reacted to the economic crisis of the 1930s with a succession of measures intended to make the domestic economy increasingly autarkic and, hence, less vulnerable to externally generated shocks. Protection against competition from imports, overvaluation of the exchange rate, price controls, subsidies, tax exemptions and direct state investments were all employed to bias the incentive structure strongly in favor of import-substitution industrialization. Before this time, however, Chile had already experienced considerable industrial development for a nation of its size and income. 1/ During the second half of the Nineteenth Century, Chilean shops and factories were producing locomotives, heavy mining equipment and armaments, in addition to a wide range of consumer goods. 2/ Capital goods industries lost dynamism after the turn of the century, however, as protection heavily favored consumer goods production.

517. Industrial output grew rapidly during World War I, 9 percent per year, as normal imports were disrupted by the diversion of production in the warring countries. By 1917, value-added in industry had reached a level of industrialization some 72 percent above that predicted by the Chenery model for a country of Chile's population and income. 3/ The "traditional" industries--processed foods, beverages, tobacco, textiles, clothing, and shoes--accounted for more than 62 percent of industrial value-added. The strong orientation toward final consumer goods is seen in the marked imbalance between the clothing industry (18 percent of industrial VA) and textiles (6 percent). The clothing industry was far more developed and depended heavily on imported intermediate goods.

518. As noted, the measures introduced after 1930 were, for the first time, explicitly protectionistic and intended to promote import-substituting industries. With the additional protective boost of World War II, industrial

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1/ This discussion is based largely on Oscar Munoz G., Crecimiento Industrial de Chile, 1914-1965, Universidad de Chile, Santiago, 1968.

2/ Some observers have argued that domestic industrial growth was stymied during this period by the adoption of liberal trade policies. This contention seems belied, however, by Chile's active participation in a number of important international industrial fairs, the vigorous recruitment by private industry of skilled-labor immigrants, the rapid growth of raw materials imports while consumer goods imports grew relatively slowly, and the active political presence of the Society for Industrial Development (SOFOPA), founded in 1883. (Ibid.) Moreover, a general tariff of 25 percent was imposed in 1878 to finance the War of the Pacific, and effective protection was increased significantly by the tariff law of 1897, which raised duties on final consumer goods while eliminating them on capital goods and raw materials imports.

3/ Hollis P. Chenery, "Patterns of Industrial Growth," American Economic Review, September 1960.

output did grow more steadily and, on average, more rapidly after 1937 than before (Table IV.26). Nevertheless, most of the import-substitution that occurred had, in global terms, already occurred by the late 1930s. The ratio of industrial goods imports to the total supply of industrial goods, which had fallen from 51.5 percent in 1914/15 to 29.9 percent in 1937/38, stood at 24.6 percent in 1963/64. <sup>1/</sup> Considerable substitution of intermediate goods did occur, however, particularly textiles, chemicals, nonmetallic minerals, and the metal-mechanical industries. In addition to increasing protection against imports, stimulus came from the growth of housing and public works expenditures, especially during 1958-64, and the creation of the state steel enterprise.

Table IV.26: AVERAGE ANNUAL RATE OF GROWTH OF MANUFACTURING VALUE-ADDED, BY SUB-PERIODS, 1915-1970

(Percent)

Periods	Manufacturing Value-Added	GDP
1915-24	4.5	4.3
1924-37	2.6	3.4
1937-45	5.5	3.5
1945-52	4.0	3.9
1952-57	2.7 <sup>a/</sup>	3.0
1957-64	7.8	3.7
1964-70	4.0	4.1
<u>1915-37</u>	<u>3.4</u>	<u>3.8</u>
1937-70	5.0	3.7
1915-70	4.2	3.7

<sup>a/</sup> 1951-53 to 1957-59.

Source: 1915-64 from Oscar Munoz, op. cit., 1964-70 from ODEPLAN, Cuentas Nacionales

519. Although the growth of industrial value-added accelerated after 1937, the average annual rate of absorption of labor into manufacturing employment slowed significantly from about 3.9 percent to 2.5 percent. Thus, the

<sup>1/</sup> Oscar Munoz G., op.cit. Viewed from another angle, import-substitution, defined as the difference between actual imports and what imports would have been had they maintained a constant proportion of total supply, accounted for 43 percent of industrial growth from 1914/15 to 1927, 73 percent from 1927 to 1937/38, and only 15 percent from the latter date to 1963/64.

character of the industrialization process shifted from one based on expanding labor inputs with virtually no improvement (perhaps even a decline) in average labor productivity to one of a steadily increasing (4.5 percent per year) capital-labor ratio. This tendency was the result of the selection of more capital-intensive production techniques within industries as well as the relatively more rapid growth of the more capital-intensive industries. The overvalued exchange rate, tariff preferences granted to capital goods imports, subsidized credit, rising payroll taxes to finance the social security system, the growing bargaining power of organized labor, and the direct investments of the State itself all contributed to this phenomenon.

520. Perhaps more remarkable is the fact that average labor productivity grew significantly less rapidly (2.5 percent per year) than the capital-labor ratio. A number of explanations have been offered for this negative "residual" in Chile's industrial growth equation. In the first place, many of the plants and industries promoted by the import-substitution policies required markets larger than provided by the domestic economy to operate at efficient levels of production. At the same time, the exchange rate policy precluded for most industries the possibility of exports. As a consequence, much of the industrial plant has been chronically underutilized. 1/ Moreover, the inefficiencies of one branch of production were frequently passed on to other branches, as the latter were required to purchase their intermediate goods inputs from the former despite the availability on international markets of lower-cost or higher quality alternatives.

521. Probably the outstanding example of the distortions evident in the pattern of Chilean industrialization is the automobile industry. 2/ In response to legislation designed to attract industry to the extreme north of the country and to a 1962 law for promoting the automotive industry per se, there were 20 different manufacturers assembling a total of 6,615 motor vehicles in Chile in 1962. The number of producers had fallen to 12 by 1967, partly because of inability to meet the local content requirements of the 1962 Law. 3/ Some companies met the local content criteria by locating assembly

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1/ Part of the problem, of course, was the policy-induced adoption of excessively capital-intensive techniques, given Chile's factor endowment, which, in turn, required larger production runs to minimize unit costs. Economically excessive product diversification was also promoted by the cascading sales tax, as enterprises were led to produce inputs for themselves, rather than from a more efficient specialist, in order to avoid the tax.

2/ See: Rhys O. Jenkins, Dependent Industrialization in Latin America: The Automotive Industry in Argentina, Chile, and Mexico, Praeger, New York, 1977. Jenkins' analysis concentrates on the motives of the transnational automobile companies in locating in countries like Chile, rather than on the policies of the latter to attract them.

3/ The Law specified that locally produced components were to rise from 30 percent of the car's FOB value in 1963 to 57.9 percent by 1967. A similar law for commercial vehicles set a local content of 25 percent for 1966, rising to 50 percent by 1970. Action taken by the Allende Government to reduce the industry's fragmentation and to bring it under mixed state-private ownership had reduced the number of companies remaining to six by 1973.

plants in Arica, near the Peruvian border, and adding heavy domestic transport costs to their "value added." Not only did the assembled vehicles have to be transported, frequently by air, from Arica to the markets of the central region, but it is estimated that the cost of the nationally produced components, which in 1969 represented about 29 percent of the value of the industry's output, was some 2.4 times their cost in the respective cars' countries of origin. <sup>1/</sup>

522. Finally, it is not surprising to note that exports played little role in industrial development during the post-Depression period. Exports accounted for about 2.5 percent of the gross value of industrial output in 1970 and for about the same proportion of the entire increment since 1914. The export growth that did occur was concentrated in industries based on domestic raw materials, namely metals, chemicals, and pulp and paper.

523. Table IV.27 summarizes the structure of the manufacturing sector according to the 1967 industrial census. Including consumer durables, it is estimated that about 45-50 percent of the gross value of industrial production went directly to the satisfaction of private consumption demand, and an additional 10-15 percent was intermediate to the production of consumer goods. Domestic industry contributed 90 percent or more of the total supply of manufactured consumer goods as compared to about 15 percent of manufactured capital goods.

524. The expansion of industry into sectors of limited domestic market, the incentives toward excessive capital intensity and vertical integration, and the importance of interlocks with the financial sector and with Government also led to a high degree of market concentration. In 25 of the 85 industries at the four-digit level of SITC disaggregation according to the 1967 industrial census, the three largest establishments accounted for more than half of value-added.

525. In summary, the foreign trade regime, which heavily protected the domestic consumer market while squelching industrial exports, had the effect of shaping the manufacturing sector in accordance with the structure of consumer demand and its derivative demand for intermediate goods, quite apart from Chile's resource endowments or the relationship between productive efficiency and market size. The resultant high production costs further limited the overall size of the market. The consequence was an excessively diversified, inefficient and underutilized industrial plant kept afloat financially by subsidized inputs, particularly credit, and monopolistic pricing made possible, to complete the circle, by the restriction of imports. Also, by 1970 the State itself accounted for about 12 percent of manufacturing output and an estimated 28 percent of industrial assets.

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<sup>1/</sup> Rhys O. Jenkins, op. cit.

Table IV.27: CHILE - STRUCTURE OF MANUFACTURING OUTPUT AND EMPLOYMENT, 1967

(Percent)

Industry	Share of:		
	Gross Output	Value-Added	Employment
<u>Traditional Consumer Goods</u>	<u>40.4</u>	<u>38.4</u>	<u>40.3</u>
Processed foods	22.1	16.4	16.7
Beverages	4.7	5.1	3.8
Tobacco	1.6	2.6	0.4
Clothing	3.0	3.0	5.3
Shoes	1.8	2.2	3.9
Furniture	0.8	1.0	2.4
Printing and publishing	2.0	2.7	3.2
Other chemical products	3.9	4.8	3.5
Other manufactures	0.5	0.6	1.1
<u>Intermediate Goods</u>	<u>45.9</u>	<u>43.5</u>	<u>38.5</u>
Textiles	8.7	10.2	13.6
Leather goods	1.2	1.1	1.4
Wood products	2.7	3.0	7.7
Paper products	2.2	2.5	1.6
Industrial chemicals	1.7	2.1	1.6
Petroleum refining	2.7	1.6	0.6
Petroleum and coal derivatives	0.3	0.2	0.1
Rubber products	1.2	1.6	1.1
Plastics	1.0	1.3	1.5
Clay, china and porcelain	0.3	0.5	0.7
Glass products	0.6	0.9	1.4
Other nonmetallic minerals products	1.6	1.9	2.3
Basic iron and steel	3.3	3.4	3.2
Basic nonferrous metals	18.4	13.2	1.7
<u>Capital Goods and Consumer Durables</u>	<u>13.5</u>	<u>18.1</u>	<u>21.0</u>
Metal products	3.8	4.7	7.3
Nonelectric machinery and equipment	2.7	3.7	4.7
Electrical machinery and appliances	2.4	3.3	2.3
Transport materiel	4.4	6.2	6.4
Professional equipment and instruments	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>
Total Manufacturing	100.0	100.0	100.0

Source: Appendix II, Table 8.13

2. Industrial Performance, 1971-1973

526. The slow growth of manufacturing during the second half of the 1960s left manufacturing plants with considerable excess capacity with which to respond to the strongly expansionist policies of 1971. Sectoral value-added rose almost 14 percent reacting to the strong growth in the demand of both Government and consumers. The largest production increases, as shown in Table IV.28, were recorded by the consumer durables industries as a consequence of their high income-elasticities of demand and almost total protection from foreign competition. 1/

Table IV.28: CHILE - INDEX OF MANUFACTURING OUTPUT BY TYPE OF GOOD, 1970-1973

(1969 = 100)

	1970	1971	1972	1973
Consumer non-durables	104.5	117.8	116.6	110.0
Consumer durables	115.6	141.2	128.3	111.2
Transport materiel	100.0	91.4	105.9	71.6
Intermediate goods for industry	100.6	111.1	115.5	113.8
Intermediate goods for construction	104.1	113.2	123.5	117.8
Miscellaneous manufactures	<u>97.2</u>	<u>105.9</u>	<u>120.5</u>	<u>114.4</u>
Total manufacturing	103.5	114.7	117.6	109.9
(Year-to-year change - %)	+3.5	+10.8	+2.5	-6.5

Source: Appendix II, Table 8.20

527. By 1972, however, the initial dynamism had been lost in the face of falling real incomes, the disruptions of work stoppages and plant takeovers, materials shortages, strikes in the transport and commercial sectors, expropriations, political uncertainty, and the exodus of managers and technicians. By the third quarter of the year, both production and sales indices had turned down, the greatest weaknesses becoming evident in the consumer goods sectors. The decline continued through 1973 with a mild recovery evident during the final quarter of the year. According to national accounts estimates, value-added in manufacturing rose 2.8 percent in 1972, before declining 6.5 percent in 1973.

1/ Production and sales indices further disaggregated by SITC subsectors are shown in Appendix II, Tables 8.20 and 8.22. Separate indices of industrial output are prepared by SOFOFA and INE. Both are presented in Appendix II, but text references are to the SOFOFA index.

528. The powerful expansion of industrial production during 1971 was accompanied by a 7.4 percent growth of manufacturing employment, the evident increase in labor productivity deriving largely from the utilization of excess plant capacity. <sup>1/</sup> Sectoral employment continued to grow in 1972 and 1973, despite the stagnation of output. Indeed, while the index of industrial output for the first six months of 1973 averaged 9 percent below the level of the same period a year earlier, average manufacturing employment averaged 9 percent above. The principal explanation was the large addition of redundant labor to the payrolls of enterprises already owned, acquired, or intervened by the State.

529. As described in Chapter II, the Allende Government intended, via the regulation of prices and wages, taxes, and the outright nationalization of enterprises, to effect a transfer of the rents accruing to domestic and foreign oligopolists to labor, on the one hand, and to the State, on the other. From this transfer was to come both a more equitable distribution of income and a pool of investible resources for achieving faster economic growth. By September 1973, more than 300 industrial enterprises had been shifted to the "social area" of the economy. The redistribution of income that was achieved, however, was short-lived, and the expected increases in investment never occurred. The forced expansion of employment and wages in the social area enterprises, combined with price controls, the flight of technical and managerial expertise, the substitution of political for productive activity, and other disruptions rapidly dissipated the sector's ability to generate reinvestible surpluses. Instead, private investment during the period was practically nil, while public investments had to be financed directly or indirectly by Central Bank money creation.

### 3. Industry since 1973

530. As the Pinochet Government began its program of economic policy reforms, Chilean industry, in addition to the structural inefficiencies that had derived from four decades of protection and subsidization, found most of its major enterprises across all manufacturing subsectors in a state of chaotic disorganization and severe illiquidity. Many private owners, managers and technicians had left the country during the Allende period and were now being followed by the public sector functionaries who had replaced them. Assets that had been in various stages of transfer from the private to the public sector were now hanging in limbo, as their legal status was sorted out and procedures established for their liquidation or return to the private sector. Labor-management relations had to be redefined and a modus vivendi found to permit the resumption of production. Exhausted inventories had to be replenished, supply and marketing channels re-established, spare parts acquired and poorly maintained machinery and infrastructure rehabilitated. While agriculture, mining, and construction rebounded strongly in 1974, manufacturing output remained flat (Table IV.30). Only intermediate goods for industry showed any significant recovery, as domestic firms built up their inventories, and exports expanded, particularly of basic metals.

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<sup>1/</sup> See Appendix II, Table 1.16. The changes in employment referred to here are based on data for Greater Santiago only.

531. The problems of the manufacturing sector were magnified by the 1975 recession. Value-added fell more than 27 percent reaching its lowest real value since 1964. Particularly hard hit were the intermediate goods industries serving construction. Only the major export products, such as paper and pulp (down 7.8 percent) and basic nonferrous metals (down 7.8 percent), were able to escape major cutbacks. In general, the contraction of output exceeded the decline in sales, as producers drew down inventories accumulated the previous year. This inventory reduction was encouraged, indeed for many firms made essential, by the freeing of interest rates in May 1975.

Table IV.29: CHILE - MANUFACTURING OUTPUT BY TYPE OF GOOD, 1973-1977

(1969 = 100)

	1973	1974	1975	1976	1977
Consumer non-durables	110.0	104.3	84.6	96.2	101.6
Consumer durables	111.2	123.9	88.1	75.9	82.5
Transport materiel	71.6	72.8	53.6	49.6	61.5
Intermediate goods for industry	113.8	132.9	113.1	130.5	139.0
Intermediate goods for construction	117.8	113.4	65.1	77.5	93.4
Miscellaneous manufactures	<u>114.4</u>	<u>105.6</u>	<u>67.4</u>	<u>81.8</u>	<u>96.4</u>
Total manufacturing	109.9	111.1	85.0	95.4	104.2
(Year-to-year change - %)	-6.5	+1.1	-23.5	+12.2	+9.2

Source: Appendix II, Table 8.20

532. Industrial recovery began during the second quarter of 1976. Real value-added is estimated to have grown 6.8 percent in that year, accelerating to 12.2 percent in 1977. The index of gross manufacturing output had returned to about the level of 1970. The index had risen another 8.6 percent through the first five months of 1978 compared to the same period a year earlier. Manufacturing employment experienced somewhat less volatility than output, falling 11 percent in 1975, then rising 3 percent and 8 percent in 1976 and 1977, respectively. Average employment in the sector during 1977 was back to approximately the record level of 1974.

533. Chilean industrialists had long been accustomed to operating in a world where the marginal returns to financial manipulation and the pursuit of subsidies and political favors were more important than productive efficiency and the quest for foreign markets. While the recession delayed the impact of trade liberalization, it also served to weaken the financial capacity of many enterprises to undertake the investments necessary to cope with foreign competition once recovery had begun. Considerable uncertainty also existed at the individual firm level regarding the probable returns to investment in the face of reduced trade barriers. These uncertainties were compounded by the



high level of domestic interest rates and by the Government's revaluation of the exchange rate in mid-1976 and early 1977 as a tool of anti-inflation policy. 1/

534. The first clues to the eventual restructuring of the industrial sector may be sought in the response of exports to the rationalization of the exchange rate. The changing composition of industrial exports, which in total nominal value rose more than six-fold from 1973 to 1977, is shown in Table IV.30. The greatest relative growth has occurred among wood products, processed foods, and chemicals. A major expansion in absolute terms has also been experienced by the pulp and paper and basic metals sectors, although both have declined relatively. There are no real surprises here; these are generally the same sectors that had been able to compete internationally even under the relatively unfavorable economic policies of the past. Their comparative advantages are rooted in the natural resource endowments of Chile's minerals, soils, forests and coastline. On the other side of the ledger, a number of industries, such as electronics and heavy consumer durables, would be expected to have difficulty surviving foreign competition. The automotive industry would almost surely fail, were it not the one sector that continues to receive a high level of protection. 2/ The major uncertainties are found among the large middle ground of industries which could probably compete with foreign goods, at least in the domestic market, if the necessary investments are made in time in the rehabilitation and modernization of their plants.

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1/ The high domestic interest rate presented a serious competitive disadvantage to local enterprises in addition to increasing the cost of investment. As reported in Chapter III, some goods were being imported for resale at little or no profit in order to acquire the accompanying suppliers credits. The latter could be turned over in the domestic market to earn a considerable profit on the interest rate differential.

2/ This continued protection reportedly derives from contractual understandings entered into with the foreign companies by the Allende Government.

Table IV.30: CHILE - COMPOSITION OF INDUSTRIAL EXPORTS, 1960-1977

(Percent)

Industry	Average 1960-64	Average 1965-69	1970	1973	1977
Processed foods	28.4	27.9	23.0	20.9	26.9
Fishmeal	(15.5)	(16.9)	(12.4)	(13.2)	(13.8)
Frozen shellfish	(3.0)	(5.4)	(5.0)	(1.8)	(4.2)
Beverages	1.4	1.0	1.4	2.8	1.3
Textiles and clothing	0.3	0.0	0.1	0.2	0.0
Wood	4.6	4.5	7.1	4.5	11.2
Sawn pine	(0.8)	(1.4)	(3.0)	(2.4)	(8.7)
Paper and Pulp	13.6	20.4	25.2	29.0	21.0
Printed matter	0.5	1.5	1.4	0.5	0.4
Leather and rubber	2.2	1.2	0.8	0.0	0.0
Chemicals	5.7	3.6	5.5	3.8	(12.4)
Petroleum derivatives	2.0	0.9	0.3	0.7	(12.4)
Nonmetallic minerals	0.0	0.3	0.4	0.0	0.0
Basic meals	33.5	29.9	18.8	27.6	16.4
Semi-elaborated copper	(17.9)	(23.3)	(11.3)	(23.9)	(7.2)
Metal goods and machinery	2.1	2.4	4.4	6.5	(5.8)
Electrical goods	1.0	1.5	1.8	0.8	(5.8)
Transport materiel	0.2	1.6	4.2	1.8	1.8
Miscellaneous	4.5	2.7	5.4	0.9	2.7
Total	100.0	100.0	100.0	100.0	100.0
Value of industrial exports (US\$ millions):	48.5	99.1	124.9	102.7	627.6

Source: Appendix II, Table 8.24

535. The situation is still in flux, and information is limited. By the end of 1977, the system had clearly not yet digested and adjusted to the extraordinary changes in relative prices, income distribution, and other parameters affecting supply and demand. Thus, Table IV.31, which summarizes subsectoral changes in physical output between 1970 and 1977, years of roughly equal total industrial output, 1/ can offer only a preliminary impression of the adjustments under way. The following observations regarding some of the more important subsectors are based on these data, mission visits to plants and trade associations, and other fragmentary information. 2/

1/ In accordance with the SOFOFA index which weighs the sectors by their shares of value-added in 1967.

2/ Forest based industries were reviewed in Section C.

Table IV. 31: CHILE - CHANGE IN PHYSICAL OUTPUT BY MANUFACTURING SUBSECTORS,  
1970-1977

(Percent)

Subsector	Increases in Output	Decreases in Output
Processed foods		- 0.2
Beverages	+22.6	
Tobacco	+40.2	
Textiles		-24.0
Clothing		-27.3
Leather products (ex. shoes)		-17.7
Shoes		-22.6
Wood and cork products	+15.6	
Furniture and accessories		-26.1
Paper and products	+ 8.0	
Printed matter		- 2.9
Industrial chemicals		-43.7
Other chemical products	+ 9.1	
Petroleum refining	+22.5	
Petroleum derivatives		-19.0
Rubber products		-12.8
Plastics	+ 2.4	
Ceramics		-22.9
Glass	+46.4	
Other nonmetallic minerals		-34.0
Basic iron and steel		-27.0
Basic nonferrous metals	+74.1	
Metal goods		-26.8
Nonelectric machinery		-40.0
Electric equipment	+ 6.6	
Electronic equipment		-43.8
Household appliances, electric	+12.0	
Transport materiel		-38.7
Professional and scientific equipment		-34.1
Miscellaneous manufactures	<u>+22.5</u>	<u>          </u>
Total manufacturing	+ 0.7	

Source: Appendix II, Table 8.20

a. Processed Foods

536. Processed foods constitute the largest manufacturing subsector in terms of value-added, employment and exports. After a sharp rise in 1971, production had fallen below the 1970 level by 1973 as a consequence of declining real incomes, falling agricultural output, and an exchange rate and tariff policy that served to subsidize food imports. By 1977, production had recovered to about the 1970 level with a substantially increased share going to exports. Meanwhile, domestic demand remained depressed from the loss of real personal income over the period and the large increase in the relative price of food which resulted from the freeing of prices generally, the unification and devaluation of the peso, and the elimination of food's exemption from sales taxation.

537. Major obstacles to the food industry's growth in the past have been general economic policies that inhibited the expansion of its domestic raw materials' supply, poor handling and quality control, and the poor quality of domestically produced and protected containers. The first of these impediments has been largely rectified, but substantial investments are needed to improve the others. Meanwhile, foreign consumers have become major competitors for the agricultural raw material, as Chile's opposite seasons make it possible for its fresh fruits and vegetables to reach the U.S. and European markets during the latter's winter and early spring.

b. Beverages

538. Beverage production in 1977 was some 23 percent above the level of 1970. Although exports accounted for a significant proportion, perhaps one-third, of the increment, they still account for only a small share of the total. Within the sector, formerly protected Chilean whiskies and other hard liquors will probably give way to foreign brands, while locally produced beer will continue to enjoy the large measure of protection accorded by location. Chilean wines, on the other hand, enjoy international prestige, and the primary constraints on export expansion will be on the supply side--the growth of vineyards, the modernization of wineries, and the improvement of bottling and corking.

c. Textiles

539. The textile industry is the second most important in terms of employment and contributes about one-tenth of sectoral value-added. It was long one of the most highly protected and cartelized of Chilean industries with imports subject to, among other restrictions, a 10,000 percent prior deposit requirement. Efficiency is hampered by obsolete plant and equipment <sup>1/</sup> and excessive vertical integration. Export potential is limited in the foreseeable future, and retention for many firms of the domestic market will require modernization and reorganization, the latter involving increasing enterprise specialization. Although production has risen 18 percent from its 1975 low, it remains 24 percent below the level of 1970.

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<sup>1/</sup> It is estimated, for example, that at least half of the spindles and three-fourths of the looms in the cotton and wool mills are more than 20 years old.

d. Chemicals

540. The chemical industry, which grew rapidly during the 1960s behind high tariff protection, produces a wide range of intermediate and consumer goods. A large share of value-added, however, consists of the simple mixing of imported ingredients. Much of industrial chemical production is tied to the activities of the mining and paper sectors. Costs and excess capacity are high, and a significant restructuring is expected to occur under the pressure of foreign competition. Fertilizers and other products based on nitrates will continue to benefit from the subsidization of the mines. Various copper-based compounds have shown good export growth as has pentaerythritol, an explosive used in mining. Future possibilities may be found in the anticipated recovery of lithium and other valuable salts from the northern desert areas.

e. Petrochemicals

541. Domestic petrochemical output in 1977 was still 19 percent below the level of 1970, and the outlook for the industry at present appears bleak. A number of joint ventures between foreign investors and CORFO were established in the 1960s for the production of ethylene, LPG, PVC, fertilizers, low density polyethylene, etc. Plants were typically of sub-economic scale with the high production costs being passed on to the manufacturers of plastic goods, textiles, and so on. Expected export possibilities from membership in the industrial agreements of the Andean Pact are now presumably lost. Meanwhile, despite excess production capacity, some users have begun to import at lower cost, and one fertilizer plant visited by the mission had halted its own production altogether and was instead importing the product bulk for repackaging. A number of proposed projects being anticipated on the basis of the large natural gas reserves in Magallanes have now apparently been abandoned in favor of a gas liquifaction plant for direct export to the United States. 1/

f. Iron and Steel

542. As described in Section E., Chile's iron and steel industry is the virtual monopoly of the Pacific Steel Company (CAP). CAP's major installation is the Huachipato Plant near Concepcion, which entered into operation in 1950 as the second largest steel producer in Latin America (the largest being the Volta Redonda mill in Brazil). Operations at Huachipato have seldom been profitable, as CAP over-diversified in an effort to supply a wide assortment of products to the limited domestic market. Exports of steel products were historically marginal, but jumped abruptly to US\$23 million in 1975 in the wake of the collapse of the domestic market. Exports rose to US\$30 million in 1976, but fell back to \$20 million in 1977 as stocks were reduced and domestic sales began to improve. Ingot production in the latter year totaled 509,000 mt, about 11 percent below the average of 1967-70, reflecting the reduced

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1/ This project and related mission observations were discussed above in Section F.

demand of industrial steel users, the low level of construction activity, and, for the first time, import competition. One of Huachipato's two blast furnaces has been shut down for lack of demand since October 1976.

543. CAP's competitive position is weakened by its high costs at a time of low world steel prices, its inability to meet international standards in a number of product lines, notably rolled steel products, and the tight domestic credit situation. These factors came together in one automotive manufacturer visited by the mission who had just placed a US\$1 million order for Japanese sheet steel at a CIF price (duties included) 20 percent below CAP's quote. The imported steel also came with a year's credit at 8 percent interest. In contrast, CAP at that time was only able to offer 60-day credit at a nominal interest rate of 8 percent (2 percent real) per month.

544. Despite these problems, domestic steel output did rise 13 percent in 1977, and 1978 production through July was another 9 percent higher than in the same period of the previous year. The prospect, then, is for CAP to share the growth of the domestic market with imported steel while pruning its product lines. With the reintroduction of its second blast furnace and the installation of a continuous casting plant, already acquired but awaiting better market conditions for its installation, steel capacity will approach one million mt per year, almost double CAP's present level of output.

g. Nonferrous Metals

545. Output of this sector in 1977 was some 74 percent above the level of 1970, largely on the basis of the exports of semi-processed copper in the forms of wire, cable, tubing and sheet. More than half of the sector's output, however, depends on the domestic market. An obvious sector of comparative advantage for Chile, its future is closely linked with world demand for copper generally and the levels of effective protection that the industrial countries choose to grant their own processors.

h. Metal-Mechanical Industries

546. Perhaps the greatest uncertainties are those affecting the metal-mechanical sectors because of the diverse levels of effective protection they received under past trade regimes, the latitude they offer for factor substitution in the production process, and the opportunities they now enjoy for replacing high cost domestically-manufactured inputs with imports. In general, the industry is over-diversified, and many enterprises lack sufficient scale to achieve internationally competitive costs. Many of these, especially among the more sophisticated household appliances and electronic equipment, may be expected to decline. In other areas where Chile has developed particular expertise, however, such as in specialized equipment for the mining and power sectors, small motors and compressors, etc., exports may now be possible. Although the sector must go through a considerable reorganization, which will involve increasing specialization and rationalization of production techniques, and will in turn require substantial investments to accomplish, there is no economic reason, as some have feared, to expect its disappearance.

547. The continuing protection accorded to the automotive sector makes it a special case in future industrial development. While other tariffs were being reduced, that applied to automobile imports was held at 115 percent of CIF value, and the present liberalization program foresees a reduction to 55 percent by 1983 when all other tariffs are to have been cut to 10 percent by mid-1979. 1/ Nevertheless, imports have grown rapidly with economic recovery, despite taxes and licensing fees which make the price to the consumer approximately three times that of the imported vehicle in its country of origin. Thus, import registrations rose from around 5,300 vehicles in 1976 to almost 34,000 in 1977. Domestic production also rose from 7,742 to 13,089 units, less than half the number of vehicles assembled in 1971.

#### 4. Mission Observations

548. The lack of precise information or of clearly delineated plans or projections about the recent and future evolution of the industrial sector reflects the Government's essentially laissez faire attitude toward the sector. As in other segments of the economy, the authorities view their role as one of setting overall rules of the game while leaving specific resource allocation decisions to the private sector. The rationalization of the price system is expected to generate the desired rationalization of resource allocation both within the industrial sector and between industry and other sectors of the economy. Other than recent reductions of the tax rate on corporate incomes from the high levels of the austerity program, few incentives to investment are offered. The uncertainties and financial difficulties faced by many Chilean enterprises as they enter this transition period are great. That investment levels in the economy have remained low (9 percent of GDP in 1977), therefore, is not surprising. In view of these difficulties and the importance of a rapid recovery of investment to the Government's development strategy, the mission urges that consideration be given to the introduction of an investment tax credit as a temporary stimulus to private capital formation. Such a credit can be expected to have a more direct impact than a general reduction of business income taxes and is, unlike accelerated depreciation allowances, neutral in its benefits between large and small enterprises.

549. Meanwhile, in the public enterprises, which still represent a substantial share of industrial assets, investments had been severely cut back as part of the austerity program and the effort to bring public sector expenditures under control. That control has now been firmly established, but an efficient system for expeditiously identifying and evaluating desirable investment projects is still being developed. 2/

550. Finally, the restructuring of industry makes necessary a substantial effort to facilitate the related transfers of labor through improved labor market information, retraining programs, protection of pensions, etc. With regard to the longer-term perspective, there is empirical evidence to support the Government's expectation that the restructuring will result in more rapid absorption of labor into manufacturing employment. A recent study of Chilean industry in the late 1960s, based on data from the 1967 industrial census,

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1/ The schedule of tariffs set for automotive parts and vehicles are set in special legislation, D.L. 1,239 of 1975, which established the terms for restoring the expropriated assembly plants to the private sectors.

2/ See Internal Working Document of the World Bank, "Note on Chile's Public Investment Program."

found that the direct capital-labor ratio in export industries was about one-fourth below that of import-substitution industries. 1/ When the full impact on supplier industries is taken into account, the capital-labor ratio of the combined export and supplier industries was less than half that of the comparable set of import-substitution and related supplier industries. 2/

#### G. TRANSPORT

551. Chile's unusual geography and the distribution of its population and resources are inevitably reflected in its transportation system. Although the country is 4,300 km in length, more than 70 percent of the population is concentrated within the roughly 600 km-long Central Valley lying between the Aconcagua and Bio-Bio rivers. More than one-third of the national population lives in the Greater Santiago Metropolitan area. As illustrated by the discussions of the mining and energy sectors, however, major resources are located far to the north or south of the country's urban-industrial heartland. The great distances involved and the absence of important economic activity along major segments of the nation's length make excess capacity in large portions of the transport system unavoidable. Because of glaciers, the far south is inaccessible over land to the rest of the country, except through Argentina. Most of the long border with Argentina and Bolivia is impeded by the Andean mountain range, and, despite the short distances between port cities and inland urban centers, this transit, too, is made difficult by the Pacific Coastal range. Even within the Central Valley, transport is complicated by many east-west mountain chains and rivers.

552. Nevertheless, the transport system is well developed, and with a few exceptions noted below, its basic coverage is adequate to present economic needs. Serious problems exist, however, as a consequence of poor maintenance and outdated equipment. Important segments of the existing highway system, moreover, must be rehabilitated or replaced, as the standards to which they were constructed are no longer adequate for current traffic loads.

553. Public investment in transport infrastructure has been sharply reduced in recent years after a major expansion of facilities during the 1960's. Recurrent expenditures have also been cut back, reflecting both

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1/ Vittorio Corbo and Patricio Meller, "Chile: Alternative Trade Strategies and Employment Implications," National Bureau of Economic Research (draft), April 1977. The comparison cited above refers to industries exporting principally to developed countries. In contrast, exports to other developing countries tended to be more capital intensive. This finding is generally consistent with the Heckscher-Ohlin theory of comparative advantage.

2/ The cited study also points up the absolute inefficiency of the import-substitution industries. The latter were found to use more capital, labor and labor skills per unit of value-added (valued at international prices) than did industries exporting to the developed countries.



the general austerity imposed since 1975 and the present Government's policy that the various transport modes become self-financing in contrast to the heavy subsidies provided by earlier administrations. The impact of reduced investment and maintenance were alleviated in the short run by the low levels of demand manifested during the recent recession period.

554. The distribution of cargo movements by mode of transport is shown in Table IV.32. Although private companies carried about 60 percent of total cargo in 1975, state enterprises are important in all transport modes save trucking and interurban buses. Transport policy and planning is the responsibility of the Ministry of Transport created in 1975 by dividing the former Ministry of Public Works and Transport. The new Transport Ministry's ability to perform its planning and policy function, however, is weakened by inadequate staffing and the continued dispersion of relevant functions among other public agencies and lack of coordination among them. Responsibility for highway planning and the Santiago subway system (Metro) remain in the Ministry of Public Works (MOP), which is also responsible for the construction and maintenance of these as well as civil works related to ports and airfields. National and international aviation are regulated by the Civil Aviation Agency, which is attached to the Ministry of Defense. And, although all public transport enterprises are legally under the Transport Ministry's jurisdiction, investment plans are submitted to ODEPLAN, and budgets, personnel levels, and pricing decisions are effectively controlled by the Ministries of Economy and Finance.

Table IV.32: DISTRIBUTION OF NATIONAL CARGO MOVEMENT BY MODE OF TRANSPORT, 1975

(Millions of metric tons)

Mode	Cargo	Percent
Rail	19.9	54.3
(State)	(11.1)	(30.3)
(Private)	(8.8)	(24.0)
Coastal shipping	4.9	13.4
Highway	9.3	25.5
Air	0.0	0.0
Pipeline	<u>2.5</u>	<u>6.7</u>
Total	36.6	100.0

Source: Appendix II, Table 8.39

555. Thus, whatever overall coordination of the transport sector may occur does so largely through the public sector budgetary process. The ability of that process to reach rational resource allocation decisions is, however, limited by the lack of systematic data collection. Most needed are national traffic counts, origin-destination surveys, a condition-of-roads inventory, a reliable road vehicle inventory, a study of the incidence of present user charges, and a study of capital depreciation rates. The specific recommendations of this report are summarized after a review of the transport sub-sectors.

#### 1. Highways

556. Chile's highway network, including seasonal tracks, totals about 75,800 km, of which 60,400 are under the jurisdiction of MOP and the remainder under the jurisdictions of regional authorities (see Appendix II, Table 8.42). Of the MOP-related highways, about one-third are earth or natural gravel; 53 percent are stabilized gravel; 9 percent are asphalt; and 6 percent are concrete. Although no regular inventories of the highway system have been carried out in recent years, available data indicate that the system has been growing at an average annual rate of about 4 percent since 1970. The main artery of the system is the Longitudinal Highway running down the center of the country, collecting traffic from the numerous transversal roads and connecting most of the main cities and regional capitals. Much of the paved system is more than 15 years old and was designed for traffic volumes below present levels. Damage from vehicle overloading is severe.

557. No regular, comprehensive traffic counts are undertaken except at the toll stations outside of Santiago and individual traffic counts for specific road projects. Nevertheless, the statistics from these toll stations are a fairly reliable source for data concerning traffic growth and composition, and, inasmuch as Santiago is the focal point for almost all goods and services, it is possible to assume that the stations represent the peak traffic volumes on the system. 1/ Passenger cars represent about 63 percent of the traffic, trucks 28 percent, and buses 8 percent. The major portion of truck traffic are gasoline powered, two-axle trucks with an average capacity of seven tons.

558. The evolution of traffic volumes mirrors the overall GDP trends of recent years. Average daily traffic and vehicle fuel consumption fell steadily after 1971, not turning up until the economic recovery beginning in late 1976 and accelerating in 1977. 2/ The economic recession created a substantial surplus of trucking capacity and resulted in vigorous competition among truckers and between truckers and other transport modes. The unregulated cargo tariffs being charged by truckers have enabled them to compete with both rail and coastal shipping over distances exceeding 250 km. These charges do not appear to cover depreciation, however, implying a decapitalization of the industry. 3/

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1/ Chilean law requires non-toll alternates to toll-roads, but the alternates are usually so poor few vehicles use them.

2/ See Appendix II, Tables 8.43 and 8.46.

3/ Indeed, the number of trucks in service fell 14 percent in 1975 from the previous year (see Appendix II, Table 8.41).

559. Responsibility for the design, construction and maintenance of the national highway system rests with the Highways Department of the Ministry of Public Works. Consistent with general Government policy, many functions formerly performed directly by the central administration are being shifted to regional authorities or contracted to the private sector. Many professional staff have also left seeking higher salaries in the private sector or abroad. Thus, the Highways Department personnel level numbered fewer than 7,000 persons in 1977, as compared to more than 13,500 in 1973. 1/

560. The financing of highway expenditures comes largely from the central government budget. In the seven years 1970-76, almost 90 percent of expenditures were either funded directly by the central government or indirectly through allocation of the regional budgets, which in turn originate from central government transfers. Highway user tolls earmarked for the Highway Department accounted for 7 percent of the latter's revenues for the same period, and 6 percent was provided by foreign borrowings. 2/ These ratios shifted dramatically in the final two years of the period, 1975 and 1976, however, as the general budgetary contribution was cut back, and highway tolls sharply increased. Tolls financed more than 20 percent of highway expenditures in 1976. If other taxes on highway users are taken into account--namely, automobile import duties, fuel taxes, and vehicle registration fees--revenues have exceeded expenditures in every year since 1972 reaching a ratio of more than 5 to 1 in 1976. 3/

561. While highway users are more than covering the present levels of road expenditures, the incidence of user charges is uneven and unrelated to the respective contributions of the various users to the costs engendered. Most current expenditures, for example, are a function of truck use of inter-urban and regional roads, while the bulk of revenues are apparently derived from automobiles. Although a careful incidence study is needed to verify and specify the result, it would appear that commercial traffic is being subsidized, perhaps encouraging the uneconomically low cargo tariff levels noted above.

562. Inadequate design standards, poor supervision of construction, several years of almost nonexistent maintenance, and the failure to police maximum load restrictions have left much of the road system in unsatisfactory condition. Major portions of the Longitudinal Highway, particularly along the southern spur through Chile's fast-growing forestry areas, are now beyond repair and in need of reconstruction. Consequently, the Government has undertaken a program for the reconstruction of some 790 km of the Longitudinal Highway. The importance of this effort can be illustrated by the estimates of a recent Bank appraisal mission which suggest a 45 percent rate of return

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1/ The staff of MOP as a whole had risen from 21,000 to 36,000 between September 1970 and September 1973, before being cut back to about 22,000 in 1977 (see Appendix II, Table 5.22).

2/ Appendix II, Table 8.45.

3/ Appendix II, Table 8.44.

on expenditures for the reconstruction of about 370 km of this highway, including only the savings of direct vehicle operating costs to highway users and the reduction of road maintenance costs. 1/

## 2. Railways

563. The railroad system, with almost 8,000 km of track, carried 54 percent of all freight traffic and 60 percent of passenger traffic in 1975. More than half of cargo moved by rail was carried by the State Railways (FFCCE), the remainder accounted for principally by private trains carrying minerals in the north of the country. Virtually all rail passengers were carried by FFCCE. Since it originated out of various private companies, the FFCCE system is composed of several networks and different gauges of track, a fact which hampers operating efficiency. Three-fourths of freight and almost all passenger movement is accounted for by the 4,800 km network running south from Santiago to Puerto Montt.

564. Freight movement in ton/km was approximately constant from 1969 through 1973, before declining by 32 percent over the next two years in reflection of the general depression of economic activity. 2/ Traffic recovered 12 percent in 1976 but remained almost 25 percent below the pre-depression level. Passenger traffic, in contrast, grew rapidly, 57 percent, between 1969 and 1973 before declining abruptly in the wake of fare adjustments and the economic downturn. By 1976, passenger travel had returned to slightly above the 1970 level.

565. The State Railways have long operated at a sizeable deficit as a result of inefficient management, overstaffing, over-aged equipment, poor maintenance, inappropriate tariff schedules, the continued operation of uneconomic lines, and the implicit subsidies provided to competing commercial highway users. 3/ By 1971, the operating deficit exceeded US\$124 million (1976 dollars) as compared to US\$45 million in 1969 (Table IV.33). The major source of the increased deficit was a doubling of personnel expenditures, while operating revenues were growing only 18 percent.

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1/ For details of assumptions and calculations, see IBRD Report No. 2145-CH of July 26, 1978. Not included among the estimated benefits are the expected generation of new traffic, reduced spoilage of agricultural goods and other cargo, and the increased comfort, safety and time savings accruing to road users. Given the high level of competitiveness prevailing in the trucking industry, it is expected that the bulk of cost savings realized by commercial highway users will be passed on to their customers.

2/ Appendix II, Table 8.39.

3/ See IBRD Report No. WH-2026 of September 10, 1970, pp. 52-54.

Table IV.33: OPERATING REVENUES AND EXPENDITURES OF STATE RAILWAY,  
1969-1977

(Millions of 1976 US Dollars)

Year	Revenues	Expenditures	Estimated Depreciation	Deficit
1969	66.4	91.0	20.0	44.6
1970	61.7	111.1	20.0	59.6
1971	78.6	182.9	20.0	124.3
1972	92.0	182.3	20.0	110.3
1973	96.7	135.5	20.0	58.8
1974	85.0	134.7	20.7	70.4
1975	47.5	77.1	18.2	47.8
1976	53.0	88.4	9.2	44.6
1977 <u>p/</u>	73.1	84.5	9.6	20.0

p/ Projected.

Source: Appendix II, Table 8.47

566. Since 1974, passenger fares and cargo tariffs have been adjusted upwards, lines eliminated, and the active payroll reduced from more than 27,000 persons in 1973 to 18,600 in 1977. The impact of the latter on FFCCE's costs, however, was largely offset by the requirement that the pensions of retired workers be met out of the railroad's own revenues. 1/ These payments amounted to about US\$20 million in 1976; almost half that year's current deficit and all of the estimated deficit for 1977.

567. One important cost reduction has been a sharp curtailment of maintenance expenditures, which in 1976 were about half the level, in real terms, of 1970. Further, in comparison with a consultant's recommendation that 1,200 km of track be renewed between 1968 and 1973, only 320 km were renewed in the period 1970-76, including only 6 km in 1975-76. 2/ Some 780 derailments were reported in 1976. Similarly, among the steam, diesel, and electric engines

1/ Unlike the employees of most state agencies and enterprises, railroad workers had their own pension and social security fund, whose deficits the railroad itself was required to meet. The pension rights of other public sector workers, were, in contrast, underwritten by the general revenues of the government.

2/ Some 250 km were renewed during the first two years of the period referred to by the consultants; viz., 1968-69. (The study was carried out by the French firm SOFRERAIL).

owned by FFCCE in 1976, many of which are more than 50 years old, their average availability during the year was only 55 percent because of breakdowns and the shortage of spare parts. The system was able to absorb the decline in effective operating capacity during the recent period of abnormally low demand, but without sharply increased expenditures for maintenance and the replacement of worn-out equipment, the rail system will pose a serious transport bottleneck as the economy recovers.

568. In summary, the railroad's current financial situation has improved considerably, outstanding debt is low, and tariffs, while substantially increased in recent years, remain competitive with alternative modes of transport. As trucking tariffs are adjusted upwards to more normal levels, further rail tariff adjustments should be possible. Nevertheless, the attractiveness of rail transport to customers is seriously jeopardized by the poor and deteriorating service provided by the present system. FFCCE is now approximately breaking even in its current operations, but unless investments are forthcoming in the renewal of rail and rolling stock, the improvement of maintenance facilities and the upgrading of staff and administration, a future of rising costs and declining service and revenues appears inevitable. A determination of the priority of such investments, however, requires the analysis of Chile's overall transport sector objectives and alternatives.

### 3. Ports

569. Chile's long coastline is dotted with some 70 ports, of which 12 are general cargo ports operated by the state-owned Chilean Port Company (EMPORCHI). The remaining ports belong to private or other public enterprises for the movement of bulk cargo, mostly oil and minerals. Port traffic totaled 22 million mt in 1975, slightly over 4 million of which was handled by EMPORCHI facilities. <sup>1/</sup> The growth of Chile's non-mineral exports is evident in the flow of goods through the general cargo ports. Excluding coastal traffic and goods in transit, loadings at EMPORCHI ports rose from 759,000 mt in 1973 to 2.0 million mt in 1976. Over the same period, unloadings (imports) declined from 2.5 million mt to 1.7 million mt. The major general ports in terms of volume are Valparaiso and San Antonio, both serving Greater Santiago, which together accounted for 52 percent of EMPORCHI traffic in 1976.

570. Although the 5.6 million mt handled by EMPORCHI in 1977 was a record for the enterprise, it represented less than 60 percent of its combined port capacity. Utilization rates in 1976 ranged from only about 22 percent at Arica to 85 percent at San Antonio and San Vicente. Moreover, these estimates considerably underestimate achievable port capacities inasmuch as they have been calculated assuming only an eleven-hour working day. Effective capacity can obviously be increased significantly by the addition of extra shifts. Capacity at San Vicente is currently being expanded to permit by mid-1979 the simultaneous docking of three ships as compared to the present two.

571. The ports are generally being managed efficiently, and ships rarely have to wait for service. Some delays have been reported at Valparaiso and San Antonio during the peak fruit-handling season, and congestion is also

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<sup>1/</sup> Appendix II, Tables 8.48 and 8.49.

beginning to appear at San Vicente, where shipments of logs and other forest products have grown rapidly. These problems can be avoided, however, with the extension of working hours and small investments in modern equipment. The situation contrasts markedly with that of 1973, when, with less traffic and far larger staff, delays were substantial, ships having to wait for up to ten days to use the port of Valparaiso.

572. Investments have been minimal since 1970, and much of the equipment is over ten years old. Consequently, some problems of breakdowns are reported, maintenance costs are high, and cargo must frequently be loaded with shipboard equipment rather than with EMPORCHI's. A study is needed of the impact of this situation on costs to determine the desirability of investing in new loading equipment.

573. EMPORCHI has reported profits on its operations since 1975, in contrast with earlier years when tariffs covered only about 30 percent of costs. These profits, which are automatically transferred to the Treasury, are to some extent illusory, however, inasmuch as depreciation allowances--less than 2 percent of net fixed assets in 1976--appear significantly understated. Moreover, the reported profits represent less than a one percent rate of return on fixed assets, not surprising in view of the low level of utilization. As in the case of other public enterprises, control over EMPORCHI's budget, personnel levels and investment programs is currently exercised by the Ministries of Economy and Finance.

574. In summary, the overall physical capacity of the port system is more than adequate for the foreseeable future, although the strong growth of exports is beginning to strain existing handling facilities at a few ports, particularly San Vicente and San Antonio. The increasing flow of traffic through these ports can evidently best be expedited by the introduction of additional work shifts. This solution in the past was impeded by the resistance of the several dock workers unions and, more recently, by the personnel level restrictions imposed under the economic austerity program. Improved material handling methods, possibly including replacement of worn-out equipment, and the installation of specialized equipment for the handling of paper products (San Vicente) and fresh fruits (San Antonio and Valparaiso) would also be useful. Finally, it should be noted that direct access to the major ports generally runs through the commercial districts of the adjoining cities with consequent diseconomies for both the transport sector and the cities, including destruction of the overloaded urban streets. Improved access routes should be considered.

#### 4. Coastal and International Shipping

575. Sixteen national companies account for most coastal shipping. One of these is the State Maritime Company (EMPREMAR). The companies operate a fleet of 64 ships and 3 barges with a total of 857,000 D.W.T. Sixty three of the ships handle solid or liquid bulk cargo, 44 can also handle general cargo, and 15 have facilities for refrigeration. Almost half of the ships are over 15 years old and in need of replacement. EMPREMAR's coastal shipping operations are chronically in deficit; tariffs do not cover costs, and cost reductions are limited by the inefficiency of the ships.

576. Although Chilean law reserves coastal shipping to Chilean flag vessels, the coastal fleet does not have the capacity to handle current cargo volumes. Consequently, almost one-fourth of the cargo in 1975 was handled by foreign lines. Total movement has ranged around five million mt since the mid-1960's, and while liquid and solid bulk cargoes have shown increases during the past years, the volume of general cargo has deteriorated (Appendix II, Table 8.50), due partly to truck and rail competition. Overland tariffs have been competitive with those of coastal shipping on distances from as far as Arica to Santiago (more than 2,000 km).

577. Most of the companies which operate in coastal shipping, including EMPREMAR, also operate internationally. The Chilean-owned international fleet had a total of 622,000 D.W.T. in 1975, an increase of about 10 percent over 1974. The companies also had four ships under charter with 195,000 D.W.T. Although the law allocates a minimum of 50 percent of international traffic to Chilean ships, Chilean flag vessels in fact handle only about 30 percent of imports and some 10 percent of exports.

#### 5. Civil Aviation

578. Chilean-owned air transport services are offered for both passengers and cargo on national and international runs. Domestic common-carriers numbered 31 aircraft in 1977, of which more than one-half are over 20 years old. The country also has a small air taxi fleet and a helicopter service fleet. On national routes, the principal operator is the state-owned National Airlines (LAN-CHILE), which accounts for about 80 percent of passenger traffic and 70 percent of cargo. Regularly scheduled service is also offered by the privately-owned Copper Air Line (LADECO) and Aerocordillera. LAN-CHILE and LADECO together handle about 99 percent of the international passenger-km and about 93 percent of the international ton-km carried on domestic airlines, which in turn accounts for about 40 percent of the air traffic in and out of Chile. National passenger traffic and both national and international cargo traffic diminished substantially between 1973 and 1976: passenger traffic by 44 percent, and national and international cargo by 30 percent and 20 percent, respectively. International passenger traffic, on the other hand, increased 57 percent over the same period. 1/

579. Utilization of both passenger and cargo capacity on both national and international runs is satisfactory, running about 60 percent for national passenger and cargo traffic and about 55 percent for international passenger and cargo traffic. Among the cost-reducing measures taken by LAN-CHILE in response to the Government's policy that it become self-financing have been a 30 percent decrease in staff (from 4,504 in 1974 to 3,145 in 1977), a drastic cutback in the frequency of domestic service and restructuring of international routes, the sale of excess aircraft, and the relocation of maintenance facilities.

580. There are about 268 airports in Chile, of which 11 are operated on a scheduled, commercial basis, and six offer international services. Airports are administered by the Aeronautic Directorate of the Ministry of Defense.

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1/ Appendix II, Table 8.51.



The latter agency is also responsible for air traffic control and the technical control of flight personnel and material. Responsibility for recommending tariffs, setting schedules and routes and negotiating international civil aviation treaties belongs to the Civil Aeronautics Council of the Ministry of Transport.

## 6. Pipelines

581. A 621 km pipeline system carries gasoline, kerosene, diesel oil, turbojet fuel, butane, propane, and fuel oil. Some 349 km of the system are owned by ENAP and the remainder by SONACOL, a joint enterprise owned by ENAP, COPEC, and Exxon Corporation. The lines presently operate at only about 55 percent of capacity. ENAP also owns a pipeline in southern Chile for the transport of natural gas to Argentina.

## 7. Urban Transportation

582. The state-owned Collective Transport Company (ETC) operates a fleet of 825 buses in Santiago, Valparaiso, Concepcion and Antofagasta. The numbers of both buses and employees have been sharply reduced since 1973, and the company has been operating without state subsidy since 1975. The fleet consists mainly of Brazilian vehicles purchased in 1972. Although these buses should enjoy a useful life of about ten years, it is likely most of them will need replacement by 1980 because of poor maintenance.

583. Studies for a Santiago subway (Metro) were started in the mid-1960's, and construction began in 1969. Phase I of the original development plan called for five lines, totaling 59 km of track at an estimated cost of about US\$300.0 million. <sup>1/</sup> As of October 1977, 11.5 km of Line 1 were in service, and another 4.8 km were under construction. Some US\$350 million had already been spent on the system, but completion has been deferred indefinitely by the Government in view of its cost.

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<sup>1/</sup> Phase I was to be constructed between 1970 and 1980. A second phase of 31 km total length was envisaged for 1980-90.

CHAPTER V:

MACROECONOMIC PROJECTIONS AND POLICY RECOMMENDATIONS

584. Previous chapters have detailed the great changes experienced by the Chilean economy over the past decade. It should be noted, however, that a number of fundamental facts have not changed, and some serious questions remain. While agrarian reform and the major shifts that have occurred in agriculture's terms of trade are undoubtedly significant for its future economic development, Chile remains an essentially urbanized nation. Some 83 percent of its population is urban, and four-fifths of its workforce is employed in non-agricultural activities. Industry provides a far greater share of both output and employment, and there is still a heavy emphasis on tertiary activities. Similarly, in spite of the recent rapid growth of non-copper exports, Chile will for the foreseeable future continue to depend on copper, a sector which employs only a small fraction of the labor force, for a large share of its export receipts and investible surplus.

585. In its broad outlines, the economic policy reforms introduced by the present Government are consistent with advice long offered Chile by the World Bank and other international institutions. These policies have thus far been successful in permitting Chile to weather a very difficult economic crisis, reducing inflation, meeting its heavy international debt obligations, diversifying exports, and resuming the growth of incomes and production despite historically low copper prices and very limited external assistance. In the mission's judgement, these policies also have laid the basis for more efficient long-term resource allocation and more rapid and sustained economic growth. Over the next ten years, in accordance with the projections summarized below, Chile may be able to sustain a real GDP growth rate on the order of 5.5 - 6.0 percent per year (4.0 - 4.5 percent per capita) while simultaneously reducing its debt service ratio and gradually accumulating international reserves. Continued growth of non-copper exports, the recovery of world copper prices, continued favorable access to foreign commercial bank credits, large foreign investments, and the passing of the debt service "hump" created by previous reschedulings are the major factors explaining the anticipated relaxation of the foreign exchange constraint.

586. Less certain, however, is whether the private and public sectors will supply the dynamism, as manifested in new investment, to generate such a growth rate; whether Chile's historically low savings rate will rise sufficiently to provide the domestic resources required; and whether the various economic interest groups that make up the Chilean society are able to resolve the competition for income shares that crucially underlies the long history of inflation and slow growth. Finally, not unrelated to these questions, the success of the present strategy depends on the Government's ability to demonstrate that efficient resource allocation and accelerated growth can be made consistent with a reasonably equitable distribution of income and the relief of absolute poverty.

A. MACROECONOMIC PROJECTIONS

587. Given the difficulties with the data base and the present transition the Chilean economy is undergoing, the purpose of any projection should necessarily be quite modest. Therefore, a simple two-gap model, highly dependent on expectations regarding the growth of exports and other items of the external accounts, has been used to check balance of payments and domestic savings consistencies with the assumption of a sustained GDP growth rate averaging 5.7 percent per year from 1978 to 1990. Such a growth rate would substantially exceed Chile's past long-term performance.

1. The External Sector

588. The growth of non-copper exports has constituted the most dynamic element of the economy since 1973. Agricultural exports, which achieved an annual average real growth rate of 36 percent from 1973 to 1977, are projected to taper off gradually to a 6 percent rate of growth by 1982 and thereafter. Similarly, the growth rate of manufactured exports, 44 percent yearly in real terms in the 1973-77 period, could gradually slow to 8 percent by 1983, but then rise again to 12 percent in the outer three years of the projection as the massive plantings of radiata pine undertaken in the mid-1970s reach maturity. 1/ Other mining exports are assumed to increase at an average annual rate of 4 percent.

589. The large copper mines are now operating at about full capacity with the important exception of Exotica, which has been shut down since 1975 because of high production costs. It would be optimistic to expect more than 2 percent real expansion of copper exports in 1979 and 1980, as Exotica is brought back into production, but during 1981-85 copper exports could grow at a 5 percent rate as major new investments now being planned by foreign producers come to fruition. More important to the projection is the expected doubling of the nominal world copper price between 1979 and 1983, as demand catches up with the stagnating world supply and the real cost of expanding mine output continues to rise. As a result, despite the faster real growth of non-copper exports, copper would continue to generate about half of export revenues over the projection period. 2/

Table V.1: CHILE - PROJECTED COPPER PRICES  
(US cents/lb)

	Actual			Projected			
	1976	1977	1978	1979	1980	1985	1990
Nominal Prices	63.5	59.4	61.9	70.0	85.0	160.0	215.0
In 1977 Prices <u>a/</u>	69.6	59.4	58.0	61.5	70.4	99.0	104.3

a/ Deflated by IBRD Index of International Inflation

Source: IBRD; refers to LME settlement price of standard electrolytic wire bars

1/ Chapter IV, Section C.

2/ For details of the export and import projections, see Appendix II, Table 3.9.

590. Food imports declined about 70 percent in real terms from 1973 to 1977 but are now likely to rise, as domestic income recovers and the initial shift in land use stimulated by exchange rate rationalization and the freeing of prices is completed. The model used relates food and other consumer goods imports to the growth of personal consumption. Imports of raw materials and intermediate goods, excluding foodstuffs and petroleum, are treated as a function of industrial output, and capital goods imports are related to gross fixed investment. Finally, the projection of petroleum imports takes account of the anticipated development of domestic oil and gas reserves, the planned development of new hydroelectric capacity, and the expected conversion of some existing power plants from oil to domestic coal. <sup>1/</sup> The aggregation of these assumptions results in a very high elasticity of demand for imports relative to GDP, averaging about 1.6 between 1979 and 1985 and then tapering off to 1.1. Consequently, the projection of the resource gap is very sensitive to the assumed GDP growth rate.

591. The inclusion of factor payments abroad (mostly interest) transfers results in the current account balances shown in Table V.2.

Table V.2: CHILE - PROJECTED CURRENT ACCOUNT BALANCE

(Millions of current US dollars)

	1979	1980	1985	1990
Balance of merchandise trade	-312	-229	34	461
Non-factor services, net	43	71	148	-309
Resource Gap	-269	-158	182	152
Net factor service income	-364	-433	-636	-918
Net transfers	42	35	33	46
Current Balance	-591	-556	-421	-720
(Percent of GDP)	(3.1)	(-2.6)	(-1.1)	(-1.1)

Source: Appendix II, Appendix Table 3.10

The resource balance would become positive in 1982. Although high interest payments abroad would keep the current account in deficit throughout the period, the ratio of the deficit to GDP would fall from about 4 percent in 1978 to around one percent by 1985 and beyond.

<sup>1/</sup> Chapter IV, Section F.

592. The response of private foreign investors to the liberalization of the foreign investment law was disappointing through mid-1978. Despite an accumulated backlog of more than US\$2.5 billion of projects approved by the Committee on Foreign Investments since 1974, little investment money had actually entered the country until early 1978, when Exxon purchased the Disputada copper mine, paying more than US\$100 million in cash. Subsequent expansion of the mine could bring Exxon's eventual investment to more than US\$1 billion. Two additional, approved copper mining ventures could result in capital inflows of US\$850 million over the next several years, if the exploratory work underway and world market conditions prove favorable. The current projections assume net direct investment flows of US\$200-250 million per year between 1978 and 1984, then falling to US\$100 million in 1987 and thereafter. Amortization of public and private medium and long term debt could rise from just over US\$1 billion in 1979 to US\$1.7 billion in 1985 and US\$2.4 billion in 1990, so that gross borrowings would double between 1979 and 1990. Net borrowing, however, would decline (see Appendix II, Table 3.10). The projection of financing needs assumes that reserve growth will be targeted to reach and then maintain a net reserve level equivalent to two months of annual imports.

593. The major assumptions underlying the composition of borrowing are that bilateral credits from governments will continue to be restricted; that credits from the multilateral lending institutions and official suppliers will be approximately constant in real terms after 1980; that the present trend toward borrowing by the private sector without public guarantees will continue; and that commercial bank credits to the public sector will be drawn as the residual. The resultant disbursement pattern is shown in Table V.3.

Table V.3: CHILE - PROJECTED LOAN DISBURSEMENTS BY SOURCE

(Millions of US dollars)

	1979	1980	1985	1990
<u>Public and Public Guaranteed:</u>				
International Organizations	76	110	277	403
Governments	70	34	34	43
Suppliers	97	104	152	213
Private financial institutions	<u>817</u>	<u>677</u>	<u>846</u>	<u>1,576</u>
Subtotal	1,060	925	1,308	2,235
<u>Private Non-Guaranteed:</u>				
	<u>563</u>	<u>579</u>	<u>812</u>	<u>995</u>
Total	1,623	1,504	2,120	3,230

Source: Mission estimates

594. This would mean that Chile would have an increasing reliance on relatively expensive sources of credit. Dependence of the public sector on foreign private financial institutions would peak at almost 75 percent of loan disbursements in 1978-80, leveling off to a range of 65-70 percent in 1985-90. <sup>1/</sup> At the same time, non-guaranteed credits to the private sector would rise from insignificant levels before 1975 to 38 percent of total foreign borrowing in 1980-85, tapering off to about 31 percent by 1990.

595. Despite a high rate of gross borrowing, Chile's general debt picture is expected to improve. Total foreign debt relative to GDP would peak at 37 percent in 1978, falling gradually thereafter toward 19 percent by 1990 (Table V.4). Total debt service would also rise less rapidly than exports. One explanation for the rapid improvement not apparent in the projection assumptions is that by 1981 Chile will have crossed over the "hump" in its debt service created by earlier reschedulings and the compensation agreements for nationalized properties.

Table V.4: CHILE - PROJECTED DEBT INDICATORS

	1978	1980	1985	1990
Foreign debt outstanding, end of year (US\$ millions):				
Public <sup>a/</sup>	4,372	4,851	5,444	8,244
Private <sup>a/</sup>	<u>1,915</u>	<u>2,556</u>	<u>3,541</u>	<u>4,191</u>
Total	6,287	7,407	8,985	12,435
Ratio to GDP (%)	37	34	23	19
Public debt service/Exports (%)	34.9	27.2	16.5	13.3
Total debt service/Exports (%)	42.1	33.1	26.1	20.6

<sup>a/</sup> IBRD classification; note that 1978 is a projection year in the model. The Government has not yet compiled end-1978 debt data in detail, but its magnitudes agree with this estimate.

596. Not only does the projection indicate that the assumed GDP growth rate is consistent with reduced dependence on foreign savings, growing net reserves, a modest accumulation of debt, and a falling debt service ratio, the anticipated borrowing is also consistent with the levels of financing Chile received in 1977 and 1978. Thus, Chile should enjoy room for maneuver, in terms of accepting a slower GDP growth rate, a slower growth of reserves, or a more rapid build-up of debt, in dealing with unforeseen balance of payments difficulties.

<sup>1/</sup> This compares to ratios of only 28 percent in 1970 and 8 percent in 1974.

## 2. National Accounts Projections

597. The most important, and most uncertain, part of any projection of Chile's economy is the savings-investment expectation. Our projected investment requirements are determined by an assumed ICOR which rises steadily from 1.2 in 1978, deriving from the continued presence of idle industrial capacity and low levels of construction activity, to 2.7 by 1986. Consumption and gross domestic savings (GDS) are then calculated as residuals. The results of the projection are summarized in Table V.5.

Table V.5: CHILE - PROJECTED NATIONAL ACCOUNTS VARIABLES

Variables <u>a/</u>	Average Annual Real Growth Rates - %			
	1978-80	1980-85	1985-90	
Gross Domestic Product (GDP)	5.9	5.7	5.8	
Gross Domestic Income (GDY) <u>b/</u>	6.6	6.6	6.1	
Exports <u>b/</u>	11.5	10.0	6.6	
Imports	9.2	8.8	6.8	
Investment	18.9	14.1	6.2	
Consumption	4.9	5.2	6.1	
Gross National Savings (GNS)	56.0	20.6	6.2	
	Ratios to GDP			
	<u>1977</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
Exports <u>c/</u>	17.3	19.8	24.1	25.0
Imports <u>c/</u>	18.6	20.6	23.7	24.7
Investment	9.0	10.7	15.7	16.0
Consumption	92.4	90.3	88.3	89.8
GNS	5.1	7.4	14.3	14.6
	<u>1977-80</u>	<u>1980-85</u>	<u>1985-90</u>	
Marginal National Savings Rate	0.20	0.30	0.15	
Incremental Capital-Output Ratio	1.70	2.30	2.75	

a/ Data expressed in 1975 U.S. dollars unless otherwise indicated.

b/ Adjusted for Terms of Trade changes.

c/ Current U.S. dollars.

Source: Appendix II, Tables 2.7 and 3.9

598. In order to achieve and sustain the targeted growth rate, gross domestic investment would have to rise from 9 percent of GDP in 1977 to 16 percent by 1985, while gross national savings would have to increase from 5 percent to 14 percent of GDP. Such average savings and investment requirements are hardly imposing by international standards or even by Chilean historical standards, 1/ but they do represent significant increases from the rates achieved during the economic and political upheavals of the present decade. Consequently, the marginal savings and investment rates required are substantial.

599. With the marked reduction of inflation and the positive real interest rates currently available to savers, the environment is considerably more conducive to savings than in the past. At the same time, the tax reform measures introduced since 1974 better protect the tax base against erosion from inflation. This, combined with the improved financial control over, and performance of, the public enterprises and the anticipated growth of copper earnings that will be flowing directly to the Treasury, greatly enhances the savings generation potential of the public sector. In this context, the savings rates called for do not appear unreasonable.

600. During the 1960s, the General Government assumed a steadily increasing share of gross national savings, its proportion rising from an average of 26 percent during 1960-64 to 41 percent in 1965-69 and 55 percent by 1970. Corporate savings accounted for the remainder; according to the national accounts, household savings were consistently negative. 2/ Because of the recentness of the tax reform (1975), the smaller modifications made since to rates and to the inclusiveness of several of the major taxes (e.g. the VAT), the increasing efficiency of tax collection, and the unusually large fluctuations of economic activity, the available data on past tax behavior are not reliable indicators of future revenue growth. Nevertheless, the power of the Central Government to generate future savings can be illustrated by the following projection of tax revenues and current expenditures.

601. Between 1974 and 1977, nominal non-copper tax revenues rose by a factor of 37.9, compared to GDP growth of 33.2 times, suggesting a buoyancy over the period of about 1.14. The relationship has varied widely from year to year, however, rising as high as 1.88 in 1977. For purposes of the present illustration, the elasticity of non-copper tax revenues with respect to GDP is assumed conservatively to be only 1.05. Central Government receipts from copper are projected separately and divided into two components: (1) those resulting from increased export volume and calculated with an assumed elasticity of 0.6 relative to the growth of export volume; and (2) those resulting from increased copper prices. The Government is assumed to receive 90 percent of the latter increment. 3/ Current expenditures are projected to grow at 5 percent per year, less than GDP but consistent with Administration desires to reduce the relative size of government in the economy. The results are summarized in Table V.6.

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1/ See Appendix II, Table 2.5. Furthermore, for 1977 the investment ratio excludes an unknown amount of inventory change.

2/ See, however, the Note on Chilean Economic Statistics, Appendix II,.

3/ Projection details and equations are found in Appendix II, Table 5.23.



Table V.6: CHILE - PROJECTED GROWTH OF CENTRAL GOVERNMENT SAVINGS,  
1977-1990 a/ BASE RUN  
(Percent of GDP)

	1977	1980	1985	1990
Tax receipts	<u>20.3</u>	<u>22.6</u>	<u>27.0</u>	<u>28.1</u>
Non-copper	18.0	18.1	18.4	18.6
Copper	2.3	4.5	8.6	9.4
Current expenditures	<u>20.2</u>	<u>19.4</u>	<u>18.5</u>	<u>17.6</u>
Current Balance	<u>0.1</u>	<u>3.2</u>	<u>8.5</u>	<u>10.5</u>

a/ Central Government savings are here defined as the difference between tax receipts and current expenditures. Non-tax revenues are assumed to be insignificant; current expenditures include transfers to the rest of the public sector and to the private sector.

Source: Appendix II, Table 5.23

602. Although obviously crude, the above projection indicates the powerful potential offered by anticipated copper earnings for financing the required levels of investment. While non-copper tax revenues would grow only fractionally as a proportion of GDP, copper revenues could rise rapidly from 2 percent of GDP in 1977 to almost 9 percent by 1985. Combined with the slow relative decline of current expenditures, the Central Government's current surplus would rise from virtually nil in 1977 to 8.5 percent of GDP in 1985 and 10.5 percent by 1990. The current surplus of the consolidated public sector outside the Central Government is estimated at about 6 percent of GDP for 1977. <sup>1/</sup> If that ratio held constant throughout the projection period, the total public sector would itself generate almost all the required national savings indicated in Table V.5.

603. This projection exercise, based on very uncertain parameters, is not intended as a prediction; it is very likely that a portion of the projected savings capacity will be shifted to the private sector through reduction of non-copper tax rates, especially the heavy payroll taxes currently financing the social security system. These figures are nevertheless important in demonstrating both the feasibility of mobilizing the savings required, and the possible powers of the Government for assuring that this mobilization occurs.

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<sup>1/</sup> IMF staff estimate.

604. The Government recognizes that a substantial improvement of savings and investment rates, along with greater efficiency of investment, are essential to the accelerated growth desired. Its Indicative Plan for 1978-83 <sup>1/</sup> sets a gross investment target of 18 percent of GDP by 1983, a level higher than suggested by the projections presented here and double the ratio attained in 1977. Although more specific targets are not stated, the Plan indicates that an increasing proportion of total investment is to be undertaken by the private sector, the latter's share rising from an estimated 45 percent in 1978 to 55 percent in 1983. Nevertheless, no special inducement to private investment is offered.

605. Consistent with the State's proclaimed "subsidiary" role, policy measures are limited to the general lowering of tax rates; improving the functioning of the capital market; providing infrastructure, natural resource surveys and (in rare cases) prefeasibility studies; and opening the economy to foreign private investment. Special tax incentives are offered only for investments in forestry and fisheries or in the extreme northern and southern provinces. Within the public sector, the major thrust of the Government's policy continues to be to hold down the growth of expenditures while improving the efficiency of public investment through rigorous project evaluation and budget control.

#### B. SAVINGS AND INVESTMENT POLICIES

606. While the Government thus has a considerable potential for savings generation, no clear policy has yet emerged to define the extent to which the Government intends to mobilize that potential, and how realized public savings are to be shared between public and private investment uses, or even within the public sector.

##### 1. Taxes, Tariffs, and Copper

607. The mission's projection of public sector savings incorporated specific assumptions regarding the growth of the tax revenues and current expenditures of the Central Government. The presumed constancy of the surpluses achieved in the rest of the public sector also contained implicit assumptions regarding the pricing policies and cost consciousness of the public enterprises, the funding and level of benefits provided through the social security system, and many others. All of these variables are sensitive to Government policy decisions, but it appears that these decisions are being made without systematic consideration of their impact on savings mobilization and use. Similarly, although the Government has given a high priority to the attraction of foreign capital as a supplement to domestic resources, important questions remain unanswered and unintegrated into the needed overview of the economy's savings and investment requirements.

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<sup>1/</sup> ODEPLAN, Plan Nacional Indicativo de Desarrollo, 1978-1983, Santiago, 1978.

a. Taxes

608. A primary aim of the 1975 tax reform was to remove most of the special exemptions, discriminatory rate schedules, etc. applied to incomes from different sources, in order to eliminate their distortionary effects on resource allocation and to improve the horizontal equity of the tax system. For the same reasons, the Government is reluctant to introduce special tax incentives for investment, electing instead to free resources to the private sector through general reduction of wage and business and personal income tax rates. The decision to channel the increased disposable income into savings and investment is left to private time preferences and profit motives.

609. In its laissez faire approach, the Government may be underestimating the investment-inhibiting effect of the present financial difficulties, extraordinary interest rates, and uncertainties besetting Chile's entrepreneurs. Consequent investment delays may result in the loss to foreign competition of many firms or industries which, with timely expenditure for rehabilitation and modernization, could survive and prosper. While the economy would eventually adjust to whatever industrial pattern emerged from realized comparative advantages, the transition costs to the economy, in terms of frictional unemployment and capital obsolescence, could be unnecessarily high. Under these circumstances, additional incentives may be necessary, at least temporarily, to bring forth investment of the desired magnitude.

610. The Government believes a continued reduction of wage taxes--to which it gives highest priority--will encourage more employment intensive investment in the long term. The mission, however, reiterates the recommendation offered in Chapter IV (para. 548) that the authorities seriously consider a temporary investment tax credit in spite of the potential abuse that may occur from difficulties in defining "investment." Such a credit would increase the likelihood that contemplated transfers of the public sector's savings potential to the private sector would in fact be channeled into capital formation and that these investments would be taken sooner. It also has the advantage, compared to other devices such as accelerated depreciation, of not discriminating in favor of large enterprises vis a vis small, or, with appropriate carry-forward provisions, in favor of established enterprises vis a vis new.

b. Public Enterprise Earnings

611. Public sector financial performance has improved enormously as a result of massive adjustments to, and the virtual indexing of, public enterprise tariffs. Most enterprises now cover their operating expenditures and return a profit to the Treasury. <sup>1/</sup> Despite this improvement, however, rates of return in some enterprises remain low and, unless raised, earnings will make only a small contribution to the financing of future investment needs.

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<sup>1/</sup> The most significant exceptions, ENACAR and SOQUIMICH, are operated as explicit subsidies to their large and immobile work forces.

612. Because of the enormous difficulties involved in valuing assets after six years of three-digit inflation, poor maintenance, and technological obsolescence, concentration on rate of return calculations would probably be academic. The mission's concern is instead focused on the issue of resource mobilization and the need to place the growth of public enterprise profits into the overall policy framework that, whether planned or willy-nilly, will determine the size and use of future national savings.

613. Table V.6 showed the enormous potential of the state-owned copper mines for generating profits and public sector savings. In addition, the copper sector continues to serve as a major attraction for foreign savings, whether tapped by CODELCO's external borrowing capacity or through direct foreign investments in new mines. The Government's policy in this regard, however, has not yet been enunciated. For example, although increases in mining capacity are probably achievable at lower cost in the existing CODELCO mines, it may be preferable in the medium term to channel the latter's profits to other sectors while exploiting copper's relative attractiveness to foreign risk capital. The point, once again, is the need to integrate this major revenue source into an overall decision-making framework affecting the level and use of the nation's savings capacity.

614. One of the most important issues affecting public sector programming and public finances, as well as exchange rate and credit policies, stems from the volatility of copper prices. Future upward movements of the copper prices, if they resulted in an appreciation of the peso, would suppress the growth of non-copper exports. The uncertainties created by an exchange rate as volatile as copper prices would also deter exports. At the same time, international reserves must be maintained sufficiently high to buffer the economy against wide swings in external resource availabilities. All of this is known; indeed it has been discussed and analyzed in Chile for years. Yet, no Chilean government has been able to deal satisfactorily with this problem. The windfall profits from a copper price rise will accrue to the Government, and it must be the Government that decides to spend or to save it. Prior administrations found it virtually impossible to resist the pressures to spend, either directly through increased fiscal outlays or indirectly through an effectively appreciated exchange rate.

615. Breaking the link between copper prices and domestic demand requires a mechanism to ensure that copper profits in high price years are held abroad or otherwise sterilized to be drawn down in periods of low copper prices. The Government is now considering establishing such a mechanism. With Chile's international reserves now restored to a reasonable level relative to import demand, implementation of this mechanism should go forward without delay. 1/

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1/ Economic history is replete with examples, from Spain in the Siglo de Oro to OPEC today, of government failures to apply prudent demand controls when faced with windfall export receipts. Only Papua-New Guinea has successfully addressed this problem by establishing a special foreign currency account similar to that outlined above to "normalize" the flow of copper receipts to its Treasury.

## 2. Expenditures and Transfers

### a. Public Investment

616. Besides realization of the public sector's capacity for mobilizing resources, there are issues related to their use. Public sector investment spending was cut after 1974 from about 12 percent of GDP in that year to 6 percent in 1977. The capital expenditures of the Central Government alone were cut from 9 percent of GDP to less than 2 percent. In many areas the gross investment was insufficient to maintain the existing capital stock. A large part of this reduction, of course, was associated with the 1975-76 austerity programs in which, typically, investment was found to be more discretionary and easily compressible than recurrent expenditures. Also underlying this cutback, however, has been a concerted effort by the authorities to bring public sector spending generally under firm central control and to enforce improved operating and investment efficiency on the various agencies and enterprises. Finally, it reflects, in addition, the broader desire to reduce the economic role of the State.

617. The former weak control exercised by the Central Government over the decentralized agencies and public enterprises precluded the meaningful formulation and execution of a public investment program. Since 1975, however, the authority of the Ministries of Economy and Finance over public sector expenditures has been firmly established. 1/ The public sector is now viewed as a single budgetary unit, with all revenues belonging to the Treasury and investment decisions guided by the expected rates of return for competing projects rather than by the distribution of current surpluses (and borrowing capacities) among agencies and enterprises. Projects must be submitted to the National Planning Office (ODEPLAN) for evaluation and approval before they receive budgetary allocations.

618. The necessity of demonstrating the economic justification of proposed projects has been firmly brought home to the various agencies, 2/ and the latter have begun to modify their own expectations and internal planning and decision-making processes accordingly. The shift from budgetary suppression and control to a more forward-looking attitude of project identification and investment programming has been slow to become institutionalized, however, stunted in part by the budgetary stringency itself and in part from administrative weaknesses.

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1/ See Chapter III and internal Bank working document on Chile's public investment programming.

2/ The 1978-83 Indicative Plan (op. cit.) outlines a tentative distribution of public investments by sectors with the proviso that "... these amounts will be available for investment by the ministries and public enterprises only if they bring forth duly evaluated projects with high social and economic rates of return. If such carefully evaluated projects are not forthcoming, the assignment or approval of investment funds will not be made" (p. 135, mission translation).

619. Inadequate resources have been devoted to such pre-investment activities as basic data collection, resource surveys, and sector studies, the essential raw materials of adequate project identification, evaluation, and design. Moreover, in the eschewal of central direction of the economy, there has been, in the mission's judgment, an excessive reluctance to assess relative priorities even within the public sector. It is not enough to depend on the various agencies and enterprises to generate projects and submit them for approval; the results greatly depend on the pre-existing distribution of competent engineers and economists and sectoral knowledge, factors which are themselves determined by prior budgetary decisions. Thus, given the tight, centralized control now being exercised over the public sector budget, the setting of these priorities, at least implicitly, cannot be avoided. Aware of the managerial problem, the Government has established project-preparation courses for administrators and technical staff. These courses, which are operated at high technical standards, have now attracted students from other Latin American governments.

620. Finally, the inter-agency coordination necessary for the proper programming of investments in such areas as energy, irrigation, and transport has been poor. A number of interministerial commissions have now been created in these and other areas, but effective project coordination has not yet been fully realized and additional effort is called for. In the meantime, the commendable desire to reduce public sector waste should not prevent the Government from going forward with investments that meet such clearly high priority needs as the rehabilitation of highways, development of indigenous energy resources, and the maintenance of productivity in the CODELCO mines.

b. Social Overhead Expenditures

621. Social overhead expenditures, while not always directly productive themselves, crucially affect the rates of return and risks of directly productive investments. Expenditures for education and public health are common examples. This report has identified some crucial social overhead needs: national resource surveys in the energy, forestry, and fisheries sectors, agricultural research, the development of market information systems for farmers and exporters, and the design and enforcement of conservation regulations in fishing and forestry. Expenditures to improve the determination of public sector investment priorities would also fit in this category. The authorities view such activities as proper and necessary components of the State's role and it is expected that, as the economy expands, increasing resources will be devoted to these purposes. In the mission's view, the concept of social overhead can be usefully extended to a number of other activities which, because of past inefficiencies, the Government has been reluctant to pursue.

622. A basic tenet of the Government's economic policy is to act in as non-discriminatory a manner as possible, setting general norms which are equally applicable to all individuals and groups. It is concerned, for example, that devices for earmarking or subsidizing credit to small farmers (or any other special group) might perpetuate the tenure of inefficient producers, exacting a high cost in growth and welfare elsewhere in the economy and ultimately defeating the redistributive objectives sought by the original discrimination. This analysis unfortunately does correspond to many of the well-intentioned subsidies and other distortions introduced by prior

Chilean administrations. In a number of cases, however, the Government's policy may not sufficiently appreciate those aspects of the current situation which place particular obstacles in the path of efficient, or potentially efficient, small producers.

623. Many of Chile's small farmers, particularly in the reformed sector, are ill-equipped by education, experience and resources to manage their land holdings efficiently. 1/ Many others, who may have the initiative and ability required of successful commercial farmers, are disadvantaged by unequal access to technical services, credit institutions, and efficient marketing channels. Because of these factors, it is likely that a purely laissez faire solution would lead, over a relatively short period of time, to the loss or sale of reformed sector parcels and their consolidation in fewer hands.

624. The immediate result would probably be an increase in farm output, reflecting the superior managerial capacities and access to inputs of the likely buyers. It is not certain, however, that long-run efficiency would thereby be served. In the first place, Chile's apparent comparative advantage in the agricultural sector lies in land- and labor-intensive crops for which high yields are quite compatible with small land units, and economies of scale in production are not significant. Secondly, the displacement of farm labor that is likely to occur in the process of consolidation, even if formerly underemployed, will not be socially costless, as migration to the cities accelerates and places additional pressure on public services and welfare programs.

625. It should thus be emphasized that the mission's proposals for a stepped-up public extension service and for strengthening credit mechanisms for small farmers, whether by earmarking credits through private lenders or upgrading specialized public institutions (e.g. INDAP), do not imply the permanent subsidization of inefficient producers. What is being recommended is the avoidance of a needless and inefficient sacrifice of the productive potential of those who, given the opportunity to compete on even terms, can make it as commercial farmers. Expenditures aimed at providing that opportunity are a social overhead investment which merit full consideration alongside the other elements of public sector activity.

626. A similar case, in the mission's view, can be made for a public sector effort to assure adequate credit and technical assistance services to small manufacturing and commercial enterprises. The serious disadvantages they have suffered vis-a-vis the larger enterprises in the post-1973 period are in many cases pecuniary rather than rooted in relative productive efficiency, and the resulting tendency toward conglomeration of assets is cause for concern. 2/ Once again, a strategy of sole reliance on the marketplace as the allocator of resources will produce desirable results only to the extent that the market signals reflect true relative costs and efficiencies and to the extent that the short-run decisions of the market do not contravene the requirements of long-term efficiency. Where one or both of these assumptions is invalid there is a case for state intervention, the expenditures for which can properly be treated as public investment.

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1/ See Chapter IV.

2/ See Chapter IV.

### 3. Policies Affecting Private Investment

#### a. Interest Rates

627. Chapters I-III described Chile's long history of administered interest rates and selective credit controls intended to stimulate investment and direct it toward designated priority sectors. The present Government, in contrast, freed interest rates and has gradually been eliminating selective credit lines and shifting the credit allocation function to the private financial institutions through the lowering of reserve requirements. Inflationary expectations and the period of extreme illiquidity through which the economy has passed resulted in very high real interest rates, the virtual disappearance of medium- and long-term credits in the domestic financial market, and heavy inflows of foreign financial capital. At the end of 1978, the average real monthly interest rate charged for short-term (30-day) commercial bank loans still exceeded 2 percent, and had fluctuated during the year between 1.5 and 5.4 percent. 1/

628. Chile's past economic performance demonstrated the inefficiency of policies which generated negative real interest rates. Private savings were inhibited; investible resources were diverted to low priority uses, including luxury consumption; the uneconomic substitution of capital for labor was encouraged; and distributive inequities were created in favor of those largely middle- and upper-income groups enjoying access to the subsidized credits. There is some question, however, whether the unusual circumstances of the past few years permit the unregulated financial market to reflect accurately the opportunity cost of capital in Chile and to guide its efficient allocation. At the same time, the low rate of private investment, the disadvantaged position of small enterprises, and the manner in which some foreign financial inflows are being utilized may serve to undermine the long-term development strategy.

629. As discussed in Chapter III, the extraordinary short-term interest rates that have prevailed since 1975 probably reflect a number of distortions both transient and structural. The most obvious transient distortion is the high and volatile level of inflationary expectations. The higher interest rates demanded by lenders in such an uncertain situation are not likely to be matched by equally inflated profits expectations on the part of investors. Similarly, while the higher risks of default perceived by lenders -- as a consequence of further uncertainties engendered by trade liberalization and the recent recession -- raise the supply price of loanable funds above that which would prevail in a more normal environment, those same uncertainties lead entrepreneurs to err on the pessimistic side in assessing the probable rates of return from prospective investments. Thus, a gap has been created between savers' time preferences and the expected rate of return on capital, reducing investment to sub-optimal levels.

630. The structural distortions alluded to are manifested in the high cost of financial intermediation. To some extent the large spread between borrowing and lending interest rates reflects operational inefficiencies in

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1/ For details, see Chapter III.



the financial institutions. These should gradually decline under the competitive pressures being induced by relaxation of legally required institutional specialization that formerly insulated financial markets. Such reforms should also reduce the effectiveness of whatever collusion, tacit or otherwise, may exist among the limited numbers of banks, finance companies, and other intermediaries. Also helpful in lowering intermediation costs is the continuing reduction of reserve requirements.

631. Throughout the recovery period, the Government has had to walk a difficult tightrope, wanting on the one hand to expand the liquidity of the economy and bring down the rate of interest, while on the other to dampen inflationary expectations. With inflationary expectations extremely volatile and conditioned by a long history of aborted stabilization efforts, it is difficult to argue that the money supply should have been expanded more rapidly. <sup>1/</sup> In view of the still existing financial market distortions, however, the mission believes there may have been, and may still be, a case for placing a ceiling on real interest rates. <sup>2/</sup> The purpose is not to reintroduce a subsidy to capital but to acknowledge that the unusual circumstances of recent years create market distortions which tend to inhibit the investment levels necessary and desirable to realizing Chile's growth objectives.

b. Competition in the Financial Market

632. A related concern is the extensive pattern of interlocking ownership and directorship among the different types of financial institutions, and between them and major industrial and commercial enterprises. The effectiveness of the above-mentioned financial reforms for increasing competition is thereby reduced, and enterprises with a direct link to the financial sector clearly have an advantage over rival firms not so connected. This advantage is particularly prejudicial in tight-money periods such as Chile has been passing through. In a number of cases this preferential access to credit, both domestic and foreign, has been utilized to conglomerate existing assets rather than to create new ones.

633. In a changing economic environment, small firms may have a far greater ability than older, larger firms to adjust product lines or develop new ones. Asset concentration therefore, may reduce mobility and adjustment. In addition to the offsetting assistance previously recommended for small enterprises, the mission therefore urges the authorities to review the current laws and regulations pertaining to ownership and management ties within the financial sector and between it and other sectors, and to introduce whatever revisions may be found desirable to assure that the financial markets are satisfying the competitive demands of the present development strategy.

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<sup>1/</sup> In fact, the growth of the real money supply since the end of 1976 has been quite rapid (See Appendix II, Table 6.2).

<sup>2/</sup> A more modest policy change that would at least neutralize inflationary expectations and eliminate a subjective barrier to the mobility of funds between short- and medium-term credits would be to permit the indexation of 30-day or shorter obligations.

c. The Exchange Rate

634. The massive devaluation of the exchange rate after September 1973, and the crawling peg which has been maintained since, have given rise to a significant diversification of exports which promises at last to relieve Chile's historical dependence on a single export commodity. The Government clearly intends to maintain an exchange rate consistent with the full realization of Chile's international comparative advantage. Nevertheless, during 1976 and early 1977, with reserves growing rapidly, the Government revalued the peso as a means of achieving a quantum reduction in the rate of inflation. The measure, which reduced the cost of imports and increased the competitive pressure on domestic producers, was highly successful in dampening both inflationary expectations and the rate of price increase itself. In the face of rapid import growth, however, the revaluation had to be partially reversed later in 1977.

635. The urgency of decelerating an inflation rate that still exceeded 100 percent and the success achieved provide a powerful argument for the action taken. Looking to the future, however, the mission strongly agrees with the Government intention that the exchange rate not be used as a tool of short-term management. The establishment of stable expectations regarding the real exchange rate is extremely important to reducing the already considerable uncertainties faced by Chile's incipient export industries as well as those which must now meet import competition. Conversely, the generation of uncertainties about the future exchange rate will further inhibit necessary investment decisions.

d. Agricultural Price Stabilization

636. Finally, there is a need to reduce some of the uncertainty now faced by farmers. The removal of price controls from farm products, long used to hold down the cost of food to urban workers, has resulted in a marked improvement in agriculture's overall terms of trade and a realignment of relative prices within the sector. The sector has responded with a strong growth of value-added and a shift in land use toward more land- and labor-intensive crops. The gradual withdrawal of the Government from short-term price support operations, however, has also increased the uncertainties faced by farmers in making their annual planting decisions and may have discouraged desirable investments and caused an overreaction in the reduction of land under cultivation. This appears particularly to have been the case during the 1977-78 crop year, when production of most traditional field crops declined sharply, and south of Bio-Bio, where transport availability and limited alternative land use for temporary crops place a higher premium on price stability.

637. An important distinction needs to be made between price support or control programs which result in a permanent subsidy to (or tax on) production and one which provides farmers with the minimum stability of expectations necessary to make reasonable year-to-year planting decisions. The short-term price movements of farm products in the world markets are particularly unpredictable, at the same time that farmers, who have no resource mobility once the planting season is past, are particularly vulnerable to price changes. Consequently, decisions made in a totally free market will inevitably be found by harvest time to have been suboptimal from the view point of static allocative

efficiency. It is not certain that these free-market errors would be smaller than those caused by an intelligent, annually adjusted price support program. Moreover, if the mission's observation is correct that the present uncertainties have led some land to be taken out of production, it would appear preferable to use the resources suboptimally than to lose their productive potential altogether.

638. To reduce price uncertainty, the Government is considering the establishment of a futures market for major crops. This may take time to develop effectively. Thus, the mission recommends that the Government examine another alternative; a mechanism that would establish price guarantees consistent with regularly adjusted best estimates of international price trends. The purpose, once again, is not to encourage inefficient production but to bring about resource shifts in conformance with Chile's comparative advantage in an environment sufficiently stable that resources remain, insofar as possible, fully employed.

### C. THE DISTRIBUTION OF INCOME

639. Economic growth, of course, is not the sole objective of development, and Chilean governments have traditionally ascribed high priority to equity and income distribution. Price controls, cheap credit, mandatory wage adjustments, direct subsidies, tax exemptions, multiple exchange rates, land redistribution, and social expenditure programs were all used toward that end. The net impact of these measures, however, was a severe distortion of resource allocation and reduced economic growth. Beneficiaries, moreover, were most often members of the urban middle class rather than the truly poor.

640. The present Government views its role as that of: (1) assuring each Chilean a fair chance to develop his or her individual potential through access to education, health, and other social services, as well as non-discriminatory treatment in the marketplace and expanding employment opportunities; and (2) providing direct subsidies and/or remedial services designed to eliminate the causes and consequences of "extreme poverty." <sup>1/</sup> Beyond this, public policy tries insofar as possible to be non-discriminatory, leaving the relative distribution of incomes to be determined in the marketplace. The strategy thus eschews the use of market-distorting measures to achieve distributive ends. By removing incentives to inefficient resource allocation, eliminating the subsidies formerly provided indiscriminantly, often to the more affluent members of the society, and increasing the efficiency of social programs, the Government expects to mount a more effective attack on absolute poverty at lower cost to the economy.

#### 1. Social Expenditure Programs

641. The major departures from past subsidy and social expenditure programs are an insistence on demonstrable cost effectiveness, rigorous identification and delimitation of target groups, and a preference for

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<sup>1/</sup> Plan Nacional Indicativo de Desarrollo 1978-1983, pp. 31-32.

contracting the actual delivery of services out to the private sector on the basis of competitive bidding. In implementing this new approach, significant and promising innovations have been introduced, particularly in the field of nutrition. 1/ Important steps have also been taken to rationalize the social security system and to improve the equity and quality of its benefits. Nevertheless, a number of problems have delayed development and adequate funding of social programs at the same time that the economic downturn and certain other Government policies greatly increased the need.

642. Part of the delay of program development reflects the normal lag time in working out the operational details and institutional consequences of a new approach. Part stems from the need to improve the administration of heretofore weak agencies and ministries never before forced to justify programs on economic or rigorous social grounds. In addition, although a consistent philosophy has been espoused which gives high national priority to the alleviation of absolute poverty, no coordinated program toward that end has emerged which would permit forward planning of the required budgetary resources. Without assured resources, agencies are slow to develop programs. The 1975/76 austerity program brought sharp reductions of social expenditures, although they were reduced proportionately less than public expenditures generally. Within the social category, the high level of unemployment during the recession period and beyond resulted in a shift of resources toward short-term relief efforts and away from longer-term developmental programs in education, health and housing. Moreover, because of reduced funding levels, as well as political animosities carried over from the 1970-73 period, many professionals and technicians left or were dismissed from the public health services, etc., further weakening the public sector's capabilities in these areas.

643. An additional cause of delay has been the general lack of reliable information regarding the overall magnitude of the poverty problem, its incidence among functional groups and regions, trends experienced over the past decade, and the eligibility of specific program applicants, actual or potential. The Government's working definition of extreme poverty derives from information on the quality of housing extracted from the 1970 censuses of population and housing. 2/ This information is useful for identifying areas of high poverty incidence. It does not, of course, record the changes that have occurred since 1970, nor does it provide guidance to program administrators in determining individual eligibility. This, combined with the general resource constraint and the drive to improve program efficiency and eliminate unjustified subsidies, has apparently resulted in a tendency to err on the low side--i.e., to restrict funding and to hold the numbers of program participants to a minimum.

644. The Government has recently indicated its intention to create locally based Social Assistance Committees. These Committees will be responsible for identifying, on the basis of uniform and objective criteria, eligible program beneficiaries in their respective municipalities and for channeling

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1/ See internal Bank working document.

2/ ODEPLAN and Universidad Catolica de Chile, Mapa de Extrema Pobreza, ICIRA, Santiago, 1974.

public subsidies to those eligible. Resources will be allocated among the local Committees in accordance with the relative poverty concentrations shown in the 1970 data. With the resources now becoming available and given the great need for these public services, the Government's full energies should be devoted to making its antipoverty effort more effective.

## 2. Wage and Employment Policies

645. One important exception to the general policy of non-intervention in pricing decisions is the continuing legal adjustment of economy-wide wages and salaries. 1/ Wage adjustments after 1973 were intended to stabilize real remunerations in the face of very rapid inflation, albeit at a level significantly below that of 1970. Larger adjustments and special bonuses were decreed for the lowest paid workers, at the same time that a number of non-wage benefits--e.g. the family allowance--which historically discriminated between blue-collar and white-collar workers, were raised and equalized. As a consequence, employed workers received some protection during the recession, average real pay rates were approximately restored to their 1970 levels by 1978, and workers in the lowest pay categories gained somewhat relative to workers generally.

646. This effort to protect and improve the earnings of the employed may have come, however, at some cost to employment. 2/ In any event, the unemployed were clearly the group most disadvantaged by the difficult economic situation and policy measures such as the removal of subsidies on bread and the extension of the value-added tax to essential consumer goods. Off-setting wage increases, of course, were received only by those with jobs. Meanwhile, the provision of unemployment allowances and the implementation of policies intended to improve the effective access of indigents to public health care, social security pensions, and other social programs have progressed more slowly.

647. The Government has declared the generation of productive employment to be its number one social objective, and the National Plan projects a reduction in the unemployment rate to below 7 percent by 1983, 3/ as compared to a 13 percent average in Greater Santiago during 1978. Under prior administrations, the growth of productive employment was inhibited by slow output growth, subsidized capital, and a social welfare system financed by relatively high labor taxes. To compensate for these distortions governments resorted to generating employment directly through public works spending

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1/ The Government has indicated that private sector wage determination will eventually be left to a restored process of collective bargaining, but no timetable for this move has been announced.

2/ In dealing with an economy-wide wage adjustment, the standard ceteris paribus assumption does not apply. Allowing further general declines in the real wage level would have further depressed aggregate demand; the net effect on employment is therefore indeterminate.

3/ ODEPLAN, Plan Nacional Indicativo ..., p. 37.

and direct employment of often redundant labor. The present Government places its primary reliance for employment generation on indirect measures: the acceleration of economic growth; further rationalization of relative factor prices, with particular emphasis on the reduction of social security taxes; and enhanced labor mobility through improved vocational education, expanded retraining programs, the creation of local job information centers, the relaxation of job security laws, and the vesting of pensions. Direct public sector employment has been reduced as part of the general contraction of the State's role in the economy and the drive for greater efficiency.

648. Nevertheless, during the 1975-76 recession, the Government introduced an emergency public employment program (PEM), which, at the economy's nadir, provided low-pay jobs to about 7 percent of Chile's total labor force. Originally intended as a temporary measure, the PEM has been continued, and a training component has been added. The wage subsidy program aimed at stimulating the private hiring of unskilled workers, has also been extended. Despite these efforts and a fairly rapid growth of employment since 1975, urban unemployment continues to be a serious problem. In part, this may reflect the gradual return to "normal" pre-1970 labor force participation rates. Since the data refer only to Greater Santiago, they may also reflect the migration of workers from the countryside or other cities in search of jobs. 1/

649. Research is now required to know to what extent the urban unemployment problem is primarily cyclical, or related to structural changes, such as shifts in land ownership or use, changes in the location of industries, or labor immobility in sectors affected by trade liberalization and removal of subsidies. Although the long-term strategy is consistent with more intensive labor use and more rapid growth of employment, historical precedents are lacking for the magnitude and speed of transition being experienced by the Chilean economy. The problems of frictional unemployment are likely to be considerable and must be closely monitored as a guide to needed adjustment assistance. No data are currently being collected to measure these shifts, presumably on the assumption that the market itself provides the most efficient and expeditious mechanism for adjustment.

650. In addition, certain features of the present economic strategy do not appear entirely consistent with the achievement of the stated employment objectives. To the extent that small enterprises tend to use labor more intensively than large ones, employment growth may be retarded by the unintended but significant pecuniary advantages being enjoyed by the latter. Also, labor displacement in the rural areas, as land reform beneficiaries give up their parcels, may complicate problems of urban unemployment.

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1/ This undoubtedly occurred during 1978. According to the UC survey, the population of working age in Greater Santiago rose 5.5 percent between June 1977 and June 1978.

651. The latter problem can be illustrated, as it has been historically, by the case of Santiago. The following table shows the rates of employment growth necessary under different assumptions about the growth of working-age population to reduce the unemployment rate to 7 percent in the capital city.

Table V.7: CHILE - EMPLOYMENT GROWTH RATES REQUIRED TO REACH  
7 PERCENT UNEMPLOYMENT RATE IN GREATER SANTIAGO BY 1983

Growth Rate of Working Age Population (%)	Growth Rate of Employment (%)
2.4	4.2
3.5	5.3
4.4	6.2

Source: Appendix II, Table 1.22

Assuming a gradual increase in the participation rate to the average of the 1968-70 period, employment would have to expand at more than 6 percent per year to reach the target if the working-age population in Santiago continues to grow at the average 4.4 percent rate of 1974-78. If the net in-migration of working age population were zero, on the other hand, and the potential labor force of Santiago grew at the projected national average of 2.4 percent per annum, the employment growth requirement would fall to about 4 percent, a rate quite consistent with the anticipated growth of GDP.

652. The mission believes that the present economic strategy substantially improves Chile's long-term employment prospects, and that intended reforms such as the reduction and eventual elimination of payroll taxes should be implemented as rapidly as practicable in the light of financial constraints. Necessary micro-level surveys of the sources and nature of unemployment should also be undertaken and regularly updated. These would enable the Government not only to monitor the employment impact of the structural transformation, but to adjust the magnitude and content of its retraining programs and incentives offered for private retraining. Given the speed and magnitude of the transformation, it may be found that many persons, because of age, skill obsolescence, or both, are permanently disqualified from employment opportunities available in the private market-place. For example, there may be no way either to retrain or find private employment for a redundant 58-year old coal miner. The Government could address this problem by extending the emergency employment program to provide useful public jobs for such individuals, or by

extending social security pension coverage to include them. The former option, properly administered, is preferable both for avoiding unnecessary resource waste and for supporting human dignity. Finally, with inflation substantially reduced and continuing to decelerate, it would seem propitious to begin the transition toward a market determination of wages through a revitalized process of collective bargaining. The real wage gains of the past two years, as generated by the legal adjustment formula, cannot be sustained without seriously retarding the growth of employment. At the same time, the rigidity in inter-sectoral, inter-firm, and inter-functional wage differentials introduced by across-the-board legal pay adjustments may tend to exacerbate the already difficult problems of frictional unemployment.

### 3. The Ownership of Productive Assets

653. The primary determinants of income distribution in the long run are likely to be employment and the ownership of, or access to, non-labor productive assets. Although corroborating data are lacking, it appears certain that the ownership of industrial assets and agricultural land has become more highly concentrated since their return to the private sector after 1973. A number of factors have led to concentration in the industrial sector. Among them are the difficult financial situation many firms faced on their return to private ownership, the compounding of this illiquidity by the reduced cash flows of the 1975-76 recession and the freeing of interest rates, and the financial advantages of those large enterprises which have preferred access to foreign credit and/or to the resources of a domestic financial-industrial-commercial conglomerate. Within the agricultural sector, the major problems are the financial weakness and technical and managerial backwardness of most land reform beneficiaries and their limited access to credit and technical assistance services.

654. The negative implications of the trend toward asset concentration for efficient resource allocation and employment have already been mentioned. Trade liberalization and the resultant pressures of international competition are heavily depended upon to minimize actual market power and the threat to efficiency and income distribution. Chile's distance from world production centers, however, provides many industries with an important degree of natural protection and the opportunity to earn significant monopoly rents. Moreover, large concentrations of economic power seldom remain divorced forever from political influence and may ultimately undermine the economic strategy itself. In addition to the assistance recommended for small enterprises, therefore, the mission urges the Government to tighten and vigorously enforce its antitrust laws and regulations, with particular attention to the links that exist between financial and non-financial institutions.

### 4. Taxes

655. The greatest improvement in the Chilean tax structure in the last six years has been the elimination of a highly regressive inflation "tax." However, no study has been made of the incidence or overall progressivity of tax collections since the major reform carried out in 1975. Such studies, however, would provide only a rough guide to future collections given the large changes that have occurred in, for example, the efficiency of tax



administration and the rate of inflation. In general, it can be said that the 1975 reform improved the system's horizontal equity by removing large numbers of special exceptions, exemptions and rates. The effective progressiveness of the system was also enhanced by, inter alia, the extension of withholding, the taxation of undistributed corporate earnings, and the indexation of the property tax base. On the other hand, the taxation of capital gains and net worth were ended, and the system has become increasingly dependent on indirect taxes, particularly the VAT. The latter tax was also extended to include a number of basic wage goods previously exempted. Given the high unemployment rate of recent years, the extension of such a high VAT must have had a very adverse impact on Chile's poor.

656. In view of the above-mentioned lack of data, the very high future savings requirements of the economy, and the need to find alternative revenue sources to substitute for high payroll taxes, the mission does not now recommend any major changes of the tax system toward greater progressivity. As the transition proceeds, however, and reduction of the tax burden becomes desirable, it is to be hoped that first attention be given to lowering the very high burden of indirect taxes, principally, the VAT. Reconsideration is also urged of the inclusion of food in the VAT.

APPENDIX I:

NOTE ON CHILEAN ECONOMIC STATISTICS

A. Price Indices

1. The necessary reliance of empirical economic analysis on numbers often gives both the analyst and the reader a sense of precision which is unjustified in view of the well-known difficulties of measurement and aggregation that are inherent to many economic concepts as well as the serious information gaps and poor quality of the data collected in most of the developing world's economies. Particular caution is called for in the use of Chilean economic statistics. The very rapid changes that have occurred in price levels, relative prices and economic structure in recent years have rendered the bases of many of the available indices obsolete and have made the interpretation of all time series expressed in value terms subject to a wide range of error. At the same time, gaps in coverage or weaknesses of definition and methodology may tend to be overlooked on first blush because of the apparent richness and sophistication of Chilean data compared with most other developing countries.

2. A number of the more significant data problems encountered by the mission are briefly reviewed below. Because of these and related problems mentioned in the text, many important questions--such as identifying recent changes in the distribution of income--could be only very partially treated. Furthermore, a considerable margin of error must be understood to surround many of the data presented in this report. Despite such caveats, however, the mission believes that it has been possible to identify correctly the fundamental trends of economic policies and performance in Chile over the past several decades and that conclusions of the report are supported by the evidence. Nevertheless, the modernization of the data base and the improvement of the quality and timeliness of the data available is urgently needed to monitor the present difficult and crucial transition period and provide needed guidance to policy makers.

3. Two aggregate price indices--the Consumer Price Index (CPI) and the Wholesale Price Index (WPI)--are regularly and systematically collected and reported in Chile. Both are prepared by the National Statistical Institute (INE). Of the two, the CPI is the more commonly used as a deflator of aggregate value series--national accounts, wages and salaries, government expenditures, etc.--as well as for purposes of indexing a wide range of assets, liabilities, and policy variables--e.g., minimum wage, savings accounts, social security benefits, mortgages, exchange rate, etc. The market basket for the CPI consists of some 300 goods and services, and monthly sampling is limited to sellers located in Greater Santiago.

4. The presently published CPI suffers an important historical discontinuity. The official CPI failed to measure properly either the extent or temporal distribution of the inflation that occurred over the period 1970-73. In the first place, the official CPI during this period recorded official prices at their legally controlled levels, while an increasing proportion

of the goods in the index were either traded in the black market at much higher prices or simply became unavailable altogether. Although INE continued its surveys of retailers as before, the latter would understandably report official prices rather than those at which goods were actually being sold (typically outside of normal business hours). When an item was reported to be out of stock, INE simply used the last reported price, which might have been several months out of date. The recorded timing of the inflation thus became distorted when, with the freeing of most prices in October 1973, the official index began to catch up with the inflation that had actually occurred over previous months and years. A more accurate picture of the chronology of inflation in Chile, therefore, would require that part of the inflation attributed by the official CPI to the last quarter of 1973 be distributed forward over the preceding 2-1/2 years. 1/

5. Moreover, the official CPI understates by a substantial margin the full extent of inflation over this period. In addition to the distortion of the price trend in time, the official index never fully caught up with actual price behavior. During 1973, a consumer price index based largely on household surveys was independently constructed by the Institute of Economics at the University of Chile. The composition of the market basket and the weights applied were similar to the INE index. When prices were freed in October, the official price statistics began to record the accumulated tariff adjustments, the effect of escudo devaluation, the October wage adjustment, etc. However, instead of recording these increases via INE's standard surveys and in relation to the December 1969 base, the official CPI simply incorporated the monthly price increases for October-December reported by the University of Chile index. But these increases, in percentage terms, were calculated from a base which had already taken black market prices into account. Thus, the rate of price increase shown by the UC index during the last quarter of 1973 is less than would have been calculated relative to the artificially depressed official CPI. In splicing the two indices together, what in effect took place was a discontinuous shift in the official index's base from December 1969 to September 1973, producing a gross underestimation of the total inflation which had occurred during 1970-73. On the basis of price data collected by INE during the last quarter of 1973, it is estimated that the understatement amounts to around 40 percent. In other words, the consumer price level in Chile is currently about 40 percent higher relative to December 1969 than is indicated by the official CPI. 2/ On the other hand, the index is believed to be a reasonable indicator of cost-of-living changes in Greater Santiago since 1974.

6. IBRD economic reports since 1973 have used an "adjusted" CPI which attempts to incorporate the full estimated inflation over the 1970-73 period,

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1/ Price controls apparently resulted in some under-recording of inflation in the late 1960s as well, but the magnitudes are small relative to the 1971-73 period.

2/ Joseph Ramos, comparing absolute prices in 1975 with those of 1970, estimates the extent of understatement to be 46.7 percent. See: Joseph Ramos, "El Costo Social: Hechos e Interpretaciones," Estudios de Economía, University of Chile, Segundo semestre, 1975.

thus permitting a more accurate comparison of current real values with those prevailing before 1971. The problem of properly allocating the inflation over the period, however, is considerably more difficult. The chronology was in fact different for each member of the society depending on his access to goods at controlled prices and the fractions of his purchases and sales which were transacted in the black market.

7. The adjusted CPI used in this and earlier Bank economic reports distributes the inflation on the basis of money supply data and certain loose assumptions regarding the velocity of money. As such it attempts to trace the path inflation would have traveled had prices been allowed to respond freely to the growing demand pressures. It thus purports to measure the growth of "total" inflation--both realized and repressed. Consequently, it may tend to overstate inflation in 1971, 1972, and early 1973 and understate inflation in late 1973 from the point of view of an individual who was able to satisfy a significant proportion of his consumption demand at official prices.

8. An alternative index, constructed on the basis of UC's household survey data, does attribute a greater proportion of the total inflation to 1973, and particularly to the last quarter after prices were freed. More information is required about the households sampled and about the differential effectiveness of price controls, state food distribution programs, etc., to judge the representativeness of this index. By attributing a greater proportion of inflation to the end of 1973, the UC index reports a lower rate of inflation (as measured by a comparison of annual averages) in 1973 and a higher inflation in 1974 than does the IBRD Index, as shown in the following table:

A.1: INCREASE IN PRICE INDICES

	Official CPI	IBRD Adjusted CPI	UC Index <u>a/</u>	Official WPI
(Percent increase)				
Annual averages:				
1970-71	20	35	25	18
1971-72	78	146	106	70
1972-73	353	462	448	512
1973-74	505	339	513	1,029
Total 1970-74	5,743	8,081	8,546	13,750
End-of-Year:				
1970-71	22	53	27	21
1971-72	163	254	212	143
1972-73	508	405	617	1,147
1973-74	376	376	376	571
Total 1970-74	9,212	12,939	13,452	24,615

a/ Mission reconstruction inferred from data on real wages presented in University of Chile, Comentarios sobre la situación económica, Primer semestre, 1974.

Consequently, deflation of wages and salaries by the UC index results in a smaller decline of average annual real wages and salaries from 1971 to 1973 and a smaller increase from 1973 to 1974 than does deflation by the IBRD index. The UC deflation seems more consistent with the relatively flat aggregate demand in 1974, as reflected in employment data and output and sales of manufactured goods. On the other hand, the low inflation rates attributed by the UC index to 1971 and 1972 suggest a sharp decline in the velocity of money in 1973 and constancy at that low level in 1972 that appear intuitively inconsistent with the accelerating inflation (according to all indices) and growing political and economic uncertainties that characterized the period. For those lacking access to official or closely regulated distribution channels, inflation was almost certainly worse than reflected by the UC index. In many cases, the implied hardship was manifested in supply shortages and queuing rather than in the price paid. The IBRD index seems a better indicator of the inflationary pressures being created by the aggregate demand policies of the Government. In any event, the IBRD and UC indices together provide a useful range within which to calculate the real changes experienced over and during the 1970-74 period, and both have been utilized in the report.

9. INE has recently completed a household budget survey of Greater Santiago, and has established a new consumption basket for the area in the light of its survey results. This new basket, with consumption weights as of December 1977 to November 1978, has led to the publication of a new CPI series with December 1978 = 100.0. The new index, of course, is not strictly comparable to the old one.

10. The Wholesale Price Index (WPI) ran below the official CPI before September 1973, possibly reflecting greater effectiveness of price controls at the wholesale level. The freeing of prices in the last quarter of 1973, on the other hand, led to an even greater explosion of the WPI than of the adjusted CPI. The difference appears to have emanated in large part from the foreign sector, where the domestic prices of imported raw materials were affected by the unification and devaluation of the exchange rate as well as the sharp jump in the world market prices of oil, wheat, and other commodities. Oil and wheat figured particularly importantly because Chile imported large quantities of each, and because they are double-counted in the WPI, first as imported crude petroleum and wheat, and then as domestic gasoline and bread. The prices of wheat, corn, and other basic commodities were also affected by the progressive elimination of government subsidies after 1973.

11. The WPI continued to rise faster than the CPI in 1975 but the relationship was reversed in 1976. Nevertheless, the inflation of the WPI over the entire period since 1970 far exceeds that of the adjusted CPIs and suggests that, even allowing for additional statistical errors, there has been a considerable narrowing of retail margins in recent years.

#### B. Employment Data

12. INE conducts periodic surveys of the national labor market. The regularity and quality of these surveys is hampered, however, by their small and uncertain coverage. Moreover, the sequential manner in which the surveys are conducted, area by area over an extended period of several months, makes their interpretation very difficult. This is particularly true in periods of

rapid change in labor market conditions, both cyclical and secular, such as have characterized the past decade. Analysis in this report, consequently, has been limited to the employment surveys of Greater Santiago.

13. There are important differences in coverage and definitions between the University of Chile and INE surveys of the Greater Santiago labor force, giving rise to divergent results. The INE survey covers 17 of the most populous and largely urban municipalities (comunas) of the Province of Santiago, accounting for about 80 percent of the Province's population. The sample includes approximately 3,000 households. Until 1977, the University of Chile (UC) survey covered 15 municipalities, containing about 86 percent of the population of the Province. 1/ Beginning with the March 1977 sampling, the UC survey has been extended to the same 17 municipalities represented in the INE survey and includes 3,500 households.

14. In view of the larger geographic area sampled by INE through 1976, and the fact that both surveys estimate current population on the basis of revisions derived from the 1970 census, it is puzzling that INE's population figures are consistently smaller than those of UC. During the first half of the current decade, both surveys overstated population in the sampled areas as a result of overestimating the population growth rate, both during the intercensal period 1960-70 and subsequently. On the basis of revised census data, an adjustment to INE's series was introduced beginning with the surveys of January-March, 1975, and resulted in a reduction of the sampled population size. In the case of the UC survey, two adjustments were made. The first, introduced with the December 1973 report, surprisingly revised the total population of the sample area upward. 2/ A further revision was introduced with the March 1976 issue and extended back over the entire intercensal period to 1960. This second revision reduced the estimated sample population somewhat but still shows an inordinate rise from 3,200,600 in June 1973 to 3,382,000 in December. Indeed, the UC estimates of population continue to run above those of the INE survey as well as those from other sources. 3/ It is also curious that the addition of two municipalities in the March 1977 UC survey did not result in a revision of the total population of the sampled area.

15. A comparison of the adjusted 1970 census and UC survey also reveals an important difference in the reported size of the population of labor force age. The UC survey reports 67.7 percent of the population of Greater Santiago to be of labor force age (14 and over) in March 1970, as compared to a smaller proportion, approximately 64.5 percent, reported by the census. Unless accounted for by an in-migration of labor from the rural areas and/or smaller

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1/ All of the municipalities covered by the UC survey were also included in the INE survey.

2/ Whereas the June report had given the population as 3,267,500, the December survey reported it as 3,448,500.

3/ For example, in June 1975 the UC survey gave the population for the 15 municipalities covered as 3,573,400, while the estimated population for the same area was reported as 3,338,500 in INE's Anuario Estadístico of 1976.

towns, however, the application by UC of a higher than actual rate of population growth to the intercensal period should have projected a population structure more heavily weighted by persons below labor force age, thus yielding a lower proportion of persons over 14 to total population.

16. The two labor force surveys differ in their definitions of the population of labor force age: the INE definition includes all population 12 years and older, while the UC survey includes those 14 and older. INE's broader definition, however, does not lead to a larger absolute measure of the labor force because of the smaller total population estimates underlying the INE survey. 1/

17. Another important difference between the two surveys is the manner in which sampling is conducted. The UC sample is surveyed quarterly, close to the end of each calendar quarter, and is completed within a very short period of time, usually about five days. Its findings thus represent a snapshot of the labor market at a moment of time. In contrast, the INE survey is based on continuous sampling over a calendar quarter, one-third of the sample being covered each month. Since none of the monthly samples are representative of the entire universe, interpretation of the results is ambiguous. The results of any one month cannot be compared with the previous or succeeding months. The non-representativeness of each month's sampled households means that even the quarterly average cannot be taken as a clear indicator of the average state of the labor market over the quarter. Since INE results reflect some sort of unweighted average of conditions over the whole quarter, they tend to obscure the full extent of the change. In comparison, the UC survey is taken late in each quarter and should tend to reflect the change which has occurred during the quarter.

18. The two surveys also differ in their definitions of unemployment, the UC employing the narrower concept. In order to qualify as unemployed, a UC survey respondent must not have worked during the reference week and must have taken active steps to find employment during that week. In contrast, the INE survey extends the period within which some effort must have been made to secure employment to the previous two months. To the extent that the "discouraged unemployed" are a significant element in the population, one would expect INE generally to report a higher unemployment rate than the UC survey. 2/ In fact, it has not done so consistently. During the 1978 period of rising unemployment, the INE rates lay well below those reported by the

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1/ The number of labor force participants between the ages of twelve and fourteen is very small, only 0.9 percent of the national labor force and only 0.6 percent in the Province of Santiago, according to the 1970 census.

2/ The "discouraged unemployed" are those who have ceased actively searching for work out of a conviction that none is available. By extending the search period back for two months, one would expect to increase measured unemployment by including many of those who gave up the search prior to the reference week. To qualify as a "discouraged unemployed" worker, of course, an individual must be currently available to accept a job if one were offered.

UC survey. This was probably the result, at least in part, of the lag introduced by the sampling procedure, as described above. The lag should tend to leave the INE's unemployment rate below that of UC during periods of rising unemployment, but above the latter during periods of declining unemployment. However, it is puzzling to find that in periods when the quarter-to-quarter variations in the employment rate are minimal (and therefore when the effect of lags is minimal), the INE rate does not exceed the UC's.

19. A shortcoming common to both surveys, as it is to Chilean data generally, is the absence of seasonal adjustments. The crude data show rather substantial seasonal variations from year to year. For example, June seems to represent a peak in the size of the labor force in the UC survey, March a trough. <sup>1/</sup> Since these seasonal swings are quite wide, they tend to obscure the extent of improvement or deterioration in Santiago labor market conditions and may obscure the occurrence of a turning point.

20. In addition to the above noted problems of definition and methodology, serious doubts arise regarding the fundamental accuracy of the two series. Part of the concern stems from the erratic movements shown by some of the measures over short periods of time. Population and labor force measures are generally highly stable in the short run and change only gradually. Large movements, therefore, cast doubt upon the reliability of the information collected or about the quality of sampling or processing procedures employed. For example, the proportion of the population of labor force age would be expected to be stable. Yet the INE survey displays some very considerable short-term variations. In the fourth quarter of 1973, the proportion of the population under twelve years of age was reported as 27.5 percent. Six months later, in the second quarter of 1974, the proportion was reported to be 25.1 percent. In absolute terms the population under twelve is shown to have declined by some 60,000, while total population was growing by 70,000. Given the calculated sampling error reported in the survey, the probability that both observations could have been drawn from the same population is remote, even allowing for migratory movements into and out of Santiago. Over a longer time interval, other implausible fluctuations are reported. For example, the reported proportion of the total population in the labor force fluctuates from a low of 29.4 percent in the fourth quarter of 1973 to a high of 34.9 percent in the second quarter of 1976. While some changes would normally occur during cyclical swings in economic activity, such wide shifts go beyond reasonable expectations.

21. The UC survey seems somewhat better "behaved" than the INE, but it, too, reports large fluctuations for variables which tend to be stable in the short run. There seems to be a discontinuous 5.7 percent jump, for example, in the size of the total surveyed population over the six-month period June 1973 to December 1973, as compared to a recorded increase of only 3.7 percent over the preceding twelve months. At the same time, the population of labor-force age is reported to have declined by 1.4 percent. These changes produce

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<sup>1/</sup> This probably reflects in part, the seasonal demand for labor in the countryside. Planting typically occurs in the third quarter and harvest in the first quarter of the year.



an abrupt fall in the calculated proportion of the total population which is of labor-force age. Such a sudden change is highly improbable, and the surveys offer no clue as to its origin; no changes in methodology or sample are reported. There would appear to be two unrelated time series: one pre-dating mid-1973, and one post-dating it.

22. This presumption of discontinuity is supported also by the abrupt changes reported in the sectoral pattern of employment and unemployment between June and December 1973. <sup>1/</sup> Over this six-month period, agricultural employment in Greater Santiago is said to have almost quintupled from 4,400 to 20,500 and mining employment to have doubled from 2,800 to 5,700; while employment in community and social services fell from 223,000 to 138,000. Despite the latter decline in jobs, the numbers of unemployed in the community and social services sector is reported to have remained constant. Meanwhile, the numbers of both employed and unemployed attributed to the manufacturing and construction sectors jumped sharply.

23. Significant divergences characterize the demographic models which underly the INE and UC series. Different rates of population growth are applied to the same geographic area. In the INE survey, the population below labor-force age is seen to be declining in absolute terms, while it is increasing in the UC. Perhaps as a result of such differences in the underlying demographic model (and thus the size of the "blow-up" factor applied to the various sample measures), or perhaps because of different enumeration or processing procedures, the two surveys indicate widely dissimilar rates of change in some of the key labor market parameters. Between the fourth quarters of 1973 and 1974, for example, INE reported a 12.7 percent increase in the labor force, the UC only a 4.1 percent increase. Between the first and last quarters of 1976, the INE recorded a 10.8 percent increase, the UC one of 7.0 percent. These differences are far greater than those that could reasonably be attributed to sampling errors.

24. Assumptions made about the size and growth of the population of labor-force age affect the perceived evolution of the labor-force participation rate, a crucial variable for interpreting changes in employment and unemployment. In attempting to analyze reported changes in labor market variables, the mission found it impossible to rely solely on one or the other of the two surveys. Ad hoc judgements frequently had to be made concerning the reliability or "reasonableness" of the reported information. Despite our numerous reservations, however, the reported direction of change in the most important labor market variables has been the same in the two surveys, even though the absolute values or rates of change may have been quite different. This provides a reassuring note to weigh against the various qualms expressed here.

25. For most purposes we have relied more heavily on the UC survey since, on the whole, it seems to be somewhat better "behaved" than the INE data. The INE surveys offer one important advantage over those of UC, however; namely, a more detailed breakdown of the data. For example, since 1975 INE has provided labor force data separately by sex as well as in aggregate form; the

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<sup>1/</sup> Appendix II, Table 1.18 and 1.20.

UC publishes only aggregates. Recently, INE also began to report on the activities of non-participants in the labor force, again by sex. It also publishes a distribution of the unemployed by duration of unemployment. While the UC survey collects this information, it reports only the average length of the unemployment. Since other measures of duration, such as the median, or the shape of the distribution itself provide useful information about the severity of unemployment, INE's fuller reporting is extremely helpful. 1/

C. National Accounts

26. Preparation of the national accounts is the responsibility of the Office of National Planning (ODEPLAN). The present system of accounts uses 1965 as its base year, and the series has been taken back to 1960. The massive price movements and structural changes which have occurred over the decade and a half since the base year make it almost impossible to judge the reliability of the data produced. No attempt has been made by the mission to revise the accounts. The purpose of this note is to summarize briefly some of the difficulties of interpreting the existing data; what is now needed is a systematic set of economic censuses and surveys that will form the basis of an entirely new system of national accounts.

1. Production Data

a. Agriculture

27. Estimates of agricultural planting and production for the 14 major field crops are based largely on a sample drawn from the 1965 Agricultural Census, with adjustments on the basis of aerial surveys and marketing reports. Given the enormous changes in relative prices, land ownership and property boundaries--and, consequently land use--which have occurred in the interim, there is no way of knowing the reliability of the estimates "blown up" from the 1965 census and its adjustments. A new agricultural census was taken in 1976, but the processing of the data is still not completed. The results may require a substantial recalculation of recent production estimates. Planting and output estimates for the 1975/76 crop year made by the Office of Agricultural Planning (ODEPA) on the basis of its standard annual survey showed wide variation from those derived from a 10 percent sample of the 1976 census.

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1/ The format of the UC published results is limited to fewer detailed breakdowns in order to facilitate a speedier release of the quarterly reports. The data collected would actually permit a much more detailed breakdown of categories than the published ones. It would be desirable if, subsequent to the release of the quarterly report in its present form, the data could be released on a less aggregated basis, thus permitting a more elaborate and revealing analysis of changes occurring in the labor market. We understand that budgetary limitations are the primary reason this is not currently being done.

28. Production data for animal products are published by both ODEPA and INE and are based principally on reported deliveries to processors—slaughterhouses, milk processors, etc. Conceptually, such data should be relatively reliable and easy to collect. Nevertheless, wide divergencies occur in the estimates made by the two agencies, the year-to-year changes frequently differing in direction as well as magnitude. Further investigation is required to understand the sources of these discrepancies.

29. Finally, there are very significant gaps in the statistical coverage. In particular, there are no systematic data available regarding the annual planting and output of orchard crops or garden fruits and vegetables, products of central importance to Chile's export diversification objective. While it is generally believed, and casually observable, that a major shift in land use is occurring in favor of those commodities, its magnitude cannot be specified.

30. An effort is now under way to improve the quality and quantity of agricultural statistics. In addition to the 1976 census, a computerized, nationwide data collection and processing system is being installed which will provide regionalized up-to-date information on output, marketing, exports, prices, purchases of inputs, inventories, etc. Until this information, along with the census, is available on a more systematic basis, no reliable conclusions are possible regarding the net impact that agrarian reform and the new economic strategy have had and are having on the distribution and utilization of Chile's agricultural resources.

b. Manufacturing

31. Much of the same must be said of the manufacturing statistics, although the problem here is perhaps not so serious. Monthly production indices by manufacturing sub-sectors are constructed by both INE and the private Society for Industrial Development (SOFOFA). <sup>1/</sup> Both indices are based on samples drawn from the 1967 Census of Manufactures, which surveyed establishments of five or more employees. Differences in sample and weights applied result in wide year-to-year divergencies in the sub-sectoral indices with no clear biases evident in their comparisons. The aggregate indices, however, tend to move in fair harmony with one another, signaling only occasional differences in the direction of manufacturing activity. INE has planned for several years to undertake a new survey of manufacturing establishments, in view of the structural changes that have occurred in the sector, but has so far lacked the budgetary resources required to carry it out.

c. Construction

32. The construction sector in the national accounts is estimated on the basis of information received directly from the Ministries of Public Works and Housing and on the SOFOFA and INE indices of production and sales of construction-related industries. The wide divergencies that occur between the national accounts and the underlying indices as shown in the following table are, therefore, puzzling.

A.2: CONSTRUCTION INDICATORS, 1970-1977

Year	Production of Construction Materials <u>a/</u>	Sales of Construction Materials <u>a/</u>	Building Starts <u>b/</u>	Value-Added Construction <u>c/</u>
1970	4.1	1.4	-32.5	2.5
1971	8.7	16.8	209.3	11.4
1972	9.1	4.1	-44.2	-9.3
1973	-4.6	-5.4	-1.2	-11.8
1974	-3.7	-3.6	-30.5	20.0
1975	-42.6	-39.6	-20.9	-31.0
1976	19.0	13.0	116.0	-18.8
1977	20.5	18.9	-38.1	3.5

a/ SOFOFA  
b/ INE  
c/ ODEPLAN

1/ See Appendix II, Tables 8.16, 8.17, and 8.20-8.24.

33. The building starts data are particularly weak indicators, as long lags frequently occur between the issuing of a permit and the actual start of construction. At the same time, construction can extend over varying periods depending on the availability of inputs. The jump in housing starts in 1971, for example, could not be sustained, and many were not completed until several years later. Crediting their completion largely to 1974, however, as the national accounts seem to do, appears inconsistent with the continuing decline in the sales and production of construction-related industries, unless the "value-added" being recorded was largely in the form of redundant labor. One source of the data inconsistencies can probably be found in the inadequate deflation of public works expenditures during a period of irregular three-digit inflation (see para. 37).

d. Problems of Aggregation

34. The extent of structural change that has occurred in Chile compounds the index number problem well known to statisticians. Any aggregate production index will suffer increasing distortion over time, as the various products or sectors composing it experience different rates of growth and/or price change. For example, if relative prices remained constant, aggregation with weights determined by relative values at the beginning of the period would result in a slower calculated rate of growth than if weighted by relative values at the end of the period. This is because the more rapidly growing components of the index will obviously acquire greater relative importance as time passes. More typically, however, the products which experience a faster growth of volume also suffer a relative price decline. In this situation, later year weights may generate a slower aggregate growth rate than the earlier.

A.3: HYPOTHETICAL EXPENDITURE STREAM, 1974-75  
(Current pesos and pesos of December 1974)

Year	Month	Nominal Expenditures	IBRD Adjusted CPI	Real Monthly Expenditures
1974	January	1000	24.0	4166.7
	February	1000	29.9	3344.5
	March	1000	34.1	2932.6
	April	1000	39.3	2544.5
	May	1000	42.7	2341.9
	June	1000	51.6	1938.0
	July	1000	57.5	1739.1
	August	1000	63.8	1567.4
	September	1000	72.0	1388.9
	October	1000	85.6	1168.2
	November	1000	93.9	1065.0
	December	1000	100.0	1000.0
	Total	12000	Avg. 57.9	Total 25196.8
	Deflated total	20725.4		
1975	January	3000	113.9	2633.9
	February	4000	132.7	3014.3
	March	4000	160.9	2386.0
	April	4000	194.3	2058.7
	May	4350	225.4	1929.9
	June	5000	270.0	1857.9
	July	5000	295.1	1694.3
	August	5000	321.4	1555.7
	September	6000	351.0	1709.4
	October	6000	380.5	1576.9
	November	7000	411.7	1700.3
	December	8000	441.0	1814.1
	Total	61350	Avg. 274.8	Total 24025.3
	Deflated total	22325.3		
		<u>Deflation of total by annual inflation</u>		<u>Sum of deflated monthly values</u>
	Year-to-year charge (Percent):	+7.7		-4.6

35. Under the peculiar circumstances of the enormous economic policy changes that have occurred in Chile, the fastest growing sectors in recent years are probably also those which have enjoyed an improvement of relative prices. The elimination of price controls, adjustment and unification of the exchange rate, and the reduction of tariffs and other trade barriers, for example, have worked to improve the relative prices of agricultural and mining commodities. This may also be the case within the agricultural and manufacturing sectors. In agriculture, as noted above, systematic data have not even been collected with respect to many of the high-value orchard and garden crops toward which land use is apparently shifting. Thus, the use of current value-added weights, other things remaining equal, would result in higher real GDP growth rate calculations since 1973 than do the 1965 weights, and might perhaps worsen the figures for 1970-73.

36. In the face of the very large and irregular price movements that have characterized the Chilean economy, the interpretation of aggregated value data becomes more speculative still. With monthly inflation rates ranging from 6 to 21 percent, for example, the periodicity of expenditures over the course of a year is vital to understanding their real implications. As illustrated in the following table, it is quite possible to reach different conclusions about both the size and direction of real change from year to year depending on whether nominal values are deflated by average annual inflation rates or calculated as the sum of deflated monthly values. The latter procedure is often not feasible because of the enormous amount of additional labor involved and the unavailability of sufficient information. Given the large fluctuations occurring in the relative prices of the component items, the picture is complicated further by month-to-month changes in the composition of the aggregate.

37. In attempting to cope with these and other problems, ODEPLAN has introduced ad hoc adjustments to their standard estimating techniques over time, but the mission was not able to ascertain their nature and validity. As regards the production accounts, ODEPLAN has generally started with an estimate of real output changes, on the basis of the various physical output indicators, and has then inflated the 1965 base year values thus derived on the basis of estimated sectoral price changes, in order to produce current price estimates. In this regard, the mission has noted that the implicit sectoral price deflators (inflators) used vary widely year-to-year from the pertinent sectoral sub-indices of the WPI. In the case of agriculture, for example, the implicit sectoral GDP deflator lags far behind the domestic agricultural component of the WPI from 1970 to 1975, while the reverse occurs from 1975 through 1977. Whether this divergence reflects changes in the relative prices of farm inputs, costs of transport, marketing margins, differential treatment of official vs. black market prices, and/or growing compositional obsolescence of the WPI is not ascertainable with the information available. It is interesting to note, however, that accumulated over the entire 1965-77 period, the implicit agricultural and manufacturing deflators are roughly in line with the price changes recorded by the sub-indices of the WPI. From 1965 through 1971, the implicit overall deflator of the GDP runs well above both the WPI and the CPI; in 1972 it is approximately equal to the inflation shown by the IBRD adjusted CPI; and thereafter is roughly equivalent to a simple average of the WPI and the adjusted CPI.

A.4: CHILE PRICE INDICES, 1965-77

(1965 = 100)

Year	WPI	Official CPI	IBRD Adjusted CPI	UC Adjusted CPI	Implicit GDP Deflator
1965	100	100	100	100	100
1966	123	123	123	123	130
1967	147	145	145	145	167
1968	191	184	184	184	221
1969	261	240	240	240	308
1970	355	318	318	325	427
1971	419	382	429	406	528
1972	713	679	1,055	835	979
1973	4,360	3,076	5,926	4,578	5,144
1974	49,213	18,600	26,041	28,076	38,849
1975	286,433	88,306	123,692	133,319	190,802
1976	919,901	275,448	385,929	415,862	638,600
1977	1,676,799	528,736	739,672	797,091	1,287,894

Source: Appendix II, Tables 9.3a-c

2. Savings, Investment, and Consumption

38. Many of the statistical problems affecting the production accounts also throw doubt on the reliability of the expenditure side of the national income accounts. In addition, long-standing methodological weaknesses appear to result in a chronic tendency to understate the proportions of GDP going to fixed investment and savings, particularly household savings, and to overestimate personal consumption. 1/

39. A number of factors contribute to the belief that investment over long periods was underestimated; 2/ principally:

- (a) The chronic tendency toward exchange rate overvaluation implies that imported machinery and equipment, which according to the national accounts have constituted some 25-30 percent of gross domestic investment (GDI), was undervalued when converted to pesos; and

1/ A fuller treatment of this point is found in Markis J. Mamalakis, The Growth and Structure of the Chilean Economy: From Independence to Allende, Yale University Press, New Haven, 1976, pp. 315-344.

2/ Mamalakis (*ibid.*) estimates that the resultant undervaluation of gross investment has averaged some 20-40 percent.

- (b) The value of domestically produced machinery and equipment (about 8 percent of GDI) was also relatively undervalued because of the capital goods sector's comparatively low rates of effective protection.

40. Since gross domestic savings are a function of gross domestic investment, they are under-estimated to a similar degree as the latter. In attributing savings by source, independent estimates are made for foreign savings, government savings, retained corporate earnings and capital depreciation allowances; household savings are then calculated in the usual way as the residual of GDI less the other savings components.

41. This procedure has led to a calculation of negative household savings in every year during 1960-70 and after 1973; only in the 1971-73 period were household savings shown as positive. <sup>1/</sup> That household savings should be low in a country of high chronic inflation, negative real interest rates, and extensive public welfare programs is not surprising. Nevertheless, there are reasons to believe, in addition to the undervaluation of GDI, that the national accounts have systematically underestimated the residual element of the savings equation:

- (a) It is likely, for example, that government savings have tended to be overstated. Until 1965, tax collections were concentrated toward the end of the year reducing their value in real terms relative to the more evenly distributed expenditures. Given Chile's historical inflation rates, the real value of the Government's current account surplus must have been less than suggested by the nominal totals for the year. A further distortion was created throughout the period by the assignment of many recurrent expenditures--e.g., salaries and wages paid by the Agrarian Reform Corporation--to the capital account, thus increasing government savings, even though the expenditures were not classified as investments.
- (b) A significant distortion, at least as compared to other countries, appears to arise out of ODEPLAN's estimates of capital depreciation. For the entire period 1961-1974, annual depreciation charges were on average equivalent to 64 percent of gross fixed investment (GFI), with a low ratio of 58 percent in 1961 and a high of 80 percent in 1973. This ratio rose to 95 and 99 percent, respectively, in 1975 and 1976, reflecting the abnormally low investment rates of the depression. In contrast, comparable data for 13 other Latin American countries show depreciation charges equivalent on average to about 30 percent of gross fixed investment, with no country exceeding 44 percent. This wide divergence reported for Chile is especially puzzling in view of the fact that construction, which is relatively long-lived, constitutes a higher proportion

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<sup>1/</sup> See Appendix II, Table 2.5.



of GFI in Chile than in the other countries sampled. 1/ The primary explanation, aside from the underestimation of GFI itself, would appear to be unusually conservative assumptions about average life expectancies. 2/

1/ The data are taken from the UN yearbook of National Accounts Statistics and IBRD country economic reports. The averages shown are for the years 1970-74:

	<u>Depreciation as percent of GFI</u>
Peru	44
Ecuador	42
Colombia	38
Panama	36
Venezuela	34
Nicaragua	33
Paraguay	31
Dominican Republic	30
Costa Rica	26
Brazil	22
Haiti	22
Honduras	21
Argentina	17

2/ In evaluating data for earlier periods, Mamalakis (*op. cit.*) points out a wide divergence between the price inflators applied to gross investment and depreciation, the latter being tied to the more rapidly rising domestic cost of living while the former was affected by the controlled cost of foreign exchange. From 1965 to 1971, however, the implicit deflators for GFI and for depreciation were the same. In 1972 and 1973, the depreciation inflator lagged behind the GFI inflator; other things being equal, this would suggest an upward bias to the residual estimate of household savings. An attempt was apparently made to compensate in 1974 by reversing the relative inflation rates. The relevant implicit deflators (inflators) are:

	<u>Depreciation</u>	<u>GFI</u>
	(1965 = 100)	
1966	131	131
1967	162	162
1968	212	212
1969	292	292
1970	391	391
1971	487	487
1972	886	995
1973	4,710	5,088
1974	40,983	39,701

42. If the proportions of GDP and national income going to investment and savings are underestimated, as the above discussion suggests, it follows that the share of consumption is overestimated. For most years, it is likely that the overestimation has been absorbed by private consumption, which is calculated as the residual of the expenditure account, i.e., GDP plus imports, less the sum of GDI, government consumption and exports, valued at current prices. The implicit deflator for private consumption expenditures and the official CPI are shown in the following table.

A.5: IMPLICIT DEFLATOR FOR PRIVATE CONSUMPTION EXPENDITURES AND CPI, 1966-77

(1965 = 100)

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Year	Deflator	Official CPI
1965	100	100
1966	125	123
1967	163	145
1968	213	184
1969	292	240
1970	407	318
1971	500	382
1972	911	679
1973	4,870	3,076
1974	38,002	18,600
1975	211,080	88,306
1976	697,828	275,448
1977	1,410,539	528,736

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43. From 1965 through 1970, the deflator consistently rose faster than the official CPI, suggesting that the national accountants were adjusting for the downward biases of the latter. The deflator remains above the official CPI during 1971-73 also, but drops below the IBRD-adjusted CPI in both absolute level and rate of change. To the extent that the IBRD adjusted index better represents the increases of the cost of living during this period, the national accounts overstate the growth of real private consumption. As a consequence of a massive upward adjustment of the implicit consumption deflator in 1974, it rose above all other consumer price indicators and has continued to grow more rapidly. By 1977, the implicit deflator was in absolute terms 90 percent above even the IBRD-adjusted CPI, and 167 percent above the official CPI. It is possible that the national accounts may have exaggerated the squeeze on real consumption in recent years. However, discrepancies of this magnitude serve to emphasize the distortions that have been accumulated in the underlying data.

### 3. Foreign Trade Statistics

44. Final data on imports and exports are available from the Superintendency of Customs only after a lag of two to three years because of the limited technology of collection procedures. In the meantime, estimates on the basis of registration data and information from the large mining companies are made by the Central Bank. These are frequently subject to large revisions when the customs data become available. In view of the importance of international trade in the present development strategy, it is surprising that little has been done to resolve the long-standing inadequacy of current trade data. One obstacle has been the intense rivalry which has existed between Customs and the Central Bank.

45. No index of import and export prices has been published since the late 1960s. An export price index is directly calculated by ODEPLAN for purposes of the constant price national accounts, but the import price index estimated for the same purpose is based somewhat loosely on the FOB price trends of trading partners' exports.

46. The exchange rate applied for conversion of most external transactions into the national accounts is an estimated weighted average of the exchange rates applied to merchandise imports. The over-valuation of the peso throughout the 1960-75 period suggests that foreign trade and factor payments data have been understated in the national accounts. Particularly understated during most of these years were exports of copper which were credited in the national accounts at the discriminatory copper exchange rate, the difference between this peso value and the value when calculated at the average national accounts exchange rate being recorded as an indirect tax.

#### D. Wages and Salaries

47. The wage and salary indices are constructed by INE on the basis of samples drawn from both the private and public sectors. <sup>1/</sup> The original samples included approximately 31,000 blue-collar and 68,000 white-collar workers from the public sector, plus 196,000 blue-collar and 38,000 white-collar workers from the private sector. The age of the samples, however, makes the reliability of these indices, too, subject to doubt.

48. The sample of enterprises for the manufacturing sector, for example, originates in the 1957 census of manufacturing and covers only 473 establishments, each with 20 or more employees. In addition to the large shifts that have occurred within the manufacturing labor force over the past two decades, it is estimated that some 40 percent of the firms in the sample no longer report.

49. Sub-indices are published for each of the five sampled sectors: manufacturing, mining, public utilities, central government, and autonomous public agencies. No data are collected on compensations paid in transport, construction, commerce, other services, or agriculture. The remunerations

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<sup>1/</sup> See Appendix II, Table 9.18.

included are basic wage and overtime, vacation and holiday pay, incentive bonuses, and the value of fringe benefits accorded regularly, whether in cash or kind. The indices exclude irregular bonuses and family allowances disbursed by employers as agents of the social security institutions. Exclusion of the latter understates the gains made, particularly by blue-collar workers, over the past 15 years. Whatever biases may be introduced by the other weaknesses noted are unknown.

E. Public Sector Accounts

50. Statistics pertaining to public sector revenues and expenditures are only partial, at best, for any given year and vary so much in coverage, accounting procedures (e.g., cash or accrual basis), and line definitions from year to year as to reduce their utility for analytical purposes. Consequently, most studies--and this one is no exception--are forced to treat only the central government accounts, which suffer many of the same problems but for which the distortions are somewhat less. The following is a list of just some of the specific problems involved in using available public sector accounts data: 1/

- a. The rapid transfer of assets from the private sector to the public sector and back again resulted in large discontinuous changes in the actual dimensions of the public sector. Not only do these changes per se complicate fiscal analysis, but to make matters worse they are captured in only varying degree by the accounting system. Of the enterprises taken over in the 1971-73 period, for example, it appears that only the operations of the copper mines, CHILECTRA, and the telecommunications company (CTC) were incorporated into the consolidated public sector accounts.
- b. Incomplete coverage was also frequently the result of the degree of administrative independence enjoyed by certain decentralized agencies and the breakdown of the central authority over them. This apparently explains the absence of such important enterprises as ENDESA, SOQUIMICH and IANSA from the consolidated information for 1970-73. Prior to 1967, different budget formats and accounting procedures among the various public sector institutions made consolidation virtually impossible.
- c. Another source of understatement and discontinuity in the reporting of the public sector role was the practice of including only cash transactions in the accounts, therefore excluding the very large expenditures financed both externally--official project loans, suppliers credits, PL480, etc.--and domestically by private contractors. Since 1976, all such expenditures are included in the accounts.

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1/ These problems are, of course, additional to the difficulties pointed out earlier of discerning the real trends implied by the nominal data.

- d. Similar to the previous point, a number of earmarked taxes-- e.g., highway tolls--were created over time with both the revenues and expenditures kept formally outside the budget. Such extrabudgetary accounts have been progressively eliminated and incorporated into the public sector budget since 1973. This discontinuity left unadjusted would result in some overstatement of the growth of public sector revenues and understatement of the decline in expenditures since 1973.
- e. During 1972 and 1973, when Congress denied budgetary requests from the Executive for certain agencies, the expenditures were financed extrabudgetarily through the banking system. CORA and INE were among the institutions financed in this way.
- f. Year-to-year distortions of the internal structure of the public sector, as described by the statistics, are introduced by inter alia, changes in the degree and coverage of tax exemptions enjoyed by public sector agencies (such exemptions were eliminated after 1973), changing classification of such expenditures as education and road maintenance between current and capital accounts, changing the treatment of central government social security contributions from a transfer to a direct personnel cost (1974), the withholding of these contributions altogether in 1967 and 1968, and the shifting of the funding of certain nutrition programs from the central government budget to the Family Allowance Fund (1975).

The Finance Ministry has just completed a new series of summary central government revenue and expenditure data for 1960-76. While the new series, which is used in this report, attempts to apply a consistent approach over the period, it cannot easily be extended beyond 1976 since the change in the budget law in that year requires the Ministry to undertake exhaustive analyses to update the series yearly.

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I. HUMAN RESOURCES, LABOR STATISTICS



Table 1.1: CHILE - ESTIMATED AND PROJECTED MIDYEAR POPULATION OF CHILE, 1950-1985

Year	Population (Thousands)	Average Year-to-Year Change (Percent)
1950	6,091	
1955	6,743	2.1
1960	7,585	2.4
1965	8,510	2.3
1966	8,686	2.1
1967	8,859	2.0
1968	9,030	1.9
1969	9,199	1.9
1970	9,369	1.8
1971	9,533	1.8
1972	9,703	1.8
1973	9,875	1.8
1974	10,047	1.7
1975	10,214	1.7
1976	10,375	1.6
1977	10,531	1.5
1978	10,689	1.5
1979	10,848	1.5
1980	11,008	1.5
1985	11,845	1.5
1990	12,703	1.4
2000	14,333	1.2

Source: The figures for 1950-1970 are official estimates based on adjusted data from the 1952, 1960, and 1970 censuses of population (ODEPLAN, Proyección de la Población de Chile por Sexo y Grupos Quinquenales de Edad, 1950-2000, Santiago, 1975; 1971-2000 are projections made by the U.S. Bureau of the Census (Country Demographic Profiles-Chile, Washington, D.C., 1978).

Table 1.2: CHILE - AGE-SEX DISTRIBUTION OF THE POPULATION, 1950, 1960 and 1970

(Thousands of persons)

Age Group	1950				1960				1970			
	Males	Females	Total	Male/Female (%)	Males	Females	Total	Male/Female (%)	Males	Females	Total	Male/Female (%)
0-4	453.1	447.1	900.3	101.3	588.6	579.2	1,167.8	101.6	607.9	597.4	1,205.3	101.8
5-9	391.6	385.9	777.5	101.5	474.0	466.0	940.0	101.7	621.7	614.2	1,235.8	101.2
10-14	327.5	321.7	649.2	101.8	433.1	428.5	861.6	101.1	566.2	560.6	1,126.8	101.0
15-19	288.3	283.0	571.3	101.9	380.8	376.8	757.6	101.1	462.7	457.6	920.3	101.1
20-24	277.6	274.0	551.6	101.3	313.9	311.3	625.1	100.8	417.2	416.9	834.1	100.1
25-29	227.1	225.2	452.3	100.8	271.6	270.8	542.4	100.3	362.2	363.3	725.5	99.7
30-34	203.6	204.4	408.0	99.6	258.9	260.4	519.3	99.4	297.2	299.2	596.4	99.3
35-39	183.8	186.5	370.4	98.6	209.6	212.4	421.9	98.7	255.3	259.4	514.7	98.4
40-44	164.0	164.7	328.7	99.6	185.4	191.1	376.5	97.0	240.8	248.1	488.9	97.1
45-49	129.5	135.5	264.9	95.6	163.8	172.2	336.0	95.1	191.3	200.2	391.5	95.6
50-54	114.9	124.1	239.0	92.6	141.7	149.1	290.8	95.0	164.8	177.5	342.3	92.8
55-59	89.2	99.7	189.0	89.5	106.9	118.8	225.7	90.0	140.0	156.3	296.3	89.6
60-64	69.9	78.0	147.9	89.6	88.9	103.7	192.6	85.7	114.0	130.0	244.1	87.7
65-69	42.5	51.8	94.3	82.0	62.4	77.0	139.4	81.0	78.1	97.1	175.2	80.4
70-74	33.8	42.5	76.4	79.5	42.2	53.4	95.6	79.0	56.2	76.4	132.5	73.6
75 and above	28.4	41.9	70.3	67.8	37.0	55.7	92.7	66.4	53.1	84.5	138.6	62.8
Total	3,024.9	3,065.9	6,090.8	98.7	3,758.8	3,826.6	7,585.4	98.2	4,628.8	4,739.8	9,368.6	97.7

Source: ODEPLAN, Proyección de la Población..., op. cit.

**Table 1.2a:** CHILE - AGE DISTRIBUTION OF THE POPULATION BY SEX, 1950, 1960 AND 1970

(Percent)

Age Group	1950			1960			1970		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0- 4	15.0	14.6	14.8	15.6	15.1	15.4	13.1	12.6	12.9
5- 9	12.9	12.6	12.8	12.6	12.1	12.4	13.4	13.0	13.2
10-14	10.8	10.5	10.7	11.5	11.2	11.4	12.2	11.7	12.0
15-19	9.5	9.2	9.4	10.1	9.8	10.0	10.0	9.7	9.8
20-24	9.2	8.9	9.1	8.4	8.1	8.2	9.0	8.8	8.9
25-29	7.5	7.3	7.4	7.2	7.1	7.1	7.8	7.7	7.7
30-34	6.7	6.7	6.7	6.9	6.8	6.8	6.4	6.3	6.4
35-39	6.1	6.1	6.1	5.5	5.6	5.6	5.5	5.5	5.5
40-44	5.4	5.4	5.4	4.9	5.0	5.0	5.2	5.2	5.2
45-49	4.3	4.4	4.3	4.4	4.5	4.4	4.1	4.2	4.2
50-54	3.8	4.0	3.9	3.8	3.9	3.8	3.6	3.7	3.6
55-59	3.0	3.2	3.1	2.8	3.1	3.0	3.0	3.3	3.2
60-64	2.3	2.5	2.4	2.4	2.7	2.5	2.5	2.7	2.6
65-69	1.4	1.7	1.5	1.7	2.0	1.8	1.7	2.0	1.9
70-74	1.1	1.4	1.2	1.1	1.4	1.3	1.2	1.6	1.4
75 and above	<u>1.0</u>	<u>1.3</u>	<u>1.1</u>	<u>1.0</u>	<u>1.5</u>	<u>1.3</u>	<u>1.2</u>	<u>1.8</u>	<u>1.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Table 1.2

**Table 1.3:** CHILE - ESTIMATED AND PROJECTED POPULATION BY AGE AND SEX, 1970 (ADJUSTED), 1976, AND 1985

Age Group	Adjusted 1970 Census <sup>a/</sup>					
	Thousands of Persons			Age Distribution (%)		
	Male	Female	Total	Male	Female	Total
0- 4	605.8	595.3	1,201.1	13.1	12.6	12.9
5- 9	619.5	612.0	1,231.5	13.4	13.0	13.2
10-14	564.2	558.7	1,122.9	12.2	11.8	12.0
15-19	461.1	456.0	917.1	10.0	9.7	9.8
20-24	415.7	415.5	831.2	9.0	8.8	8.9
25-29	360.9	362.1	723.0	7.8	7.7	7.7
30-34	296.2	298.2	594.3	6.4	6.3	6.4
35-39	254.4	258.5	512.9	5.5	5.5	5.5
40-44	240.0	247.2	487.2	5.2	5.2	5.2
45-49	190.6	199.5	390.1	4.1	4.2	4.2
50-54	164.2	176.9	341.1	3.6	3.7	3.7
55-59	139.6	155.7	295.3	3.0	3.3	3.2
60-64	113.6	129.6	243.2	2.5	2.7	2.6
65-69	77.8	96.7	174.6	1.7	2.0	1.9
70-74	56.0	76.1	132.1	1.2	1.6	1.4
75 and Above	52.9	85.2	138.1	1.1	1.8	1.5
Total	4,612.6	4,723.2	9,335.8	100.0	100.0	100.0

Age Group	Midyear 1976 (Projected)					
	Thousands of Persons			Age Distribution (%)		
	Male	Female	Total	Male	Female	Total
0- 4	600.7	587.4	1,188.1	11.7	11.2	11.5
5- 9	595.7	587.1	1,182.8	11.6	11.2	11.4
10-14	617.5	611.2	1,228.7	12.1	11.6	11.8
15-19	578.0	574.3	1,152.2	11.3	10.9	11.1
20-24	472.3	470.2	942.5	9.2	8.9	9.1
25-29	414.9	418.4	833.4	8.1	8.0	8.0
30-34	364.1	370.1	734.1	7.1	7.0	7.1
35-39	299.0	305.4	604.4	5.8	5.8	5.8
40-44	250.2	258.4	508.6	4.9	4.9	4.9
45-49	232.7	245.2	477.9	4.5	4.7	4.6
50-54	186.3	200.9	387.2	3.6	3.8	3.7
55-59	152.7	170.9	323.7	3.0	3.3	3.1
60-64	125.8	147.8	273.6	2.5	2.8	2.6
65-69	98.2	119.6	217.8	1.9	2.3	2.1
70-74	65.4	86.3	151.6	1.3	1.6	1.5
75 and Above	64.2	104.1	168.3	1.3	2.0	1.6
Total	5,117.7	5,257.3	10,375.0	100.0	100.0	100.0

Age Group	1985 (Projected)					
	Thousands of Persons			Age Distribution (%)		
	Male	Female	Total	Male	Female	Total
0- 4	591.5	574.0	1,165.6	10.1	9.6	9.8
5- 9	562.8	546.9	1,109.7	9.6	9.1	9.4
10-14	600.1	590.0	1,190.0	10.3	9.8	10.0
15-19	594.5	588.1	1,182.6	10.2	9.8	10.0
20-24	611.4	608.4	1,219.8	10.5	10.1	10.3
25-29	552.1	553.2	1,105.3	9.5	9.2	9.3
30-34	444.4	448.1	892.4	7.6	7.5	7.5
35-39	395.5	405.7	801.9	6.8	6.8	6.8
40-44	339.0	351.3	690.4	5.8	5.9	5.8
45-49	272.5	286.0	558.5	4.7	4.8	4.7
50-54	226.6	243.7	470.3	3.9	4.1	4.0
55-59	203.6	227.1	430.7	3.5	3.8	3.6
60-64	151.0	176.0	327.0	2.6	2.9	2.8
65-69	118.1	146.3	264.5	2.0	2.4	2.2
70-74	87.6	116.5	204.1	1.5	1.9	1.7
75 and Above	90.9	142.0	232.9	1.6	2.4	2.0
Total	5,841.6	6,003.3	11,844.9	100.0	100.0	100.0

<sup>a/</sup> April 1970.

Source: U.S. Bureau of the Census, *op. cit.*

Table 1.4: CHILE - GEOGRAPHICAL DISTRIBUTION OF THE POPULATION BY REGION AND PROVINCE AND BY PROPORTION URBAN AND RURAL AS REPORTED IN THE UNADJUSTED CENSUSES OF 1952, 1960, AND 1970

(Population in thousands)

Region and Province	Population in 1952				Population in 1960				Population in 1970 <sup>2/</sup>			
	Total	% of Nat'l. Popn.	Percent Urban <sup>1/</sup>	Percent Rural	Total	% of Nat'l. Popn.	Percent Urban	Percent Rural	Total	% of Nat'l. Popn.	Percent Urban	Percent Rural
National Total	5,933	100.0	60.2	39.8	7,374	100.0	68.2	31.8	8,884	100.0		
<u>Northern Zone</u>	<u>630</u>	<u>10.6</u>	<u>58.9</u>	<u>41.1</u>	<u>764</u>	<u>10.4</u>	<u>72.9</u>	<u>27.1</u>	<u>920</u>	<u>10.4</u>		
Tarapaca	103	1.7	59.2	39.8	123	1.7	87.1	12.9	175	2.0		
Antofagasta	185	3.1	89.2	10.8	215	2.9	95.6	4.4	252	2.9		
Atacama	80	1.4	51.3	48.7	116	1.6	75.9	24.1	153	1.7		
Coquimbo	262	4.4	39.3	60.7	309	4.2	53.9	46.1	340	3.8		
<u>Central Zone</u>	<u>3,227</u>	<u>54.4</u>	<u>71.2</u>	<u>28.8</u>	<u>4,176</u>	<u>56.6</u>	<u>77.5</u>	<u>22.5</u>	<u>5,275</u>	<u>58.8</u>		
Aconcagua	128	2.2	39.8	60.2	141	1.9	58.6	41.4	161	1.8		
Valparaiso	498	8.4	85.3	14.7	618	8.4	90.0	10.0	738	8.3		
Santiago	1,755	29.6	86.7	13.3	2,437	33.0	90.8	10.0	3,231	36.4		
O'Higgins	255	3.8	40.4	59.6	259	3.5	52.5	47.5	307	3.5		
Colchagua	140	2.3	26.4	73.6	159	2.2	33.1	66.9	169	1.9		
Curico	89	1.5	37.1	62.9	106	1.4	41.0	59.0	115	1.3		
Talca	174	2.9	39.7	60.3	206	2.8	44.7	55.3	232	2.6		
Maule	72	1.2	36.1	63.9	80	1.1	39.4	60.6	83	0.9		
Líneres	146	2.5	30.1	69.9	171	2.3	36.3	63.7	189	2.1		
<u>Southern Zone</u>	<u>2,076</u>	<u>35.0</u>	<u>43.6</u>	<u>56.4</u>	<u>2,434</u>	<u>33.0</u>	<u>50.7</u>	<u>49.3</u>	<u>2,740</u>	<u>30.8</u>		
Nuble	251	4.2	35.1	64.9	286	3.9	40.0	60.0	317	3.6		
Concepción	412	7.0	76.1	23.9	539	7.3	82.0	18.0	644	7.2		
Arauco	72	1.2	28.6	71.4	89	1.2	45.6	54.4	99	1.1		
Bío-Bío	138	2.3	31.9	68.1	169	2.3	38.0	62.0	194	2.2		
Malleco	159	2.7	38.9	61.1	174	2.4	44.3	55.7	177	2.0		
Cautín	365	6.2	33.1	66.9	395	5.4	38.7	61.3	423	4.8		
Valdivia	233	3.9	37.3	62.7	260	3.5	44.6	55.4	278	3.1		
Osorno	123	2.1	40.7	59.3	144	2.0	47.0	53.0	160	1.8		
Llanquihue	140	2.4	32.1	67.9	167	2.3	33.4	56.6	199	2.2		
Chiloe	101	1.7	17.8	82.2	99	1.3	22.2	77.8	111	1.2		
Aysen	26	0.4	44.5	55.5	38	0.5	51.4	48.6	49	0.6		
Magallanes	55	0.9	81.8	18.2	73	1.0	83.9	16.1	89	1.0		

Source: Instituto Nacional de Estadísticas, censuses of the population, 1952, 1960, 1970.

<sup>1/</sup> Urban is defined, by the census, as any populated center of some geographic and administrative importance which provides certain public services.

<sup>2/</sup> The summary volume for the 1970 census did not present urban-rural totals by province.

Table 1.4a: CHILE - INTERCENSAL POPULATION CHANGE BY ZONE AND PROVINCE, 1952 - 1970

Region and Province	1952-1960			1960-70		
	Absolute Change in Population ('000)	Percentage Change	Annual Growth Rate	Absolute Change in Population ('000)	Percentage Change	Annual Growth Rate
National Total	1,441	24.5	2.8	1,511	20.5	1.9
<u>Northern Zone</u>	<u>134</u>	<u>21.3</u>	<u>2.4</u>	<u>156</u>	<u>20.4</u>	<u>1.9</u>
Tarapaca	20	19.4	2.2	52	42.3	3.6
Antofagasta	30	16.2	1.9	37	17.2	1.6
Atacama	36	45.0	4.8	37	31.9	2.8
Coquimbo	47	17.9	2.1	31	10.0	1.0
<u>Central Zone</u>	<u>949</u>	<u>29.4</u>	<u>3.3</u>	<u>1,049</u>	<u>25.1</u>	<u>2.3</u>
Aconcagua	13	10.2	1.2	20	14.2	1.3
Valparaiso	12	24.1	2.7	120	19.4	1.8
Santiago	681	38.8	4.2	795	32.6	2.9
O'Higgins	35	15.7	1.8	47	18.1	1.7
Colchagua	19	13.6	1.6	10	6.3	0.6
Curico	17	19.1	2.2	9	8.5	0.8
Talca	32	18.4	2.1	26	12.6	1.2
Maule	8	11.1	1.3	3	3.8	0.4
Linares	25	17.1	2.0	18	10.5	1.0
<u>Southern Zone</u>	<u>358</u>	<u>17.2</u>	<u>2.0</u>	<u>306</u>	<u>12.6</u>	<u>1.2</u>
Nuble	35	13.9	1.6	31	10.8	1.0
Concepción	127	29.1	3.4	105	19.5	1.8
Arauco	18	25.0	2.8	9	10.0	0.9
Bío-Bío	31	22.5	2.6	25	14.8	1.4
Malleco	15	9.4	1.1	3	1.7	0.2
Cautin	30	8.2	1.0	28	7.1	0.7
Valdivia	27	11.6	1.4	18	6.9	0.7
Osorno	21	17.1	2.0	16	11.1	1.1
Llanquihue	27	19.3	2.2	32	19.2	1.8
Chiloe	- 2	- 2.0	-0.3	12	12.1	1.2
Aysen	12	46.2	4.9	11	28.9	2.6
Magallanes	18	32.7	3.6	16	21.9	2.0

Source: Table 1.4

Table 1.5: CHILE - POPULATION GROWTH FOR SELECTED CITIES, 1952-1970

Cities	Population			Annual Growth Rates		
	1952	1960	1970	1952-1960	1960-1970	1952-1970
Gran Santiago	1,423,623	1,983,945	2,861,900	4.2	3.7	4.0
Valparaiso-Viña del Mar	315,506	384,324	430,000	2.5	1.2	1.7
Concepción- Talcahuano	220,391	314,412	326,200	4.5	0.4	2.2
Antofagasta	62,272	87,860	125,100	4.4	3.6	4.0
Temuco	51,497	72,132	110,300	4.3	4.3	4.3
Talca	55,059	67,463	94,500	2.6	3.4	3.0
Arica	18,147	43,334	87,700	11.4	7.3	9.1
Chillan	52,576	46,774	87,600	3.0	2.7	2.9
Rancagua	39,972	53,318	86,400	3.7	4.9	4.4
Valdivia	45,128	61,334	82,400	3.9	3.0	3.4
Osorno	40,120	54,693	68,800	3.9	2.3	3.0
Iquique	39,576	50,665	64,500	3.1	2.4	2.8
Puerto Montt	28,944	41,681	62,700	4.7	4.1	4.4
La Serena	37,618	40,854	61,900	1.0	4.2	2.8
Punta Arenas	34,440	51,200	61,900	5.1	1.9	3.3
Coquimbo	24,962	33,794	50,400	3.9	4.1	4.6

Source: Instituto Nacional Estadísticas, censuses of the population, 1952, 1960, 1970.

**Table 1.6:** CHILE - ESTIMATED AGE-SPECIFIC FERTILITY RATES AND SELECTED DERIVED MEASURES, 1960 and 1970 - 1975

Age	Births per 1,000 Women						
	1960	1970	1971	1972	1973	1974	1975
15 to 19 years	78	79	83	85	82	78	74
20 to 24 years	226	184	192	196	196	185	173
25 to 29 years	263	175	177	175	167	161	149
30 to 34 years	221	129	131	126	119	112	103
35 to 39 years	154	90	86	80	74	71	67
40 to 44 years	65	43	41	38	34	32	29
45 to 49 years	14	8	7	7	15	6	5
<u>DERIVED MEASURES</u>							
Total fertility rate per woman <u>a/</u>	5.11	3.54	3.59	3.53	3.43	3.22	3.00
Gross reproduction rate per woman <u>b/</u>	2.51	1.74	1.76	1.73	1.68	1.58	1.47
Net reproduction rate per woman <u>c/</u>	2.07	1.54	1.57	1.55	1.51	1.44	1.35
Sex ratio at birth <u>d/</u>	1.03	1.04	1.04	1.04	1.04	1.04	1.04

a/ The average number of children that would be born per woman if all women lived to the end of their childbearing years and bore children according to given age-specific fertility rates. It is equal to 5 x sum of age-specific fertility rates ÷ 1,000.

b/ The average number of daughters born per women in accordance with a given set of age-specific fertility rates and assuming that all women live to the end of their childbearing years.

c/ The gross reproduction rate adjusted for the mortality of women from birth through the end of their childbearing years.

d/ Number of male births to each female birth.

Source: U.S. Bureau of the Census, op. cit.



Table 1.7: CHILE - POPULATION, AGES 5 to 19, ENROLLED IN SCHOOL, BY SEX: 1970 <sup>a/</sup>  
(Percent)

Age Group	Both Sexes	Male	Female
Total, 5 to 19 years	74.0	75.0	73.1
5 to 9 years	73.1	72.1	74.0
10 to 14 years	92.2	93.2	91.2
15 to 19 years	53.2	56.4	50.2

a/ Enrollment is defined as attendance at any public or private educational institution at any level of education. The distribution of the population enrolled in school, by sex, is based on data from the 5 percent census sample, weighted to equal the number of total population enrolled in school obtained from the 100 percent tabulation. (School enrollment data, by sex, are not available from the 100 percent tabulation.)

Source: INE

Table 1.7a: CHILE - POPULATION, AGES 6 to 14, ENROLLED IN SCHOOL, 1970-1978

	1970	1978
A. Population, ages 6-12 (thousands)	1,639	1,830
B. Children in grades 1-6 (thousands)	1,752	1,810
C. Ratio: B/A (percent)	107	102
D. Population, ages 13-14 (thousands)	438	500
E. Children in grades 7-8 (thousands)	288	423
F. Ratio: E/D (percent)	66	85

Source: Ministry of Education, 1970 census, and mission interpolation of 1970 census proportions to 1978 population data

**Table 1.8:** CHILE - POPULATION, AGES 15 YEARS AND OVER, WHO HAVE COMPLETED SCHOOL, BY LEVEL AND SEX: 1970

	Percent Who Have Completed At Least: <sup>a/</sup>								
	Primary School			Secondary School			Higher Level		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total, 15 years and over	32.7	33.7	31.9	3.8	4.9	2.8	1.4	2.0	0.8
15 to 24 years	37.9	37.4	38.3	3.8	4.2	3.3	0.3	0.4	0.3
25 to 39 years	36.2	37.6	35.0	4.8	6.2	3.6	2.2	2.9	1.4
40 years and over	25.7	27.3	24.3	3.0	4.5	1.7	1.6	2.7	0.7

<sup>a/</sup> Primary education is defined as completing at least 8 years of primary school; secondary education as completing at least 6 years at a secondary, middle, commercial, industrial, agricultural, female technical, or normal school; and higher education as completing at least 4 years at a university.

Source: INE

Table 1.9: CHILE - CENSUS DISTRIBUTION OF ECONOMICALLY ACTIVE POPULATION BY JOB STATUS AND SECTOR OF ECONOMIC ACTIVITY, 1960 and 1970

(Numbers of workers)

Branch of Activity	Employers and Self-Employed		Wage and Salary Earners		Unremunerated Family Workers		Total Labor Force <sup>1/</sup>	
	1960	1970	1960	1970	1960	1970	1960	1970
Agriculture, forestry, hunting and fishing	165,315	171,360	443,752	341,340	52,743	31,880	662,379	552,340
Mining and quarrying	3,268	5,740	87,489	67,960	140	160	91,112	75,300
Manufacturing	98,850	79,160	326,178	321,040	3,597	1,480	428,862	415,440
Construction	14,443	14,780	120,967	130,060	278	260	135,758	148,500
Electricity, gas, water and sanitary service	286	720	18,538	20,120	5	20	18,866	21,280
Commerce and finance	127,232	158,340	108,031	174,200	5,671	3,880	241,018	345,080
Transport, storage and communication	22,178	31,700	94,957	118,860	731	380	117,941	155,520
Services	46,636	98,560	495,718	551,680	1,337	1,680	544,270	667,540
Activities not adequately described	3,750	21,460	43,991	102,480	425	3,240	148,461	226,360
Totals	481,958	582,220	1,739,621	1,827,740	64,927	42,980	2,388,667	2,607,360
Category as percent of total labor force	20.2	22.3	72.8	70.1	2.7	1.6	100.0	100.0

Note: Because of varying census definitions, the data are only roughly comparable between census years.

<sup>1/</sup> The totals in this column are greater than the sum of the three status categories due to the omission of the category labeled "other or status unknown."

Source: INE, 1960 and 1970 censuses of population

Table 1.10: CHILE - CENSUS DISTRIBUTION OF ACTIVE LABOR FORCE BY JOB STATUS AND OCCUPATIONAL CATEGORY, 1960 and 1970

(Numbers of workers)

Occupational Category	Employers and Self-Employed		Wage and Salary Earners		Unremunerated Family Workers		Total Labor Force <sup>1/</sup>	
	1960	1970	1960	1970	1960	1970	1960	1970
Professional, technical and related workers	13,335	22,460	104,028	154,880	185	460	118,203	185,060
Administrative, executive and managerial workers	34,166	32,300	11,073	16,500	577	340	45,952	49,860
Clerical workers	2,964	7,460	157,075	236,620	1,151	380	162,026	249,000
Sales workers	113,073	136,580	50,108	68,520	4,688	3,020	168,219	213,680
Farmers, fishermen, hunters, loggers and related workers	164,739	174,000	438,128	336,320	52,584	32,000	657,205	549,860
Workers in transport and communication	20,751	28,380	55,836	71,160	731	460	77,751	103,600
Craftsmen, prod.-process workers and laborers not classified elsewhere	109,748	138,580	574,905	600,260	4,149	2,680	690,115	767,280
Service, sport and recreation workers	21,296	27,680	298,266	269,900	751	540	321,519	303,740
Workers not classified by occupation	1,886	14,780	52,371	73,580	111	3,100	147,677	185,280
Totals	481,958	582,220	1,739,621	1,827,740	64,927	42,980	2,388,667	2,607,360

<sup>1/</sup> The totals in this column are greater than the sum of the three status categories due to the omission of the category labeled "other or status unknown."

Source: INE, 1960 and 1970 censuses of population

**Table 1.11:** CHILE - PERCENT OF POPULATION ECONOMICALLY ACTIVE,<sup>a/</sup> BY AGE AND SEX, 1952, 1960 AND 1970

(Percent)

	1952			1960			1970		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<u>Total, 12 Years and Over</u>	<u>78.1</u>	<u>24.8</u>	<u>50.7</u>	<u>77.5</u>	<u>20.9</u>	<u>48.3</u>	<u>71.7</u>	<u>19.7</u>	<u>45.2</u>
12-14	9.0 <sup>a/</sup>	3.6 <sup>a/</sup>	6.3 <sup>a/</sup>	11.8	3.9	7.9	5.8	2.3	4.0
15-19	72.2	30.0	50.7	61.7	23.5	42.2	45.8	16.7	30.9
20-24	93.3	35.6	63.2	91.6	32.4	60.9	85.5	31.9	57.7
25-29	)	)	)	97.0	27.9	60.9	96.7	29.7	62.0
30-34	97.1)	29.4)	61.9)	97.5	23.8	59.7	98.1	25.6	60.6
35-39	)	)	)	97.0	22.5	58.4	98.0	24.6	59.9
40-44	97.2)	27.6)	62.7)	95.7	22.2	58.2	96.6	23.0	59.0
45-49	)	)	)	93.4	21.3	56.2	94.0	21.4	56.4
50-54	93.7)	25.6)	59.2)	88.0	19.4	53.3	88.5	19.3	52.3
55-59	)	)	)	83.7	16.7	49.3	82.6	15.5	47.3
60-64	88.2)	21.0)	53.2)	76.8	13.7	43.5	72.1	11.1	40.0
65 and over	70.2	13.2	38.8	51.4	7.9	27.3	42.4	6.5	22.5

<sup>a/</sup> Ages 10-14.

Sources: National Institute of Statistics, Censuses of 1952, 1960 and 1970

Table 1.12: CHILE - NATIONAL LABOR FORCE CHARACTERISTICS, 1975

(Thousands of persons)

	Total	Male			Female			Total	Total
		Urban	Rural	Total	Urban	Rural	Total		
<u>Total Population</u>	<u>10,311.8</u>	<u>3,583.3</u>	<u>1,360.0</u>	<u>4,943.3</u>	<u>4,092.0</u>	<u>1,276.5</u>	<u>5,368.5</u>	<u>7,675.3</u>	<u>2,636.5</u>
Under 12 years	2,756.7	967.1	437.6	1,404.7	946.4	405.6	1,352.0	1,913.5	843.2
12 years and over	7,555.1	2,616.2	922.4	3,538.6	3,145.6	870.9	4,016.5	5,761.8	1,793.3
<u>Outside Labor Force</u>	<u>4,371.6</u>	<u>1,003.3</u>	<u>258.0</u>	<u>1,261.3</u>	<u>2,353.5</u>	<u>756.8</u>	<u>3,110.3</u>	<u>3,356.8</u>	<u>1,014.8</u>
Homemakers	2,137.5	17.2	14.9	32.1	1,533.2	572.2	2,105.4	1,550.4	587.1
Students and other inactives	2,234.1	986.1	243.1	1,229.2	820.3	184.6	1,004.9	1,806.4	427.7
<u>Active Labor Force</u>	<u>3,183.5</u>	<u>1,612.9</u>	<u>664.4</u>	<u>2,277.3</u>	<u>792.1</u>	<u>114.1</u>	<u>906.2</u>	<u>2,405.0</u>	<u>778.5</u>
Employed	2,715.9	1,373.3	616.1	1,989.4	632.4	94.1	726.5	2,005.7	710.2
Unemployed	467.6	239.6	48.3	287.0	159.7	20.0	179.7	399.3	68.3
Previously employed	(308.2)	(182.5)	(32.3)	(214.8)	(84.5)	( 8.9)	(93.4)	(267.0)	(41.2)
Seeking first job	(159.4)	( 57.1)	(16.0)	( 73.1)	(75.2)	(11.1)	(86.3)	(132.3)	(27.1)

Source: National Institute of Statistics

Table 1.13: CHILE - NATIONAL LABOR FORCE, EMPLOYED AND UNEMPLOYED BY SECTOR, URBAN/RURAL, 1975

(Thousands of persons)

	Labor Force			Employed			Unemployed		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Agriculture	610.3	91.3	519.0	535.9	83.2	502.7	74.4	8.1	16.3
Mining	89.7	73.4	16.3	83.3	68.1	15.2	6.4	5.3	1.1
Industrial Manufacturing	528.5	476.9	51.6	456.7	410.2	46.5	71.8	66.7	5.1
Electricity, Gas and Water	26.0	19.6	6.4	21.2	15.0	6.2	4.8	4.6	0.2
Construction	170.3	148.1	22.2	121.4	103.5	17.9	48.9	44.6	4.3
Commerce	436.0	400.2	35.8	397.4	364.5	32.9	38.6	35.7	2.9
Transport, Warehousing, etc.	199.4	183.5	15.9	175.4	162.0	13.4	24.0	21.5	2.5
Financial Services	79.7	78.4	1.3	71.2	70.0	1.2	8.5	8.4	0.1
Public Administration	208.1	192.9	15.2	193.3	178.4	14.9	14.8	14.5	0.3
Education	172.8	152.9	19.9	166.7	148.4	18.3	6.1	4.5	1.6
Health	99.1	95.0	4.1	92.4	88.5	3.9	6.7	6.5	0.2
Other Services	379.9	340.4	39.5	331.7	297.7	34.0	48.2	42.7	5.5
Other	24.3	20.1	4.2	19.3	16.2	3.1	5.0	3.9	1.1
Seeking work for first time	159.4	132.3	27.1				159.4	132.3	27.1
<u>Total</u>	<u>3,183.5</u>	<u>2,405.0</u>	<u>778.5</u>	<u>2,715.9</u>	<u>2,005.7</u>	<u>710.2</u>	<u>467.6</u>	<u>399.3</u>	<u>68.3</u>

Source: National Institute of Statistics

Table 1.14: CHILE - NATIONAL LABOR FORCE, EMPLOYED AND UNEMPLOYED, BY JOB CLASSIFICATION, URBAN/RURAL, 1975

(Thousands of persons)

	Labor Force			Employed			Unemployed		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Employers	61.6	52.2	9.4	60.7	51.3	9.4	0.9	0.9	-
Self-employed	687.9	449.0	338.9	665.3	428.2	237.1	22.6	20.8	1.8
White-collar workers	961.1	897.3	63.8	879.3	821.0	58.3	81.8	76.3	5.5
Blue-collar workers	1,226.4	842.3	384.1	1,025.3	675.0	350.3	201.1	167.3	33.8
Unremunerated family workers	87.1	31.9	55.2	85.3	30.2	55.1	1.8	1.7	0.1
Seeking work for first time	<u>159.4</u>	<u>132.3</u>	<u>27.1</u>				<u>159.4</u>	<u>132.3</u>	<u>27.1</u>
Total	3,183.5	2,405.0	778.5	2,715.9	2,005.7	710.2	467.6	399.3	68.3

Source: National Institute of Statistics



Table 1.15: LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT IN GREATER SANTIAGO, 1968-1978

(Thousands of persons)

Year/Month	Population 14 Years+	Labor Force	Employed	Unemployed				Participation Rate (2/1)	Unemployment Rate (4/2)
				Total	Previously Employed	Looking for First Job	Not Active but Desirous of Employment		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1968 March	1,728.7	902.7	852.4	50.3	40.8	9.6	166.9	52.2	5.6
June	1,752.1	929.1	869.7	59.4	48.3	11.2	156.6	53.0	6.4
September	1,792.5	943.5	879.5	63.6	52.2	11.4	179.3	52.6	6.7
December	1,835.6	965.1	912.9	52.2	43.4	8.9	195.0	52.6	5.4
1969 March	1,834.7	953.0	888.2	64.8	50.5	15.2	182.7	51.9	6.8
June	1,840.3	968.1	899.0	69.1	53.2	15.9	194.1	52.6	7.1
September	1,882.6	992.9	940.3	52.6	43.7	8.9	184.5	52.7	5.3
December	1,908.5	1,012.6	958.0	54.7	44.0	10.7	181.5	53.1	5.4
1970 March	1,923.2	987.4	920.0	67.5	52.6	14.9	182.2	51.3	6.8
June	1,959.6	1,023.4	951.9	71.5	57.3	14.2	207.9	52.2	7.0
September	1,974.7	1,021.0	955.3	65.6	54.1	11.6	239.8	51.7	6.4
December	1,992.6	1,034.1	948.8	85.4	68.2	17.2	257.7	51.9	8.3
1971 March	2,008.4	1,031.4	946.4	85.0	63.9	21.2	203.7	51.4	8.2
June	2,053.7	1,073.8	1,018.0	55.8	43.2	11.4	223.9	52.3	5.2
September	2,074.4	1,061.8	1,011.1	50.7	38.3	12.4	194.7	51.2	4.8
December	2,065.5	1,059.4	1,019.3	40.1	29.7	10.4	196.5	51.3	3.8
1972 March	2,113.4	1,060.6	1,010.2	50.4	38.8	11.6	180.6	50.2	4.8
June	2,175.4	1,105.3	1,064.7	40.7	24.9	15.8	176.8	50.8	3.7
September	2,156.6	1,065.9	1,034.0	31.9	23.3	8.6	211.8	49.5	3.0
December	2,172.2	1,079.4	1,040.9	38.5	29.7	8.8	250.1	49.7	3.6
1973 March	2,261.2	1,014.1	1,062.5	41.6	27.3	14.3	247.3	48.8	3.8
June	2,319.8	1,135.0	1,099.8	35.2	23.4	11.8	251.6	48.9	3.1
September	..	..	..	..	..	..	..	..	..
December	2,332.5	1,203.6	1,119.2	84.4	60.0	24.4	259.6	51.6	7.0
1974 March	2,341.1	1,203.7	1,092.5	111.2	76.9	34.3	224.1	51.4	9.2
June	2,382.0	1,208.9	1,083.9	124.9	90.5	34.5	238.2	50.7	10.3
September	2,390.6	1,226.4	1,111.2	115.2	83.0	32.3	219.9	51.3	9.4
December	2,399.2	1,228.6	1,109.3	119.2	75.4	43.8	199.2	51.2	9.7
1975 March	2,436.8	1,230.9	1,067.2	163.7	112.1	51.6	179.4	50.5	13.3
June	2,495.7	1,226.7	1,029.5	197.2	147.7	49.4	174.8	49.2	16.1
September	2,509.2	1,223.3	1,019.9	203.5	153.7	49.7	150.6	48.8	16.6
December	2,523.5	1,280.2	1,041.2	239.0	176.6	62.3	228.1	50.7	18.7
1976 March	2,549.5	1,298.7	1,041.1	257.6	191.7	66.0	208.9	50.9	19.8
June	2,600.3	1,333.5	1,093.0	240.5	178.6	61.9	212.9	51.3	18.0
September	2,619.5	1,291.5	1,089.2	202.3	157.0	45.3	141.7	49.3	15.7
December	2,646.9	1,317.5	1,138.3	179.2	131.6	47.6	164.9	49.8	13.6
1977 March	2,671.2	1,336.6	1,151.4	185.2	126.6	58.6	144.4	50.0	13.9
June	2,674.3	1,368.8	1,190.4	178.4	139.2	39.2	137.0	51.2	13.0
September	2,710.8	1,371.3	1,195.6	175.8	137.3	38.5	133.8	50.6	12.8
December	2,752.9	1,374.9	1,193.9	180.9	135.8	45.2	148.7	49.9	13.2
1978 March	2,794.6	1,417.2	1,208.9	208.4	158.2	50.1	190.3	50.7	14.7
June	2,822.2	1,426.9	1,244.8	182.1	134.3	47.8	172.8	50.6	12.8
September	2,844.8	1,466.7	1,265.1	201.6	156.4	45.3	190.4	51.6	13.7

a/ Not surveyed.

Source: Department of Economics, University of Chile

Table 1.16: EMPLOYMENT BY SECTORS, GREATER SANTIAGO, 1968-1978<sup>a/</sup>

(Thousands of persons)

Year/Month	Agriculture and Fishing	Mining	Manufacturing	Construction	Commerce	Government and Finance	Personal Services	Community and Social Services	Transport, Warehousing, and Public Utilities	Unspecified	Total Employed
1968 March	7.3	3.3	231.2	44.1	134.5	78.9	136.2	155.0	61.2	0.7	852.4
June	9.5	2.4	274.4	39.8	128.8	76.1	146.1	155.6	64.4	-	869.7
September	11.1	1.7	258.6	40.8	129.0	79.4	147.0	151.8	60.1	-	879.5
December	8.3	2.9	244.5	47.5	148.9	86.6	151.6	154.8	66.0	1.9	912.9
1969 March	9.8	3.6	237.1	40.0	141.2	81.7	150.1	158.1	66.6	1.8	888.2
June	6.8	2.6	252.3	46.2	153.4	72.9	134.4	164.1	65.7	0.9	899.0
September	5.6	2.8	269.9	47.0	148.6	79.9	154.2	158.9	71.5	1.9	940.3
December	4.9	3.2	260.0	41.3	151.0	90.5	162.4	178.3	65.8	0.5	958.0
1970 March	6.4	3.4	230.5	44.8	138.5	94.5	152.4	180.3	67.7	1.6	920.0
June	3.8	3.4	261.4	54.3	142.8	83.5	150.5	186.9	64.5	0.9	951.9
September	5.2	2.4	266.7	51.0	153.5	85.7	140.3	176.5	72.1	2.0	953.3
December	4.2	2.2	250.5	44.7	157.8	91.6	149.8	176.4	71.5	0.2	948.8
1971 March	3.7	3.5	249.2	43.6	143.2	99.2	141.7	184.6	77.8	-	946.4
June	6.4	3.9	266.5	49.8	152.1	99.8	162.1	205.2	72.5	-	1,018.0
September	5.8	3.6	278.6	56.5	152.5	96.9	157.0	184.6	74.6	0.9	1,011.1
December	5.5	2.5	289.8	61.7	151.8	106.0	134.0	188.9	78.6	0.6	1,019.3
1972 March	6.9	2.5	272.0	51.4	151.9	106.4	147.9	192.6	78.3	0.4	1,010.2
June	6.2	3.7	282.2	52.4	171.5	106.0	150.9	217.8	72.7	1.4	1,064.7
September	4.5	3.3	293.3	52.9	163.2	93.5	142.4	199.5	72.9	0.4	1,034.0
December	9.0	3.5	285.0	44.6	160.0	117.0	135.4	205.6	80.8	-	1,040.9
1973 March	9.1	2.8	292.2	50.3	153.6	118.4	142.4	207.9	84.9	0.8	1,062.5
June	4.4	2.0	311.9	47.6	165.8	105.0	154.8	223.0	84.2	1.0	1,099.8
September	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
December	20.5	5.7	341.0	79.4	178.4	87.6	176.1	137.8	85.8	7.1	1,119.2
1974 March	14.6	6.0	317.4	85.8	177.1	90.6	168.3	141.4	87.0	4.3	1,092.5
June	18.0	7.1	317.5	80.6	172.8	84.4	169.5	135.6	93.5	4.8	1,083.9
September	17.2	4.4	319.8	88.6	188.9	97.3	164.5	139.1	84.5	6.9	1,111.2
December	22.0	7.2	333.3	90.0	171.0	102.2	156.6	142.2	80.0	4.8	1,109.3
1975 March	18.8	6.6	309.4	74.8	176.3	110.2	152.5	131.6	88.9	5.9	1,067.2
June	14.0	6.9	273.1	70.1	187.6	111.6	155.1	122.7	86.0	2.5	1,029.5
September	17.1	7.1	265.0	64.2	171.7	109.7	162.0	136.7	85.3	1.2	1,019.9
December	16.5	5.2	285.3	51.2	169.3	111.5	161.5	145.0	92.1	3.5	1,041.2
1976 March	17.0	4.5	270.6	56.7	184.9	119.5	156.4	143.9	87.2	0.3	1,041.1
June	16.1	4.8	294.4	58.5	208.9	112.6	171.9	141.1	84.2	0.5	1,093.0
September	16.9	5.5	296.2	62.7	184.5	120.3	175.2	143.0	82.8	2.3	1,089.2
December	14.6	6.4	306.6	64.9	182.7	117.5	189.1	152.6	100.5	3.5	1,138.3
1977 March	10.7	5.5	304.5	54.7	190.7	126.1	197.2	153.5	104.9	3.7	1,151.4
June	16.2	5.1	327.8	62.2	220.0	125.1	189.4	153.0	90.0	1.6	1,190.4
September	14.6	3.7	306.9	64.3	230.2	130.4	207.4	150.0	83.4	4.8	1,195.6
December	15.8	5.3	325.9	74.0	207.9	122.0	203.7	150.8	88.5	-	1,193.9
1978 March	13.7	6.7	307.5	73.5	208.6	139.4	213.0	163.5	82.5	0.8	1,208.9
June	13.4	7.1	325.9	77.5	216.8	140.9	209.5	158.1	93.4	1.9	1,244.8
September	14.5	5.2	334.7	85.7	238.1	130.5	202.2	161.0	93.5	1.4	1,265.1

a/ Because of changes in sectoral classifications, data before December 1973 are not comparable with subsequent data.

Source: Department of Economics, University of Chile

Table 1.17: EMPLOYMENT BY JOB STATUS, GREATER SANTIAGO, 1968-1978

(Thousands of persons)

Year/Month	Employers	Self-Employed	White-Collar Employees	Manual Workers	Non-remunerated Family Workers	Status Unknown	Total Employed
1968 March	21.0	145.3	295.6	375.8	14.5	0.2	852.4
June	21.3	168.4	304.8	360.0	15.3	-	869.7
September	27.4	156.4	310.5	369.5	15.8	-	879.5
December	22.2	166.7	338.3	367.4	18.3	-	912.9
1969 March	22.2	160.8	318.9	365.1	20.4	-	888.2
June	20.8	176.6	313.2	361.4	27.2	-	899.0
September	23.1	167.9	330.4	350.8	15.1	-	940.3
December	27.8	179.3	364.4	368.7	17.8	-	958.0
1970 March	19.2	159.1	373.9	351.3	16.5	-	920.0
June	21.9	179.9	348.3	379.5	22.4	-	951.9
September	19.4	180.3	364.9	366.8	23.9	0.2	955.3
December	19.5	172.6	397.3	337.5	21.9	-	948.8
1971 March	22.3	176.3	394.4	329.6	23.9	-	946.4
June	24.8	199.6	411.5	353.5	28.8	-	1,018.0
September	24.6	168.9	407.6	391.1	19.0	-	1,011.1
December	22.5	186.3	407.0	380.3	23.1	0.2	1,019.3
1972 March	26.6	193.5	387.2	381.1	21.8	-	1,010.2
June	28.3	205.8	450.2	349.4	30.8	-	1,064.7
September	23.0	195.1	418.3	381.2	16.5	-	1,034.0
December	21.4	198.9	447.5	351.2	21.8	-	1,040.9
1973 March	24.4	214.4	453.4	350.3	20.0	-	1,062.5
June	26.2	231.4	454.9	359.1	28.2	-	1,099.8
September	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
December	22.1	256.4	411.0	408.3	21.4	-	1,119.2
1974 March	27.3	217.9	397.2	431.9	17.5	0.7	1,092.5
June	26.1	236.7	393.8	401.2	23.3	2.8	1,083.9
September	24.1	229.0	425.2	406.5	24.6	1.7	1,111.2
December	23.0	214.1	444.4	409.0	17.5	1.4	1,109.3
1975 March	25.9	213.6	431.7	374.7	20.0	1.4	1,067.2
June	22.9	222.0	410.5	349.3	24.8	-	1,029.5
September	21.6	201.6	435.8	340.4	20.1	0.5	1,019.9
December	23.6	198.4	416.6	383.5	18.4	0.7	1,041.2
1976 March	25.2	186.4	427.6	380.8	21.0	-	1,041.1
June	34.9	241.6	398.2	390.2	28.2	-	1,093.0
September	32.0	213.4	388.6	438.4	16.9	-	1,089.2
December	28.4	210.1	424.6	452.5	22.7	-	1,138.3
1977 March	24.8	199.3	486.3	423.2	17.0	0.8	1,151.4
June	29.5	226.5	439.1	464.3	31.1	-	1,190.4
September	28.1	227.8	468.6	446.9	24.2	-	1,195.6
December	30.9	236.9	450.9	454.3	20.9	-	1,193.9
1978 March	19.9	234.2	441.8	488.9	24.0	-	1,208.9
June	32.6	253.6	456.4	479.1	22.9	-	1,244.8
September	35.1	274.0	450.1	481.1	24.7	-	1,265.1

Source: Department of Economics, University of Chile

Table 1.18: UNEMPLOYMENT BY SECTOR, GREATER SANTIAGO, 1968-1978<sup>a/</sup>

(Thousands of persons)

Year/Month	Agriculture and Fishing	Mining	Manu- facturing	Construc- tion	Commer- ce	Government and Finance	Personal Services	Community and Social Services	Transport, b/ etc.	Unspecified	Total Unem- ployed
1968 March	1.3	0.2	12.7	8.1	5.5	0.8	4.1	6.3	1.8	-	40.8
June	1.9	0.2	13.8	12.3	5.4	1.9	3.7	6.5	2.9	-	48.3
September	1.3	0.3	16.5	11.1	6.4	2.0	4.4	6.4	3.9	-	52.2
December	0.5	0.7	12.2	10.0	5.1	1.2	3.9	7.5	2.2	0.2	43.4
1969 March	0.5	-	15.9	10.2	8.2	1.6	9.5	15.0	4.0	-	64.8
June	0.9	-	13.2	9.7	6.4	1.6	8.5	9.9	3.3	-	53.2
September	0.5	-	14.3	6.9	5.1	1.6	4.6	8.1	2.6	-	43.7
December	0.9	0.4	11.1	10.4	4.0	0.9	4.8	7.9	3.5	0.2	44.0
1970 March	0.2	-	16.9	11.9	4.4	0.7	5.5	8.7	4.3	-	52.6
June	0.9	0.4	17.7	11.3	5.4	0.7	6.8	9.7	4.3	0.2	57.3
September	0.4	0.7	14.8	12.3	5.6	1.5	4.7	10.1	4.0	-	54.1
December	1.5	0.6	17.9	16.8	6.2	1.3	6.6	12.0	5.5	-	68.2
1971 March	0.2	0.7	22.3	15.5	3.7	1.3	8.3	7.2	4.8	-	63.9
June	1.3	1.0	13.2	9.0	5.4	1.2	2.6	6.4	3.4	-	43.2
September	0.8	0.2	9.9	8.3	5.1	2.2	3.6	5.4	2.8	-	38.3
December	0.8	-	8.1	6.6	3.2	0.6	3.6	5.5	1.3	-	29.7
1972 March	0.2	0.2	13.0	5.5	3.1	0.8	3.8	8.8	3.3	0.2	38.8
June	-	0.6	7.3	3.9	3.3	0.4	2.7	4.4	2.3	-	24.9
September	0.2	-	7.6	3.5	4.3	0.2	2.5	2.7	2.3	-	23.3
December	0.4	0.2	10.8	4.9	3.5	0.8	2.4	3.5	3.1	-	29.7
1973 March	-	0.2	8.7	3.6	2.8	0.8	3.0	6.1	2.2	-	27.3
June	-	-	8.4	1.6	4.4	1.6	1.6	4.4	1.4	-	23.4
September	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
December	1.1	0.9	17.6	9.6	9.4	1.6	9.1	4.3	5.5	0.9	60.0
1974 March	1.0	1.9	26.1	11.3	10.3	2.2	12.2	6.0	6.0	-	76.9
June	2.3	1.8	27.6	13.7	10.1	4.1	17.2	7.3	6.3	-	90.5
September	2.5	0.5	26.6	14.0	9.8	3.2	12.3	5.2	8.1	0.7	83.0
December	2.2	-	25.2	12.5	9.6	3.4	11.5	6.5	4.3	0.5	75.4
1975 March	1.9	-	37.3	23.3	15.0	5.0	17.1	6.2	6.2	0.2	112.1
June	2.0	1.0	49.2	32.2	15.2	6.9	24.3	8.4	8.6	-	147.7
September	1.2	0.9	54.9	29.8	18.9	6.2	19.4	9.2	13.0	-	153.7
December	3.8	0.7	54.1	33.5	21.0	9.9	28.6	10.9	12.8	1.4	176.6
1976 March	4.0	0.5	59.7	37.5	26.5	9.3	26.7	14.7	12.7	-	191.7
June	4.6	1.1	60.3	32.5	23.9	6.2	33.5	7.5	8.9	0.3	178.6
September	2.8	1.5	48.8	34.2	16.8	8.3	26.7	7.8	9.8	0.3	157.0
December	2.5	0.5	43.7	22.2	14.8	9.1	22.7	7.2	8.6	0.2	131.6
1977 March	0.8	0.8	39.5	19.1	18.6	7.6	19.4	10.2	10.5	0.3	126.6
June	1.9	1.1	42.7	28.4	19.5	8.6	19.5	8.9	8.1	0.5	139.2
September	3.5	1.1	40.9	30.3	15.7	7.7	18.9	11.4	7.2	0.8	137.3
December	2.4	1.8	45.7	25.6	13.7	7.9	16.1	13.7	8.7	-	135.8
1978 March	1.9	1.6	46.4	20.8	22.6	11.1	29.9	14.8	8.6	0.5	158.2
June	3.0	0.5	34.9	25.9	21.8	11.7	17.2	10.6	8.2	0.3	124.3
September	2.5	0.3	42.8	25.8	21.7	12.3	27.7	12.6	10.4	0.3	156.4

a/ Data before December 1973 not comparable with subsequent data because of changing definitions. Does not include persons seeking work for first time.

b/ Transport, storage, communications and public utilities.

Source: Department of Economics, University of Chile

Table 1.18a: UNEMPLOYMENT RATES BY SECTORS, GREATER SANTIAGO, 1968-1978

(Percent of sectoral labor force)

Year/Month	Agriculture and		Manu- facturing	Construction	Commerce	Government and Finance	Personal Services	Community and Social Services	Transport, etc. <sup>a/</sup>		Total <sup>b/</sup>
	Fishing	Mining							Unspecified		
1968 March	x	x	5.2	15.5	3.9	1.0	2.9	3.9	2.9	-	4.5
June	x	x	5.3	23.6	4.0	2.4	2.4	4.0	4.2	-	5.2
September	x	x	6.0	21.4	4.7	2.5	2.9	4.0	6.0	-	5.5
December	x	x	4.8	17.4	3.3	1.4	2.5	4.6	3.2	x	4.5
1969 March	x	x	4.9	16.6	4.3	1.4	4.7	6.9	4.4	-	5.3
June	x	x	4.9	17.3	4.0	2.1	5.9	5.7	4.8	-	5.5
September	x	x	5.0	12.7	3.3	1.9	2.9	4.8	3.5	-	4.4
December	x	x	4.1	20.1	2.6	1.0	2.8	4.2	5.1	x	4.3
1970 March	x	x	6.8	21.0	3.1	0.7	3.5	4.6	5.9	-	5.3
June	x	x	6.4	17.2	3.6	0.9	4.3	4.9	6.3	x	5.6
September	x	x	5.3	19.4	3.5	1.7	3.2	5.4	5.2	-	5.3
December	x	x	6.7	27.3	3.8	1.4	4.2	6.4	7.1	-	6.6
1971 March	x	x	8.2	26.2	2.5	1.3	5.5	3.7	5.8	-	6.2
June	x	x	4.7	15.2	3.4	1.1	1.6	3.0	4.4	-	4.0
September	x	x	3.5	12.8	3.2	2.3	2.2	2.9	3.6	-	3.6
December	x	x	2.7	9.7	2.1	0.5	2.6	2.8	1.7	-	2.8
1972 March	x	x	4.6	9.7	2.0	0.7	2.5	4.4	4.0	x	3.7
June	x	x	2.5	6.8	1.9	0.4	1.8	2.0	3.1	-	2.3
September	x	x	2.5	6.2	2.6	0.2	1.7	1.3	3.1	-	2.2
December	x	x	3.7	9.9	2.2	0.7	1.7	1.7	3.7	-	2.7
1973 March	x	x	2.9	6.6	1.8	0.7	2.0	2.9	2.5	-	2.5
June	x	x	2.6	3.2	2.5	1.5	1.0	1.9	1.6	-	2.1
September	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
December	x	x	4.9	10.8	5.0	1.8	4.9	3.0	6.0	x	5.0
1974 March	x	x	7.6	11.6	5.5	2.3	6.8	4.1	6.4	x	6.4
June	x	x	8.0	14.5	5.5	4.6	9.2	5.1	6.3	x	7.5
September	x	x	7.7	13.7	5.0	3.2	7.0	3.6	8.8	x	6.8
December	x	x	6.9	12.2	5.3	3.2	6.8	4.3	5.1	x	6.1
1975 March	x	x	10.9	23.7	7.8	4.3	10.1	4.5	6.5	x	9.1
June	x	x	15.3	31.5	7.5	5.8	13.6	6.5	9.1	x	12.0
September	x	x	17.2	31.7	9.9	5.5	10.7	6.3	15.3	-	12.6
December	x	x	15.9	39.6	11.1	7.7	15.6	7.0	12.2	x	13.8
1976 March	x	x	18.1	39.8	12.5	7.2	14.6	9.3	12.8	-	14.8
June	x	x	17.0	35.7	10.3	5.2	16.3	5.1	9.5	x	13.4
September	x	x	14.2	35.3	8.4	6.5	13.2	5.2	10.6	x	12.2
December	x	x	12.5	25.5	7.5	7.2	10.7	4.5	7.9	x	10.0
1977 March	x	x	11.5	25.9	8.9	5.7	8.9	6.2	9.1	x	9.5
June	x	x	11.5	31.3	8.1	6.5	9.3	5.5	8.3	x	10.2
September	x	x	11.8	32.0	6.4	5.6	8.3	7.1	7.9	x	10.0
December	x	x	12.3	25.7	6.2	6.1	7.3	8.3	9.0	-	9.9
1978 March	x	x	13.1	22.1	9.8	7.3	12.3	8.3	9.5	x	11.2
June	x	x	9.7	29.1	9.2	7.7	7.6	6.5	8.1	x	9.4
September	x	x	11.5	23.6	8.3	8.6	12.1	7.5	10.0	x	10.7

x/ Refers to figures either less than 0.5 or not statistically representative.

a/ Transport, storage, communications and public utilities.

b/ Does not include persons seeking work for the first time.

Source: Department of Economics, University of Chile

Table 1.19: UNEMPLOYMENT BY JOB STATUS, GREATER SANTIAGO, 1968-1978 <sup>a/</sup>

(Thousands of persons)

Year/Month	Employers	Self-Employed	White-Collar Employees	Manual Workers	Non-remunerated		Total Unemployed	b/
					Family Workers	Unknown		
1968 March	0.5	5.1	7.4	27.7	0.1	-	40.8	
June	-	8.0	8.4	32.0	-	-	48.3	
September	-	5.9	7.6	38.8	-	-	52.2	
December	0.3	6.1	8.7	28.3	-	-	43.4	
1969 March	-	4.5	11.9	34.1	-	-	50.5	
June	-	8.5	11.3	33.6	-	-	53.2	
September	0.2	6.2	7.4	29.9	-	-	43.7	
December	0.2	4.8	9.9	29.2	-	-	44.0	
1970 March	0.2	4.1	11.9	36.4	-	-	52.6	
June	0.2	7.4	10.2	39.6	-	-	57.3	
September	0.4	5.1	10.7	38.0	-	-	54.1	
December	-	6.0	15.5	46.7	-	-	68.2	
1971 March	-	3.9	15.6	44.3	-	-	63.9	
June	0.4	4.9	11.4	26.6	-	-	43.2	
September	0.4	3.4	12.4	22.2	-	-	38.3	
December	0.4	2.5	5.9	21.0	-	-	29.7	
1972 March	0.4	3.3	12.6	22.5	-	-	38.8	
June	-	0.8	8.7	15.4	-	-	24.9	
September	-	1.7	6.4	15.2	-	-	23.3	
December	-	1.4	9.0	19.3	-	-	29.7	
1973 March	0.2	3.4	8.5	15.2	-	-	27.3	
June	-	2.4	9.4	11.6	-	-	23.4	
September	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
December	-	9.1	14.6	36.3	-	-	60.0	
1974 March	0.2	12.0	17.3	47.2	-	0.2	76.9	
June	-	10.9	24.8	54.2	0.3	0.3	80.5	
September	0.2	12.1	18.5	51.7	-	0.5	83.0	
December	1.0	9.1	17.2	47.2	0.5	0.5	75.4	
1975 March	-	14.3	21.9	75.5	-	0.5	112.1	
June	0.5	19.4	31.5	96.1	0.2	-	147.7	
September	0.2	20.6	36.7	96.2	-	-	153.7	
December	1.2	21.7	46.3	107.2	-	0.2	176.6	
1976 March	0.3	27.7	49.5	114.0	0.3	-	191.7	
June	0.5	19.8	40.0	118.3	-	-	178.6	
September	0.5	20.4	31.5	104.4	0.3	-	157.0	
December	0.2	10.4	22.9	93.1	-	-	131.6	
1977 March	0.8	10.2	39.0	76.6	-	-	126.6	
June	0.3	14.9	28.1	95.9	-	-	139.2	
September	0.3	14.1	30.0	92.9	-	-	137.3	
December	-	14.8	36.5	84.5	-	-	135.8	
1978 March	0.5	14.6	44.7	98.4	-	-	158.2	
June	-	13.6	38.5	82.2	-	-	134.3	
September	-	21.9	38.1	96.3	-	-	156.4	

a/ Data prior to December 1973 not comparable with subsequent data.

b/ Does not include persons seeking work for the first time.

Source: Department of Economics, University of Chile

Table 1.19a: UNEMPLOYMENT RATES BY PRIOR JOB STATUS, GREATER SANTIAGO, 1968-1978

(Percent of occupational labor force)

Year/Month	Employers	Self-Employed	White-Collar Employees	Manual Workers	Unpaid Family Workers	Unknown	Total Disemployed	New Entrants	Total Unemployed
1968 March	2.3	3.4	2.5	6.9	-	-	4.5	1.1	5.6
June	-	4.5	2.7	8.1	-	-	5.2	1.2	6.4
September	-	3.6	2.4	9.5	-	-	5.5	1.2	6.7
December	1.5	3.5	2.5	7.2	-	-	4.5	0.9	5.4
1969 March	-	2.7	3.6	8.5	-	-	5.3	1.6	6.8
June	-	4.6	3.5	8.5	-	-	5.5	1.6	7.1
September	0.7	3.3	2.0	7.4	-	-	4.4	0.9	5.3
December	0.6	2.6	2.6	7.3	-	-	4.3	1.1	5.4
1970 March	0.9	2.5	3.1	9.4	-	-	5.3	1.5	6.8
June	0.8	3.9	2.8	9.4	-	-	5.6	1.4	7.0
September	1.8	2.7	2.8	9.4	-	-	5.3	1.1	6.4
December	-	3.4	3.8	12.2	-	-	6.6	1.7	8.3
1971 March	-	2.1	3.8	11.9	-	-	6.2	2.1	8.2
June	1.5	2.4	2.7	7.0	-	-	4.0	1.1	5.2
September	1.5	2.0	3.0	5.4	-	-	3.6	1.2	4.8
December	1.7	1.3	1.4	5.2	-	-	2.8	1.0	3.8
1972 March	1.4	1.7	3.2	5.6	-	-	3.7	1.1	4.8
June	-	0.4	1.9	4.2	-	-	2.3	1.4	3.7
September	-	0.9	1.5	3.8	-	-	2.2	0.8	3.0
December	-	0.7	2.0	5.2	-	-	2.7	0.8	3.6
1973 March	0.8	1.5	1.8	4.2	-	-	2.5	1.3	3.8
June	-	1.0	2.0	3.1	-	-	2.1	1.0	3.1
September	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
December	-	3.4	3.4	8.2	-	-	5.0	2.0	7.0
1974 March	0.9	5.2	4.2	9.9	-	x	6.4	2.8	9.2
June	-	4.4	5.9	11.9	1.1	x	7.5	2.9	10.3
September	1.0	5.0	4.2	11.3	-	x	6.8	2.6	9.4
December	4.0	4.1	3.7	10.3	2.7	x	6.1	3.6	9.7
1975 March	-	6.3	4.8	16.8	-	x	9.1	4.2	13.3
June	2.1	8.0	7.1	21.6	-	-	12.0	4.0	16.1
September	1.1	9.3	7.8	22.0	-	-	12.6	4.1	16.6
December	4.8	9.9	10.0	21.9	-	x	13.8	4.9	18.7
1976 March	1.0	13.0	10.4	23.0	1.2	-	14.8	5.1	19.8
June	1.5	7.6	9.1	23.3	-	-	13.4	4.6	18.0
September	1.6	8.7	7.5	19.2	x	-	12.2	3.5	15.7
December	x	4.7	6.2	17.1	-	-	10.0	3.6	13.6
1977 March	x	4.9	7.4	15.3	-	-	9.5	4.4	13.9
June	x	6.2	6.0	17.1	-	-	10.2	2.9	13.0
September	x	5.8	6.0	17.2	-	-	10.0	2.8	12.8
December	-	5.9	7.5	15.7	-	-	9.9	3.3	13.2
1978 March	2.6	5.9	9.2	16.8	-	-	11.2	3.5	14.7
June	-	5.1	7.8	14.6	-	-	9.4	3.3	12.8
September	-	7.4	7.8	16.7	-	-	10.7	3.1	13.7

x/ Refers to figures either less than 0.5 percent or not statistically representative.

Source: Department of Economics, University of Chile

Table 1.20: UNEMPLOYMENT RATE BY SEX AND DURATION OF UNEMPLOYMENT, GREATER SANTIAGO, 1973-1978

Year and Quarter	INE Unemployment Rate (percent)			Median Duration of Unemployment (Weeks) <sup>1/</sup>	INE Unemployment Rate (percent)						UC Unemployment Rates			Mean Duration of Unemployment (Months)	
	Total	Experienced Workers	New Entrants to Labor Force		Men			Women			Total	Experienced Workers	New Entrants		
					Total	Experienced Workers	New Entrants	Total	Experienced Workers	New Entrants					
1973															
I	5.5	3.6	1.9	8.2								3.8	2.5	1.3	
II	4.2	3.3	0.9	9.3								3.1	2.1	1.0	
III	4.1	3.4	0.7	7.7								-	-	-	
IV	5.5	4.7	0.8	8.0								7.0	5.0	2.0	6.4
1974															
I	6.6	5.5	1.1	10.7								9.2	6.4	2.8	7.6
II	8.2	5.9	2.3	13.9								10.3	7.5	2.9	8.0
III	8.4	6.4	2.0	13.6								9.4	6.8	2.6	7.6
IV	9.7	7.5	2.2	13.9								9.7	6.1	3.6	8.5
1975															
I	12.4	9.5	2.9	13.4	11.2	9.3	1.9	15.1	10.0	5.1	13.3	9.1	4.2	9.7	
II	14.8	10.5	4.3	13.6	13.5	10.8	2.7	17.3	10.1	7.2	16.1	12.0	4.0	8.5	
III	16.4	12.8	3.6	15.0	16.6	14.0	2.6	15.8	10.3	5.5	16.6	12.6	4.1	8.4	
IV	16.5	13.1	3.4	16.7	16.0	13.8	2.2	17.5	11.8	5.7	18.7	13.8	4.9	10.5	
1976															
I	17.6	13.8	3.8	14.6	15.6	13.3	2.3	21.3	14.8	6.5	19.8	14.8	5.1	12.3	
II	19.1	14.5	4.6	15.6	16.6	13.9	2.7	23.4	15.6	7.8	18.0	13.4	4.6	10.3	
III	17.8	14.3	3.5	20.6	15.4	13.4	2.0	21.6	15.8	5.8	15.7	12.2	3.5	11.8	
IV	13.6	10.1	3.5	19.4	12.2	9.8	2.4	16.1	10.5	5.6	13.6	10.0	3.6	11.2	
1977															
I	15.8	11.7	4.1								13.9	9.5	4.4	12.0	
II	14.9	11.0	3.9								13.0	10.2	2.9	11.3	
III	13.2	10.2	3.0								12.8	10.0	2.8	12.0	
IV	11.5	9.4	2.1								13.2	9.9	3.3	11.5	
1978															
I	13.5	10.1	3.4								14.7	11.2	3.5	11.8	
II	13.2	10.0	3.2								12.8	9.4	3.3	10.2	
III	14.6	11.5	3.1								13.7	10.7	3.1	12.0	
IV	13.7	10.4	3.3												

<sup>1/</sup> The median has been estimated by interpolation from grouped data.



Table 1.21: CHILE - MINIMUM EMPLOYMENT PROGRAM

	Number of Beneficiaries (Thousands of Persons)			Monthly Benefit per Person (Pesos)	Total Expenditures <u>1/</u> (Thous. of Pesos)
	Metropolitan Area	Rest of Country	Total		
1975 March	..	..	19.0	86.4	3,000
June	..	..	60.0	150.0	6,600
September	28.9	82.3	111.2	190.0	23,158
December	28.7	98.3	127.0	243.2	35,618
1976 January	27.8	105.7	133.5	243.2	37,381
March	28.4	119.7	148.2	321.0	54,616
June	37.3	139.1	176.4	505.0	102,479
September	39.0	166.0	205.0	606.0	145,967
December	43.1	180.1	233.2	660.0	169,728
1977 January	39.7	158.5	198.2	(219.9) ..	..
February	39.8	153.0	192.8	(217.7) ..	..
March	39.8	149.0	188.8	(209.9) ..	..
April	39.8	148.9	188.7	..	..
May	38.3	147.8	186.1	..	..
June	36.3	150.8	187.1	..	..
July	35.9	153.3	189.2	..	..
August	35.7	156.3	192.0	..	..
September	35.1	154.9	190.0	..	..
October	33.8	153.1	186.9	..	..
November	32.2	146.4	178.6	..	..
December	30.7	142.5	173.2	..	..
1978 January	34.3	145.0	179.3	..	..
February	33.9	134.7	168.6	..	..
March	33.6	128.6	162.2	..	..
April	32.3	124.5	156.8	..	..
May	30.2	118.7	148.9	..	..
June	29.0	119.0	148.0	..	..
July	27.5	114.1	141.6	..	..
August	27.3	109.2	136.5	..	..
September	27.5	107.7	135.2	..	..
October	26.4	104.5	130.9	..	..
November	24.3	99.6	123.9	..	..
December	22.1	95.5	117.6	..	..

.. Not Available

1/ Including other inputs such as training programs and supplies.

Note: Source for 1975-76 data is ODEPLAN; source for 1977-78 is the Ministry of Interior. There are some discrepancies between the two series; note that for the first three months in 1977 the total in parenthesis--from ODEPLAN--reveal estimates about 20,000 persons higher per month.

Source: ODEPLAN and Ministry of Interior

Table 1.22: CHILE - LABOR FORCE PROJECTIONS, GREATER SANTIAGO, 1978-1985

	1978	1979	1980	1981	1982	1983	1984	1985	Ave. Annual Rate of Growth %
Working age population ('000) <sup>a/</sup>	A. 2,822.2	2,889.9	2,959.3	3,030.3	3,103.0	3,177.5	3,253.8	3,331.9	2.4
	B. 2,822.2	2,921.0	3,023.2	3,129.0	3,238.5	3,351.9	3,469.2	3,590.6	3.5
	C. 2,822.2	2,946.4	3,076.0	3,211.4	3,352.7	3,500.2	3,654.2	3,815.0	4.4
Participation rate (%)	50.6	50.9	51.3	51.6	52.0	52.3	52.3	52.3	
Active labor force ('000)	A. 1,426.9	1,471.0	1,518.1	1,563.6	1,613.6	1,661.8	1,701.7	1,742.6	2.9
	B. 1,426.9	1,486.8	1,550.9	1,614.6	1,684.0	1,753.0	1,814.4	1,877.9	4.0
	C. 1,426.9	1,499.7	1,578.0	1,657.1	1,743.4	1,830.6	1,911.1	1,995.2	4.9
Unemployment rate (%)	12.8	11.6	10.5	9.3	8.2	7.0	5.8	4.7	
Unemployment ('000)	A. 182.1	170.6	159.4	145.4	132.3	116.3	98.7	81.9	-10.8
	B. 182.1	172.5	162.8	150.2	138.1	122.7	105.2	88.3	-9.8
	C. 182.1	174.0	165.7	154.1	143.0	128.1	110.8	94.8	-8.9
Employment ('000)	A. 1,244.8	1,300.4	1,358.7	1,418.2	1,481.3	1,545.5	1,603.0	1,660.7	4.2
	B. 1,244.8	1,314.3	1,388.1	1,464.4	1,545.9	1,630.3	1,709.2	1,789.6	5.3
	C. 1,244.8	1,325.7	1,412.3	1,503.0	1,600.4	1,702.5	1,800.3	1,900.4	6.2

a/ Population 14 years and older.

Note: Alternative A assumes that Santiago's working-age population will grow at the projected national average (Table 1.4); Alternative C extrapolates the rate experienced from 1974 to 1978 (Table 1.17); Alternative B suggests a mid range.

II. NATIONAL ACCOUNTS

Table 2.1: CHILE - GROSS DOMESTIC PRODUCT, BY SECTOR OF ORIGIN, 1965-1978

(Millions of current pesos)

Sector	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978 a/
Agriculture, forestry and fishing	1.8	2.2	3.0	3.3	4.5	7.0	9.8	16.8	80.1	536.3	2,396.5	11,767.0	33,010.8	32,693.6
Mining	1.8	2.9	3.4	4.7	8.3	10.0	8.7	18.5	110.6	921.8	3,546.9	12,101.9	16,051.2	15,922.8
Manufacturing	4.6	6.2	8.4	12.4	17.8	26.1	32.6	58.6	316.2	2,244.3	8,636.4	31,631.1	65,468.2	70,574.7
Construction	1.0	1.3	1.5	1.9	2.6	3.7	6.2	11.9	38.7	325.5	992.1	2,937.1	6,316.0	6,695.0
Electricity, gas, water and sanitary services	0.3	0.4	0.5	0.7	1.1	1.5	1.7	2.5	5.7	87.3	606.0	2,699.4	5,572.5	5,879.0
Transport, storage and communication	0.8	1.2	1.6	2.2	3.2	4.3	5.6	11.2	53.9	374.1	1,628.5	5,342.9	12,005.1	12,605.4
Wholesale and retail commerce	3.7	5.4	7.0	9.0	12.7	18.6	25.1	52.8	305.9	2,781.5	13,316.3	41,791.9	93,222.2	105,526.4
Banking, insurance and real estate	0.4	0.6	0.9	1.4	2.4	3.9	5.6	5.8	42.5	441.0	2,403.8	8,775.1	23,015.5	) 94,735.5
Housing	1.4	1.9	2.4	3.2	4.2	5.6	7.6	11.2	59.0	393.8	1,878.7	6,150.7	11,594.4	
Public administration and defense	0.9	1.3	1.7	2.3	3.2	5.5	8.5	17.3	69.5	503.7	2,380.8	8,274.4	35,908.8	) 19,024.1
Services	2.0	2.8	3.8	5.3	7.4	10.8	17.7	32.3	131.1	1,051.2	4,304.8	15,176.6	19,024.1	
GDP at market prices	<u>18.8</u>	<u>26.2</u>	<u>34.4</u>	<u>46.3</u>	<u>67.4</u>	<u>97.0</u>	<u>129.0</u>	<u>239.0</u>	<u>1,213.1</u>	<u>9,660.5</u>	<u>42,091.0</u>	<u>148,648.2</u>	<u>321,187.9</u>	<u>344,632.4</u>

a/ Preliminary estimates in 1977 pesos.

Source: ODEPLAN

Table 2.2: CHILE - GDP AT CONSTANT PRICES BY SECTOR OF ORIGIN, 1965-1977

(Thousands of 1965 pesos)

Sector	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Agriculture, forestry and fishing	1,784	1,929	2,063	2,114	1,919	2,037	2,174	2,084	1,780	2,077	2,156	2,213	2,526
Mining	1,771	1,928	1,944	1,980	2,230	2,252	2,297	2,249	2,286	2,650	2,519	2,885	2,944
Manufacturing	4,567	4,959	5,100	5,225	5,380	5,451	6,197	6,371	5,956	5,903	4,286	4,578	5,137
Construction	1,001	961	924	929	1,010	1,037	1,155	1,048	924	1,109	765	621	643
Electricity, gas, water and sanitary services	289	307	357	330	333	346	392	448	461	518	525	544	570
Transport, storage and communication	829	851	854	897	960	998	1,061	1,037	1,055	1,049	939	987	1,073
Wholesale and retail commerce	3,749	4,095	4,100	4,283	4,432	4,666	4,906	4,936	4,912	5,037	4,273	4,324	5,099
Banking, insurance and real estate	410	470	554	601	782	912	1,058	847	803	1,041	1,259	1,332	1,402
Housing	1,438	1,509	1,558	1,610	1,678	1,737	1,769	1,812	1,865	1,903	1,912	1,948	1,979
Public administration and defense	916	965	994	998	1,008	1,024	1,060	1,095	1,121	1,211	1,212	1,286	1,235
Services	1,998	2,092	2,107	2,205	2,173	2,235	2,371	2,492	2,372	2,369	2,214	2,246	2,331
GDP at market prices	<u>18,752</u>	<u>20,066</u>	<u>20,555</u>	<u>21,172</u>	<u>21,905</u>	<u>22,695</u>	<u>24,440</u>	<u>24,419</u>	<u>23,535</u>	<u>24,867</u>	<u>22,060</u>	<u>22,964</u>	<u>24,939</u>

Source: ODEPLAN

Table 2.2a: CHILE - ANNUAL RATES OF CHANGE OF REAL GDP, BY SECTORS, 1966-1978

(Percent)

Sector	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Agriculture, forestry and fishing	8.1	6.9	2.5	-9.2	6.1	6.7	-4.1	-14.6	16.7	3.8	2.6	14.1	-0.1
Mining	8.9	0.8	1.9	12.6	1.0	2.0	-2.1	1.6	15.9	-4.9	14.5	2.0	-0.8
Manufacturing	8.6	2.8	2.5	3.0	1.3	13.7	2.8	-6.5	-0.9	-27.4	6.8	12.2	7.8
Construction	-4.0	-3.9	0.5	8.7	2.7	11.4	-9.3	-11.8	20.0	-31.0	-18.8	3.5	6.0
Electricity, gas, water and sanitary services	6.2	16.3	-7.6	0.9	3.9	13.3	14.3	2.9	12.4	1.4	3.6	4.8	5.5
Transport, storage and communication	2.7	0.4	5.0	7.0	4.0	6.3	-2.3	1.7	-0.6	-10.5	5.1	8.7	5.0
Wholesale and retail commerce	9.2	0.1	4.5	3.5	5.3	5.1	0.6	-0.5	2.5	-15.2	1.2	17.9	13.2
Banking, insurance and real estate	14.6	17.9	8.5	30.1	16.6	16.0	-19.9	-5.2	29.6	20.9	5.8	5.3 )	
Housing	4.9	3.2	3.3	4.2	3.5	1.8	2.4	2.9	2.0	0.5	1.9	1.6 )	
Public administration and defense	5.3	3.0	0.4	1.0	1.6	3.5	3.3	2.4	8.0	0.1	6.1	-4.0 )	5.8
Services	4.7	0.7	4.7	-1.5	2.9	6.1	5.1	-4.8	-0.0	-6.5	1.4	3.8 )	
GDP at market prices	<u>7.0</u>	<u>2.4</u>	<u>3.0</u>	<u>3.5</u>	<u>3.6</u>	<u>7.7</u>	<u>-0.0</u>	<u>-4.6</u>	<u>5.7</u>	<u>-11.3</u>	<u>4.1</u>	<u>8.6</u>	<u>7.3</u>

Source: Tables 2.1 and 2.2; note that for 1978 growth a 1977 base is used, instead of a 1965 base

Table 2.3: CHILE - EXPENDITURE ON GROSS DOMESTIC PRODUCT AT CURRENT PRICES, 1965-1978

(Millions of pesos)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978 <sup>c/</sup>
Consumption	15.4	21.4	28.8	38.8	55.1	81.2	112.1	217.0	1,065.4	8,319.5	40,889.5	132,702.0	296,560.6 <sup>b/</sup>	319,752.5 <sup>b/</sup>
Personal <sup>a/</sup>	(13.4)	(18.4)	(25.0)	(33.6)	(47.4)	(68.6)	(92.7)	(179.3)	(914.7)	(7,048.7)	(35,360.1)	(113,773.8)	(257,508.0) <sup>b/</sup>	(279,684.6) <sup>b/</sup>
General government	( 2.0)	( 3.0)	( 3.8)	( 5.3)	( 7.6)	(12.6)	(19.4)	( 37.7)	(150.7)	(1,270.8)	( 5,529.3)	( 18,928.1)	( 39,052.5)	( 40,067.9)
Gross Domestic Investment	3.3	4.5	5.1	7.1	10.8	15.1	18.2	30.3	169.0	1,304.0	2,647.8	7,996.9		
Gross fixed investment	( 2.9)	( 3.8)	( 4.8)	( 6.7)	( 9.7)	(13.3)	(16.8)	( 28.9)	(161.5)	(1,201.6)	( 4,267.5)	( 12,814.3)	( 28,830.1)	( 35,634.0)
Change in inventories	( 0.4)	( 0.7)	( 0.3)	( 0.4)	( 1.1)	( 1.8)	( 1.5)	( 1.3)	( 7.5)	( 102.4)	(-1,619.7)	( -4,817.4)	- <sup>b/</sup>	- <sup>b/</sup>
Exports of goods and services	2.5	3.9	4.9	6.6	11.4	14.5	13.9	22.5	154.6	1,632.9	8,312.8	30,547.6	55,576.0	61,578.2
Imports of goods and services	-2.4	-3.6	-4.5	-6.3	-9.8	-13.9	-15.2	-30.7	-176.0	-1,595.9	-9,759.1	-24,598.3	-59,778.8	-72,332.3
GDP at market prices	<u>18.8</u>	<u>26.2</u>	<u>34.4</u>	<u>46.3</u>	<u>62.4</u>	<u>97.0</u>	<u>129.0</u>	<u>239.0</u>	<u>1,213.1</u>	<u>9,660.5</u>	<u>42,091.0</u>	<u>146,648.2</u>	<u>321,187.9</u>	<u>344,632.4</u>

<sup>a/</sup> Includes consumption of nonprofit institutions.<sup>b/</sup> In 1977 and 1978 change in inventories is included as residual in personal consumption.<sup>c/</sup> Preliminary estimates in 1977 pesos.

Source: ODEPLAN

Table 2.3a: CHILE - DISTRIBUTION OF EXPENDITURE ON GDP AT CURRENT PRICES, 1965-1978

(Percent)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978 <sup>a/</sup>
Consumption	<u>81.8</u>	<u>81.8</u>	<u>83.9</u>	<u>83.7</u>	<u>81.6</u>	<u>83.8</u>	<u>86.9</u>	<u>90.8</u>	<u>87.8</u>	<u>86.2</u>	<u>97.1</u>	<u>90.5</u>	<u>92.4</u> <sup>b/</sup>	<u>92.8</u> <sup>b/</sup>
Personal <sup>a/</sup>	71.2	70.5	72.8	72.4	70.3	70.8	71.9	75.0	75.4	73.0	84.0	77.6	80.2 <sup>b/</sup>	81.2
General government	10.6	11.3	11.1	11.3	11.3	13.0	15.0	15.8	12.4	13.2	13.1	12.9	12.2	11.6 <sup>b/</sup>
Gross Domestic Investment	<u>17.3</u>	<u>17.1</u>	<u>14.8</u>	<u>15.4</u>	<u>15.9</u>	<u>15.5</u>	<u>14.1</u>	<u>12.7</u>	<u>13.9</u>	<u>13.5</u>	<u>6.3</u>	<u>5.4</u>	-	-
Gross fixed investment	15.2	14.5	13.9	14.5	14.3	13.7	13.0	12.1	13.3	12.4	10.1	8.7	9.0	10.3
Change in inventories	2.1	2.6	0.9	0.9	1.6	1.8	1.1	0.6	0.6	1.1	-3.8	-3.3	- <sup>b/</sup>	- <sup>b/</sup>
Exports of goods and services	13.4	14.9	14.3	14.3	16.9	15.0	10.8	9.4	12.7	16.9	19.7	20.8	17.3	17.9
Imports of goods and services	-12.6	-13.7	-13.0	-13.5	-14.6	-14.3	-11.8	-12.9	-14.5	-16.5	-23.2	-16.8	-18.6	-21.0
GDP at market prices	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

<sup>a/</sup> Includes consumption of nonprofit institutions.

<sup>b/</sup> In 1977 and 1978 change in inventories is included as residual in personal consumption.

<sup>c/</sup> Note that in 1978 the preliminary estimate is in 1977 pesos.

Source: Appendix Table 2.3



Table 2.4: CHILE - EXPENDITURE ON GROSS DOMESTIC PRODUCT AT CONSTANT PRICES, 1965-1977

(Thousands of pesos at 1965 prices)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Consumption	<u>15,352</u>	<u>16,967</u>	<u>17,484</u>	<u>18,086</u>	<u>18,653</u>	<u>19,459</u>	<u>21,394</u>	<u>22,637</u>	<u>21,848</u>	<u>21,846</u>	<u>19,821</u>	<u>19,556</u>	<u>21,467</u> <sup>b/</sup>
Personal <sup>a/</sup>	<u>13,359</u>	<u>14,780</u>	<u>15,298</u>	<u>15,790</u>	<u>16,222</u>	<u>16,868</u>	<u>18,563</u>	<u>19,666</u>	<u>18,782</u>	<u>18,548</u>	<u>16,752</u>	<u>16,304</u>	<u>18,256</u> <sup>b/</sup>
General government	1,993	2,187	2,186	2,296	2,431	2,591	2,831	2,971	3,066	3,298	3,069	3,252	3,211
Gross Domestic Investment	<u>3,254</u>	<u>3,442</u>	<u>3,132</u>	<u>3,370</u>	<u>3,730</u>	<u>3,874</u>	<u>3,746</u>	<u>3,047</u>	<u>3,041</u>	<u>3,451</u>	<u>1,862</u>	<u>1,709</u>	
Fixed investment	2,859	2,900	2,941	3,166	3,313	3,407	3,446	2,917	2,834	3,229	2,355	2,246	2,655
Change in Inventories	395	542	191	204	417	467	300	130	207	222	-493	-537	- <sup>b/</sup>
Exports of goods & services	<u>2,515</u>	<u>2,662</u>	<u>2,851</u>	<u>2,875</u>	<u>3,055</u>	<u>3,040</u>	<u>2,982</u>	<u>2,536</u>	<u>2,682</u>	<u>3,725</u>	<u>3,978</u>	<u>4,773</u>	<u>5,231</u>
Imports of goods & services	<u>-2,369</u>	<u>-3,005</u>	<u>-2,912</u>	<u>-3,159</u>	<u>-3,533</u>	<u>-3,678</u>	<u>-3,682</u>	<u>-3,801</u>	<u>-4,036</u>	<u>-4,155</u>	<u>-3,601</u>	<u>-3,074</u>	<u>-4,414</u>
GDP	<u>18,752</u>	<u>20,066</u>	<u>20,555</u>	<u>21,172</u>	<u>21,905</u>	<u>22,695</u>	<u>24,440</u>	<u>24,419</u>	<u>23,535</u>	<u>24,867</u>	<u>22,060</u>	<u>22,964</u>	<u>24,939</u>

a/ Includes consumption of nonprofit institutions.

<sup>b/</sup> In 1977, change in inventories is included as residual in personal consumption.

Source: ODEPLAN

Table 2.4a: ANNUAL GROWTH OF EXPENDITURE ON GDP AT CONSTANT PRICES, 1966-1977

(Percent)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Consumption	<u>10.5</u>	<u>3.0</u>	<u>3.4</u>	<u>3.1</u>	<u>4.3</u>	<u>9.9</u>	<u>5.8</u>	<u>-3.5</u>	<u>-0.0</u>	<u>-9.3</u>	<u>-1.3</u>	<u>9.8</u> <sup>b/</sup>
Personal <sup>a/</sup>	10.6	3.5	3.2	2.7	4.0	10.0	5.9	-4.5	-1.2	-9.7	-2.7	12.0 <sup>b/</sup>
General government	9.7	-0.0	5.0	5.9	6.6	9.3	4.9	3.2	7.6	-6.9	6.0	-1.3
Gross Domestic Investment	<u>5.8</u>	<u>-9.0</u>	<u>7.6</u>	<u>10.7</u>	<u>3.9</u>	<u>-3.3</u>	<u>-18.7</u>	<u>-0.2</u>	<u>13.5</u>	<u>-46.0</u>	<u>-8.2</u>	<u>-</u> <sup>b/</sup>
(of which fixed)	(1.4)	(1.4)	(7.7)	(4.6)	(2.8)	(1.1)	(-15.4)	(-2.8)	(13.9)	(-27.1)	(-4.6)	(18.2)
Exports of goods and services	5.8	7.1	0.8	6.3	-0.5	-1.9	-15.0	5.8	38.9	6.8	20.0	9.6
Imports of goods and services	26.8	-3.1	8.5	11.8	4.1	0.1	3.2	6.2	2.9	-13.3	-14.6	43.6
GDP at market prices	<u>7.0</u>	<u>2.4</u>	<u>3.0</u>	<u>3.5</u>	<u>3.6</u>	<u>7.7</u>	<u>-0.0</u>	<u>-3.6</u>	<u>5.7</u>	<u>-11.3</u>	<u>4.1</u>	<u>8.6</u>

<sup>a/</sup> Includes consumption of nonprofit institutions.

<sup>b/</sup> In 1977, change in inventories is included as residual in personal consumption.

Source: Appendix Table 2.4

Table 2.5: CHILE - SAVINGS AND INVESTMENT, 1965-1976

(Millions of current pesos)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>Savings</u>												
1. General Government Savings	0.8	1.6	2.0	2.6	5.3	7.7	-0.6	-11.4	-53.3	565.8	909.2	6,165.9
2. Corporate Savings	0.6	0.8	1.0	1.5	1.7	1.9	2.0	- 1.3	44.2	710.4	-784.7	2,889.8
3. Personal Savings and Savings of Non-profit Institutions	<u>-0.3</u>	<u>-0.6</u>	<u>-1.5</u>	<u>-2.0</u>	<u>-2.2</u>	<u>-4.0</u>	<u>2.8</u>	<u>14.5</u>	<u>18.2</u>	<u>-886.1</u>	<u>-4,137.8</u>	<u>-11,690.2</u>
Subtotal	<u>1.2</u>	<u>1.8</u>	<u>1.5</u>	<u>2.2</u>	<u>4.8</u>	<u>5.7</u>	<u>4.2</u>	<u>1.7</u>	<u>9.2</u>	<u>390.0</u>	<u>-4,013.3</u>	<u>- 2,634.6</u>
4. Depreciation Allowances	1.8	2.3	3.0	4.0	5.5	8.2	11.4	19.4	129.4	851.2	4,036.1	12,746.6
Gross National Savings	3.0	4.1	4.5	6.2	10.3	13.9	15.6	21.2	138.6	1,241.2	22.8	10,112.0
5. Net Factor Incomes	0.4	0.7	1.0	1.3	2.0	1.8	1.3	1.7	8.5	101.6	1,155.7	3,666.0
Gross Domestic Savings	3.4	4.8	5.5	7.5	12.3	15.7	16.9	22.9	147.1	1,342.8	1,178.5	13,778.0
<u>Investment</u>												
1. Gross Fixed Investment	2.9	3.8	4.8	6.7	9.7	13.3	16.8	28.9	161.5	1,201.6	4,267.5	12,814.3
a. Construction	(1.8)	(2.3)	(2.7)	(3.7)	(5.4)	(7.5)	(10.9)	(20.2)	(89.2)	(807.7)	(2,222.5)	(6,029.5)
b. Machinery and Equipment	(1.1)	(1.5)	(2.1)	(3.0)	(4.2)	(5.8)	( 5.8)	( 8.7)	(72.3)	(393.9)	(2,045.0)	(6,784.8)
2. Increase in Inventories	0.4	0.7	0.3	0.4	1.1	1.8	1.5	1.3	7.5	102.4	-1,619.7	-4,817.4)
Gross Domestic Investment	3.3	4.5	5.1	7.1	10.8	15.1	18.2	30.3	169.0	1,304.0	2,647.8	7,996.9

Source: ODEPLAN and mission estimates

Table 2.5a: CHILE - SAVINGS AND INVESTMENT, 1965-1976

(Percent of GDP)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>Savings</u>												
1. General Government Savings	4.5	6.2	5.9	5.7	7.8	7.9	-0.4	-4.8	-4.4	5.9	2.2	4.2
2. Corporate Savings	3.4	2.9	2.9	3.2	2.5	2.0	1.5	-0.6	3.6	7.4	-1.9	2.0
3. Personal Savings and Savings of Non-profit Institutions	<u>-1.4</u>	<u>-2.3</u>	<u>-4.5</u>	<u>-4.3</u>	<u>-3.3</u>	<u>-4.1</u>	<u>2.1</u>	<u>6.1</u>	<u>1.5</u>	<u>-9.2</u>	<u>-9.8</u>	<u>-8.0</u>
Subtotal	<u>6.4</u>	<u>6.8</u>	<u>4.4</u>	<u>4.6</u>	<u>7.1</u>	<u>5.9</u>	<u>3.3</u>	<u>0.7</u>	<u>0.8</u>	<u>4.0</u>	<u>-9.5</u>	<u>-1.8</u>
4. Depreciation Allowances	9.7	8.8	8.7	8.7	8.2	8.5	8.9	8.1	10.7	8.8	9.6	8.7
Gross National Savings	16.1	15.6	13.1	13.3	15.3	14.3	12.1	8.9	11.4	12.8	0.1	6.9
5. Net Factor Incomes	2.0	2.7	3.0	2.9	2.9	3.2	1.0	0.3	0.7	1.1	2.7	2.5
Gross Domestic Savings	18.1	18.3	16.1	16.2	18.2	16.2	13.1	9.2	12.1	13.9	2.8	9.4
<u>Investment</u>												
1. Gross Fixed Investment	15.2	14.5	13.9	14.5	14.3	13.7	13.0	12.1	13.3	12.4	10.1	8.7
a. Construction	(9.6)	(8.9)	(7.9)	(7.9)	(8.0)	(7.7)	(8.5)	(8.5)	(7.4)	(8.4)	(5.3)	(4.1)
b. Machinery and Equipment	(5.6)	(5.6)	(6.0)	(6.6)	(6.3)	(6.0)	(4.5)	(3.6)	(6.0)	(4.1)	(4.9)	(4.6)
2. Increase in Inventories	2.1	2.6	0.9	0.9	1.6	1.8	1.1	0.6	0.6	1.1	-3.8	-3.3
Gross Domestic Investment	17.4	17.1	14.8	15.4	16.0	15.6	14.1	12.7	13.9	13.5	6.3	5.5

Source: Appendix Table 2.5

Table 2.6: CHILE - SAVINGS AND INVESTMENT AT CONSTANT PRICES, 1965-1976

(Thousands of pesos of 1965)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
I. Gross National Savings	<u>3,022</u>	<u>3,128</u>	<u>2,771</u>	<u>2,881</u>	<u>3,573</u>	<u>3,554</u>	<u>3,119</u>	<u>1,919</u>	<u>2,343</u>	<u>3,288</u>	<u>913</u>	<u>2,029</u>
II. Net Factor Incomes	<u>375</u>	<u>542</u>	<u>617</u>	<u>614</u>	<u>635</u>	<u>431</u>	<u>224</u>	<u>73</u>	<u>165</u>	<u>274</u>	<u>596</u>	<u>574</u>
III. Gross Domestic Savings	<u>3,397</u>	<u>3,670</u>	<u>3,388</u>	<u>3,495</u>	<u>4,208</u>	<u>3,985</u>	<u>3,343</u>	<u>1,992</u>	<u>2,508</u>	<u>3,562</u>	<u>1,509</u>	<u>2,603</u>
IV. Gross Domestic Investment	<u>3,254</u>	<u>3,442</u>	<u>3,132</u>	<u>3,370</u>	<u>3,730</u>	<u>3,874</u>	<u>3,746</u>	<u>3,047</u>	<u>3,041</u>	<u>3,451</u>	<u>1,862</u>	<u>1,709</u>
A. Gross fixed investment	<u>2,859</u>	<u>2,900</u>	<u>2,941</u>	<u>3,166</u>	<u>3,313</u>	<u>3,407</u>	<u>3,446</u>	<u>2,917</u>	<u>2,834</u>	<u>3,229</u>	<u>2,355</u>	<u>2,246</u>
1. Construction	<u>1,803</u>	<u>1,743</u>	<u>1,669</u>	<u>1,711</u>	<u>1,858</u>	<u>1,938</u>	<u>2,113</u>	<u>1,873</u>	<u>1,569</u>	<u>1,936</u>	<u>1,265</u>	<u>997</u>
a. Housing	(512)	(528)	(498)	(572)	(649)	(635)	(735)	(616)	(511)	(580)	(344)	(270)
b. Non-residential buildings	(464)	(403)	(389)	(366)	(358)	(342)	(402)	(374)	(242)	(284)	(174)	(162)
c. Other	(827)	(812)	(782)	(773)	(851)	(961)	(976)	(883)	(816)	(1,072)	(747)	(565)
2. Machinery and equipment	1,056	1,157	1,272	1,455	1,455	1,469	1,333	1,044	1,265	1,293	1,090	1,249
B. Increase in inventories	<u>395</u>	<u>542</u>	<u>191</u>	<u>204</u>	<u>417</u>	<u>467</u>	<u>300</u>	<u>130</u>	<u>207</u>	<u>222</u>	<u>-493</u>	<u>-537</u>

Source: ODEPLAN and mission estimates

Table 2.6a: CHILE - ANNUAL RATE OF CHANGE OF SAVINGS AND INVESTMENT AT CONSTANT PRICES, 1966-1976

(Percent)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
I. Gross National Savings	<u>3.5</u>	<u>-11.4</u>	<u>4.0</u>	<u>24.0</u>	<u>-0.5</u>	<u>-12.2</u>	<u>-38.5</u>	<u>22.1</u>	<u>40.3</u>	<u>-72.2</u>	<u>122.2</u>
II. Net Factor Incomes	<u>44.5</u>	<u>13.8</u>	<u>-0.5</u>	<u>3.4</u>	<u>-32.1</u>	<u>-48.0</u>	<u>-67.4</u>	<u>126.0</u>	<u>66.1</u>	<u>117.5</u>	<u>-3.7</u>
III. Gross Domestic Savings	<u>8.0</u>	<u>-7.7</u>	<u>3.2</u>	<u>20.4</u>	<u>-5.3</u>	<u>-16.1</u>	<u>-40.4</u>	<u>25.9</u>	<u>42.0</u>	<u>-57.6</u>	<u>72.5</u>
IV. Gross Domestic Investment	<u>5.8</u>	<u>-9.0</u>	<u>7.6</u>	<u>10.7</u>	<u>3.9</u>	<u>-3.3</u>	<u>-18.7</u>	<u>-0.2</u>	<u>13.5</u>	<u>-46.0</u>	<u>-9.2</u>
A. Gross fixed investment	<u>1.4</u>	<u>1.4</u>	<u>7.7</u>	<u>4.6</u>	<u>2.8</u>	<u>1.1</u>	<u>-15.4</u>	<u>-2.8</u>	<u>13.9</u>	<u>-27.1</u>	<u>-4.6</u>
1. Construction	-3.3	-4.2	2.5	8.6	4.3	9.0	-11.4	-16.2	23.4	-34.7	-21.2
a. Housing	(3.1)	(-5.7)	(14.9)	(13.5)	(-2.2)	(15.7)	(-16.2)	(-17.0)	(13.5)	(-40.7)	(-21.5)
b. Non-residential buildings	(-13.1)	(-3.5)	(-5.9)	(-2.2)	(-4.5)	(17.5)	(-7.0)	(-35.3)	(17.4)	(-38.7)	(-6.9)
c. Other	(-1.8)	(-3.7)	(-1.2)	(10.1)	(12.9)	(1.6)	(-9.5)	(-7.6)	(31.4)	(-30.0)	(-24.4)
2. Machinery and equipment	9.6	9.9	14.4	0.0	1.0	-9.3	-21.7	21.2	2.2	-15.7	14.6
B. Increase in inventories	<u>37.2</u>	<u>-64.8</u>	<u>6.8</u>	<u>104.4</u>	<u>12.0</u>	<u>-35.8</u>	<u>-56.7</u>	<u>59.2</u>	<u>7.2</u>	<u>-322.1</u>	<u>-8.9</u>

Source: Appendix Table 2.6

Table 2.7: PROJECTED GDP AND GNP 1978-1990  
(Millions of 1975 US Dollars)

	1978	1979	1980	1985	1990	Rates of Growth - %		
						1978-80	1980-85	1985-90
Gross Domestic Product	10,368	10,979	11,618	15,294	20,235	5.9	5.7	5.8
Terms of Trade Adjustment	-147	-156	3	712	1,253			
Gross Domestic Income	10,221	10,824	11,621	16,006	21,489	6.6	6.6	6.1
Imports	2,626	2,846	3,131	4,769	6,618	9.2	8.8	6.8
Exports (volume)	2,577	2,801	3,017	4,153	5,428	8.2	6.6	5.5
Exports, Adjusted for TOT	2,431	2,645	3,030	4,865	6,681	11.5	10.0	6.6
Resource Gap	196	201	111	-96	-63			
Consumption	9,537	9,997	10,488	13,509	18,180	4.9	5.2	6.1
Investment	880	1,028	1,244	2,401	3,246	18.9	14.1	6.2
Gross National Savings	352	590	856	2,183	2,954	56.0	20.6	6.2
Gross Domestic Savings	685	827	1,133	2,496	3,309	28.6	17.1	5.8
Gross National Product	9,991	10,711	11,317	14,964	19,861	6.4	5.8	5.8
Gross National Income	9,844	10,555	11,320	15,675	21,115	7.2	6.7	6.1
GDP in Current US\$	17,129	19,318	21,669	38,172	64,458	12.5	12.0	11.0

Source: IBRD

III. BALANCE OF PAYMENTS



Table 3.1a: CHILE - BALANCE OF PAYMENTS SUMMARY, 1967-1978 <sup>a/</sup>  
(Millions of US dollars)

	1967	1968	1969	1970	1971	1972	1973	1974	1975 <sup>b/</sup>	1976 <sup>c/</sup>	1977 <sup>e/</sup>	1978 <sup>e/</sup>
1. Exports	984.6	1,031.0	1,308.0	1,254.9	1,134.6	980.0	1,434.9	2,386.6	1,763.1	2,392	2,636	3,089
a. Goods, FOB	873.2	910.8	1,171.9	1,111.7	996.8	847.4	1,310.5	2,238.9	1,535.3	2,109	2,177	2,480
b. Nonfactor services	110.3	120.0	134.7	143.0	136.0	130.8	118.8	143.2	192.2	276	450	598
c. Nonmonetary gold	1.1	0.2	1.4	0.2	1.8	1.8	5.6	4.5	35.6	7	9	11
2. Imports	-907.9	-958.0	-1,088.4	-1,160.2	-1,225.1	-1,330.9	-1,625.6	-2,328.4	-2,066.6	-1,946	-2,723	-3,413
a. Goods, CIF	-769.0	-801.0	-926.8	-956.0	-1,014.9	-1,102.6	-1,447.4	-2,013.1	-1,775.6	-1,655	-2,244	-2,917
b. Nonfactor services	-138.9	-156.4	-161.6	-204.2	-210.2	-228.3	-178.2	-315.3	-291.0	-291	-479	-496
3. Resource Balance	74.1	73.0	219.6	94.7	-90.5	-350.9	-190.7	58.2	-303.5	+446	-87	-324
4. Net Factor Payments	-212.7	-215.2	-228.8	-199.4	-118.5	-59.3	-109.6	-184.5	-284.2	-326	-362	-463
a. Direct investment income	-139.2	-139.6	-130.7	-103.8	-30.0	-24.8	-0.1	-8.9	-7.5	-4	-23	-39
b. Net interest (of which public)	-73.5 (-40.9)	-75.6 (-49.9)	-98.1 (-56.7)	-95.6 (-63.7)	-88.5 (-62.8)	-34.5 (-17.2)	-109.5 (-105.2)	-175.6 (-144.4)	-276.7 (-229.5)	-322 (-)	-339 (-)	-424 (-)
5. Net Current Transfers	8.6	6.9	3.6	1.8	3.5	5.4	12.7	10.8	10.0	28	50	57
6. Current Account Balance	-130.0	-135.3	-5.6	-102.9	-205.5	-404.8	-287.6	-115.5	-577.7	+148	-399	-730
7. Foreign Direct Investment, net <sup>b/</sup>	4.0	-53.6	-177.3	4.5	-21.9	-0.3	-4.1	-16.7	-4.2	+7	+30	+187
8. Public Medium- and Long-Term Loans, net <sup>c/</sup>	103.6	264.0	436.2	214.6	102.5	215.5	-8.1	-88.9	-179.8	-114	-138	574
a. Disbursements	175.8	356.4	534.9	373.2	229.4	275.4	242.7	290.3	297.8	458	552	1,317
b. Repayments	-72.2	-92.4	-98.7	-158.6	-126.9	-59.9	-250.8	-379.2	-477.6	-572	-690	-743
9. Private Medium- and Long-Term Loans, net <sup>d/</sup>	30.3	85.0	75.0	70.6	-20.5	-9.8	-1.1	30.6	102.1	+166	174	640
a. Disbursements	109.9	168.2	142.5	145.9	20.0	18.1	-	53.9	139.3	279	336	807
b. Repayments	-79.6	-83.2	-67.5	-75.3	-40.5	-27.9	-1.1	-23.2	-37.2	-113	-162	-167
10. Debt Rescheduling Loans	-	-	-	-	-	-	249.8	331.2	253.6	-	-	-
11. Short-Term Capital, net	-14.0	8.1	-107.7	-22.2	-86.6	24.2	5.8	-28.2 <sup>f/</sup>	127.0 <sup>f/</sup>	84	254	6
12. Allocations of SDRs	-	-	-	21.8	16.7	18.2	-	-	-	-	-	-
13. Net Errors and Omissions	-17.3	-50.3	-46.1	-72.9	-84.5	-72.0	-66.6	-157.6	4.4	+164	+72	-60
14. Change in Reserves (-denotes increase)	23.4	-117.9	-174.5	-113.5	299.8	229.0	111.9	45.1	274.6	-455	+7	-617

a/ Medium- and long-term loan disbursements, repayments, and net interest attributed to public and private sector borrowers, debt reschedulings, and other capital transactions on basis of classifications of the Central Bank. Similarly, debt reschedulings are treated as new loan disbursements (Item 10), and IMF credits are treated "below the line" as compensatory financing rather than additions to reserves.

b/ Includes only investments registered under the procedures of D.L. 600 and D.F.L. 258. Some direct investments may also enter under Article 14 of D.L. 1,272, but are included here for lack of information, as private medium- and long-term loans (see Note d).

c/ Includes all loans to public sector institutions and loans to the private sector guaranteed by public sector institutions.

d/ Includes funds entering under Article 14 of D.L. 1,272.

e/ Estimate.

f/ Includes capital repatriations.

g/ Provisional.

Source: Central Bank, mission estimates

Table 3.1b: CHILE - BALANCE OF PAYMENTS SUMMARY, 1967-1977<sup>a/</sup>

(Millions of US dollars)

	1967	1968	1969	1970	1971	1972	1973	1974	1975 <sup>d/</sup>	1976 <sup>e/</sup>	1977 <sup>e/</sup>
1. <u>Exports</u>	984.6	1,031.0	1,308.0	1,254.9	1,134.6	980.0	1,434.9	2,386.6	1,763.1	2,392	2,636
a. Goods, FOB	873.2	910.8	1,171.9	1,111.7	996.8	847.4	1,310.5	2,238.9	1,535.3	2,109	2,177
b. Nonfactor services	110.3	120.0	134.7	143.0	136.0	130.8	118.8	143.2	192.2	276	450
c. Nonmonetary gold	1.1	0.2	1.4	0.2	1.8	1.8	5.6	4.5	35.6	7	9
2. <u>Imports</u>	-907.9	-958.0	-1,088.4	-1,160.2	-1,225.1	-1,330.9	-1,625.6	-2,328.4	-2,066.6	-1,946	-2,723
a. Goods, CIF	-769.0	-801.6	-926.8	-956.0	-1,014.9	-1,102.6	-1,447.4	-2,013.1	-1,775.6	-1,655	-2,244
b. Nonfactor services	-138.9	-156.4	-161.6	-204.2	-210.2	-228.3	-178.2	-315.3	-291.0	-291	-479
3. <u>Resource Balance</u>	74.1	73.0	219.6	94.7	-90.5	-350.9	-190.7	58.2	-303.5	446	-87
4. <u>Net Factor Payments</u>	-212.7	-215.2	-228.8	-199.4	-118.5	-59.3	-109.6	-184.5	-284.2	-326	-362
a. Direct investment income	-139.2	-139.6	-130.7	-103.8	-30.0	-24.8	-0.1	-8.9	-7.5	-4	-23
b. Net interest (of which public)	-73.5 (-41.2)	-75.6 (-50.2)	-98.1 (-54.3)	-95.6 (-77.9)	-88.5 (-80.4)	-34.5 (-26.5)	-109.5 (-36.7)	-175.6 (-79.1)	-276.7 (-156.6)	-322 (-270)	-339 (-238)
5. <u>Net Current Transfers</u>	8.6	6.9	3.6	1.8	3.5	5.4	12.7	10.8	10.0	28	50
6. <u>Current Account Balance</u>	-130.0	-155.3	-5.6	-102.9	-205.5	-404.8	-287.6	-115.5	-577.7	+148	-399
7. <u>Foreign Direct Investment, net</u> <sup>b/</sup>	4.0	-53.6	-177.3	4.5	-21.9	-0.3	-4.1	-419.5 <sup>c/</sup>	-4.2	+7	+30
8. <u>Public Medium- and Long-Term Loans, net</u>	121.0	191.4	263.1	233.9	28.7	186.3	195.9	743.4 <sup>c/</sup>	-57.5	-116	-81
a. Disbursements	214.3	357.2	427.1	397.3	190.5	257.5	315.8	942.3 <sup>c/</sup>	287.4	433	570
b. Repayments	-93.3	-165.8	-164.0	-163.4	-161.8	-71.1	-119.9	-198.9	-344.9	-548	-650
9. <u>Private Medium- and Long-Term Loans, net</u> <sup>d/</sup>	12.9	157.6	248.1	51.3	23.3	19.4	44.7	-67.7	233.4	227	240
10. <u>Short-Term Capital, net</u>	-14.0	8.1	-107.7	-22.2	-86.6	24.2	5.8	-28.2	127.0 <sup>f/</sup>	84	254
11. <u>Allocations of SDRs</u>	-	-	-	21.8	16.7	18.2	-	-	-	-	-
12. <u>IMF Credit, net</u>	-15.2	15.3	-22.0	-77.3	68.0	49.7	14.3	100.3	190.4	78	-100
13. <u>Net Errors and Omissions</u>	-17.3	-50.3	-46.1	-72.9	-84.5	-72.0	-66.6	-157.6	4.4	+164	+72
14. <u>Change in Reserves (-denotes increase)</u>	38.6	-133.2	-152.5	-36.2	231.8	179.3	97.6	-55.2	84.2	-592	-16

a/ Medium- and long-term loan disbursements, repayments, and net interest attributed to public and private sector borrowers on the basis of IBRD External Debt Division classifications. Calculations are after debt rescheduling (i.e. debt reschedulings are not treated as new loans as in Table 3.1a), and IMF credits are listed "above the line" and calculated as additions to reserves.

b/ Includes only investments registered under the procedures of D.L. 600 and D.F.L. 258. Some direct investments may also enter under Article 14 of D.L. 1,272, but are included here for lack of information, as private medium- and long-term loans (see Note d).

c/ Includes US\$402.8 million compensation agreements for expropriated properties.

d/ Includes funds entering under Article 14 of D.L. 1,272.

e/ Estimate.

f/ Includes capital repatriations.

p/ Provisional.

Source: Central Bank, IBRD External Debt Division, mission estimates

Table 3.2: CHILE - COMPOSITION OF EXPORTS, 1965-1978

(Millions of dollars and % of total)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
(\$ millions)														
<u>Total Exports f.o.b.</u>	<u>684</u>	<u>866</u>	<u>873</u>	<u>911</u>	<u>1,172</u>	<u>1,112</u>	<u>997</u>	<u>847</u>	<u>1,311</u>	<u>2,239</u>	<u>1,552</u>	<u>2,083</u>	<u>2,190</u>	<u>2,408</u>
<u>Mining Products</u>	<u>558</u>	<u>729</u>	<u>766</u>	<u>795</u>	<u>1,044</u>	<u>954</u>	<u>818</u>	<u>723</u>	<u>1,183</u>	<u>1,873</u>	<u>1,075</u>	<u>1,444</u>	<u>1,403</u>	<u>1,423</u>
Copper	<u>429</u>	<u>599</u>	<u>651</u>	<u>684</u>	<u>926</u>	<u>840</u>	<u>702</u>	<u>618</u>	<u>1,056</u>	<u>1,716</u>	<u>890</u>	<u>1,246</u>	<u>1,187</u>	<u>1,202</u>
Large mining companies	(307)	(479)	(521)	(537)	(720)	(662)	(577)	(496)	(874)	(1,474)	(719)	(1,054)	(994)	(1,007)
Medium and small mines	(122)	(120)	(130)	(148)	(206)	(178)	(125)	(123)	(182)	(242)	(171)	(192)	(193)	(195)
Nitrates and iodine	37	38	31	22	29	25	34	29	31	49	55	41	40	47
Iron ore	76	76	66	70	71	67	69	57	72	72	91	86	81	80
Molybdenite	14	12	13	10	12	16	8	12	10	19	30	46	54	47
Other	2	4	5	9	6	6	6	7	14	17	9	23	41	47
<u>Agricultural and Fishery Products</u>	<u>23</u>	<u>21</u>	<u>23</u>	<u>25</u>	<u>27</u>	<u>33</u>	<u>39</u>	<u>21</u>	<u>25</u>	<u>57</u>	<u>86</u>	<u>119</u>	<u>160</u>	<u>204</u>
Crops	15	12	12	16	15	22	28	17	20	43	59	86	127	158
Livestock products	7	8	7	8	10	8	5	1	1	6	17	25	23	28
Forestry products	1	1	1	1	1	1	5	2	2	3	4	1	1	2
Fishery products	1	1	3	1	1	1	1	1	2	5	6	7	9	16
<u>Industrial Products</u>	<u>103</u>	<u>116</u>	<u>84</u>	<u>91</u>	<u>101</u>	<u>125</u>	<u>140</u>	<u>103</u>	<u>103</u>	<u>308</u>	<u>391</u>	<u>520</u>	<u>628</u>	<u>781</u>
Manufactured copper	1	1	1	1	1	1	2	2	4	6	32	16	-	-
Semi-manufactured copper	55	36	8	9	7	14	13	12	24	30	3	35	45	46
Paper and cellulose	10	17	23	24	28	32	31	27	30	110	94	136	134	159
Chemical products & petro. derivatives	4	5	4	5	5	7	12	11	5	52	46	65	78	106
Fishmeal	8	26	13	18	18	15	28	18	14	35	29	61	86	106
Canned and frozen fish	4	6	6	7	7	9	11	7	6	12	14	23	33	37
Other manufactured products	21	25	29	27	35	47	43	26	20	63	173	184	252	327
(Percent)														
<u>Total Exports</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Copper	63	69	75	75	79	76	70	73	80	77	57	60	54	50
Other mining products	19	16	12	12	10	10	12	12	10	7	12	9	10	9
Agriculture and fishery products	3	2	3	3	2	3	4	3	2	2	6	6	7	8
Industrial products	15	13	10	10	9	11	14	12	8	14	25	25	29	33

1/ Exports of semi-finished copper in 1964-66 largely represent export of primary copper by fabricators circumventing price controls in order to take advantage of the differential between "producers' prices" and higher LME prices.

Source: Central Bank of Chile

Table 3.3: CHILE - EXPORTS BY COUNTRY OF DESTINATION, 1967-1977

(Millions of US\$)

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<u>Europe</u>	<u>550.8</u>	<u>507.1</u>	<u>624.7</u>	<u>753.7</u>	<u>542.3</u>	<u>460.5</u>	<u>635.7</u>	<u>1,122.4</u>	<u>816.2</u>	<u>953.3</u>	<u>863.5</u>
Germany, Federal Republic	71.0	75.7	102.1	134.9	122.9	117.0	172.4	336.7	239.1	310.2	298.9
Belgium	42.5	13.8	25.0	38.4	17.2	12.9	18.8	33.2	56.1	64.7	63.6
Spain	16.9	19.0	33.3	29.7	24.6	14.0	21.1	33.7	67.7	76.6	64.6
France	49.8	40.3	59.8	68.7	47.1	32.7	33.3	86.5	70.3	70.2	62.1
Netherlands	124.5	108.5	119.2	187.8	103.3	65.4	58.4	94.0	90.7	46.5	63.6
Italy	74.5	61.0	87.5	92.4	70.2	60.7	88.3	161.3	80.1	106.6	94.9
United Kingdom	123.9	141.8	154.3	154.2	110.1	94.0	123.6	217.2	137.2	141.1	108.6
Sweden	38.7	39.8	37.7	39.3	26.9	34.0	30.0	52.2	34.3	22.4	16.1
Rest of Europe	9.0	7.2	5.8	8.3	20.0	29.8	89.8	107.6	40.7	115.1	91.1
<u>Latin America</u>	<u>83.7</u>	<u>93.8</u>	<u>115.3</u>	<u>156.3</u>	<u>142.8</u>	<u>113.6</u>	<u>147.9</u>	<u>412.7</u>	<u>394.7</u>	<u>516.8</u>	<u>552.1</u>
Argentina	39.8	48.0	66.4	78.5	59.5	51.1	73.8	169.3	166.4	125.3	143.9
Brazil	16.2	19.9	23.7	24.4	30.1	19.3	33.0	144.0	98.0	252.5	283.1
Colombia	1.4	3.2	3.1	6.1	11.7	8.8	7.1	37.7	25.0	29.6	34.5
Mexico	8.3	5.5	7.6	10.5	15.4	7.9	10.2	22.7	10.0	15.7	6.4
Peru	6.7	4.4	4.6	9.0	8.5	7.8	12.7	15.6	25.0	29.0	12.3
Venezuela	4.9	4.9	2.5	3.2	2.3	1.5	1.8	8.5	23.9	-	-
Rest of Latin America	6.4	7.9	7.4	24.6	15.3	17.2	9.3	14.9	46.4	64.7	71.9
United States	168.4	210.9	185.9	177.2	76.4	82.0	105.8	286.1	146.5	222.6	289.4
Canada	0.5	0.5	0.9	0.5	4.7	1.1	21.4	64.7	20.0	18.0	4.3
China, People's Republic	0.4	0.4	-	-	6.5	23.2	0.5	117.2	12.5	32.5	19.4
Japan	108.0	124.9	146.0	149.8	183.5	147.7	217.4	407.0	186.6	223.7	263.7
Other	1.2	3.2	2.6	11.1	6.1	27.3	101.8	70.4	84.8	115.7	197.9
<u>Total</u>	<u>913.0</u>	<u>940.8</u>	<u>1,075.4</u>	<u>1,248.6</u>	<u>962.3</u>	<u>855.4</u>	<u>1,230.5</u>	<u>2,480.5</u>	<u>1,661.3</u>	<u>2,082.6</u>	<u>2,190.3</u>

Source: Central Bank

Table 3.4: CHILE - IMPORTS OF GOODS AND NON-FACTOR SERVICES, 1965-1976

(Millions of US\$ and % of total goods)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>Total</u> <sup>a/</sup>	<u>715.2</u>	<u>887.0</u>	<u>907.9</u>	<u>958.1</u>	<u>1,088.4</u>	<u>1,160.2</u>	<u>1,225.0</u>	<u>1,330.9</u>	<u>1,625.6</u>	<u>2,328.4</u>	<u>2,066.6</u>	<u>..</u>
Non-Factor Services	99.7	111.6	138.9	156.4	161.6	204.2	210.2	228.3	178.2	315.3	291.0	..
<u>Total Imports, fob</u>	<u>615.5</u>	<u>775.4</u>	<u>769.0</u>	<u>801.7</u>	<u>926.8</u>	<u>956.0</u>	<u>1,014.8</u>	<u>1,102.6</u>	<u>1,447.4</u>	<u>2,013.1</u>	<u>1,775.6</u>	<u>1,640.0</u>
<u>Consumer Goods</u>	<u>84.8</u>	<u>105.2</u>	<u>110.1</u>	<u>130.9</u>	<u>138.8</u>	<u>150.1</u>	<u>177.9</u>	<u>298.8</u>	<u>314.3</u>	<u>267.2</u>	<u>175.9</u>	<u>187.8</u>
Food <sup>b/</sup>	40.2	53.3	52.4	51.8	55.9	53.9	88.5	180.4	180.1	70.9	82.9	90.6
Other	44.6	51.9	57.7	79.1	82.9	96.2	89.4	118.4	134.1	196.3	93.0	97.2
<u>Intermediate Goods</u>	<u>371.2</u>	<u>447.7</u>	<u>431.6</u>	<u>433.5</u>	<u>543.8</u>	<u>529.6</u>	<u>588.9</u>	<u>618.2</u>	<u>889.8</u>	<u>1,467.0</u>	<u>1,318.7</u>	<u>1,104.2</u>
Food <sup>c/</sup>	97.1	105.3	115.4	111.8	109.2	84.7	103.7	158.0	336.4	374.6	277.9	180.1
Fuels <sup>d/</sup>	16.5	28.9	28.6	23.6	35.8	28.5	57.3	63.8	71.3	344.7	251.6	338.6
Other	257.6	313.5	287.7	298.1	398.8	416.4	427.9	396.3	482.0	747.7	789.2	585.5
<u>Capital Goods</u>	<u>159.6</u>	<u>222.4</u>	<u>227.3</u>	<u>237.3</u>	<u>244.2</u>	<u>276.2</u>	<u>248.0</u>	<u>185.6</u>	<u>243.3</u>	<u>278.8</u>	<u>281.0</u>	<u>348.0</u>
- - - - - % of Total - - - - -												
<u>Total Imports, c.i.f.</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>Consumer Goods</u>	<u>13</u>	<u>14</u>	<u>14</u>	<u>16</u>	<u>15</u>	<u>16</u>	<u>18</u>	<u>27</u>	<u>22</u>	<u>13</u>	<u>10</u>	<u>12</u>
Food	6	7	7	6	6	6	9	16	13	3	5	6
Other	7	7	7	10	9	10	9	11	9	10	5	6
<u>Intermediate Goods</u>	<u>61</u>	<u>57</u>	<u>56</u>	<u>54</u>	<u>59</u>	<u>55</u>	<u>58</u>	<u>56</u>	<u>61</u>	<u>73</u>	<u>74</u>	<u>67</u>
Food	16	13	15	14	12	9	10	14	23	19	16	11
Fuels	3	4	4	3	4	3	6	6	5	17	14	21
Other	42	40	37	37	43	43	42	36	33	37	44	36
<u>Capital Goods</u>	<u>26</u>	<u>29</u>	<u>30</u>	<u>30</u>	<u>26</u>	<u>29</u>	<u>24</u>	<u>17</u>	<u>17</u>	<u>14</u>	<u>16</u>	<u>21</u>

a/ Includes freight, insurance, etc.

b/ Includes C.I.I.U. categories: 01 Agriculture and cattle; 20 Edible manufactured products except beverages; and 21 Beverages.

c/ Includes C.I.I.U. categories: 01 Agriculture and cattle; 04 Fish; and 20 Edible manufactured products except beverages.

d/ Includes C.I.I.U. category: 13 Crude petroleum and natural gas.

Source: Central Bank

Table 3.5: CHILE - IMPORTS BY COUNTRY OF ORIGIN, 1966-1974

(Millions of US\$)

	1966	1967	1968	1969	1970	1971	1972	1973	1974
<u>Europe</u>	<u>236.9</u>	<u>236.1</u>	<u>230.3</u>	<u>284.7</u>	<u>328.2</u>	<u>337.5</u>	<u>341.4</u>	<u>415.9</u>	<u>493.4</u>
Germany, Federal Republic	96.8	91.5	84.0	93.1	145.5	102.5	88.4	112.8	151.4
Spain	10.4	9.3	12.3	16.1	21.3	30.9	34.6	25.8	31.1
France	19.9	17.9	10.2	27.9	31.6	32.3	40.6	36.4	54.4
Netherlands	11.8	13.0	12.5	12.9	13.0	11.3	25.5	31.4	48.4
Italy	10.2	13.1	16.5	28.8	24.8	19.8	32.2	30.6	18.1
United Kingdom	42.3	48.7	42.4	48.2	58.1	64.4	54.4	64.0	68.9
Switzerland	11.9	11.2	11.0	17.4	16.7	14.2	16.2	13.4	10.8
Rest of Europe	33.6	31.4	41.4	40.3	17.2	62.1	49.5	101.5	110.3
<u>Latin America</u>	<u>177.2</u>	<u>195.9</u>	<u>189.5</u>	<u>229.9</u>	<u>201.9</u>	<u>249.3</u>	<u>286.2</u>	<u>332.0</u>	<u>636.5</u>
Argentina	63.3	77.1	80.0	92.4	93.3	110.7	144.0	166.6	323.8
Brazil	25.6	22.7	19.2	31.5	24.8	27.4	38.9	33.9	84.9
Ecuador	5.6	7.3	9.5	12.2	9.0	10.2	14.6	13.4	78.1
Mexico	17.0	23.5	26.5	21.2	18.7	30.2	25.7	27.9	29.9
Rest of Latin America	65.7	65.3	54.3	72.6	56.1	70.8	63.0	90.2	119.8
United States	299.8	256.6	285.4	349.0	343.6	267.3	160.5	179.1	415.7
Australia	1.6	6.6	9.4	7.3	2.0	12.9	23.9	47.4	98.0
Canada	8.7	10.2	8.3	10.2	11.6	13.8	12.0	28.3	39.9
Japan	16.8	8.9	13.2	18.2	27.7	44.3	33.5	35.2	48.6
Other	9.6	8.1	6.6	2.8	15.8	54.9	83.6	60.0	179.0
<u>Total</u>	<u>750.6</u>	<u>722.4</u>	<u>742.7</u>	<u>902.1</u>	<u>930.8</u>	<u>980.0</u>	<u>941.1</u>	<u>1,097.9</u>	<u>1,911.1</u>

Source: Central Bank (Superintendencia de Aduanas)

**Table 3.6: CHILE - IMPORT REGISTRATIONS, BY PRODUCT GROUP, 1968-1978**

(Millions of US dollars)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
1. <u>Consumer Goods</u>	109.9	141.5	164.7	245.3	276.6	237.8	153.2	83.8	154.0	366.2	524.4
a. Agricultural origin	25.0	33.3	29.2	34.7	11.6	9.0	10.0	11.5	8.8	13.0	18.7
b. Processed foods	23.5	28.5	41.5	110.0	190.8	167.5	35.8	13.9	39.2	89.4	112.8
c. Pharmaceutical	23.3	73.1	90.3	27.7	36.4	32.4	30.4	15.7	17.6	23.6	34.6
d. Tools	13.6	-	-	10.7	5.7	6.8	15.3	9.4	10.2	13.6	17.3
e. Other	24.6	6.5	3.7	62.1	32.1	22.1	61.8	33.3	78.2	226.6	341.0
2. <u>Intermediate Goods and Raw Materials</u>	283.6	486.3	519.3	720.4	822.6	1,110.2	1,757.6	872.1	1,119.0	1,308.2	1,629.6
a. Raw materials of agricultural origin	61.1	92.7	100.8	152.3	216.7	304.0	328.7	240.5	246.7	154.8	282.4
(i) Food	(43.6)	(69.1)	(76.0)	(121.8)	(146.8)	(233.3)	(253.0)	(222.2)	(200.8)	(96.2)	(226.3)
(ii) Nonfood	(17.5)	(23.6)	(24.8)	( 30.5)	( 70.0)	( 70.6)	( 75.7)	( 18.3)	( 45.9)	(58.6)	( 56.1)
b. Raw materials of industrial origin	100.3	162.1	173.5	232.8	267.5	372.3	575.9	188.6	264.1	357.6	371.9
(i) Food	(12.2)	(15.6)	(24.7)	( 44.5)	( 98.4)	(137.6)	(213.4)	( 69.8)	( 74.2)	(121.5)	( 82.8)
(ii) Nonfood	(88.1)	(146.4)	(148.9)	(188.5)	(169.1)	(234.7)	(362.6)	(118.8)	(189.9)	(236.1)	(289.1)
c. Industrial intermediate goods	43.4	62.7	63.8	92.9	90.1	107.6	141.7	76.7	102.7	178.2	248.3
d. Replacement parts	47.1	115.6	114.3	132.7	123.8	155.2	183.4	107.5	103.7	127.0	171.1
(i) Of machinery and equipment	(33.2)	( 66.3)	( 63.7)	( 71.4)	( 48.6)	( 76.0)	( 99.1)	( 91.8)	( 85.6)	( 95.8)	(121.3)
(ii) Of transport equipment	(13.9)	( 49.3)	( 50.6)	( 61.4)	( 75.2)	( 79.1)	( 84.3)	( 15.7)	( 18.1)	( 31.2)	( 49.9)
e. Fuels and lubricants	31.7	53.2	66.9	109.7	101.4	148.0	480.8	257.0	391.7	446.2	479.2
f. Assembly parts	-	-	-	-	23.1	23.1	26.3	1.5	10.1	44.4	76.6
g. Other	-	-	-	-	-	-	20.7	0.2	-	-	-
3. <u>Capital Goods</u>	67.6	289.0	264.4	200.0	312.2	333.5	502.1	382.3	410.7	585.2	632.3
a. Machinery and equipment	54.2	202.7	200.2	139.0	158.5	176.2	281.9	217.2	237.9	321.9	327.9
b. Transport equipment	12.3	83.2	57.4	57.9	143.7	144.8	217.3	164.9	171.9	260.6	302.0
c. Reproductive animals	1.1	3.1	6.8	3.0	10.0	12.5	2.8	0.2	0.9	2.7	2.4
Total	461.0	916.7	948.4	1,165.6	1,411.4	1,681.4	2,412.9	1,338.2	1,683.7	2,259.6	2,786.4

Source: Central Bank





Table 3.7: CHILE - NET INTERNATIONAL RESERVES, 1960-1978 <sup>a/</sup>

(Millions of US dollars)

	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977	1978
I. Central Bank, net	<u>38.4</u>	<u>-34.2</u>	<u>393.8</u>	<u>154.1</u>	<u>33.5</u>	<u>12.9</u>	<u>-42.3</u>	<u>-375.7</u>	<u>43.5</u>	<u>164.2</u>	<u>870.0</u>
A. Assets	<u>131.7</u>	<u>162.5</u>	<u>435.0</u>	<u>253.5</u>	<u>199.7</u>	<u>306.0</u>	<u>312.1</u>	<u>241.3</u>	<u>658.5</u>	<u>722.0</u>	<u>1,337.0</u>
1. Gold	(45.1)	(43.9)	(46.7)	(47.1)	(51.5)	(58.1)	(60.7)	(54.8)	(56.4)	(57.6)	(58.7)
2. Special Drawing Rights	( - )	( - )	(21.8)	(38.3)	( 2.2)	( 0.4)	(16.8)	(24.5)	(55.9)	(66.2)	(26.9)
3. IMF subscription	(18.7)	(25.0)	(39.5)	(39.6)	(42.9)	(47.6)	(48.2)	(46.3)	(45.7)	(47.8)	(51.4)
4. Foreign exchange <sup>a/</sup>	(65.5)	(93.6)	(310.3)	(120.9)	(96.7)	(134.9)	(35.7)	(31.4)	(343.1)	(316.1)	(769.2)
5. Bonds and other investments	( - )	( - )	( 9.9)	( 7.5)	( - )	( - )	( - )	( 2.0)	( 8.0)	(44.0)	(244.0)
6. Payments agreements	( 2.4)	( - )	( 6.8)	( 0.1)	( 1.4)	( 65.0)	(148.7)	(82.3)	(149.4)	(190.3)	(226.8)
B. Liabilities	93.3	196.7	41.2	99.4	161.2	293.1	354.4	617.0	615.0	557.8	507.0
1. To IMF	(29.4)	125.0)	(41.0)	(79.0)	(128.7)	(143.0)	(243.3)	(433.7)	(511.5)	(411.8)	(346.6)
2. Payments agreements	(29.5)	( 2.3)	( 0.2)	(20.4)	( 18.2)	( 71.4)	(111.1)	( 50.4)	(103.5)	(141.2)	(155.4)
3. Short-term credits	(34.4)	(69.4)	( - )	( - )	( 14.3)	( 78.7)	( - )	(132.9)	( - )	( 4.8)	( 5.0)
II. Commercial Banks, net	<u>-15.4</u>	<u>-58.5</u>	<u>15.5</u>	<u>-44.6</u>	<u>-153.0</u>	<u>-244.3</u>	<u>-234.2</u>	<u>-175.4</u>	<u>-139.4</u>	<u>-266.7</u>	<u>-355.2</u>
A. Assets	<u>16.9</u>	<u>21.7</u>	<u>66.7</u>	<u>44.2</u>	<u>96.2</u>	<u>71.5</u>	<u>107.1</u>	<u>96.2</u>	<u>124.2</u>	<u>104.7</u>	<u>143.8</u>
1. Gold	( 2.1)	( 5.5)	( 4.2)	( 4.1)	( 4.3)	( 4.3)	( 5.7)	( 5.7)	( 5.9)	( 5.6)	( 5.8)
2. Foreign exchange	(14.8)	(16.2)	(62.5)	(40.1)	( 52.0)	( 67.2)	(101.4)	( 90.5)	(118.3)	( 99.1)	(138.0)
B. Liabilities	32.3	80.2	51.2	88.8	209.2	315.8	341.3	271.6	263.6	371.4	499.0
III. Net Reserves of the Banking System <sup>a/</sup>	<u>23.0</u>	<u>-92.7</u>	<u>409.3</u>	<u>109.5</u>	<u>-119.5</u>	<u>-231.4</u>	<u>-276.5</u>	<u>-551.1</u>	<u>-95.6</u>	<u>-102.5</u>	<u>514.8</u>
(Import equivalent - months)	0.4	- 1.6	4.2	1.1	- 1.1	- 1.7	- 1.4	- 3.3	- 0.7	- 0.4	2.1

<sup>a/</sup> Excludes blocked or frozen foreign exchange assets. Such assets totaled US\$2 million during 1972-74, \$12 million in 1975, \$17 million in 1976, \$25 million in 1977, and \$17 million in mid-1978.

Source: Central Bank

Table 3.8: AVERAGE ANNUAL NOMINAL EXCHANGE RATES, 1940-1978  
(Escudos per dollar) a/

<u>Year</u>	<u>Nominal Exchange Rate b/</u>
1940	0.025
1945	0.030
1950	0.051
1955	0.181
1960	1.049
1961	1.049
1962	1.153
1963	1.871
1964	2.418
1965	3.237
1966	4.000
1967	5.080
1968	6.860
1969	9.040
1970	11.83
1971	13.47
1972	21.87
1973 Jan.-Sept.	58.77
1973 Oct.-Dec.	405.18
1974	863.65
1975	4903.
1976	13052.
1977	21540.
1978	31670.

a/ The escudo replaced the peso as Chile's currency unit in 1962 at the rate of 1,000 escudos = 1 peso. The escudo was, in turn, replaced by a new peso in October 1975, again at the ratio of 1,000 to one.

b/ Figures through 1972 are weighted averages of legal exchange rates calculated by Behrman; 1973 and 1974 figures are averages of the average bankers and brokers rates with weights of 0.8 and 0.2, respectively; only the average bankers rate is used from 1975 on.

Sources: Jere R. Behrman, Foreign Trade Regimes and Economic Development: Chile, National Bureau of Economic Research, Columbia University Press, New York, 1976; Central Bank of Chile

**Table 3.9:** EXPORT AND IMPORT PROJECTIONS, 1975-1990  
(US\$ Millions)

	1975	1976	1977	1978	1979	1980	1985	1990
<b>Exports</b>								
In 1975 Prices								
Copper	849.6	1086.8	1097.8	1116.4	1138.7	1161.5	1482.4	1636.7
Agricultural Goods	84.3	94.1	94.3	122.2	140.6	154.6	210.8	282.1
Manufactured Goods	395.0	536.2	611.5	681.7	797.6	917.2	1423.5	2375.9
Other Goods	242.0	184.3	181.0	203.1	211.2	219.7	267.3	325.2
Non-Factor Services	192.2	258.7	378.2	453.9	512.9	564.1	769.2	807.7
<u>Total</u>	<u>1763.1</u>	<u>2160.1</u>	<u>2382.7</u>	<u>2577.3</u>	<u>2801.0</u>	<u>3017.2</u>	<u>4153.3</u>	<u>5427.6</u>
In Current Prices								
Copper	849.6	1238.0	1167.0	1239.6	1387.1	1768.5	4249.8	7087.9
Agricultural Goods	84.3	119.0	160.0	207.4	230.4	251.7	466.4	815.8
Manufactured Goods	395.0	539.0	670.0	799.1	995.7	1213.7	2520.8	5369.8
Other Goods	242.0	185.0	198.0	210.9	235.3	255.7	500.5	846.0
Non-Factor Services	192.2	276.0	450.0	577.8	695.4	810.8	1479.4	1982.5
<u>Total</u>	<u>1763.1</u>	<u>2357.0</u>	<u>2645.0</u>	<u>3034.8</u>	<u>3543.8</u>	<u>4300.5</u>	<u>9216.9</u>	<u>16102.0</u>
<b>Imports</b>								
In 1975 Prices								
Food	360.8	263.3	187.9	194.4	204.7	214.3	258.0	321.3
Other Consumer Goods	93.2	97.4	328.8	360.5	378.8	397.4	514.0	707.1
Petroleum, Oil, Lubricants	251.6	314.5	361.8	378.0	367.9	384.7	562.0	743.6
Other Intermediate Goods	789.2	510.6	609.6	768.1	839.9	910.4	1325.4	1947.4
Capital Goods	281.0	352.3	468.7	529.1	626.6	765.0	1488.6	2063.5
Non-Factor Services <sup>1/</sup>	290.8	272.7	407.5	446.6	480.9	514.4	692.4	933.6
<u>Total</u>	<u>2066.6</u>	<u>1810.7</u>	<u>2364.3</u>	<u>2626.4</u>	<u>2846.1</u>	<u>3130.9</u>	<u>4768.8</u>	<u>6618.1</u>
In Current Prices								
Food	360.8	332.0	339.0	347.4	399.6	455.5	778.2	1262.7
Other Consumer Goods	93.2	105.0	382.0	385.7	431.7	480.1	830.9	1458.7
Petroleum, Oil, Lubricants	251.6	337.0	418.0	447.2	486.7	552.0	1078.3	1812.2
Other Intermediate Goods	789.2	513.0	572.0	906.0	1055.1	1212.3	2361.8	4428.9
Capital Goods	281.0	354.0	517.0	624.5	787.6	1019.2	2654.3	4695.9
Non-Factor Services <sup>1/</sup>	290.8	291.0	445.0	568.6	652.0	739.4	1331.6	2291.8
<u>Total</u>	<u>2066.6</u>	<u>1932.0</u>	<u>2813.0</u>	<u>3279.3</u>	<u>3812.6</u>	<u>4458.5</u>	<u>9035.1</u>	<u>15950.2</u>

<sup>1/</sup> Imports are stated CIF during 1975-77, and non-factor services excludes insurance and freight. Thereafter imports are calculated FOB.

Source: IBRD

Table 3.10. BALANCE OF PAYMENTS AND EXTERNAL BORROWING PROJECTIONS  
(US\$ Million)

	Actual				Projected			
	1975	1976	1977	1978	1979	1980	1985	1990
Exports of Goods and Non Factor Services	1763.1	2357.0	2645.0	3034.8	3543.8	4300.5	9216.9	16102.0
Imports of Goods and Non Factor Services	2066.6	1932.0	2813.0	3279.3	3812.6	4458.5	9035.1	15950.2
Resource Balance	-303.5	425.0	-168.0	-244.5	-268.8	-158.0	181.8	151.8
Net Factor Service Income (of which: On Public M+LT Loans)	-284.2 (-156.6)	-315.0 (-208.9)	-381.0 (-201.3)	-480.5 (-395.4)	-363.8 (-301.2)	-432.9 (-345.0)	-635.6 (-428.4)	-918.2 (-647.0)
Current Transfers	10.0	28.0	50.0	57.0	42.0	35.0	32.8	46.0
Current Account Balance	-577.7	138.0	-479.0	-668.0	-590.6	-566.0	-421.0	-720.4
Direct Foreign Investment	-4.2	7.0	25.0	200.0	250.0	200.0	200.0	100.0
Capital Grants	5.8	1.2	.4	.0	.0	.0	.0	.0
Public M+LT Loans, net (Disbursements)	-57.5 (287.4)	-115.6 (432.7)	-80.7 (569.8)	839.0 (1503.0)	379.8 (1060.2)	98.9 (924.9)	214.2 (1308.4)	732.8 (2234.9)
(Amortizations)	(-344.9)	(-548.3)	(-650.5)	(-664.0)	(-680.4)	(-826.0)	(-1094.2)	(-1502.1)
Other M+LT Loans, Net (Disbursements)	-	-	-	433.0 (600.0)	212.5 (562.5)	428.9 (578.9)	158.7 (811.9)	118.3 (994.6)
(Amortizations)	-	-	-	(-167.0)	(-350.0)	(-150.0)	(-653.2)	(-876.3)
Use of IMF Resources	190.4	78.0	-100.0	-79.7	-182.7	-86.0	.0	.0
Short-Term Capital and Capital n.e.i.	359.0	424.4	528.3	-11.0	20.0	22.0	35.4	57.1
Change in Reserves (-=increase)	84.2	-533.0	106.0	-713.3	-89.1	-107.9	-187.3	-287.8
Memorandum Item: Net Foreign Reserves at end of Period	-551.1	-95.9	-102.5	635.1	724.2	832.0	1596.3	2751.1

Source: IBRD

IV. EXTERNAL DEBT

Table 4.1 : RESOURCE FLOWS BETWEEN CHILE AND INTERNATIONAL LENDERS, 1968-1976 <sup>a/</sup>

(Millions of US dollars)

	Bilateral Loans	Multi- lateral Loans <sup>b/</sup>	Suppliers Credits	Private Financial Institutions	Other Private Debt <sup>c/</sup>	T O T A L
<b>A. Commitments</b>						
1968	122.5	23.9	87.7	57.6	-	291.7
1969	110.7	1.8	71.9	208.2	-	392.6
1970	16.8	31.3	162.6	132.2	-	342.9
1971	169.4	-	79.1	28.6	-	277.1
1972	174.9	2.2	92.0	90.4	-	359.6
1973	255.0	0.2	60.8	12.3	-	328.4
1974	307.9	138.0	271.5	30.7	-	748.1
1975	119.1	67.1	178.9	38.4	-	403.5
1976	110.3	97.3	155.7	120.1	-	483.5
1977	23.4	65.2	45.5	825.9	-	960.0
<b>B. Disbursements</b>						
1968	166.3	26.7	127.7	36.9	-	357.7
1969	147.5	26.6	103.3	149.7	-	427.1
1970	98.3	33.7	155.7	109.6	-	397.3
1971	59.3	24.1	64.9	42.2	-	190.5
1972	66.4	13.2	105.2	72.6	-	257.5
1973	149.4	11.2	69.0	66.2	-	315.8
1974	262.9	41.3	194.5	40.8	-	539.5
1975	91.4	45.7	108.9	41.5	-	287.4
1976	90.7	27.5	199.6	115.0	-	432.7
1977	83.4	47.6	92.9	346.0	-	569.8
<b>C. Repayments</b>						
1968	40.7	10.3	39.0	32.4	43.5	165.8
1969	52.7	13.5	37.4	20.0	40.4	164.0
1970	60.5	15.9	47.4	29.9	9.6	163.4
1971	58.7	14.4	51.7	22.6	14.4	161.8
1972	22.8	12.5	13.3	9.2	13.3	71.1
1973	57.2	10.1	22.0	12.0	18.6	119.9
1974	70.6	24.7	44.6	32.0	27.0	198.9
1975	115.2	21.3	73.2	35.2	99.9	344.9
1976	209.5	19.3	119.4	108.7	91.4	548.3
1977	236.9	23.7	216.1	117.1	56.8	650.5
<b>D. Net Disbursements (B-C)</b>						
1968	125.6	16.4	88.8	4.6	-43.5	191.9
1969	94.8	13.1	65.9	129.8	-40.4	263.1
1970	37.8	17.8	108.3	79.7	-9.6	233.9
1971	0.6	9.7	13.2	19.6	-14.4	28.7
1972	43.6	0.7	91.9	63.4	-13.3	186.3
1973	92.2	1.1	47.0	74.2	-18.6	195.9
1974	192.3	16.6	149.9	8.8	-27.0	340.6
1975	-23.8	24.4	35.7	6.3	-99.9	-57.5
1976	-118.8	8.2	80.2	6.3	-91.4	-115.6
1977	-153.5	23.9	-123.2	228.9	-56.8	-80.7
<b>E. Interest</b>						
1968	21.3	8.0	10.7	4.4	5.8	50.2
1969	26.3	9.1	11.7	4.2	3.1	54.3
1970	30.6	9.9	17.5	17.8	2.2	77.9
1971	24.4	10.0	24.5	14.6	6.8	80.4
1972	8.6	8.9	5.1	1.6	2.4	26.5
1973	4.2	6.7	11.1	10.4	4.2	36.7
1974	20.4	22.0	9.4	21.4	5.8	79.1
1975	69.9	17.0	11.6	19.9	38.2	156.6
1976	90.0	16.7	36.7	31.0	34.6	208.9
1977	73.1	18.5	39.0	44.6	26.0	201.3
<b>F. Net Resource Flow (D-E)</b>						
1968	104.3	8.4	78.1	0.2	-49.3	141.7
1969	68.5	4.0	54.2	125.6	-43.5	208.8
1970	7.2	7.9	90.8	61.9	-11.8	156.0
1971	-23.8	-0.3	-11.4	5.0	-21.2	-51.7
1972	35.0	-8.2	86.8	61.8	-15.7	159.8
1973	66.0	-5.6	35.9	63.8	-22.8	159.2
1974	171.9	-5.4	140.5	-12.6	-32.8	261.6
1975	-93.7	7.4	24.1	-13.6	-138.1	-214.0
1976	-208.8	-8.5	43.5	-24.7	-126.0	-324.5
1977	-226.6	5.4	-162.2	184.3	-82.8	-282.0

a/ Actual flows after rescheduling; includes medium- and long-term public debts repayable in foreign currency.

b/ Excludes loans made in foreign currency but repayable in local currency.

c/ Includes public bonds and nationalization agreements.

Source: Table 4.2

Table 4.2: CHILE - EXTERNAL PUBLIC DEBT REPAYABLE IN FOREIGN CURRENCY OUTSTANDING AS OF DECEMBER 31, 1977,  
BY TYPE OF CREDITOR AND CREDITOR COUNTRY

(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR CREDITOR COUNTRY	D E B T O U T S T A N D I N G : I N A R R E A R S				
	DISBURSED	UNDISBURSED	TOTAL	PRINCIPAL	INTEREST
SUPPLIERS CREDITS					
ARGENTINA	53,683	1,600	55,283	-	-
AUSTRALIA	946	-	946	-	-
BELGIUM	3,361	-	3,361	-	-
BRAZIL	38,187	42,743	80,930	-	-
CANADA	700	-	700	-	-
COLOMBIA	66	-	66	-	-
CZECHOSLOVAKIA	7	-	7	-	-
DENMARK	3,381	-	3,381	-	-
FINLAND	48	-	48	-	-
FRANCE	24,118	-	24,118	-	-
GERMAN DEM. REP.	2,320	-	2,320	-	-
GERMANY, FED.REP. OF	29,327	4,631	33,958	-	-
ITALY	12,589	1,894	14,483	-	-
JAPAN	143,684	3,917	147,601	-	-
NETH. ANTILLES	6,000	-	6,000	-	-
NETHERLANDS	6,092	137	6,229	-	-
NORWAY	2,142	-	2,142	-	-
PANAMA	241	-	241	-	-
PERU	44	-	44	-	-
SPAIN	42,227	29,853	72,080	-	-
SWEDEN	5,340	-	5,340	-	-
SWITZERLAND	8,032	619	8,651	-	-
UNITED KINGDOM	28,384	-	28,384	-	-
UNITED STATES	140,336	-	140,336	-	-
TOTAL SUPPLIERS CREDITS	551,255	85,394	636,649	-	-
FINANCIAL INSTITUTIONS					
ARGENTINA	979	-	979	-	-
AUSTRIA	2,588	12,030	14,618	-	-
BELGIUM	15,442	1,146	16,588	-	-
CANADA	15,194	-	15,194	-	-
FRANCE	119,728	26,087	145,815	-	-
GERMANY, FED.REP. OF	42,896	53,304	96,200	-	-
ITALY	21,271	-	21,271	-	-
NETH. ANTILLES	457	-	457	-	-
NETHERLANDS	12,000	30,000	42,000	-	-
PANAMA	500	-	500	-	-
SPAIN	10,525	125,000	135,525	-	-
SWEDEN	265	-	265	-	-
SWITZERLAND	6,232	25,065	31,297	-	-
UNITED KINGDOM	45,322	15,172	60,494	-	-
UNITED STATES	382,184	261,261	643,445	-	-
TOTAL FINANCIAL INSTITUTIONS	675,583	549,065	1,224,648	-	-

(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR CREDITOR COUNTRY	D E B T O U T S T A N D I N G : I N A R R E A R S			PRINCIPAL	INTEREST
	DISBURSED	UNDISBURSED	TOTAL		
BONDS					
SWITZERLAND	6,731	-	6,731	-	-
UNITED KINGDOM	5,682	-	5,682	-	-
UNITED STATES	806	-	806	-	-
TOTAL BONDS	13,219	-	13,219	-	-
NATIONALIZATION					
FRANCE	3,170	-	3,170	-	-
GERMANY, FED.REP. OF	2,895	-	2,895	-	-
NETHERLANDS	2,500	-	2,500	-	-
PANAMA	100	-	100	-	-
SPAIN	578	-	578	-	-
UNITED STATES	290,025	-	290,025	-	-
TOTAL NATIONALIZATION	299,268	-	299,268	-	-
MULTILATERAL LOANS					
ADELA	12,235	-	12,235	-	-
CORP. ANDINA FOMENTO	16,550	-	16,550	-	-
IBRD	141,202	88,651	229,853	-	-
IDA	21,450	-	21,450	-	-
IDB	90,592	132,962	223,554	-	-
TOTAL MULTILATERAL LOANS	282,029	221,613	503,642	-	-
BILATERAL LOANS					
ARGENTINA	98,481	96,984	195,465	-	-
BELGIUM	8,145	-	8,145	-	-
BRAZIL	133,227	58,346	191,573	-	-
BULGARIA	2,738	-	2,738	-	-
CANADA	19,871	-	19,871	-	-
CHINA, P.R. OF	16,775	-	16,775	-	-
CZECHOSLOVAKIA	1,649	-	1,649	-	-
DENMARK	4,776	-	4,776	-	-
FRANCE	93,643	691	94,334	-	-
GERMAN DEM. REP.	8,397	-	8,397	-	-
GERMANY, FED.REP. OF	150,970	-	150,970	-	-
ITALY	26,004	-	26,004	-	-
JAPAN	21,848	-	21,848	-	-
MEXICO	4,781	13,438	18,219	-	-
NETHERLANDS	21,654	1,421	23,075	-	-
NORWAY	2,206	-	2,206	-	-
ROMANIA	6,686	-	6,686	-	-
SPAIN	53,049	10,000	63,049	-	-
SWEDEN	7,373	-	7,373	-	-
SWITZERLAND	15,159	-	15,159	-	-



(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR CREDITOR COUNTRY	D E B T O U T S T A N D I N G : I N A R R E A R S				
	DISBURSED	UNDISBURSED	TOTAL	PRINCIPAL	INTEREST
UNITED KINGDOM	58,992	-	58,992	-	-
UNITED STATES	892,640	18,503	911,143	-	-
USSR	92,812	-	92,812	-	-
MULTIPLE LENDERS	20,000	-	20,000	-	-
TOTAL BILATERAL LOANS	1,761,876	199,383	1,961,259	-	-
TOTAL EXTERNAL PUBLIC DEBT	3,583,230	1,055,455	4,638,685	-	-

NOTES: (1) ONLY DEBTS WITH AN ORIGINAL OR EXTENDED MATURITY OF OVER ONE YEAR ARE INCLUDED IN THIS TABLE.  
(2) DEBT OUTSTANDING INCLUDES PRINCIPAL IN ARREARS BUT EXCLUDES INTEREST IN ARREARS.

EXTERNAL DEBT DIVISION  
ECONOMIC ANALYSIS AND PROJECTIONS DEPARTMENT  
SEPTEMBER 20, 1978

Table 4.2a: CHILE - PROJECTED SERVICE PAYMENTS AND DISBURSEMENTS ON FOREIGN CURRENCY EXTERNAL PUBLIC DEBT  
OUTSTANDING AS OF DECEMBER 31, 1977

(IN THOUSANDS OF U.S. DOLLARS)

YEAR	DEBT OUTSTANDING AT :		TOTAL TRANSACTIONS DURING PERIOD :					OTHER CHANGES	
	BEGINNING OF PERIOD :								
	DISBURSED :	INCLUDING :	COMMIT-	DISBURSE-	SERVICE PAYMENTS :			CANCEL-	ADJUST-
	ONLY :	UNDISBURSED :	MENTS :	MENTS :	PRINCIPAL :	INTEREST :	TOTAL :	LATIONS :	MENT *
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1971	2,065,748	2,533,957	277,112	190,488	161,762	80,387	242,149	20,162	94,584
1972	2,179,803	2,723,729	359,572	257,465	71,139	26,499	97,638	14,424	226,365
1973	2,588,901	3,224,103	328,392	315,772	119,868	36,718	156,586	119,782	27,396
1974	2,812,115	3,340,241	748,120	539,545	198,909	79,056	277,965	116,398	601,243
1975	3,789,056	4,374,297	403,517	287,424	344,910	156,561	501,471	83,920	10,935
1976	3,751,475	4,359,919	483,466	432,684	548,311	208,938	757,249	4,154	-29,218
1977	3,609,136	4,261,702	960,002	569,786	650,494	201,269	851,763	9,603	77,078
1978	3,583,230	4,638,685	-	700,101	589,343	236,590	825,933	-	-49,980
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1978	3,583,230	4,638,685	-	700,101	589,343	236,590	825,933	-	-49,980
1979	3,644,009	3,999,362	-	195,318	690,878	225,462	916,340	-	4
1980	3,148,452	3,308,488	-	68,939	602,832	186,692	789,524	-	11
1981	2,614,570	2,705,667	-	40,765	528,187	149,511	677,698	-	-1
1982	2,127,148	2,177,479	-	21,297	449,506	115,492	564,998	-	13
1983	1,698,951	1,727,986	-	17,385	347,545	89,076	436,621	-	-
1984	1,368,792	1,380,441	-	7,050	212,029	70,101	282,130	-	3
1985	1,163,816	1,168,415	-	3,383	168,195	58,366	226,561	-	-3
1986	999,001	1,000,217	-	949	137,821	48,557	186,378	-	7
1987	862,136	862,403	-	191	108,122	41,371	149,493	-	1

NOTES:

- INCLUDES ALL DEBTS LISTED IN TABLE 1, PREPARED SEPTEMBER 20, 1978.
- PROJECTIONS EXCLUDE US\$50.0 MILLION FROM USSR WHICH ARE ELIGIBLE FOR RESCHEDULING AND THE TERMS OF WHICH ARE UNKNOWN.

\* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

EXTERNAL DEBT DIVISION  
ECONOMIC ANALYSIS AND PROJECTIONS DEPARTMENT  
SEPTEMBER 20, 1978

Table 4.3: CHILE - EXTERNAL PUBLIC DEBT REPAYABLE IN LOCAL CURRENCY OUTSTANDING AS OF DECEMBER 31, 1977  
BY TYPE OF CREDITOR, CREDITOR COUNTRY, AND CURRENCY OF DRAWINGS

(IN THOUSANDS OF U.S. DOLLARS)

TYPE OF CREDITOR CREDITOR COUNTRY CURRENCY OF DRAWINGS	D E B T O U T S T A N D I N G			I N A R R E A R S	
	DISBURSED	UNDISBURSED	TOTAL	PRINCIPAL	INTEREST
MULTILATERAL LOANS					
IDB					
DRAWINGS IN LOCAL CURRENCY	31,022	28,452	59,474	-	-
DRAWINGS IN FOREIGN CURRENCY	94,573	200	94,773	-	-
TOTAL IDB	125,595	28,652	154,247	-	-
TOTAL MULTILATERAL LOANS	125,595	28,652	154,247	-	-
BILATERAL LOANS					
UNITED STATES					
DRAWINGS IN LOCAL CURRENCY	17,970	-	17,970	-	-
TOTAL UNITED STATES	17,970	-	17,970	-	-
TOTAL BILATERAL LOANS	17,970	-	17,970	-	-
TOTAL EXTERNAL PUBLIC DEBT	143,565	28,652	172,217	-	-

NOTES: (1) ONLY DEBTS WITH AN ORIGINAL OR EXTENDED MATURITY OF OVER ONE YEAR ARE INCLUDED IN THIS TABLE.  
(2) DEBT OUTSTANDING INCLUDES PRINCIPAL IN ARREARS BUT EXCLUDES INTEREST IN ARREARS.

EXTERNAL DEBT DIVISION  
ECONOMIC ANALYSIS AND PROJECTIONS DEPARTMENT  
SEPTEMBER 20, 1978

Table 4.3a: CHILE - PROJECTED SERVICE PAYMENTS AND DISBURSEMENTS ON LOCAL CURRENCY EXTERNAL PUBLIC DEBT  
OUTSTANDING AS OF DECEMBER 31, 1977

(IN THOUSANDS OF U.S. DOLLARS)									
YEAR	DEBT OUTSTANDING AT		TRANSACTIONS DURING PERIOD					OTHER CHANGES	
	BEGINNING OF PERIOD		TOTAL						
	DISBURSED	INCLUDING	COMMIT-	DISBURSE-	SERVICE PAYMENTS			CANCEL-	ADJUST-
	ONLY	UNDISBURSED	MENTS	MENTS	PRINCIPAL	INTEREST	TOTAL	LATIONS	MENT *
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1971	137,524	217,423	11,600	25,941	8,685	4,916	13,601	229	-1,076
1972	153,708	219,033	-	16,855	8,913	4,937	13,850	62	-3,007
1973	158,643	207,051	-	14,373	7,581	4,557	12,138	-	-1,987
1974	163,448	197,483	-	14,435	8,728	4,672	13,400	7,553	-3,431
1975	165,724	177,771	-	7,195	9,542	4,599	14,141	1,019	-1,924
1976	161,381	165,286	27,500	2,205	14,117	5,355	19,472	386	2,282
1977	151,751	180,565	4,400	4,336	12,403	4,999	17,402	226	-119
1978	143,565	172,217	-	-	-	-	-	-	-
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1978	143,565	172,217	-	3,618	12,979	4,801	17,780	-	1
1979	134,205	159,239	-	4,671	12,587	4,436	17,023	-	-2
1980	126,287	146,650	-	5,414	12,496	4,103	16,599	-	1
1981	119,206	134,155	-	5,499	12,241	3,783	16,024	-	-2
1982	112,462	121,912	-	4,023	11,309	3,441	14,750	-	1
1983	105,177	110,604	-	2,571	10,669	3,118	13,787	-	2
1984	97,081	99,937	-	1,820	11,308	2,796	14,104	-	-2
1985	87,591	88,627	-	819	11,129	2,452	13,581	-	-
1986	77,281	77,498	-	217	10,570	2,096	12,666	-	-1
1987	66,927	66,927	-	-	9,120	1,774	10,894	-	-1

\* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

EXTERNAL DEBT DIVISION  
ECONOMIC ANALYSIS AND PROJECTIONS DEPARTMENT  
SEPTEMBER 20, 1978

V. PUBLIC FINANCE

Table 5.0: CHILE - PUBLIC SECTOR FINANCE, 1960-1970

(Thousands of pesos)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1968 Adj. e/	1969 e/	1970 e/
A. Current Revenues	1247.0	1453.9	1779.2	2558.8	3755.7	5868.0	8691.1	11799.3	16575.2		24526.4	34819.8
Central government	707.7	796.7	971.6	1353.8	1962.2	3209.1	4897.9	6312.2	8757.6		13068.6	19302.3
Other public sector a/	539.3	657.2	807.6	1205.0	1793.5	2658.9	3793.2	5487.1	7817.6		11457.8	15517.5
B. Current Expenditures	1064.7	1239.5	1503.4	2060.8	3000.5	4772.0	6800.7	9230.7	12645.4		18350.2	28658.0
Central government b/	418.7	425.7	556.7	730.0	1079.7	1650.3	2211.4	2955.9	3954.7		5619.8	9618.2
Other public sector c/	646.0	813.8	946.7	1330.8	1920.8	3121.7	4589.3	6274.8	8690.7		12730.4	19039.8
C. Current Balance (A-B)	182.3	214.4	275.8	498.0	755.2	1096.0	1890.4	2568.6	3929.8		6176.2	6161.8
Central government	289.0	371.0	414.9	623.8	882.5	1558.8	2686.5	3356.3	4802.9		7448.8	9684.1
Other public sector	-106.7	-156.6	-139.1	-125.8	-127.3	-462.8	-796.1	-787.7	-873.1		-1272.6	-3522.3
D. Capital Expenditures d/	299.9	393.9	558.4	790.9	1189.7	1897.2	2692.7	3592.9	5357.0	6361.1	9808.2	15625.0
Central government b/	105.7	100.4	142.5	211.9	323.2	600.4	820.2	872.1	1164.4	1164.4	1684.7	2605.7
Other public sector c/	194.2	293.4	415.9	579.0	866.5	1872.5	2720.8	2720.8	4192.6	5196.7	8123.5	13019.3
E. Capital Revenues	51.5	102.9	72.4	123.1	132.2	229.0	271.9	544.3	906.7		1677.1	2634.7
Central government	-	12.0	6.5	8.0	-	-	-	-	0.4		53.5	163.0
Other public sector	51.5	90.9	65.9	115.1	132.3	229.0	271.9	544.3	906.3		1623.6	2471.7
F. Overall Balance (C-D+E)	-66.1	-76.6	-210.2	-169.8	-302.2	-572.2	-530.4	-480.0	-520.5	-1524.6	-1954.9	-6828.5
Central government	183.3	282.6	278.9	419.9	559.3	958.4	1866.3	2484.2	3638.9	3638.9	5817.6	7241.4
Other public sector	-249.4	-359.1	-489.1	-589.7	-861.5	-1530.6	-2396.7	-2964.2	-4159.4	-5163.5	-7772.5	-14069.9

a/ Excludes transfers from central government.

b/ Excludes transfers to other public sector institutions.

c/ Includes transfers from central government.

d/ Excludes amortization payments.

e/ Estimate.

Sources: IBRD, Report No. WH-2026, September 10, 1970; Report No. 551-CH of October 18, 1974.

Table 5.0a: PUBLIC SECTOR FINANCE, 1960-1970

(Thousands of pesos of December 1969)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1968 Adj.	1969 <sup>e/</sup>	1970 <sup>e/</sup>
A. Current Revenues	10834	11772	12654	12421	12383	15015	18103	20803	23076		26136	27990
Central government	6149	6451	6910	6572	6470	8212	10202	11129	12192		13926	15516
Other public sector <sup>a/</sup>	4685	5321	5744	5850	5913	6804	7901	9674	10883		12210	12474
B. Current Expenditures	9250	10036	10693	10004	9893	12211	14165	16274	17605		19555	23037
Central government <sup>b/</sup>	3638	3447	3959	3544	3560	4223	4606	5211	5506		5989	7732
Other public sector <sup>c/</sup>	5613	6589	6733	6460	6333	7988	9559	11063	12099		13566	15305
C. Current Balance (A-B)	1584	1736	1962	2417	2490	2805	3938	4529	5471		6582	4953
Central government	2511	3004	2951	3028	2910	3989	5596	5917	6686		7938	7785
Other public sector	-927	-1268	-989	-611	-420	-1184	-1658	-1389	-1216		-1356	-2831
D. Capital Expenditures <sup>d/</sup>	2606	3189	3972	3839	3923	4855	5609	6334	7458	8856	10452	12560
Central government <sup>b/</sup>	918	813	1014	1029	1066	1536	1708	1538	1621	1621	1795	2095
Other public sector <sup>c/</sup>	1687	2376	2958	2811	2857	3318	3900	4797	5837	7235	8657	10466
E. Capital Revenues	447	833	515	598	436	586	566	960	1262		1787	2118
Central government	-	97	46	39	-	-	-	-	1		57	131
Other public sector	447	736	469	559	436	586	566	960	1262		1730	1987
F. Overall Balance (C-D+E)	-574	-620	-1495	-824	-996	-1464	-1105	-846	-725	-2123	-2083	-5489
Central government	1593	2288	1984	2038	1844	2452	3887	4380	5066	5066	6199	5821
Other public sector	-2167	2908	-3479	-2863	-2840	-3917	-4992	-5226	-5791	-7189	-8283	-11310

<sup>a/</sup> Excludes transfers from central government.

<sup>b/</sup> Excludes transfers to other public sector institutions

<sup>c/</sup> Includes transfers from central government.

<sup>d/</sup> Excludes amortization payments.

Sources: IBRD, Report No. WH-202b, September 10, 1970; Report No. 551-CH of October 18, 1974

Table 5.1: CHILE - SUMMARY OPERATIONS OF THE CENTRAL GOVERNMENT, INCLUDING U.S. AND LOCAL CURRENCY OPERATIONS, 1960-1977

(In thousands of current pesos)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 <sup>d/</sup>
<b>Current Revenues</b>	708	808	959	1,473	2,112	2,492	5,205	6,643	9,090	14,635	21,340	25,361	41,598	224,622	1,961,973	8,973,334	30,202,211	63,521,400
Tax Revenues	669	761	897	1,278	1,933	3,128	4,625	6,014	8,378	12,487	18,169	22,720	36,603	185,899	1,729,678	8,574,729	29,387,731	61,958,300
Non-Tax Revenues	39	47	58	79	115	244	273	261	409	726	1,056	1,781	2,922	16,655	232,295	398,605	814,580	1,563,000
Adjustments <sup>a/</sup>	-	-	4	66	64	126	305	368	303	1,422	1,915	860	2,073	-	-	-	-	-
<b>Current Expenditures</b>	635	715	903	1,243	1,815	2,847	3,983	5,065	6,773	10,565	17,066	27,392	52,624	250,607	1,718,001	6,939,899	23,852,036	54,902,100
Personnel Outlays	344	380	477	593	907	1,374	2,020	2,570	3,518	4,928	8,691	14,715	28,009	95,175	711,210	3,216,135	10,715,649	21,278,200
Purchase of Goods and Services	71	85	82	134	176	285	375	453	478	713	1,090	1,540	3,013	20,335	294,449	875,145	2,722,595	7,738,500
Transfers to Public Sector	166	198	272	341	519	867	1,037	1,238	1,835	2,492	3,930	7,786	15,607	96,526	607,944	1,736,592	4,572,841	17,673,400
Transfers to Private Sector	45	42	53	74	99	126	185	261	445	645	907	1,810	3,519	14,719	88,187	467,674	3,615,047	5,638,100
Interest Payments	11	10	15	35	50	71	65	175	197	367	553	681	403	1,784	76,211	644,353	2,225,906	2,212,600
Adjustments <sup>a/</sup>	-	-	4	66	64	126	305	368	303	1,422	1,915	860	2,073	22,068	-	-	-	361,500
<b>Current Account Surplus or Deficit (-)</b>	73	95	56	180	297	645	1,220	1,578	2,317	4,070	4,054	-2,031	-11,026	-25,985	-243,972	-2,033,433	-6,350,275	-8,619,300
<b>Capital Revenues<sup>a/</sup></b>	-	-	1	16	16	31	76	92	76	355	479	215	518	5,517	-	-	-	-
<b>Capital Expenditures</b>	209	222	302	475	674	1,237	1,740	1,876	2,583	3,845	5,504	8,403	13,481	76,701	863,283	1,888,660	4,158,527	8,137,600
Direct Investment	89	100	125	211	330	604	770	925	1,062	1,466	2,122	3,069	6,427	31,232	458,656	1,154,814	2,022,767	4,750,900
Financial Investment (incl. transfers)	120	122	176	248	328	602	894	859	1,445	2,025	2,905	5,119	6,536	39,952	404,627	733,846	2,135,760	3,346,700
Adjustments <sup>a/</sup>	-	-	1	16	16	31	76	92	76	355	479	215	518	5,517	-	-	-	-
<b>Expenditures Financed Directly by Banking System</b>	-	-	-	-	-	-	-	-	-	-	-	-	4,049	169,000	-	-	-	-
<b>Overall Surplus or Deficit (-)</b>	-136	-127	-244	-279	-361	-561	-444	-205	-190	580	-971	-10,219	-28,038	-266,169	-619,311	144,725	2,191,748	481,700
<b>Financing, Net</b>	136	127	244	279	361	561	444	205	190	-580	971	10,219	28,038	266,169	619,311	-144,725	-2,191,748	-481,700
Domestic Loans	156	90	184	139	277	326	242	347	453	299	4,373	11,895	26,822	135,186	950,436	1,740,186	3,651,216	4,961,400
Special Direct Financing by Monetary System	-	-	-	-	-	-	-	-	-	-	-	-	4,049	169,000	-	-	-	-
External Lending, Net	-20	28	78	117	45	267	210	-177	-254	-635	-1,474	-1,617	-734	-6,882	-235,508	-1,242,720	-3,567,063	-5,443,100
Foreign Exchange Operations	-	1	8	13	26	-	-	49	-	7	-27	-8	23	7	-58,137	-82,259	-696,327	-
Others	-	8	-26	10	35	-32	-8	-14	-9	-251	99	-51	-2,122	-31,142	-37,480	-59,982	1,579,574	-

a/ Mission assumed that the offsetting receipts and expenditures shown by the Ministry of Finance under the category called "Derechos Aduana y Movimiento Extrapresupuestario"--an adjustment item which mainly reflects import tariffs foregone by public sector imports--for the period 1965-1973 in the local currency portion of the central government budget represented 80 percent current expenditures and 20 percent capital outlays. In 1977 figures represent other expenditures and receipts not otherwise classified.

b/ Includes statistical discrepancy.

c/ Provisional.

Source: Ministry of Finance, IMF, mission estimates



Table 5.1a: CHILE - CENTRAL GOVERNMENT OPERATIONS RELATIVE TO TOTAL EXPENDITURES, 1960-1977

(In percent)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 <sup>B/</sup>
<u>Current Revenues</u>	83.8	86.4	79.7	82.8	84.9	85.5	90.9	95.7	97.2	101.6	95.6	70.9	62.9	68.6	76.0	101.6	107.8	100.8
Tax Revenues	79.2	81.3	74.5	74.4	77.7	76.4	80.8	86.7	89.5	86.7	80.4	63.5	55.4	56.8	67.0	97.1	104.9	98.3
Non-Tax Revenues	4.7	5.1	4.8	4.6	4.6	6.0	4.8	3.8	4.4	5.0	4.7	5.0	4.4	5.1	9.0	4.5	2.9	2.5
Adjustments <sup>a/</sup>	-	-	0.3	3.8	2.6	3.1	5.3	5.3	3.2	9.9	8.5	2.4	3.1	6.7	-	-	-	-
<u>Current Expenditures</u>	75.2	76.2	75.0	72.4	72.9	69.2	69.6	73.0	72.4	73.3	75.6	76.5	79.6	76.6	66.6	78.6	85.2	87.1
Personnel Outlays	40.7	40.7	39.5	34.6	36.7	33.6	35.3	37.0	37.6	34.2	38.5	41.1	42.7	39.1	27.6	36.4	38.5	33.8
Purchase of Goods and Services	8.5	8.8	6.8	7.8	7.1	6.9	6.6	6.5	9.1	5.0	4.8	4.3	4.6	6.2	9.1	9.9	9.7	12.3
Transfers to Public Sector	19.7	21.2	22.6	19.8	20.9	21.2	18.1	17.8	19.6	17.3	17.4	21.8	23.6	29.5	23.6	19.7	16.3	28.0
Transfers to Private Sector	5.1	4.5	4.4	4.3	4.0	3.1	3.2	3.8	4.8	4.5	4.0	5.1	5.3	4.5	3.4	5.3	12.9	8.9
Interest Payments	1.3	1.0	1.3	2.0	2.0	1.7	1.1	2.5	2.1	2.6	2.5	1.9	0.6	0.6	3.0	7.3	8.0	3.5
Adjustments <sup>a/</sup>	-	-	0.3	3.8	2.6	3.1	5.3	5.3	3.2	9.9	8.5	2.4	3.1	6.7	-	-	-	0.6
<u>Current Account Surplus or Deficit (-)</u>	8.6	10.2	4.7	10.5	11.9	15.8	21.3	22.7	24.8	28.3	18.0	-5.7	-16.7	-7.9	9.5	23.0	22.7	13.7
<u>Capital Revenues <sup>a/</sup></u>	-	-	0.1	0.9	0.6	0.8	1.3	1.3	0.8	2.5	2.1	0.6	0.8	1.7	-	-	-	-
<u>Capital Expenditures</u>	24.8	25.8	25.0	27.6	27.1	30.3	30.4	27.0	27.6	26.7	24.4	23.5	20.4	23.4	23.4	21.4	14.9	12.9
Direct Investment	10.5	10.7	10.4	12.3	13.3	14.8	13.5	13.3	11.4	10.2	9.4	8.6	9.7	9.5	17.8	13.1	7.2	7.6
Financial Investments (incl. transfers)	14.3	15.1	14.6	14.4	13.2	14.7	15.6	12.4	15.5	14.1	12.9	14.3	9.9	12.2	15.7	8.3	7.6	5.3
Adjustments <sup>a/</sup>	-	-	0.1	0.9	0.6	0.8	1.3	1.3	0.8	2.5	2.1	0.6	0.8	1.7	-	-	-	-
<u>Expenditures Financed Directly by Banking System</u>	-	-	-	-	-	-	-	-	-	-	-	-	6.1	21.6	-	-	-	-
<u>Overall Surplus or Deficit (-)</u>	-16.2	-13.6	-20.3	-16.2	-14.5	-13.7	-7.8	-3.0	-2.0	4.0	-1.3	-28.6	-42.4	-31.3	-24.0	1.6	7.8	0.8

<sup>a/</sup> See footnote <sup>a/</sup> of Table 5.1.<sup>B/</sup> Provisional.

Source: Table 5.1

Table 5.2: CHILE - SUMMARY OPERATIONS OF THE CENTRAL GOVERNMENT, 1960-1977

(In thousands of pesos at constant December 1969 prices) <sup>b/</sup>

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 <sup>c/</sup>
<b>Current Revenues</b>	<b>6,148</b>	<b>6,543</b>	<b>6,822</b>	<b>6,907</b>	<b>6,962</b>	<b>8,935</b>	<b>10,838</b>	<b>11,712</b>	<b>12,255</b>	<b>15,596</b>	<b>16,994</b>	<b>16,925</b>	<b>15,660</b>	<b>2,943</b>	<b>19,279</b>	<b>18,963</b>	<b>20,026</b>	<b>21,975</b>
Tax Revenues	5,805	6,159	6,582	6,208	6,371	7,988	9,633	10,603	11,664	13,307	14,606	15,207	13,779	8,228	16,996	17,759	19,486	21,454
Non-Tax Revenues	342	385	412	584	590	624	569	460	570	773	849	1,192	1,100	737	2,283	825	540	541
Adjustments <sup>a/</sup>	-	-	28	320	211	322	635	649	422	1,515	1,539	576	780	977	-	-	-	-
<b>Current Expenditures</b>	<b>5,516</b>	<b>5,774</b>	<b>6,419</b>	<b>6,034</b>	<b>5,983</b>	<b>7,284</b>	<b>8,296</b>	<b>8,929</b>	<b>9,429</b>	<b>11,258</b>	<b>13,735</b>	<b>18,335</b>	<b>19,810</b>	<b>11,094</b>	<b>16,881</b>	<b>14,357</b>	<b>15,816</b>	<b>18,993</b>
Personnel Outlays	2,934	3,084	3,386	2,884	2,989	3,515	4,206	4,551	4,897	5,249	6,986	9,850	10,544	4,213	6,988	6,655	7,105	7,361
Purchase of Goods and Services	620	668	584	649	580	724	781	798	665	759	876	1,031	1,134	900	2,504	1,810	1,805	2,677
Transfers to Public Sector	1,442	1,607	1,936	1,654	1,712	2,219	2,161	2,182	2,551	2,656	3,159	5,211	5,875	4,273	5,974	3,593	3,032	6,114
Transfers to Private Sector	374	337	337	357	327	322	381	460	619	687	729	1,212	1,325	652	867	967	2,397	1,950
Interest Payments	97	77	107	170	164	182	132	309	275	392	445	456	152	79	749	1,333	1,476	765
Adjustments <sup>a/</sup>	-	-	28	320	211	322	635	649	422	1,515	1,539	576	780	977	-	-	-	125
<b>Current Account Surplus or Deficit (-)</b>	<b>631</b>	<b>769</b>	<b>403</b>	<b>873</b>	<b>980</b>	<b>1,650</b>	<b>2,541</b>	<b>2,783</b>	<b>3,226</b>	<b>4,338</b>	<b>3,259</b>	<b>-1,359</b>	<b>-4,151</b>	<b>-1,150</b>	<b>2,392</b>	<b>4,207</b>	<b>4,211</b>	<b>2,982</b>
<b>Capital Revenues <sup>a/</sup></b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>78</b>	<b>53</b>	<b>79</b>	<b>158</b>	<b>162</b>	<b>106</b>	<b>378</b>	<b>285</b>	<b>144</b>	<b>192</b>	<b>244</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Capital Expenditures</b>	<b>1,817</b>	<b>1,799</b>	<b>2,144</b>	<b>2,304</b>	<b>2,222</b>	<b>3,164</b>	<b>3,625</b>	<b>3,307</b>	<b>3,597</b>	<b>4,098</b>	<b>4,425</b>	<b>5,624</b>	<b>5,075</b>	<b>2,395</b>	<b>8,483</b>	<b>3,907</b>	<b>2,757</b>	<b>2,815</b>
Direct Investment	772	811	888	1,024	1,089	1,545	1,604	1,630	1,480	1,562	1,706	2,054	2,419	1,383	4,507	2,389	1,341	1,657
Financial Investment (incl. transfers)	1,045	988	1,256	1,280	1,081	1,540	1,863	1,515	2,012	2,538	2,334	3,426	2,461	1,769	3,976	1,518	1,416	1,158
Adjustments <sup>a/</sup>	-	-	7	78	53	79	158	162	106	378	285	144	192	244	-	-	-	-
<b>Expenditures Financed Directly by Banking System</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,524</b>	<b>7,481</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Overall Surplus or Deficit (-)</b>	<b>-1,186</b>	<b>-1,030</b>	<b>-1,734</b>	<b>-1,353</b>	<b>-1,190</b>	<b>-1,435</b>	<b>-925</b>	<b>-362</b>	<b>-265</b>	<b>618</b>	<b>-781</b>	<b>-6,840</b>	<b>-10,555</b>	<b>-11,783</b>	<b>-6,085</b>	<b>300</b>	<b>1,453</b>	<b>167</b>
<b>Financing, Net</b>	<b>1,185</b>	<b>1,031</b>	<b>1,734</b>	<b>1,353</b>	<b>1,190</b>	<b>1,435</b>	<b>925</b>	<b>362</b>	<b>264</b>	<b>-618</b>	<b>780</b>	<b>6,839</b>	<b>10,555</b>	<b>11,783</b>	<b>6,085</b>	<b>-300</b>	<b>-1,453</b>	<b>-167</b>
Domestic Loans	1,355	726	1,307	675	913	833	504	612	631	318	1,907	7,962	10,097	5,984	9,339	3,600	2,421	1,716
Special Direct Financing by Monetary System	-	-	-	-	-	-	-	-	-	-	-	-	1,524	7,481	-	-	-	-
External Lending, Net	-173	228	553	570	140	683	438	-312	-354	-677	-1,185	-1,083	-276	-305	-2,314	-2,571	-2,365	-1,883
Foreign Exchange Operations	5	12	60	54	87	1	-	87	-	7	-21	-6	9	-	-571	-170	-462	-
Others	-	65	-185	44	49	-82	-17	-25	-13	-266	79	-34	-799	-1,379	-368	-1,158	-1,047	-

<sup>a/</sup> See footnote a/ in Table 5.1.<sup>b/</sup> Deflated by official CPI 1960-1972, by the average of the official and IBRD adjusted CPIs in 1973 and by the IBRD adjusted CPI thereafter.<sup>c/</sup> Provisional.

Source: Table 5.1

Table 5.2a: CHILE - ANNUAL REAL GROWTH OF MAJOR CENTRAL GOVERNMENT OPERATIONS, 1961-1977

(In percent)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 <sup>p/</sup>
<u>Current Revenues</u>	6.4	4.3	1.3	0.8	28.5	21.3	8.1	8.1	23.2	9.0	-0.1	-7.8	-36.5	95.9	-3.7	7.9	9.7
Tax Revenues	6.1	3.6	-2.8	2.7	25.4	20.6	10.1	10.0	14.1	9.8	4.1	-9.4	-40.3	106.5	4.4	9.9	10.0
Non-Tax Revenues	12.5	7.0	-6.7	-1.1	64.3	-8.9	-19.1	23.9	35.7	9.8	40.5	-7.7	-33.0	209.6	-63.9	-34.5	0.2
<u>Current Expenditures</u>	4.7	11.2	-6.0	-0.9	21.8	13.9	7.6	5.6	19.4	22.0	33.5	8.1	-44.0	52.2	-15.0	10.2	20.1
Personnel Outlays	3.4	9.8	-14.8	3.6	17.6	19.7	7.7	8.1	7.2	33.1	41.0	7.1	-60.0	65.9	-6.8	6.8	3.6
Purchase of Goods and Services	7.8	-12.5	11.0	-10.6	24.8	7.8	2.2	-16.6	14.2	15.4	17.7	10.1	-20.7	155.9	-21.4	-0.3	48.3
Transfers to Public Sector	11.5	20.4	-14.6	3.5	29.6	-2.6	1.0	16.9	4.1	19.0	64.9	12.7	-27.3	39.8	-39.9	-15.6	101.7
Transfers to Private Sector	-9.5	11.8	-5.4	-8.4	-1.4	18.2	20.8	34.5	11.0	6.1	66.2	9.3	-50.8	33.0	11.7	147.8	-18.7
Interest Payments	-20.0	38.5	58.7	-3.6	10.8	-27.3	134.0	-11.1	42.4	13.6	2.4	-66.7	-48.0	848.3	78.0	10.7	-48.2
<u>Capital Expenditures</u>	-1.0	19.2	7.4	-3.5	42.4	14.5	-8.3	8.8	13.9	8.0	27.1	-9.8	-33.1	149.8	-53.4	-29.4	2.1
Direct Investment	5.0	9.9	15.4	6.3	41.9	3.8	1.7	-9.2	5.6	9.2	20.4	17.8	-42.9	226.0	-47.0	-13.9	23.6
Financial Investment (incl. transfers)	-5.4	26.4	-3.9	-10.1	42.5	20.9	-18.7	32.8	7.5	8.2	46.8	-28.2	-28.1	124.8	-61.8	-6.7	-18.2
<u>Expenditures Financed Directly by Banking System</u>	-	-	-	-	-	-	-	-	-	-	-	0.0	391.0	-	-	-	-

p/ Provisional.

Source: Table 5.2



Table 5.4: CHILE - CENTRAL GOVERNMENT EXPENDITURES BY FUNCTION, 1965-1974

(Thousands of current pesos)

	1965	1966	1967	1968		1969			1970			
	Total	Total	Total	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital
<b>Government</b>	<u>195.9</u>	<u>327.4</u>	<u>466.9</u>	<u>695.0</u>	<u>639.3</u>	<u>59.7</u>	<u>1,294.8</u>	<u>1,215.3</u>	<u>79.5</u>	<u>1,882.3</u>	<u>1,740.4</u>	<u>141.9</u>
Political Administration				122.2	116.8	5.4	178.7	165.6	15.1	284.6	265.5	19.1
Financial Administration				382.9	351.1	31.8	903.7	851.9	51.8	1,162.4	1,128.5	33.9
Community Administration				103.9	87.2	16.7	96.8	89.1	7.7	274.8	193.1	81.7
Legal Administration				-	-	-	-	-	-	-	-	-
External Relations				86.0	80.2	5.8	115.6	110.7	4.9	160.5	153.3	7.2
<b>Protection, Personal &amp; Property</b>	<u>222.9</u>	<u>310.1</u>	<u>405.4</u>	<u>531.7</u>	<u>524.5</u>	<u>7.2</u>	<u>729.1</u>	<u>729.4</u>	<u>9.7</u>	<u>1,240.8</u>	<u>1,224.3</u>	<u>16.5</u>
Justice				132.6	128.4	4.2	178.3	172.7	5.6	273.8	266.5	7.3
Police				366.6	363.7	2.9	519.5	515.8	3.7	899.6	891.0	8.6
Other				32.5	32.4	0.1	41.3	40.9	0.4	67.4	66.8	0.6
<b>Defense</b>	<u>357.6</u>	<u>541.5</u>	<u>681.1</u>	<u>917.0</u>	<u>799.6</u>	<u>117.4</u>	<u>1,318.8</u>	<u>1,087.1</u>	<u>231.7</u>	<u>2,404.7</u>	<u>1,998.8</u>	<u>405.9</u>
Army				314.3	274.9	39.4	427.3	370.1	57.2	889.9	693.3	196.6
Navy				392.1	354.0	38.1	374.3	480.6	93.7	942.3	862.5	79.8
Air Force				202.4	162.5	39.9	303.4	222.6	80.8	550.9	423.4	127.5
Other				8.2	8.2	-	13.8	13.8	-	21.6	21.6	-
<b>Public Health, etc.</b>	<u>362.5</u>	<u>494.4</u>	<u>608.1</u>	<u>767.1</u>	<u>715.3</u>	<u>51.8</u>	<u>1,069.4</u>	<u>996.2</u>	<u>73.2</u>	<u>1,693.4</u>	<u>1,596.2</u>	<u>97.2</u>
Public Health				738.2	687.0	51.2	1,021.9	951.8	70.1	1,611.7	1,517.0	94.7
Social Assistance, etc.				28.9	28.3	0.6	47.5	44.4	3.1	82.0	79.2	2.8
<b>Housing and Urbanization</b>	<u>372.5</u>	<u>468.1</u>	<u>512.0</u>	<u>737.8</u>	<u>111.5</u>	<u>626.3</u>	<u>886.8</u>	<u>86.9</u>	<u>799.9</u>	<u>1,154.0</u>	<u>156.5</u>	<u>997.5</u>
Housing				360.8	38.9	321.9	544.4	52.9	491.5	588.3	102.5	485.8
Urbanization				777.0	72.6	304.4	342.4	34.0	308.4	565.7	54.0	511.7
<b>Social Security</b>	<u>475.6</u>	<u>698.8</u>	<u>723.6</u>	<u>1,050.8</u>	<u>1,050.8</u>	<u>-</u>	<u>1,145.7</u>	<u>1,145.7</u>	<u>-</u>	<u>2,499.6</u>	<u>2,499.6</u>	<u>-</u>
<b>Education</b>	<u>592.3</u>	<u>881.2</u>	<u>1,174.2</u>	<u>1,654.3</u>	<u>1,376.9</u>	<u>277.4</u>	<u>2,418.8</u>	<u>2,161.7</u>	<u>257.1</u>	<u>3,841.8</u>	<u>3,552.3</u>	<u>289.5</u>
Primary				555.7	555.2	0.5	1,033.8	945.6	88.2	1,630.3	1,559.6	70.7
Secondary				142.7	142.6	0.1	307.3	274.2	33.1	463.0	428.7	34.3
Professional & Technical				152.3	102.6	49.7	292.4	214.6	77.8	324.6	324.4	0.2
University				542.1	511.0	31.1	616.1	583.2	32.9	1,118.3	1,063.4	54.9
Cons. of Educa. Facilities				41.1	10.0	31.1	36.6	12.2	24.4	24.1	9.6	14.5
Miscellaneous				218.7	53.8	164.9	130.3	129.6	0.7	278.6	163.7	114.9
School Administration				1.7	1.7	-	2.3	2.3	-	2.9	2.9	-
Cultural Development				1/	1/	1/	1/	1/	1/	1/	1/	1/
<b>Agriculture and Fishing</b>	<u>231.1</u>	<u>337.9</u>	<u>446.6</u>	<u>635.8</u>	<u>208.5</u>	<u>427.3</u>	<u>786.5</u>	<u>261.4</u>	<u>525.1</u>	<u>1,102.6</u>	<u>385.0</u>	<u>718.6</u>
Irrigation				92.7	20.0	72.7	103.6	0.6	103.0	167.9	6.4	161.5
Technical Assistance				310.5	112.9	197.6	270.5	166.2	104.3	407.7	265.3	142.4
Colonization				9.7	9.4	0.3	12.7	12.5	0.2	25.4	25.3	0.1
Fishing				3.4	3.0	0.4	3.9	3.9	-	4.5	4.5	-
Agrarian Reform				193.4	38.4	155.0	316.5	45.8	270.7	451.0	56.0	395.0
General Administration				26.1	24.8	1.3	32.9	32.4	0.5	28.2	27.5	0.7
CORFO Agriculture				-	-	-	46.4	-	46.4	18.9	-	18.9
Other				-	-	-	-	-	-	-	-	-
<b>Transport &amp; Communication</b>	<u>565.1</u>	<u>556.7</u>	<u>1,024.9</u>	<u>1,302.8</u>	<u>643.2</u>	<u>659.6</u>	<u>2,114.2</u>	<u>924.1</u>	<u>1,190.1</u>	<u>3,268.6</u>	<u>1,468.9</u>	<u>1,799.7</u>
Air				77.8	25.2	52.6	123.4	37.3	84.1	131.3	66.1	65.2
Maritime				133.3	85.3	48.0	190.0	110.6	79.4	282.5	126.6	155.9
Urban				43.8	40.1	3.7	49.5	46.2	3.3	97.5	86.6	10.9
Road				504.8	78.3	426.5	651.4	-	651.4	1,036.6	-	1,096.6
Rail				337.4	246.7	90.7	445.1	302.1	143.0	630.7	479.6	151.1
Mail & Telecommunication				197.2	166.4	30.8	271.7	213.7	58.0	638.9	402.3	236.6
Miscellaneous				8.5	1.2	7.3	-	-	-	-	-	-
General Administration				-	-	-	385.1	214.2	170.9	638.3	402.3	236.6
<b>Mining</b>	<u>34.9</u>	<u>66.2</u>	<u>75.0</u>	<u>112.1</u>	<u>47.8</u>	<u>64.3</u>	<u>179.3</u>	<u>57.8</u>	<u>111.5</u>	<u>310.6</u>	<u>82.2</u>	<u>228.4</u>
<b>Energy &amp; Fuels</b>	<u>78.7</u>	<u>113.9</u>	<u>115.2</u>	<u>148.9</u>	<u>6.2</u>	<u>142.7</u>	<u>237.0</u>	<u>10.5</u>	<u>226.5</u>	<u>284.8</u>	<u>14.4</u>	<u>270.4</u>
<b>Industry and Commerce</b>	<u>60.0</u>	<u>83.8</u>	<u>109.4</u>	<u>234.0</u>	<u>69.7</u>	<u>164.3</u>	<u>248.1</u>	<u>88.9</u>	<u>159.2</u>	<u>561.7</u>	<u>137.6</u>	<u>424.1</u>
<b>Other</b>	<u>322.6</u>	<u>413.3</u>	<u>541.9</u>	<u>905.1</u>	<u>341.6</u>	<u>563.5</u>	<u>1,599.2</u>	<u>367.1</u>	<u>1,232.1</u>	<u>1,911.5</u>	<u>544.0</u>	<u>1,367.5</u>
Public Debt				302.7	380.0	496.6	748.8	197.8	551.0	1,277.2	367.1	910.1
Miscellaneous				19.9	33.3	45.3	156.3	143.8	12.5	322.0	-	-71.7
<b>Total</b>	<u>3,991.7</u>	<u>5,693.3</u>	<u>6,884.3</u>	<u>9,692.4</u>	<u>6,530.9</u>	<u>3,161.5</u>	<u>14,037.2</u>	<u>9,142.1</u>	<u>4,895.6</u>	<u>22,117.4</u>	<u>15,360.2</u>	<u>6,757.2</u>

1/ Included in other functions of education.

2/ Includes cast balances.

Source: Ministry of Finance

Table 5.4: CHILF - CENTRAL GOVERNMENT EXPENDITURES BY FUNCTION, 1963-1974

(Thousands of current pesos)

	1971			1972			1973			1974		
	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital
<b>Government</b>	2,719.9	2,600.4	119.5	6,232.8	5,972.7	259.1	21,662	21,124	468	415,387	210,913	204,474
Political Administration	414.4	406.4	8.0	784.2	715.9	68.3	2,728	2,448	280	22,678	17,050	5,628
Financial Administration	1,564.9	1,531.5	33.4	3,680.2	3,577.8	102.4	11,499	11,557	-58	321,341	139,094	182,847
Community Administration	442.3	375.1	67.2	1,338.2	1,256.8	81.4	4,874	4,757	117	43,493	28,625	14,868
Legal Administration	-	-	-	-	-	-	1,027	1,026	1	9,278	9,276	2
External Relations	298.3	287.4	10.9	430.2	423.2	7.0	1,534	1,406	128	17,997	16,868	1,129
<b>Protection, Personal &amp; Property</b>	1,865.3	1,804.4	60.9	3,735.2	3,614.7	120.5	15,173	14,456	717	138,265	125,767	12,498
Justice	472.0	425.1	46.9	834.2	754.9	79.3	2,103	1,762	341	19,705	17,615	2,090
Police	1,282.4	1,270.7	11.7	2,665.6	2,630.2	35.4	12,531	12,167	364	115,104	104,717	10,387
Other	110.9	108.6	2.3	234.4	229.6	4.8	539	527	12	3,456	3,435	21
<b>Defense</b>	2,951.2	2,873.7	77.5	6,314.2	5,752.2	562.0	41,434	37,742	3,692	431,646	367,120	64,526
Army	1,030.6	999.9	30.7	2,415.0	2,143.2	271.8	12,944	11,569	1,375	171,703	137,888	33,815
Navy	1,301.1	1,269.5	31.6	2,647.2	2,496.9	150.3	15,827	14,871	956	167,826	154,519	13,307
Air Force	568.8	554.1	14.7	1,237.8	1,100.7	137.1	6,648	5,427	1,221	87,042	69,783	17,259
Other	50.7	50.2	0.5	14.2	11.4	2.8	6,015	5,875	140	5,075	4,930	145
<b>Public Health, etc.</b>	2,858.0	2,700.9	157.1	6,361.3	6,010.3	351.0	31,007	28,106	2,901	193,423	170,666	22,757
Public Health	2,747.5	2,592.3	155.2	6,101.2	5,758.9	342.3	30,302	27,414	2,888	188,271	165,563	22,708
Social Assistance, etc.	110.5	108.6	1.9	260.1	251.4	8.7	705	692	13	5,152	5,103	49
<b>Housing and Urbanization</b>	2,025.0	484.2	2,540.8	5,575.8	943.0	4,632.8	30,386	3,783	26,603	236,237	22,480	213,757
Housing	1,504.4	283.7	1,220.7	3,074.5	595.3	2,479.2	17,048	2,344	14,704	163,126	12,345	150,781
Urbanization	1,520.6	200.5	1,320.1	2,501.3	347.7	2,153.6	13,338	1,439	11,899	73,131	10,135	62,996
<b>Social Security</b>	5,244.8	5,244.7	0.1	9,351.1	9,350.9	0.2	28,127	28,126	1	211,794	211,793	1
<b>Education</b>	6,245.1	5,916.8	328.3	12,816.4	11,916.3	900.1	46,891	41,405	5,486	392,575	357,460	35,115
Primary	2,878.4	2,794.3	84.1	5,493.0	5,448.2	44.8	17,683	17,671	12	116,500	116,344	156
Secondary	631.0	592.4	38.6	1,070.9	1,069.6	1.3	3,584	3,584	0	22,470	22,449	21
Professional and Technical	445.8	445.3	0.5	905.7	866.7	39.0	3,171	2,966	205	26,900	18,184	8,716
University	1,917.0	1,857.6	59.4	4,491.0	3,964.9	526.1	18,848	15,313	3,535	118,181	110,280	7,901
Cons. of Educa. Facilities	54.8	16.7	38.1	121.9	19.4	102.5	1,693	125	1,568	13,006	2,847	10,159
Miscellaneous	288.9	181.4	107.5	657.8	531.5	126.3	1,749	1,689	60	95,217	87,067	8,150
School Administration	5.2	5.1	0.1	14.6	14.5	0.1	45	44	1	301	289	12
Cultural Development	24.0	24.0	-	1.5	1.5	-	13	13	-	-	-	-
<b>Agriculture and Fishing</b>	2,956.0	1,131.0	1,825.0	4,448.8	2,451.0	1,997.8	18,660	11,834	6,826	108,739	55,960	52,839
Irrigation	381.2	71.3	309.9	838.1	122.9	715.2	3,629	523	3,106	33,071	680	32,391
Technical Assistance	371.3	749.7	121.6	1,647.0	1,569.9	77.1	9,366	8,798	568	52,674	40,958	11,716
Colonization	38.9	36.8	2.1	79.3	64.7	14.6	228	209	19	1,486	1,413	73
Fishing	5.7	5.7	-	6.7	6.7	-	13	13	-	1,392	-	1,392
Agrarian Reform	1,074.8	142.7	932.1	1,593.7	495.7	1,098.0	4,864	1,755	3,109	15,609	8,544	7,065
General Administration	124.8	124.8	-	191.1	191.1	-	212	212	-	1,960	1,960	-
COPEO Agriculture	459.3	-	459.3	39.2	-	39.2	-	-	-	-	-	-
Other	-	-	-	53.7	-	53.7	348	324	24	2,607	2,405	202
<b>Transport &amp; Communication</b>	4,472.3	2,537.1	1,935.2	7,454.0	3,902.0	3,552.0	33,458	14,487	18,971	345,379	115,212	230,166
Air	207.9	139.3	68.6	342.4	178.3	164.1	2,183	1,064	1,119	19,685	6,678	13,007
Maritime	504.8	354.5	150.3	1,076.9	655.6	421.3	3,991	2,257	1,734	21,876	6,582	15,294
Urban	491.7	171.1	320.6	6,397.4	267.5	540.2	7,200	1,313	5,887	71,417	3,921	67,496
Road	1,367.8	244.2	1,123.6	807.7	328.7	479.0	9,101	1,325	7,776	118,441	-	118,441
Rail	1,034.2	864.3	169.9	1,602.3	1,251.3	351.0	5,311	4,045	1,266	59,505	50,335	9,170
Mail & Telecommunication	581.5	506.7	74.8	936.4	878.4	58.0	3,728	3,610	118	23,333	22,704	629
Miscellaneous	-	-	-	64.7	-	64.7	142	-	142	-	-	-
General Administration	270.5	257.0	13.5	505.0	341.7	163.3	1,802	873	929	31,122	24,993	6,129
<b>Mining</b>	269.7	160.2	109.5	347.7	189.4	158.3	1,841	333	908	7,558	282	7,286
<b>Energy &amp; Fuels</b>	46.4	33.4	13.0	107.6	71.0	36.6	386	225	161	65,761	2,088	63,673
<b>Industry and Commerce</b>	895.6	293.2	602.4	392.9	269.0	123.9	22,973	21,619	1,354	220,749	100,621	120,128
<b>Other</b>	2,907.4	615.7	2,291.7	1,812.7	356.4	1,456.3	13,350	2,494	10,856	217,162	23,892	193,270
Public Debt	2,511.6	615.7	1,895.9	1,582.3	356.4	1,225.9	9,421	1,427	7,997	211,993	23,740	188,253
Miscellaneous	395.8	-	395.8	230.4	-	230.4	3,926	1,067	2,859	5,169	152	5,017
<b>Total</b>	36,456.7	26,395.7	10,061.0	64,950.5	50,799.9	14,150.6	305,348	226,404	78,944	2,984,765	1,764,255	1,220,510

1/ Included in other functions of education.

2/ Includes cash balances.

Source: Ministry of Finance

Table 5.5: CHILE - CENTRAL GOVERNMENT EXPENDITURES BY FUNCTION, 1965-1974

(Thousands of pesos of December 31, 1969) <sup>u/</sup>

Function	1965	1966	1967	1968		1969		1970				
	Total	Total	Total	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital
<b>Government</b>	<u>501</u>	<u>682</u>	<u>823</u>	<u>968</u>	<u>884</u>	<u>83</u>	<u>1,380</u>	<u>1,295</u>	<u>85</u>	<u>1,513</u>	<u>1,399</u>	<u>114</u>
Political administration				170	163	7	190	174	16	229	213	15
Financial administration				533	489	44	963	908	55	934	907	27
Community administration				145	121	23	103	95	8	221	155	66
Legal administration				-	-	-	-	-	-	-	-	-
External relations				120	112	8	123	118	5	129	123	6
<b>Protection, Personal and Property</b>	<u>570</u>	<u>646</u>	<u>715</u>	<u>740</u>	<u>730</u>	<u>730</u>	<u>10</u>	<u>787</u>	<u>777</u>	<u>10</u>	<u>997</u>	<u>13</u>
Justice				185	179	6	190	184	6	220	214	6
Police				510	506	4	554	550	4	723	716	7
Other				45	45	0	44	44	0	54	53	1
<b>Defense</b>	<u>915</u>	<u>1,128</u>	<u>1,201</u>	<u>1,276</u>	<u>1,113</u>	<u>173</u>	<u>1,405</u>	<u>1,158</u>	<u>247</u>	<u>1,933</u>	<u>1,607</u>	<u>326</u>
Army				438	383	35	455	394	60	715	557	158
Navy				546	493	53	612	512	100	757	693	64
Air force				282	226	55	323	237	86	442	339	104
Other				11	11	-	15	15	-	17	17	-
<b>Public Health, etc.</b>	<u>927</u>	<u>1,030</u>	<u>1,072</u>	<u>1,068</u>	<u>996</u>	<u>72</u>	<u>1,140</u>	<u>1,062</u>	<u>78</u>	<u>1,361</u>	<u>1,283</u>	<u>78</u>
Public health				1,028	956	71	1,089	1,014	75	1,293	1,219	74
Social assistance, etc.				40	40	1	51	47	4	66	64	2
<b>Housing and Urbanization</b>	<u>953</u>	<u>975</u>	<u>903</u>	<u>1,027</u>	<u>155</u>	<u>872</u>	<u>945</u>	<u>92</u>	<u>853</u>	<u>928</u>	<u>126</u>	<u>801</u>
Housing				502	54	448	580	56	524	473	82	391
Urbanization				1,082	101	424	365	36	329	455	44	411
<b>Social Security</b>	<u>1,217</u>	<u>1,456</u>	<u>1,276</u>	<u>1,463</u>	<u>1,462</u>	<u>-</u>	<u>1,220</u>	<u>1,220</u>	<u>-</u>	<u>1,977</u>	<u>1,977</u>	<u>-</u>
<b>Education</b>	<u>1,515</u>	<u>1,835</u>	<u>2,070</u>	<u>2,303</u>	<u>1,916</u>	<u>386</u>	<u>2,578</u>	<u>2,304</u>	<u>274</u>	<u>3,088</u>	<u>2,856</u>	<u>232</u>
Primary				774	773	1	1,102	1,008	94	1,310	1,254	56
Secondary				199	199	0	327	292	35	392	345	28
Professional and technical				212	142	69	311	229	83	261	250	1
University				755	711	43	657	621	35	899	855	44
Construction				57	14	43	39	13	26	19	8	11
Miscellaneous <sup>b/</sup>				304	75	230	130	138	1	223	132	92
School administration				2	2	-	2	2	-	2	2	-
JNAEB				b/	b/	b/	b/	b/	b/	b/	b/	b/
<b>Agriculture and Fishing</b>	<u>591</u>	<u>704</u>	<u>787</u>	<u>885</u>	<u>290</u>	<u>595</u>	<u>838</u>	<u>279</u>	<u>559</u>	<u>886</u>	<u>309</u>	<u>578</u>
Irrigation				129	28	101	110	1	139	134	5	129
Technical assistance				432	157	275	288	117	111	328	213	15
Colonization				13	13	0	13	13	0	20	20	-
Fishing				5	4	0	4	4	-	4	4	-
Agrarian reform				269	53	215	337	49	288	363	45	318
General administration				36	34	2	35	34	1	23	22	1
CORFO agriculture <sup>a/</sup>				-	-	-	49	-	49	15	-	15
Other				-	-	-	-	-	-	-	-	-
<b>Transport and Communication</b>	<u>1,702</u>	<u>1,993</u>	<u>1,807</u>	<u>1,813</u>	<u>895</u>	<u>918</u>	<u>2,252</u>	<u>934</u>	<u>1,268</u>	<u>2,627</u>	<u>1,131</u>	<u>1,446</u>
Air				108	35	73	129	40	89	106	54	52
Water				186	119	67	202	118	84	227	102	125
Urban				61	56	5	53	49	4	78	70	8
Road				703	109	594	694	-	694	882	-	882
Rail				470	343	126	474	322	152	507	386	121
Mail and telecommunications				275	232	43	290	228	62	513	323	190
Miscellaneous				12	2	10	-	-	-	-	-	-
General administration				-	-	-	410	228	182	513	323	192
<b>Mining</b>	<u>140</u>	<u>138</u>	<u>132</u>	<u>156</u>	<u>67</u>	<u>89</u>	<u>191</u>	<u>72</u>	<u>119</u>	<u>250</u>	<u>66</u>	<u>184</u>
<b>Energy and Fuels</b>	<u>201</u>	<u>237</u>	<u>203</u>	<u>207</u>	<u>9</u>	<u>199</u>	<u>253</u>	<u>11</u>	<u>242</u>	<u>229</u>	<u>12</u>	<u>217</u>
<b>Industry and Commerce</b>	<u>153</u>	<u>175</u>	<u>193</u>	<u>326</u>	<u>97</u>	<u>229</u>	<u>264</u>	<u>95</u>	<u>169</u>	<u>451</u>	<u>111</u>	<u>341</u>
<b>Other</b>	<u>825</u>	<u>861</u>	<u>955</u>	<u>1,260</u>	<u>475</u>	<u>784</u>	<u>1,704</u>	<u>391</u>	<u>1,303</u>	<u>1,537</u>	<u>437</u>	<u>1,099</u>
Public debt				774	792	767	1,361	351	970	1,594	437	1,157
Miscellaneous				51	69	17	343	-	343	-57	1	-58
<b>Total</b>	<u>10,215</u>	<u>11,859</u>	<u>12,137</u>	<u>13,493</u>	<u>9,092</u>	<u>4,401</u>	<u>14,959</u>	<u>9,742</u>	<u>5,217</u>	<u>17,779</u>	<u>12,347</u>	<u>5,432</u>

Table 5.5: CHILE - CENTRAL GOVERNMENT EXPENDITURES BY FUNCTION, 1965-1974

(Thousands of pesos of December 31, 1969) <sup>a/</sup>

Function	1971			1972			1973			1974		
	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital
<b>Government</b>	<b>1,822</b>	<b>1,742</b>	<b>80</b>	<b>2,348</b>	<b>2,250</b>	<b>98</b>	<b>1,231</b>	<b>1,204</b>	<b>27</b>	<b>4,082</b>	<b>2,073</b>	<b>2,009</b>
Political administration	277	272	5	295	270	26	155	139	16	223	1,671	55
Financial administration	1,048	1,026	22	1,386	1,348	39	654	657	-3	3,163	1,367	1,797
Community administration	296	251	45	504	473	31	277	270	7	427	281	145
Legal administration	-	-	-	-	-	-	58	58	0	91	91	0
External relations	200	192	8	162	159	3	87	80	7	177	166	11
<b>Protection, Personal and Property</b>	<b>1,249</b>	<b>1,208</b>	<b>41</b>	<b>1,407</b>	<b>1,361</b>	<b>45</b>	<b>853</b>	<b>822</b>	<b>41</b>	<b>1,358</b>	<b>1,216</b>	<b>123</b>
Justice	316	285	31	314	284	30	120	100	20	194	173	21
Police	859	851	8	1,004	991	14	712	692	20	1,131	1,029	102
Other	74	73	1	89	86	2	31	30	1	34	33	1
<b>Defense</b>	<b>1,977</b>	<b>1,924</b>	<b>52</b>	<b>2,378</b>	<b>2,167</b>	<b>212</b>	<b>2,355</b>	<b>2,145</b>	<b>209</b>	<b>4,241</b>	<b>3,607</b>	<b>634</b>
Army	693	670	20	910	807	102	736	658	78	1,687	1,355	332
Navy	871	850	21	997	940	57	900	845	55	1,649	1,518	131
Air force	381	371	10	466	415	52	378	309	69	855	686	169
Other	34	34	0	5	4	1	342	334	8	50	49	1
<b>Public Health, etc.</b>	<b>1,914</b>	<b>1,809</b>	<b>108</b>	<b>2,395</b>	<b>2,264</b>	<b>132</b>	<b>1,763</b>	<b>1,598</b>	<b>165</b>	<b>1,901</b>	<b>1,677</b>	<b>224</b>
Public health	1,840	1,736	104	2,298	2,169	129	1,723	1,558	165	1,850	1,627	223
Social assistance, etc.	74	73	1	97	95	3	40	39	1	51	50	1
<b>Housing and Urbanization</b>	<b>2,026</b>	<b>324</b>	<b>1,702</b>	<b>2,100</b>	<b>355</b>	<b>1,745</b>	<b>1,727</b>	<b>-215</b>	<b>1,512</b>	<b>2,321</b>	<b>221</b>	<b>2,100</b>
Housing	1,008	190	818	1,158	224	934	969	133	836	1,603	121	1,482
Urbanization	1,018	134	884	942	131	811	758	82	676	719	100	619
<b>Social Security</b>	<b>3,513</b>	<b>3,513</b>	<b>0</b>	<b>3,522</b>	<b>3,522</b>	<b>0</b>	<b>1,599</b>	<b>1,599</b>	<b>0</b>	<b>2,031</b>	<b>2,031</b>	<b>0</b>
<b>Education</b>	<b>4,183</b>	<b>3,963</b>	<b>220</b>	<b>4,827</b>	<b>4,488</b>	<b>327</b>	<b>2,666</b>	<b>2,354</b>	<b>312</b>	<b>3,857</b>	<b>3,512</b>	<b>345</b>
Primary	1,928	1,871	57	2,059	2,052	7	1,005	1,004	1	1,145	1,143	2
Secondary	423	397	26	403	403	1	204	204	0	221	220	1
Professional and technical	299	298	1	343	326	15	180	159	21	264	179	86
University	1,284	1,244	40	1,691	1,493	198	1,072	871	201	1,161	1,084	77
Construction	37	11	26	69	7	61	96	7	89	128	28	100
Miscellaneous b/	193	121	72	25	200	48	99	96	3	936	856	80
School administration	33	3	0	6	5	0	3	2	1	3	2	1
JMAB	16	16	-	1	1	-	1	1	-	-	-	-
<b>Agriculture and Fishing</b>	<b>1,980</b>	<b>757</b>	<b>1,223</b>	<b>1,676</b>	<b>924</b>	<b>752</b>	<b>1,860</b>	<b>673</b>	<b>388</b>	<b>1,069</b>	<b>550</b>	<b>519</b>
Irrigation	255	48	207	316	46	269	206	30	176	325	7	318
Technical assistance	584	502	82	620	591	29	532	500	32	518	403	115
Colonization	26	25	1	30	24	5	13	12	1	15	14	1
Fishing	4	4	-	3	3	-	1	1	-	14	-	14
Agrarian reform	720	96	624	600	187	413	276	100	176	153	84	69
General Administration	84	84	-	72	72	-	12	12	-	19	19	-
CONFO agriculture a/	307	8	307	15	-	15	-	-	-	-	-	-
Other	-	-	-	20	-	20	20	18	2	26	24	2
<b>Transport and Communication</b>	<b>2,995</b>	<b>1,699</b>	<b>1,296</b>	<b>2,808</b>	<b>1,470</b>	<b>2,823</b>	<b>1,902</b>	<b>824</b>	<b>1,078</b>	<b>3,394</b>	<b>1,132</b>	<b>2,262</b>
Air	139	93	55	129	67	129	124	60	64	193	66	127
Water	338	237	101	406	247	405	227	123	99	215	55	150
Urban	329	115	214	2,410	101	2,410	409	75	334	702	39	663
Road	916	164	752	798	124	798	517	75	442	1,164	-	1,164
Rail	693	579	114	603	471	603	302	230	72	585	495	90
Mail and telecommunications	389	339	50	352	331	352	212	205	7	229	223	6
Miscellaneous	-	-	-	24	-	24	8	-	8	-	-	-
General administration	182	172	10	190	129	190	102	50	52	306	246	60
<b>Mining</b>	<b>181</b>	<b>107</b>	<b>74</b>	<b>131</b>	<b>71</b>	<b>131</b>	<b>105</b>	<b>53</b>	<b>52</b>	<b>74</b>	<b>3</b>	<b>71</b>
<b>Energy and Fuels</b>	<b>31</b>	<b>22</b>	<b>9</b>	<b>40</b>	<b>27</b>	<b>40</b>	<b>22</b>	<b>13</b>	<b>9</b>	<b>646</b>	<b>21</b>	<b>625</b>
<b>Industry and Commerce</b>	<b>600</b>	<b>196</b>	<b>404</b>	<b>148</b>	<b>101</b>	<b>148</b>	<b>1,306</b>	<b>1,229</b>	<b>77</b>	<b>2,169</b>	<b>989</b>	<b>1,180</b>
<b>Other</b>	<b>1,947</b>	<b>412</b>	<b>1,535</b>	<b>683</b>	<b>134</b>	<b>683</b>	<b>759</b>	<b>142</b>	<b>617</b>	<b>2,134</b>	<b>235</b>	<b>1,899</b>
Public debt	1,682	412	1,269	596	134	595	536	81	455	2,083	233	1,850
Miscellaneous	265	-	265	87	-	87	223	61	162	51	1	50
<b>Total</b>	<b>24,418</b>	<b>17,680</b>	<b>6,738</b>	<b>24,463</b>	<b>19,134</b>	<b>24,464</b>	<b>17,359</b>	<b>12,871</b>	<b>4,488</b>	<b>29,329</b>	<b>17,336</b>	<b>11,993</b>

a/ 1955-72 are deflated by official CPI; 1973 by an average of the official and IBRD adjusted CPIs; thereafter by the IBRD adjusted CPI.

b/ Included in other education functions.

Source: Table 5.4



Table 5.6: CHILE - CENTRAL GOVERNMENT EXPENDITURES FOR SOCIAL PROGRAMS, 1965-1977  
(Millions of constant 1976 US dollars)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 a/
Health	138.3	148.0	139.7	136.5	134.4	154.2	211.6	247.8	237.2	190.7	133.4	135.4	153.2
Education	237.6	272.0	281.6	302.1	316.0	362.0	473.1	524.2	354.9	381.3	289.1	320.7	371.0
Housing	149.9	143.9	122.7	136.1	115.7	108.6	229.0	228.3	229.9	172.8	70.0	72.7	90.4
Child Assistance	-	-	-	0.6	0.7	0.7	0.6	0.8	0.7	4.1	3.4	8.7	8.5
Social Welfare & Labor Benefits	9.6	5.7	7.6	5.3	6.2	7.8	8.4	10.6	5.3	5.1	5.1	8.2	12.8
Social Subsidies	-	-	-	2.3	1.5	1.9	1.5	0.8	0.3	2.0	8.9	6.4	7.5
Minimum Employment Program	-	-	-	-	-	-	-	-	-	-	34.8	79.4	112.9
A. <u>Total Social Expenditure</u>	<u>535.4</u>	<u>569.6</u>	<u>551.6</u>	<u>582.9</u>	<u>574.5</u>	<u>635.2</u>	<u>924.2</u>	<u>1,012.5</u>	<u>828.3</u>	<u>756.0</u>	<u>544.7</u>	<u>631.5</u>	<u>756.3</u>
B. <u>Total Fiscal Expenditure</u> (excl. Public Debt)	<u>1,646.3</u>	<u>1,795.8</u>	<u>1,666.7</u>	<u>1,740.4</u>	<u>1,896.8</u>	<u>2,195.9</u>	<u>2,757.5</u>	<u>2,949.0</u>	<u>3,829.3</u>	<u>2,736.0</u>	<u>1,853.5</u>	<u>1,884.5</u>	<u>2,188.7</u>
A/B (%)	32.5	31.7	33.1	33.5	30.3	28.9	33.5	34.3	21.6	27.6	29.4	33.5	34.5

a/ Budget.

Source: Ministry of Finance

Table 5.7: CHILE - CENTRAL GOVERNMENT TAX REVENUES, 1965-1977

(Millions of current pesos)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
I. <u>Direct Taxes</u>	<u>1.4</u>	<u>2.1</u>	<u>2.7</u>	<u>3.4</u>	<u>5.1</u>	<u>7.7</u>	<u>7.9</u>	<u>10.0</u>	<u>59.8</u>	<u>680.2</u>	<u>3,394.7</u>	<u>12,311.7</u>	<u>22,357.8</u>
A. Taxes on income	0.6	1.0	1.4	1.7	2.5	3.8	6.1	8.3	53.9	431.1	2,101.1	6,426.8	11,514.4
B. Taxes on property	0.3	0.4	0.4	0.5	0.6	0.8	1.3	1.6	5.1	51.4	314.2	1,035.8	2,887.1
C. Copper	0.4	0.8	0.9	1.2	2.0	3.1	0.5	0.1	-	159.0	866.8	4,594.2	7,520.4
D. Other	-	-	-	-	-	-	-	0.1	0.8	38.7	106.6	254.9	435.9
II. <u>Indirect Taxes</u>	<u>1.7</u>	<u>2.5</u>	<u>3.3</u>	<u>4.9</u>	<u>7.4</u>	<u>10.7</u>	<u>14.8</u>	<u>26.1</u>	<u>124.6</u>	<u>1,043.2</u>	<u>5,182.1</u>	<u>18,734.6</u>	<u>42,836.1</u>
A. Sales <sup>a/</sup>	0.8	1.1	1.6	2.3	3.4	4.7	7.7	13.3	64.4	487.7	2,113.2	8,200.6	22,781.5
B. Production excises <sup>b/</sup>	0.2	0.3	0.4	0.6	0.9	1.4	1.9	4.4	24.9	244.5	1,205.2	4,432.8	9,015.9
1. Alcoholic beverages							(0.3)	(1.7)	(9.1)	(51.1)	(88.4)	(349.9)	(689.5)
2. Tobacco							(0.9)	(1.5)	(5.8)	(53.3)	(265.3)	(1,038.5)	(2,436.9)
3. Fuels							(0.7)	(1.0)	(7.4)	(137.5)	(850.8)	(3,044.4)	(5,889.5)
4. Other							(0.0)	(0.3)	(2.7)	(2.5)	(0.0)	(-)	(-)
C. Services	0.2	0.3	0.4	0.6	1.0	1.4	1.6	2.7	12.3	75.1	519.6	1,864.9	814.5
D. Legal transactions	0.1	0.2	0.3	0.4	0.7	1.0	1.3	1.9	7.2	54.4	288.6	1,033.3	3,026.7
E. Customs duties	0.3	0.5	0.7	1.0	1.5	2.0	2.3	3.8	12.3	176.1	1,040.1	2,915.8	6,794.9
F. Other	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	3.5	5.4	15.3	287.2	402.6
III. <u>Total Taxes</u>	<u>3.0</u>	<u>4.6</u>	<u>6.1</u>	<u>8.4</u>	<u>12.5</u>	<u>18.3</u>	<u>22.7</u>	<u>36.1</u>	<u>184.4</u>	<u>1,723.3</u>	<u>8,576.8</u>	<u>31,046.3</u>	<u>65,193.9</u>

a/ Cascading sales tax from 1965-1974; value-added tax from 1975.

b/ Breakdown not available 1965-70.

Source: Ministry of Finance

Table 5.7a: CHILE - DISTRIBUTION OF CENTRAL GOVERNMENT TAX REVENUES BY TYPE, 1960-1977

(Percent)

	1965-69 Average	1970	1971	1972	1973	1974	1975	1976	1977
I. <u>Direct Taxes</u>	<u>43.4</u>	<u>41.8</u>	<u>34.7</u>	<u>27.8</u>	<u>32.4</u>	<u>39.5</u>	<u>39.6</u>	<u>39.7</u>	<u>34.3</u>
A. Taxes on income	21.0	20.6	26.9	22.8	29.2	25.0	24.5	20.7	17.7
B. Taxes on property	7.2	4.4	5.7	4.4	2.8	3.0	3.7	3.3	4.4
C. Copper	15.3	16.9	2.1	0.3	-	9.2	10.1	14.8	11.5
D. Other	-	-	-	0.2	0.5	2.2	1.2	0.8	0.7
II. <u>Indirect Taxes</u>	<u>56.6</u>	<u>58.2</u>	<u>65.3</u>	<u>72.2</u>	<u>67.6</u>	<u>60.5</u>	<u>60.4</u>	<u>60.3</u>	<u>65.7</u>
A. Sales	26.0	25.9	33.8	36.9	34.9	28.3	24.6	26.4	34.9
B. Excises	7.2	7.6	8.5	12.3	13.5	14.2	14.1	14.3	13.8
C. Services	6.8	7.4	7.2	7.4	6.7	4.4	6.1	6.0	1.2
D. Legal transactions	4.8	5.4	5.5	5.2	3.9	3.2	3.4	3.3	4.6
E. Customs duties	11.5	11.2	10.3	10.4	6.6	10.2	12.1	9.4	10.4
F. Other	0.3	0.7	0.0	0.0	1.9	0.3	0.2	0.9	0.6
III. <u>Total Taxes</u>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Table 5.7

Table 5.7b: CHILE - DISTRIBUTION OF NON-COPPER TAX REVENUES, 1960-1977

(Percent)

	1965-69 Average	1970	1971	1972	1973	1974	1975	1976	1977
I. <u>Direct Taxes</u>	<u>33.2</u>	<u>30.0</u>	<u>33.3</u>	<u>27.6</u>	<u>32.4</u>	<u>33.3</u>	<u>32.8</u>	<u>29.2</u>	<u>25.7</u>
A. Taxes on income	24.7	24.7	27.5	22.9	29.2	27.6	27.3	24.3	20.0
B. Taxes on property	8.5	5.2	5.8	4.5	2.8	3.3	4.1	3.9	5.0
C. Other	-	-	-	0.2	0.5	2.5	1.4	1.0	0.8
II. <u>Indirect Taxes</u>	<u>66.8</u>	<u>70.0</u>	<u>66.7</u>	<u>72.4</u>	<u>67.6</u>	<u>66.7</u>	<u>67.2</u>	<u>70.8</u>	<u>74.3</u>
A. Sales	30.6	31.2	34.5	37.0	34.9	31.2	27.4	31.0	39.5
B. Excises	8.5	9.1	8.7	12.3	13.5	15.6	15.6	16.8	15.6
C. Services	8.0	8.9	7.4	7.4	6.7	4.8	6.6	7.1	1.4
D. Legal transactions	5.7	6.5	5.6	5.2	3.9	3.5	3.7	3.9	5.2
E. Customs duties	13.6	13.5	10.5	10.5	6.6	11.3	13.5	11.0	11.8
F. Other	0.3	0.9	0.0	0.0	1.9	0.3	0.2	1.1	0.7
III. <u>Total Taxes</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: Table 5.7

Table 5.8 CHILE - CENTRAL GOVERNMENT TAX REVENUES AT CONSTANT PRICES, 1965-1977

(Thousands of pesos of December 1969) <sup>a/</sup>

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
I. <u>Direct Taxes</u>	<u>3,489</u>	<u>4,411</u>	<u>4,781</u>	<u>4,782</u>	<u>5,401</u>	<u>6,161</u>	<u>5,260</u>	<u>3,784</u>	<u>3,400</u>	<u>6,683</u>	<u>7,023</u>	<u>8,163</u>	<u>7,735</u>
A. Taxes on income	1,625	1,983	2,402	2,420	2,655	3,027	4,082	3,110	3,063	4,236	4,346	4,261	3,983
B. Taxes on property	822	743	735	744	591	642	859	605	290	505	650	687	999
C. Copper	1,042	1,685	1,643	1,618	2,148	2,493	320	45	-	1,562	1,793	3,046	2,602
D. Other	-	-	-	-	-	-	-	24	47	380	220	169	151
II. <u>Indirect Taxes</u>	<u>4,294</u>	<u>5,221</u>	<u>5,888</u>	<u>6,866</u>	<u>7,908</u>	<u>8,563</u>	<u>9,914</u>	<u>9,830</u>	<u>7,082</u>	<u>10,250</u>	<u>10,720</u>	<u>12,422</u>	<u>14,819</u>
A. Sales	1,964	2,327	2,812	3,147	3,589	3,814	5,124	5,019	3,659	4,792	4,371	5,437	7,881
B. Production excises	587	618	756	886	991	1,112	1,287	1,673	1,417	2,402	2,493	2,939	3,119
1. Alcoholic beverages							(210)	(633)	(517)	(502)	(183)	(232)	(239)
2. Tobacco							(603)	(550)	(327)	(524)	(549)	(689)	(843)
3. Fuels							(469)	(378)	(419)	(1,351)	(1,760)	(2,019)	(2,037)
4. Other							( 4)	(112)	(153)	( 25)	( 1)	( -)	( -)
C. Services	458	623	686	894	1,014	1,086	1,095	1,004	701	738	1,075	1,236	282
D. Legal transactions	365	472	444	549	739	797	838	707	408	535	597	685	1,047
E. Customs duties	888	1,143	1,170	1,373	1,547	1,646	1,565	1,422	696	1,731	2,152	1,933	2,351
F. Other	32	37	19	17	28	108	5	4	200	53	32	190	139
III. <u>Total Taxes</u>	<u>7,783</u>	<u>9,633</u>	<u>10,668</u>	<u>11,648</u>	<u>13,308</u>	<u>14,724</u>	<u>15,174</u>	<u>13,614</u>	<u>10,483</u>	<u>16,933</u>	<u>17,743</u>	<u>20,585</u>	<u>22,553</u>

a/ Deflated by IBRD adjusted CPI.

Source: Table 5.7

Table 5.8a: CHILE - ANNUAL GROWTH OF TAX REVENUES, BY MAJOR TAX, 1966-1977

(Percent)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
I. <u>Direct Taxes</u>	<u>26</u>	<u>8</u>	<u>-</u>	<u>13</u>	<u>14</u>	<u>-15</u>	<u>-28</u>	<u>-10</u>	<u>97</u>	<u>5</u>	<u>16</u>	<u>-5</u>
(excluding copper)	(11)	(15)	(1)	(3)	(13)	(35)	(-24)	(- 9)	(51)	(2)	(-2)	(-)
A. Taxes on income	22	21	1	10	14	35	-24	- 2	38	3	-2	-7
B. Taxes on property	-10	-1	1	-21	9	34	-30	-52	74	29	6	45
C. Copper	62	-2	-1	33	16	-87	-86	-100	x	15	70	-15
II. <u>Indirect Taxes</u>	<u>22</u>	<u>13</u>	<u>17</u>	<u>15</u>	<u>8</u>	<u>16</u>	<u>- 1</u>	<u>- 28</u>	<u>45</u>	<u>5</u>	<u>16</u>	<u>19</u>
A. Sales	18	21	12	14	6	34	- 2	-27	31	-9	24	45 <sup>a/</sup>
B. Excises	5	22	17	12	12	16	30	-15	70	4	18	6
C. Services	36	10	30	13	7	1	- 8	-30	5	46	15	-77 <sup>a/</sup>
D. Legal transactions	29	-6	24	35	8	5	-16	-42	31	12	15	53
E. Customs	29	2	17	13	6	-5	- 9	-51	149	24	-10	22
III. <u>Total Taxes</u>	<u>24</u>	<u>11</u>	<u>9</u>	<u>14</u>	<u>11</u>	<u>3</u>	<u>-10</u>	<u>-23</u>	<u>62</u>	<u>5</u>	<u>16</u>	<u>10</u>
(excluding copper)	(18)	(14)	(11)	(11)	(10)	(21)	(- 9)	(-23)	(47)	(4)	(10)	(14)

<sup>a/</sup> The tax on services was merged with the VAT in 1977.

Source: Table 5.8

Table 5.9: CHILE - CENTRAL GOVERNMENT REVENUES AND EXPENDITURES RELATIVE TO GDP, 1965-1977

(Percent)

	1960	1965-69 Ave.	1970	1971	1972	1973	1974	1975	1976	1977
I. <u>Current Revenues</u>	<u>17.0</u>	<u>18.5</u>	<u>19.9</u>	<u>18.5</u>	<u>16.1</u>	<u>16.3</u>	<u>19.9</u>	<u>20.9</u>	<u>21.7</u>	<u>21.7</u>
A. Taxes	16.1	17.6	18.9	17.6	15.1	15.2	17.8	20.4	21.2	20.3
1. Direct taxes	(5.8)	(7.6)	(7.9)	(6.1)	(4.2)	(4.9)	(7.0)	(8.1)	(8.4)	(7.0)
a. Income		<3.7>	<3.9>	<4.7>	<3.5>	<4.4>	<4.5>	<5.0>	<4.4>	<3.6>
b. Property		<1.3>	<0.8>	<1.0>	<0.7>	<0.4>	<0.5>	<0.7>	<0.7>	<0.9>
c. Copper	<2.2>	<2.7>	<3.2>	<0.4>	<0.0>	< - >	<1.6>	<2.1>	<3.1>	<2.3>
d. Other		< - >	< - >	< - >	<0.0>	<0.1>	<0.4>	<0.3>	<0.2>	<0.1>
2. Indirect taxes	(10.3)	(10.0)	(11.0)	(11.5)	(10.9)	(10.3)	(10.8)	(12.3)	(12.8)	(13.3)
a. Sales		<4.6>	<4.9>	<5.9>	<5.6>	<5.3>	<5.0>	<5.0>	<5.6>	<7.1>
b. Excises		<1.3>	<1.4>	<1.5>	<1.9>	<2.1>	<2.5>	<2.9>	<3.0>	<2.8>
c. Customs		<2.0>	<2.1>	<1.8>	<1.6>	<1.0>	<1.8>	<2.5>	<2.0>	<2.1>
d. Other		<2.1>	<2.6>	<2.3>	<1.8>	<1.9>	<1.4>	<1.9>	<2.2>	<1.3>
B. Nontax Revenues	0.9	0.9	1.0	0.9	1.0	1.1	2.1	0.5	0.5	1.4
II. <u>Expenditures</u>	<u>20.2</u>	<u>19.7</u>	<u>21.4</u>	<u>26.8</u>	<u>28.4</u> <sup>b/</sup>	<u>38.4</u> <sup>b/</sup>	<u>27.2</u>	<u>23.7</u>	<u>20.1</u>	<u>22.0</u>
A. Current	15.3	13.9	15.8	20.5	23.0 <sup>b/</sup>	32.6 <sup>b/</sup>	18.3	19.2	17.3	20.2
B. Capital	5.0	5.8	5.6	6.3	5.4	5.8	8.9	4.5	2.8	1.8
III. <u>Current Surplus</u>	<u>1.7</u>	<u>4.6</u>	<u>4.1</u>	<u>-1.9</u>	<u>-6.9</u>	<u>-16.3</u>	<u>1.7</u>	<u>1.7</u>	<u>4.4</u>	<u>1.6</u>
IV. <u>Overall Surplus</u> <sup>a/</sup>	<u>-3.2</u>	<u>-1.2</u>	<u>-1.3</u>	<u>-7.8</u>	<u>-11.9</u>	<u>-21.7</u>	<u>-6.9</u>	<u>-2.3</u>	<u>1.5</u>	<u>-0.3</u>

a/ Includes capital revenues except in 1976 and 1977.

b/ Includes expenditures financed directly by banking system.

Source: Tables 2.3, 5.1 and 5.7

Table B.10: CHILE - CENTRAL GOVERNMENT PESO AND FOREIGN CURRENCY TRANSFERS TO THE REST OF THE PUBLIC SECTOR, 1966-1975

## I. Current Transfers

(Thousands of current pesos and US dollars)

	1966		1967		1968		1969		1970		1971	
	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$
<b>Social Security Payments, Pensions &amp; Family Allowances</b>	696	-	825	-	1,172	-	1,519	700	2,699	660	5,660	680
Social security funds (S.S.S & Caja Previs.)	495	-	590	-	1,047	-	1,141	-	2,047	-	4,622	-
Pensions and other direct payments	114	-	129	-	-	-	224	-	406	-	612	-
Employers' contributions (govt.)	-	-	-	-	-	-	-	-	-	-	-	-
Family allowances	87	-	106	-	126	-	154	700	246	660	451	680
<b>Transfers to the Public Sector</b>	953	17,770	1,174	7,510	1,620	13,030	2,397	12,000	3,613	27,970	7,582	15,070
<b>State Economic Enterprises</b>	269	7,240	316	4,560	555	9,360	698	10,700	942	20,320	2,270	3,770
Railroads	151	4,450	166	2,500	227	2,960	279	2,500	354	10,800	838	2,150
National airline (LAN)	5	1,410	5	680	12	990	18	1,000	21	3,350	62	430
Maritime transport (EMPRESMAR)	6	570	5	-	13	800	22	800	31	800	59	-
Public bus company (ETC)	23	590	31	1,060	97	500	41	600	83	330	105	60
Port company (EMPREPORT, EMPORCHI)	27	190	26	320	46	560	33	300	40	60	184	60
Agricultural Institutions	49	50	65	-	202	-	272	-	399	360	882	70
(Agrarian Reform-CORA)	(15)	(-)	(-)	(-)	(36)	(-)	(46)	(-)	(56)	(-)	(129)	(-)
(Agrarian Dev. Inst.-INDAP)	(20)	(30)	(18)	(-)	(26)	(-)	(44)	(-)	(86)	(-)	(271)	(-)
(Agri. & Livestock Serv.-SAG)	(-)	(-)	(-)	(-)	(64)	(-)	(94)	(-)	(134)	(360)	(362)	(70)
(Agri. Marketing Inst.-ECA)	(1)	(-)	(0)	(-)	(50)	(-)	(60)	(-)	(85)	(-)	(-)	(-)
(Others)	(13)	(-)	(4)	(-)	(22)	(-)	(38)	(-)	(58)	(-)	(120)	(-)
State mining company (ENAMI)	8	-	18	-	28	3,750	13	5,500	14	5,220	140	1,000
EMPRECAN or ECA	-	-	-	-	-	-	-	-	-	-	-	-
<b>Economic Development Institutions</b>	22	6,200	22	-	52	-	68	-	118	-	252	-
Development corporation (CORFO)	7	6,200	-	-	-	-	-	-	-	-	6	-
Public housing	15	-	22	-	53	-	58	-	118	-	244	-
(Housing Corp.-CORVI)	(4)	(-)	(-)	(-)	(0)	(-)	(1)	(-)	(1)	(-)	(-)	(-)
(Housing Foundation-CORHABIT)	(10)	(-)	(18)	(-)	(26)	(-)	(33)	(-)	(63)	(-)	(154)	(-)
(Others)	(1)	(-)	(4)	(-)	(27)	(-)	(34)	(-)	(54)	(-)	(90)	(-)
<b>Social Institutions</b>	411	3,000	507	2,710	648	2,490	917	2,500	1,439	5,050	2,502	5,200
National health service (SNS)	403	3,000	510	2,710	641	2,490	907	2,500	1,419	5,050	2,448	5,200
Medical service for employees (SERMENA)	8	-	7	-	7	-	6	-	18	-	340	-
Others	-	-	-	-	-	-	-	-	2	-	200	-
<b>Educational Institutions</b>	171	1,280	226	640	213	1,110	416	1,000	715	1,040	1,351	540
University of Chile	137	1,150	178	570	244	1,070	352	1,000	551	1,000	932	530
State technical University	34	150	42	70	54	40	85	-	154	40	264	10
School construction society	-	-	9	-	10	-	12	-	10	-	17	-
Others	-	-	-	-	5	-	7	-	20	-	158	-
<b>Defense</b>	15	-	17	-	30	30	33	450	76	160	174	950
<b>Municipalities</b>	-	-	-	-	-	-	89	-	193	-	375	-
<b>Miscellaneous</b>	-	-	71	-	21	40	91	350	330	800	658	4,610
Banco del Estado	-	-	-	-	-	-	-	-	213	-	3	-
Other	65	-	73	-	21	40	91	350	117	800	655	4,610
<b>Transfers to the Private Sector</b>	183	-	261	-	445	2,320	626	2,100	876	2,990	1,771	2,930
<b>Education</b>	-	-	-	-	214	-	331	-	530	-	881	60
Universities	-	-	-	-	135	-	217	-	366	-	647	-
Catolica de Santiago	-	-	-	-	38	-	59	-	112	-	197	-
Catolica de Valparaiso	-	-	-	-	17	-	24	-	38	-	73	-
Federico Sta. Maria	-	-	-	-	9	-	14	-	25	-	44	-
Concepción	-	-	-	-	42	-	65	-	110	-	203	-
Norte	-	-	-	-	7	-	11	-	33	-	52	-
Austral	-	-	-	-	21	-	29	-	46	-	72	-
Other	-	-	-	-	-	-	5	-	3	-	6	-
Private schools	-	-	-	-	-	-	101	-	152	-	219	-
Other	-	-	-	-	80	-	-	-	12	-	15	60
<b>Tax Rebates and Customs Duties</b>	-	-	-	-	142	250	206	400	239	80	447	10
<b>Subsidies</b>	-	-	-	-	13	-	11	-	20	-	239	-
<b>Other</b>	183	-	261	-	76	2,070	78	1,700	87	2,510	204	2,860
<b>Total</b>	1,832	12,270	2,260	7,010	3,238	15,330	4,902	17,800	7,388	31,220	15,038	18,680

Source: Ministry of Finance



Table 5.10: CHILE - CENTRAL GOVERNMENT PESO AND FOREIGN CURRENCY TRANSFERS TO THE REST OF THE PUBLIC SECTOR, 1966-1975

## I. Current Transfers

(Thousands of current pesos and US dollars)

	1972		1973		1974		1975	
	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$
<b>Social Security Payments, Pensions &amp; Family Allowances</b>	10,067	750	29,959	970	232,274	1,030	1,185,703	180
Social security funds (S.S.S. & Caja Previs.)	8,365	-	29,767	-	175,886	-	869,052	-
Pensions and other direct payments	966	-	2,298	-	15,276	-	58,545	180
Employers' contributions (govt.)	-	-	-	-	3,953	-	28,505	-
Family allowances	736	750	1,894	970	37,159	1,030	229,601	-
<b>Transfers to the Public Sector</b>	15,876	11,250	94,465	18,560	569,245	84,230	1,838,582	13,830
<b>State Economic Enterprises</b>	4,105	5,850	32,486	5,130	126,626	9,100	256,354	6,420
Railroads	1,221	1,600	3,621	4,500	43,211	8,500	60,526	5,420
National airline (LAN)	4	4,000	350	-	-	-	-	-
Maritime transport (EMPRESMAR)	113	-	311	-	-	-	-	-
Public bus company (ETC)	167	180	492	430	3,921	-	4,034	-
Port company (EMPRESPORT, EMPORCHI)	283	70	894	200	300	370	5,145	-
Agricultural Institutions	2,145	-	10,244	-	79,194	230	151,806	1,000
(Agrarian Reform-CORA)	(473)	(-)	(1,687)	(-)	(7,960)	(-)	(22,940)	(-)
(Agrarian Dev. Inst.-INDAP)	(578)	(-)	(3,931)	(-)	(9,459)	(-)	(21,883)	(-)
(Agri. & Livestock Serv.-SAG)	(559)	(-)	(2,096)	(-)	(14,573)	(-)	(39,762)	(750)
(Agri. Marketing Inst.-ECA)	(100)	(-)	(-)	(-)	(32,914)	(57,200) <sup>1/2</sup>	(-)	(-)
(Others)	(455)	(-)	(2,530)	(-)	(14,279)	(230)	(47,221)	(250)
State mining company (ENAMI)	172	-	798	-	-	-	46,843	-
EMPRECAN or ECA	-	-	18,294	-	-	-	-	-
<b>Economic Development Institutions</b>	516	-	2,382	-	29,658	2,500	94,795	1,500
Development corporation (CORFO)	-	-	1,027	-	11,814	2,500	28,951	1,500
Public housing	516	-	2,555	-	17,844	-	65,754	-
(Housing Corp.-CORVI)	(29)	(-)	(440)	(-)	(14,301)	(-)	(14,428)	(-)
(Housing Foundation-CORHABIT)	(314)	(-)	(1,112)	(-)	(4,908)	(-)	(25,855)	(-)
(Others)	(173)	(-)	(1,003)	(-)	(6,635)	(-)	(25,432)	(-)
<b>Social Institutions</b>	5,667	2,630	25,604	11,140	153,033	11,450	536,162	3,220
National health service (SNS)	5,589	3,630	25,342	11,140	151,281	11,400	532,977	3,180
Medical service for employees (SERMENA)	63	-	194	-	-	-	-	-
Others	15	-	68	-	1,752	50	3,185	40
<b>Educational Institutions</b>	2,413	-	10,654	-	124,061	-	368,011	-
University of Chile	1,815	-	7,103	-	91,133	-	249,852	-
State technical University	563	-	2,275	-	14,085	-	62,400	-
School construction society	19	-	125	-	2,847	-	4,477	-
Others	16	-	1,135	-	10,934	-	51,282	-
<b>Defense</b>	454	1,030	7,628	2,220	16,741	2,480	74,527	2,310
<b>Municipalities</b>	1,256	-	4,757	-	28,625	-	70,304	-
<b>Miscellaneous</b>	1,465	740	6,754	70	90,501	58,700	428,519	380
Banco del Estado	531	-	3,818	-	-	-	186,787	-
Other	934	740	2,936	70	90,501	58,700	251,732	380
<b>Transfers to the Private Sector</b>	3,466	2,380	14,353	3,260	84,215	4,600	531,798	4,410
<b>Education</b>	1,626	-	7,577	-	75,287	-	227,426	330
Universities	1,586	-	5,830	-	62,408	-	184,680	330
Catolica de Santiago	493	-	1,807	-	20,447	-	59,225	-
Catolica de Valparaiso	172	-	634	-	6,580	-	20,579	-
Federico Sta. Maria	116	-	469	-	3,673	-	16,079	330
Concepción	485	-	1,739	-	15,777	-	51,326	-
Norte	138	-	636	-	7,245	-	21,064	-
Austral	165	-	575	-	5,686	-	16,407	-
Other	19	-	-	-	-	-	-	-
Private schools	-	-	-	-	8,209	-	39,933	-
Other	40	-	1,697	-	5,670	-	-	-
<b>Tax Rebates and Customs Duties</b>	719	-	2,136	270	300 <sup>2/</sup>	10	258,467	1,520
<b>Subsidies</b>	419	-	41	-	1,490	-	1,738	-
<b>Other</b>	702	2,380	4,599	2,990	5,638 <sup>3/</sup>	4,590	44,167	2,560
<b>Total</b>	29,409	14,380	138,777	22,790	885,734	89,860	3,556,083	18,420

1/ Debt re-financing; not included in total.

2/ Includes 0.352 Reintegros y Devoluciones and 0.448 Devolucion de Impuestos.

3/ Includes 0.210 unemployment compensation.

Source: Ministry of Finance

Table 5.10: CHILE - CENTRAL GOVERNMENT PESO AND FOREIGN CURRENCY TRANSFERS TO THE REST OF THE PUBLIC SECTOR, 1966-1975

## II. Capital Transfers

(Thousands of current pesos and US dollars)

	1966		1967		1968		1969		1970	
	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$
<b>Transfers to the Public Sector</b>	<b>1,642</b>	<b>89,000</b>	<b>1,769</b>	<b>80,180</b>	<b>1,361</b>	<b>10,770</b>	<b>1,916</b>	<b>11,400</b>	<b>2,519</b>	<b>31,160</b>
<b>State Economic Enterprises</b>	<b>213</b>	<b>19,900</b>	<b>272</b>	<b>9,300</b>	<b>370</b>	<b>5,240</b>	<b>389</b>	<b>5,000</b>	<b>812</b>	<b>5,760</b>
Railroads	45	9,100	62	1,450	84	990	134	1,000	126	2,200
National airline (LAN)	2	6,400	1	3,360	1	2,990	1	2,800	0	640
Maritime transport (EMPRESMAR)	0	400	0	150	0	800	0	800	0	800
Public bus company (ETC)	9	300	2	720	2	200	2	100	4	630
Port company (EMPREPORT, EMPORCHI)	1	500	1	90	6	90	25	100	700	310
Agricultural Institutions	129	300	181	530	247	170	373	200	543	1,180
(Agrarian Reform-CORA)	(62)	(-)	(105)	(-)	(151)	(-)	(266)	(-)	(390)	(-)
(Agrarian Dev. Inst.-INDAP)	(52)	(-)	(54)	(-)	(66)	(-)	(78)	(-)	(100)	(-)
(Agri. & Livestock Serv.-SAG)	(-)	(-)	(-)	(-)	(10)	(-)	(12)	(-)	(28)	(-)
(Agri. Marketing Inst.-ECA)	(8)	(300)	(5)	(180)	(5)	(170)	(5)	(200)	(5)	(1,180)
(Others)	(7)	(-)	(17)	(350)	(15)	(-)	(12)	(-)	(20)	(-)
State mining company (ENAMI)	29	2,900	25	3,000	30	-	54	-	69	-
EMPRECAN or ECA	-	-	-	-	-	-	-	-	-	-
<b>Economic Development Institutions</b>	<b>364</b>	<b>9,400</b>	<b>320</b>	<b>580</b>	<b>863</b>	<b>5,330</b>	<b>1,140</b>	<b>5,900</b>	<b>1,432</b>	<b>18,760</b>
Development corporation (CORFO)	59	9,300	117	580	510	5,330	600	5,400	747	18,760
Public housing	305	100	203	-	353	-	540	500	685	18,760
(Housing Corp.-CORVI)	(246)	(-)	(106)	(-)	(112)	(-)	(216)	(-)	(203)	(-)
(Housing Foundation-CORHABIT)	(54)	(-)	(71)	(-)	(179)	(-)	(183)	(-)	(160)	(-)
(Others)	(25)	(100)	(26)	(-)	(62)	(-)	(141)	500	(322)	(-)
<b>Social Institutions</b>	<b>16</b>	<b>500</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>-</b>	<b>35</b>	<b>-</b>	<b>44</b>	<b>-</b>
National health service (SNS)	16	500	-	-	28	-	35	-	44	-
Medical service for employees (SERMENA)	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
<b>Educational Institutions</b>	<b>59</b>	<b>1,400</b>	<b>180</b>	<b>190</b>	<b>57</b>	<b>-</b>	<b>62</b>	<b>-</b>	<b>55</b>	<b>800</b>
University of Chile	13	1,000	11	-	20	-	25	-	31	780
State technical University	5	300	6	-	11	-	8	-	10	20
School construction society	15	-	16	-	22	-	24	-	14	-
Others	26	100	147	190	4	-	5	-	-	-
<b>Defense</b>	<b>20</b>	<b>12,900</b>	<b>22</b>	<b>10,510</b>	<b>4</b>	<b>200</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>700</b>
National Security Fund	-	-	-	-	-	-	-	-	-	-
Other	20	12,900	22	10,510	4	200	5	0	6	700
<b>Municipalities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>14</b>	<b>-</b>
<b>Miscellaneous</b>	<b>970</b>	<b>44,900</b>	<b>975</b>	<b>59,600</b>	<b>41</b>	<b>-</b>	<b>77</b>	<b>500</b>	<b>156</b>	<b>5,140</b>
Banco del Estado	-	-	-	-	-	-	-	-	-	-
Other	970	44,900	975	59,600	41	-	77	500	156	5,140
<b>Transfers to the Private Sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>400</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1,280</b>
<b>Education</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>790</b>
Universities	-	-	-	-	-	-	-	-	-	90
Catolica de Santiago	-	-	-	-	-	-	-	-	-	20
Catolica de Valparaiso	-	-	-	-	-	-	-	-	-	60
Federico Sta. Maria	-	-	-	-	-	-	-	-	-	140
Concepción	-	-	-	-	-	-	-	-	-	-
Norte	-	-	-	-	-	-	-	-	-	90
Austral	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Private schools	-	-	-	-	-	-	-	-	-	290
Other	-	-	-	-	-	-	-	-	-	-
<b>Tax Rebates and Customs Duties</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subsidies</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>400</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>490</b>
<b>Total</b>	<b>1,642</b>	<b>89,000</b>	<b>1,769</b>	<b>80,180</b>	<b>1,362</b>	<b>11,170</b>	<b>1,916</b>	<b>11,400</b>	<b>2,520</b>	<b>32,450</b>

Source: Ministry of Finance

Table 5.10: CHILE - CENTRAL GOVERNMENT PESO AND FOREIGN CURRENCY TRANSFERS TO THE REST OF THE PUBLIC SECTOR, 1966-1975

## II. Capital Transfers

(Thousands of current pesos and US dollars)

	1971		1972		1973		1974		1975	
	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$	Pesos	US\$
<b>Transfers to the Public Sector</b>	<b>4,913</b>	<b>13,970</b>	<b>6,421</b>	<b>4,890</b>	<b>38,404</b>	<b>4,200</b>	<b>398,052</b>	<b>162,140</b>	<b>509,533</b>	<b>39,190</b>
<b>State Economic Enterprises</b>	<b>1,382</b>	<b>3,090</b>	<b>1,680</b>	<b>1,920</b>	<b>5,635</b>	<b>2,520</b>	<b>28,877</b>	<b>8,060</b>	<b>31,804</b>	<b>2,240</b>
Railroads	157	1,050	324	1,480	1,021	2,200	5,050	4,400	11,930	2,800
National airline (LAN)	6	400	-	100	-	-	-	-	-	-
Maritime transport (EMPRESAR)	-	800	-	70	-	-	-	-	-	-
Public bus company (ETC)	5	510	4	-	40	-	2,224	-	1,761	440
Port company (EMPREFORT, EMPORCHI)	45	100	31	-	202	320	2,732	660	-	-
Agricultural Institutions	1,061	160	1,182	-	3,455	-	18,871	-	4,408	-
(Agrarian Reform-CORA)	(932)	(-)	(1,098)	(-)	(3,109)	(-)	(7,023)	(-)	(2,488)	(-)
(Agrarian Dev. Inst.-INDAP)	(71)	(-)	(10)	(-)	(85)	(-)	(8,551)	(-)	(-)	(-)
(Agri. & Livestock Serv.-SAG)	(35)	(-)	(53)	(-)	(221)	(-)	(755)	(-)	(700)	(-)
(Agri. Marketing Inst.-ECA)	(7)	(180)	(6)	(-)	(4)	(-)	(1,000)	(-)	(-)	(-)
(Others)	(16)	(-)	(15)	(-)	(16)	(-)	(1,542)	(-)	(1,220)	(-)
State mining company (ENAMI)	108	50	139	270	800	-	-	3,000	13,705	-
EMPRECAN or ECA	-	-	-	-	117	-	-	-	-	-
<b>Economic Development Institutions</b>	<b>3,018</b>	<b>5,780</b>	<b>3,000</b>	<b>290</b>	<b>22,585</b>	<b>-</b>	<b>239,088</b>	<b>47,500</b>	<b>234,931</b>	<b>32,920</b>
Development corporation (CORFO)	1,246	5,680	217	290	2,612	-	157,355	47,500	204,500	32,920
Public housing	1,772	100	2,783	-	19,973	-	81,733	-	30,431	-
(Housing Corp.-CORVI)	(579)	(-)	(1,056)	(-)	(8,422)	(-)	44,508	-	(15,677)	(-)
(Housing Foundation-CORHABIT)	(319)	(-)	(489)	(-)	(2,424)	(-)	(3,862)	(-)	(919)	(-)
(Others)	(874)	(100)	(1,238)	(-)	(9,127)	(-)	(33,363)	(-)	(13,835)	(-)
<b>Social Institutions</b>	<b>55</b>	<b>-</b>	<b>78</b>	<b>-</b>	<b>275</b>	<b>-</b>	<b>3,131</b>	<b>-</b>	<b>13,586</b>	<b>990</b>
National health service (SNS)	55	-	70	-	275	-	1,956	-	12,726	990
Medical service for employees (SERMENA)	-	-	-	-	-	-	-	-	-	-
Others	-	-	8	-	-	-	1,175	-	860	-
<b>Educational Institutions</b>	<b>76</b>	<b>-</b>	<b>679</b>	<b>-</b>	<b>4,243</b>	<b>-</b>	<b>18,165</b>	<b>-</b>	<b>43,076</b>	<b>-</b>
University of Chile	35	-	404	-	2,114	-	5,001	-	7,910	-
State technical University	17	-	122	-	561	-	2,900	-	3,164	-
School construction society	24	-	153	-	1,568	-	10,159	-	32,002	-
Others	-	-	-	-	-	-	105	-	-	-
<b>Defense</b>	<b>22</b>	<b>460</b>	<b>37</b>	<b>1,300</b>	<b>352</b>	<b>1,560</b>	<b>3,347</b>	<b>1,600</b>	<b>7,188</b>	<b>1,350</b>
National Security Fund	-	-	-	-	-	-	-	-	-	-
Other	22	460	37	1,300	352	1,560	3,347	1,600	7,188	1,350
<b>Municipalities</b>	<b>12</b>	<b>4,500</b>	<b>81</b>	<b>-</b>	<b>117</b>	<b>-</b>	<b>344</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Miscellaneous</b>	<b>348</b>	<b>140</b>	<b>866</b>	<b>1,380</b>	<b>5,197</b>	<b>120</b>	<b>105,100</b>	<b>104,980</b>	<b>178,858</b>	<b>690</b>
Banco del Estado	-	-	-	-	-	-	-	-	-	-
Other	348	140	866	1,380	5,197	120	105,100	104,980	178,858	690
<b>Transfers to the Private Sector</b>	<b>9</b>	<b>630</b>	<b>8</b>	<b>-</b>	<b>885</b>	<b>10</b>	<b>5,789</b>	<b>770</b>	<b>25,463</b>	<b>1,400</b>
<b>Education</b>	<b>8</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>860</b>	<b>-</b>	<b>5,737</b>	<b>-</b>	<b>23,854</b>	<b>470</b>
Universities	8	-	1	-	858	-	5,737	-	23,854	470
Catolica de Santiago	-	-	-	-	176	-	2,207	-	12,793	-
Catolica de Valparaiso	-	-	-	-	147	-	900	-	1,414	-
Federico Sta. Maria	-	-	-	-	99	-	500	-	146	470
Concepción	-	-	-	-	221	-	900	-	2,205	-
Norte	4	-	-	-	100	-	530	-	1,196	-
Austral	4	-	1	-	115	-	700	-	6,100	-
Other	-	-	-	-	-	-	-	-	-	-
Private schools	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	2	-	-	-	-	-
<b>Tax Rebates and Customs Duties</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Subsidies</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other</b>	<b>1</b>	<b>630</b>	<b>7</b>	<b>-</b>	<b>25</b>	<b>10</b>	<b>52</b>	<b>770</b>	<b>1,609</b>	<b>930</b>
<b>Total</b>	<b>4,922</b>	<b>14,600</b>	<b>6,429</b>	<b>4,890</b>	<b>39,289</b>	<b>4,210</b>	<b>403,841</b>	<b>162,910</b>	<b>534,906</b>	<b>40,590</b>

Source: Ministry of Finance

Table 5.11: CHILE - CENTRAL GOVERNMENT TRANSFERS TO MAJOR STATE ENTERPRISES AND INSTITUTIONS, 1966-75

(Thousands of current pesos)

	1966			1967			1968			1969			1970		
	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total
Social Security Payments, Pensions, and Family Allowances	696	-	696	825	-	825	1,173	-	1,173	1,525	-	1,525	2,202	-	2,202
State Enterprises:	298	292	590	339	319	658	618	406	1,024	794	634	1,428	976	828	1,804
Railroads	100	79	247	178	69	247	247	91	338	301	143	444	479	151	630
Airline (LAN)	10	27	37	8	18	26	19	21	40	27	26	53	60	7	67
Shipping (EMPREMAR)	8	2	10	5	1	6	18	5	23	29	7	36	40	9	49
Bus (ETC)	25	10	35	36	6	42	40	3	43	47	3	50	87	11	98
Ports (EMPREPORT, EMPORCHI)	28	3	31	30	1	31	48	7	55	56	25	82	41	74	115
Agricultural:	49	130	179	63	184	247	202	248	450	272	375	647	403	557	960
CORA	(15)	(62)	(77)	(-)	(105)	(105)	(38)	(151)	(189)	(46)	(266)	(312)	(56)	(390)	(446)
INDAP	(20)	(52)	(72)	(18)	(54)	(72)	(28)	(66)	(94)	(44)	(78)	(122)	(86)	(100)	(186)
SAG	(-)	(-)	(-)	(-)	(-)	(-)	(64)	(10)	(74)	(94)	(12)	(106)	(138)	(28)	(166)
ECA	(17)	(9)	(10)	(0)	(6)	(6)	(50)	(5)	(55)	(80)	(7)	(87)	(85)	(19)	(104)
Other	(13)	(7)	(20)	(45)	(19)	(64)	(22)	(15)	(37)	(28)	(12)	(40)	(38)	(20)	(58)
Mining (ENAMT)	8	40	48	18	40	58	43	30	73	62	54	116	74	69	143
EMPRECAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CORFO	31	96	127	-	120	120	-	546	546	-	648	648	-	964	964
Housing (CORVI, CORHABIT, etc.)	15	306	321	22	203	225	53	353	406	68	544	612	118	685	803
Health (SNS, SERMENA, etc.)	423	18	441	531	-	531	665	28	693	35	374	1,497	44	541	
Educational Institutions	176	65	241	232	181	413	535	57	592	796	62	858	1,257	73	1,330
Public	176	65	241	232	181	413	321	57	378	465	62	527	727	64	791
Private	-	-	-	-	-	-	214	-	214	331	-	331	530	9	539
State Bank (BECH)	-	-	-	-	-	-	-	-	-	-	-	-	213	-	213
Other	263	1,218	1,481	351	1,350	1,701	298	50	348	539	94	633	981	250	1,231
Total	1,902	1,994	3,896	2,300	2,172	4,472	3,342	1,438	4,784	4,662	2,018	6,680	7,749	2,895	10,644

Source: Table 5.10

Table 5.11: CHILE - CENTRAL GOVERNMENT TRANSFERS TO MAJOR STATE ENTERPRISES AND INSTITUTIONS, 1966-75  
(Thousands of current pesos)

	1971			1972			1973			1974			1975		
	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total
Social Security Payments, Pensions, and Family Allowances	5,693	-	5,693	10,082	-	10,082	30,066	-	30,066	233,131	-	233,131	1,186,587	-	1,186,587
State Enterprises:	2,317	1,420	3,737	4,219	1,717	5,936	36,054	5,914	41,968	134,197	35,583	169,780	287,876	47,712	335,588
Railroads	865	170	1,035	1,252	353	1,605	4,120	1,265	5,385	50,283	8,711	58,994	95,139	25,678	120,816
Airline (LAN)	67	11	78	82	2	84	350	-	350	-	-	-	-	-	-
Shipping (EMPREMAR)	59	10	69	113	1	114	311	-	311	-	-	-	-	-	-
Bus (ETC)	106	11	117	171	4	175	540	40	580	-	2,224	2,224	4,034	3,921	7,955
Ports (EMPREPORT, EMPORCHI)	186	46	232	284	31	315	916	237	1,153	608	3,281	3,889	5,145	-	5,145
Agricultural:	883	1,063	1,946	2,145	1,182	3,327	10,244	3,455	13,699	79,385	18,871	97,256	136,716	4,408	14,124
GORA	(129)	(932)	(1,051)	(473)	(1,098)	(1,571)	(1,687)	(3,109)	(4,796)	(7,969)	(7,023)	(15,092)	(22,940)	(2,488)	(25,428)
INDAP	(271)	(71)	(342)	(578)	(10)	(588)	(3,931)	(85)	(4,016)	(9,459)	(8,551)	(18,010)	(21,883)	(-)	(21,883)
SAG	(363)	(35)	(398)	(559)	(53)	(612)	(2,096)	(221)	(2,317)	(14,573)	(755)	(15,328)	(43,444)	(700)	(44,144)
ECA	(-)	(7)	(7)	(100)	(6)	(106)	(-)	(4)	(4)	(80,522)	(1,000)	(81,552)	(-)	(-)	(-)
Other	(120)	(16)	(136)	(435)	(15)	(450)	(2,530)	(16)	(2,546)	(14,470)	(1,542)	(16,012)	(48,449)	(1,220)	(49,669)
Mining (ENAMI)	152	108	260	172	144	316	798	800	1,598	-	2,496	2,496	46,843	13,705	62,548
EMPRECAN	-	-	-	-	-	-	18,294	117	18,411	-	-	-	-	-	-
CORFO	8	1,316	1,324	-	223	223	1,027	2,612	3,639	13,894	196,875	210,316	36,316	366,137	402,453
Housing (CORVI, CORHABIT, etc.)	244	1,773	2,017	516	2,783	3,299	2,555	19,973	22,528	17,844	81,733	99,577	65,754	30,431	96,185
Health (SNS, SERMENA, etc.)	2,566	55	2,621	5,738	78	5,816	26,838	275	27,113	162,559	3,131	165,690	551,972	18,447	57,419
Educational Institutions	2,240	84	2,324	4,039	680	4,719	18,231	5,103	23,334	200,348	23,902	224,250	597,057	69,238	666,295
Public	1,358	76	1,434	2,413	679	3,092	10,654	4,243	14,897	124,061	18,165	142,226	368,011	43,076	411,087
Private	882	8	890	1,626	1	1,627	7,577	860	8,437	76,287	5,737	82,024	229,046	26,162	255,208
State Bank (BECH)	3	-	3	531	-	531	3,818	-	3,818	-	-	-	186,787	-	186,787
Other	2,199	455	2,654	4,564	1,043	5,607	22,713	5,878	28,591	198,525	198,158	396,683	734,176	202,238	936,414
Total	15,270	5,103	20,373	29,689	6,524	36,213	141,302	39,755	181,057	960,498	539,382	1,499,880	3,646,525	734,203	4,380,728

Source: Table 5.10

Table 5.12: CHILE - CENTRAL GOVERNMENT TRANSFERS TO MAJOR STATE ENTERPRISES AND INSTITUTIONS, 1966-75

(Thousands of pesos of December 1969)

	1966			1967			1968			1969			1970		
	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total
Social Security Payments,															
Pensions and Family Allowances	1,450	-	1,450	1,454	-	1,454	1,633	-	1,633	1,625	-	1,625	2,176	-	2,176
State Enterprises:	621	608	1,229	598	362	1,160	860	563	1,426	846	676	1,522	784	706	1,490
Railroads	350	164	514	314	122	435	344	127	471	321	152	473	385	121	506
Airline (LAN)	21	56	77	14	32	46	26	29	56	29	28	56	48	6	54
Shipping (EMPREMAR)	17	4	21	9	2	11	25	7	32	31	7	38	32	7	39
Bus (ETC)	52	21	73	63	10	74	56	4	60	50	3	53	70	9	79
Ports (EMPREPORT, EMPORCHI)	58	6	64	53	2	55	67	10	76	60	28	88	33	59	92
Agricultural	102	271	373	111	324	435	281	345	626	290	400	690	324	448	772
CORA	(31)	(129)	(160)	(-)	(185)	(185)	(53)	(210)	(263)	(49)	(283)	(332)	(45)	(314)	(359)
INDAP	(42)	(108)	(150)	(32)	(95)	(127)	(39)	(92)	(131)	(47)	(83)	(130)	(69)	(80)	(150)
SAG	(-)	(-)	(-)	(-)	(-)	(-)	(89)	(14)	(103)	(100)	(13)	(113)	(111)	(22)	(133)
ECA	(2)	(19)	(21)	(-)	(10)	(10)	(70)	(7)	(77)	(54)	(7)	(61)	(68)	(15)	(83)
Other	(27)	(15)	(42)	(79)	(33)	(113)	(31)	(21)	(52)	(30)	(13)	(43)	(30)	(16)	(47)
Mining (ENAMI)	17	83	100	32	70	102	50	42	102	66	58	124	59	55	115
EMPRECON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CORFO	54	200	264	-	212	212	-	760	760	-	690	690	-	775	775
Housing (CORVI, CORHABIT, etc.)	31	637	669	39	358	397	74	491	565	72	580	652	95	551	645
Health (SNS, SERMENA, etc.)	881	37	918	936	-	936	926	39	968	1,001	37	1,038	1,203	35	1,239
Educational institutions	366	136	502	409	319	728	745	79	824	848	66	914	1,010	59	1,069
Public	366	136	502	409	319	728	447	79	526	496	66	562	584	51	636
Private	-	-	-	-	-	-	298	-	298	353	-	353	426	7	433
State Bank (BECH)	-	-	-	-	-	-	-	-	-	-	-	-	171	-	171
Other	548	2,537	3,085	619	2,380	2,999	415	70	484	574	100	674	788	201	989
Total	3,962	4,153	8,115	4,055	3,829	7,884	4,653	2,002	6,660	4,968	2,150	7,118	6,229	2,327	8,556

Source: Table 5.11

Table 5.12: CHILE - CENTRAL GOVERNMENT TRANSFERS TO MAJOR STATE ENTERPRISES AND INSTITUTIONS, 1966-75

(Thousands of pesos of December 1969)

	1971			1972			1973			1974			1975		
	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total
Social Security Payments, Pensions and Family Allowances	3,813	-	3,813	3,797	-	3,797	1,709	-	1,709	2,291	-	2,291	2,455	-	2,455
State Enterprises:	1,552	951	2,503	1,589	647	2,236	2,050	336	2,386	1,319	350	1,668	596	99	695
Railroads	579	114	693	472	133	604	234	72	306	494	86	580	197	53	250
Airline (LAN)	45	7	52	31	1	32	20	-	20	-	-	-	-	-	-
Shipping (EMPREMAR)	40	7	47	42	0	42	18	-	18	-	-	-	-	-	-
Bus (ETC)	71	7	78	64	2	66	31	2	33	-	22	22	8	8	16
Ports (EMPREPORT, EMPORCHI)	124	31	155	107	12	119	52	13	66	6	32	38	11	-	11
Agricultural:	591	712	1,303	808	445	1,253	582	196	779	780	185	965	283	9	292
CORA	(86)	(624)	(704)	(178)	(414)	(592)	(96)	(177)	(273)	(78)	(69)	(148)	(47)	(5)	(53)
INDAP	(182)	(48)	(229)	(218)	(4)	(222)	(223)	(5)	(228)	(93)	(84)	(177)	(45)	(-)	(45)
SAG	(243)	(23)	(266)	(210)	(20)	(230)	(119)	(13)	(132)	(143)	(7)	(151)	(90)	(1)	(91)
ECA	(-)	(5)	(5)	(38)	(2)	(40)	(-)	(2)	(2)	(791)	(10)	(801)	(-)	(-)	(-)
Other	(80)	(11)	(91)	(164)	(6)	(169)	(144)	(1)	(145)	(142)	(15)	(157)	(100)	(2)	(103)
Mining (ENAMI)	102	72	174	65	54	119	45	45	90	-	24	24	96	28	129
EMPRECAN	-	-	-	-	-	-	1,040	7	1,047	-	-	-	-	-	-
CORFO	5	881	886	-	84	84	58	148	207	137	1,934	2,071	78	757	832
Housing (CORVI, CORHABIT, etc.)	163	1,188	1,351	194	1,048	1,242	145	1,135	1,281	175	803	978	136	63	199
Health (SNS, SERMENA, etc.)	1,719	37	1,756	2,161	29	2,190	1,526	16	1,541	1,597	31	1,628	1,142	38	1,180
Educational institutions	1,500	56	1,556	1,521	256	1,777	1,036	290	1,326	1,969	235	2,203	1,235	143	1,378
Public	910	51	960	909	256	1,165	606	241	847	1,219	178	1,398	761	89	850
Private	591	5	596	612	0	612	431	49	480	750	56	806	474	54	528
State Bank (BECH)	2	-	2	200	-	200	217	-	217	-	-	-	386	-	386
Other	1,473	305	1,778	1,719	393	2,112	1,291	334	1,625	1,951	1,947	3,898	1,519	418	1,937
Total	10,228	3,418	13,646	11,182	2,457	13,640	8,033	2,260	10,293	9,438	5,300	14,738	7,544	1,519	9,062

Source: Table 5.11

Table 5.13: CHILE - SUMMARY OF PUBLIC SECTOR FINANCIAL MOVEMENT, 1967-74

(Thousands of current pesos)

	1967	1968	1969	1970	1971	1972	1973	1974
<u>Current Revenues</u>	<u>11,799.3</u>	<u>16,575.2</u>	<u>24,526.4</u>	<u>34,819.8</u>	<u>46,798.3</u>	<u>77,592.1</u>	<u>360,067</u>	<u>4,137,162</u>
Central Government	6,312.2	8,757.6	13,068.6	19,302.3	23,602.9	38,300.8	195,834	1,841,857
Decentralized agencies	5,487.1	7,817.6	11,457.8	15,517.5	17,502.2	30,101.6	94,798	2,295,305
Public enterprises	n.a.	n.a.	n.a.	n.a.	5,693.2	9,189.7	69,435	n.a.
<u>Current Expenditures</u>	<u>9,230.7</u>	<u>12,645.4</u>	<u>18,350.2</u>	<u>28,658.0</u>	<u>46,577.9</u>	<u>88,128.2</u>	<u>378,137</u>	<u>3,530,949</u>
Fiscal sector	2,955.7	3,954.7	5,619.8	9,618.2	14,694.7	28,561.5	119,779	894,381
Decentralized sector	6,275.0	8,690.7	12,730.4	19,039.8	23,845.6	45,126.3	141,878	2,636,568
Public enterprises	n.a.	n.a.	n.a.	n.a.	8,037.6	14,440.4	116,480	n.a.
<u>Public Sector Surplus or Deficit (-)</u>	<u>2,568.6</u>	<u>3,929.8</u>	<u>6,176.2</u>	<u>6,161.8</u>	<u>220.4</u>	<u>-10,536.1</u>	<u>-18,070</u>	<u>606,213</u>
<u>Capital Revenues</u>	<u>1,670.9</u>	<u>2,698.2</u>	<u>4,218.7</u>	<u>7,233.1</u>	<u>21,199.8</u>	<u>47,930.7</u>	<u>257,048</u>	<u>1,497,534</u>
Central Government	572.1	934.8	910.3	2,745.6	12,112.0	27,532.3	134,912	907,684
(Domestic loans)	(401.6)	(677.2)	(548.0)	(2,439.2)	(11,509.7)	(26,592.8)	(130,955)	(568,610)
(Foreign loans)	(170.5)	(257.2)	(258.5)	(125.4)	(198.6)	(97.5)	(63)	(277,048)
(Other) 1/	(-)	(0.4)	(103.8)	(181.0)	(403.7)	(842.0)	(3,894)	(62,026)
Decentralized agencies	1,098.8	1,763.4	3,308.4	4,487.5	7,328.4	15,062.3	86,136	589,850
(Domestic loans)	(128.9)	(202.0)	(521.5)	(1,028.3)	(3,855.7)	(10,504.3)	(20,892)	(232,328)
(Foreign loans)	(425.6)	(655.1)	(1,163.4)	(987.4)	(696.7)	(543.5)	(1,309)	(63,464)
(Investment income) 2/	(544.3)	(906.3)	(1,623.5)	(2,471.8)	(2,776.0)	(4,014.5)	(63,935)	(294,058)
Public enterprises	n.a.	n.a.	n.a.	n.a.	1,759.4	5,336.1	36,000	n.a.
(Domestic loans)	-	-	-	-	(1,652.8)	(5,123.1)	(34,904)	-
(Foreign loans)	-	-	-	-	(35.6)	(51.2)	(194)	-
(Investment income)	-	-	-	-	(71.0)	(161.8)	(902)	-
<u>Various Adjustments</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-1,939.5</u>	<u>-4,125.0</u>	<u>-61,972</u>	<u>-380,623</u>
<u>Available Financial Resources for Capital Expenditures</u>	<u>4,239.5</u>	<u>6,628.0</u>	<u>10,394.9</u>	<u>13,394.9</u>	<u>19,480.7</u>	<u>33,269.6</u>	<u>177,006</u>	<u>1,723,124</u>
<u>Capital Expenditures</u>	<u>4,239.5</u>	<u>6,628.0</u>	<u>10,394.9</u>	<u>13,394.9</u>	<u>19,480.7</u>	<u>33,269.6</u>	<u>177,006</u>	<u>1,723,124</u>
Total public investment	3,509.4	5,002.2	7,217.8	9,783.8	15,939.3	28,555.8	163,736	1,230,369
(Direct investment) 3/	..	..	..	..	(10,549.6)	(19,274.8)	(91,107)	(989,601)
(Indirect investment) 4/	..	..	..	..	(5,389.7)	(9,281.0)	(72,629)	(240,768)
Amortization of the public debt	406.5	758.8	1,641.4	2,149.9	3,541.4	4,713.8	13,270	492,755
(Domestic debt)	(130.9)	(275.6)	(588.4)	(869.6)	(1,672.9)	(3,878.4)	(5,304)	(206,070)
(Foreign debt)	(275.6)	(483.2)	(1,053.0)	(1,280.3)	(1,868.5)	(835.4)	(7,966)	(286,685)
Other	323.6	867.0	1,535.7	1,461.2	-	-	-	-

1/ Includes pesos 50.3 thousand statistical discrepancy in 1969; and pesos 18.0 thousand statistical discrepancy in 1970.

2/ Includes pesos 0.1 thousand statistical discrepancy in 1970.

3/ Corresponds to capital formation, purchases or assets and other capital expenditures.

4/ Corresponds to transfers and financial investment.

Source: Ministry of Finance



Table 5.14: CHILE - CONSOLIDATED INCOME OF THE PUBLIC SECTOR

(Thousands of current pesos)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Current Revenues</b>	<u>5,868.0</u>	<u>8,691.1</u>	<u>11,799.3</u>	<u>16,575.2</u>	<u>24,526.4</u>	<u>34,819.8</u>	<u>46,798.3</u>	<u>77,592.1</u>	<u>360,067</u>	<u>4,137,162</u>
Sales of goods and services	1,099.3	1,521.3	2,220.8	3,210.0	4,714.8	5,122.8	7,401.4	11,653.7	77,087	1,571,166
Income from investments	139.5	182.0	282.7	559.0	993.2	913.9	738.2	1,336.1	8,850	54,796
Social taxes	1,201.5	1,699.3	2,162.5	2,927.9	4,236.6	6,422.3	10,126.2	19,096.7	57,590	230,192
Special taxes	-	-	-	-	1,344.6	2,272.2	4,047.6	5,940.3	13,716	352,536
Direct taxes	1,363.5	2,117.9	2,711.5	3,434.9	5,068.0	7,664.4	7,853.7	10,047.6	57,652	662,282
(Income)	(635.2)	(952.1)	(1,362.5)	(1,738.2)	(2,491.7)	(3,765.2)	(6,093.8)	(8,257.4)	(52,625)	(419,912)
(Property)	(321.3)	(356.9)	(417.1)	(534.6)	(560.4)	(798.5)	(1,282.4)	(1,605.9)	(4,192)	(44,694)
(Copper)	(407.0)	(808.9)	(931.9)	(1,162.1)	(2,015.9)	(3,100.7)	(477.5)	(120.2)	(-)	(158,961)
(Other direct)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(64.1)	(835)	(38,715)
Indirect taxes	1,678.1	2,506.7	3,339.6	4,932.1	7,402.5	10,645.5	14,802.5	26,093.6	124,395	980,028
(Sales)	(767.5)	(1,117.2)	(1,595.2)	(2,260.9)	(3,367.7)	(4,745.0)	(7,650.2)	(13,325.1)	(64,366)	(457,615)
(Production)	(229.5)	(296.9)	(429.0)	(636.5)	(930.3)	(1,383.3)	(1,921.9)	(4,442.3)	(24,931)	(222,544)
(Service)	(179.0)	(299.1)	(389.2)	(642.1)	(951.9)	(1,350.6)	(1,634.4)	(2,661.3)	(12,158)	(64,063)
(Legal services)	(142.5)	(226.7)	(251.7)	(394.0)	(693.1)	(991.6)	(1,251.9)	(1,878.4)	(7,187)	(54,408)
(Foreign trade)	(347.2)	(549.0)	(664.0)	(986.4)	(1,451.5)	(2,047.6)	(2,336.1)	(3,776.3)	(12,254)	(176,004)
(Other indirect)	(12.4)	(17.8)	(10.5)	(12.2)	(26.0)	(127.4)	(8.0)	(10.2)	(3,499)	(5,394)
Transfers of the public sector	-	-	-	-	99.8	538.7	51.1	177.7	4,240	42,438
Other current revenues	386.1	663.9	1,082.2	1,511.3	638.5	1,216.9	1,424.3	3,246.4	16,537	243,724
Adjustment for foreign exchange transactions	-	-	-	-	10.4	23.1	-9.5	-	-	-
<b>Capital Revenues</b>	<u>1,294.6</u>	<u>1,482.2</u>	<u>1,670.9</u>	<u>2,698.2</u>	<u>4,168.4</u>	<u>7,215.0</u>	<u>21,199.8</u>	<u>47,930.7</u>	<u>257,048</u>	<u>1,497,534</u>
Sales of assets	20.3	11.7	18.5	81.2	214.5	111.9	202.6	397.4	32,728	52,598
Loan recuperations	178.9	213.8	300.7	455.7	761.3	1,097.3	1,496.7	1,885.1	6,603	39,232
Domestic credit	409.6	510.3	530.5	879.2	1,069.5	3,467.5	17,018.2	42,220.2	186,751	778,523
Foreign credit	656.0	702.0	596.1	912.3	1,421.9	1,112.8	930.9	692.2	1,566	340,512
Other revenues	29.8	44.4	225.1	369.8	456.1	1,425.5	1,551.4	2,735.8	29,400	286,669
(Bonds)	-	-	-	-	(119.4)	(869.2)	(624.5)	(1,250.4)	(2,342)	(170,457)
(Savings deposits)	-	-	-	-	(99.0)	(131.0)	(163.6)	(-)	(19,569)	(9,535)
(Other resources)	-	-	-	-	(53.5)	(219.9)	(90.1)	(174.7)	(-)	[65,924]
(Public sector transfers)	-	-	-	-	(92.1)	(63.4)	(23.6)	(69.8)	(2,201)	(-)
(Other capital revenues)	-	-	-	-	(92.1)	(142.0)	(649.6)	(1,240.9)	(5,288)	(40,753)
<b>Total Revenue</b>	<u>7,162.6</u>	<u>10,173.3</u>	<u>13,470.2</u>	<u>19,273.4</u>	<u>28,449.7</u>	<u>42,052.9</u>	<u>67,998.1</u>	<u>125,522.8</u>	<u>617,115</u>	<u>5,634,696</u>
<b>Miscellaneous Adjustments</b>	-	-	-	-	295.4	-	-1,939.6	-4,125.0	-61,972	-380,623
Owing to exchange operations	-	-	-	-	245.0	-	-	-198.2	5,070	-115,804
Cash balances	-	-	-	-	-	-	1,939.6	-3,950.9	-66,992	-267,738
Exchange fluctuations	-	-	-	-	-	-	-	-0.7	-	2,919
Statistical discrepancy	-	-	-	-	50.4	-	-	-	-	-
<b>Total Financing</b>	<u>7,162.6</u>	<u>10,173.3</u>	<u>13,470.2</u>	<u>19,273.4</u>	<u>28,745.1</u>	<u>42,052.9</u>	<u>66,058.5</u>	<u>121,397.8</u>	<u>555,143</u>	<u>5,254,073</u>

Source: Ministry of Finance

Table 5.15: CHILE - CONSOLIDATED EXPENDITURES OF THE PUBLIC SECTOR, 1965-1974

(Thousands of current pesos)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<u>Current Expenditures</u>	<u>4,772.0</u>	<u>6,800.7</u>	<u>9,230.7</u>	<u>12,645.4</u>	<u>18,350.2</u>	<u>28,658.0</u>	<u>46,577.9</u>	<u>88,128.2</u>	<u>378,137</u>	<u>3,530,949</u>
<u>Operational Expenditures</u>	<u>2,762.0</u>	<u>4,023.9</u>	<u>5,225.5</u>	<u>7,225.2</u>	<u>10,980.6</u>	<u>16,480.2</u>	<u>25,428.9</u>	<u>48,694.9</u>	<u>241,658</u>	<u>2,561,390</u>
Wages and salaries	1,723.2	2,506.7	3,432.2	4,766.8	6,982.9	11,373.0	18,116.2	35,847.1	131,379	1,069,952
Purchases of Goods and Services	1,038.8	1,517.2	1,793.3	2,458.4	3,997.7	5,107.2	7,312.7	12,847.8	110,279	1,491,438
<u>Transfers</u>	<u>1,881.9</u>	<u>2,710.5</u>	<u>3,834.1</u>	<u>5,134.4</u>	<u>7,080.2</u>	<u>11,882.1</u>	<u>20,254.8</u>	<u>37,414.7</u>	<u>135,292</u>	<u>927,015</u>
Pensions and Family Allowances (Pensions)	1,530.2	2,202.0	2,989.7	3,837.8	5,427.3	8,664.5	15,385.6	28,687.5	76,607	575,794
(Family Allowances)	(1,017.0)	(1,486.0)	(2,009.1)	(2,624.0)	(3,671.1)	(6,034.7)	(11,066.2)	(19,537.1)	(56,411)	(404,817)
Transfers to the Private Sector <sup>1/</sup>	(513.2)	(716.0)	(980.6)	(1,213.8)	(1,756.2)	(2,629.8)	(4,319.4)	(9,150.4)	(20,196)	(170,977)
Transfers to the Public Sector <sup>2/</sup>	156.7	273.5	412.9	646.1	901.7	1,295.2	2,380.2	5,126.5	38,475	137,651
Transfers to the Fiscal Sector	115.1	110.4	199.1	322.6	210.7	1,183.2	1,495.7	2,675.5	17,139	62,802
Interest on the Public Debt (Internal)	-	-	-	-	-	-	-	40.4	116	774
(External)	79.9	124.6	232.4	327.9	540.5	739.2	993.3	884.8	2,955	149,994
(Internal)	(24.6)	(34.3)	(76.0)	(88.8)	(101.8)	..	(314.0)	(632.2)	(1,007)	(105,935)
(External)	(55.3)	(90.3)	(156.4)	(239.1)	(438.7)	..	(679.3)	(252.6)	(1,948)	(44,059)
<u>Other Current Transfers</u>	<u>128.1</u>	<u>66.3</u>	<u>171.1</u>	<u>285.8</u>	<u>289.4</u>	<u>295.7</u>	<u>894.2</u>	<u>2,018.6</u>	<u>1,187</u>	<u>42,544</u>
<u>Capital Expenditures</u>	<u>2,390.6</u>	<u>3,372.6</u>	<u>4,239.5</u>	<u>6,628.0</u>	<u>10,394.9</u>	<u>13,394.9</u>	<u>19,480.6</u>	<u>33,269.6</u>	<u>177,006</u>	<u>1,723,124</u>
<u>Real Investment</u>	<u>1,604.6</u>	<u>2,299.8</u>	<u>2,727.2</u>	<u>3,948.3</u>	<u>5,388.5</u>	<u>7,901.9</u>	<u>11,176.1</u>	<u>21,169.1</u>	<u>94,927</u>	<u>1,045,064</u>
Capital Formation	1,530.3	2,226.4	2,565.6	3,314.4	5,002.2	6,787.4	10,159.6	18,056.3	84,746	956,407
Purchase of Assets	27.7	26.3	74.7	312.7	165.4	206.0	335.4	1,089.7	5,378	31,373
Transfers (To Private Sector)	46.6	47.1	86.9	321.2	220.9	908.5	681.1	2,023.1	4,803	57,284
(To Central Government)	(1.2)	(1.0)	(3.6)	(13.8)	(22.1)	(112.5)	(36.2)	(383.9)	(1,391)	(8,153)
(To Public Sector)	(45.4)	(46.1)	(83.3)	(307.4)	(198.8)	(795.5)	(644.9)	(1,590.6)	(2,782)	(48,361)
Financial Investment	517.2	736.1	1,105.8	1,816.9	3,365.0	3,343.1	4,763.1	7,257.8	67,826	183,484
Purchase of Securities	31.4	8.5	159.6	357.9	648.4	252.5	1,185.7	2,786.1	36,599	52,586
Loans	360.4	545.7	892.7	1,168.4	1,700.9	2,856.4	3,428.9	4,471.7	20,778	130,898
Devaluation of Savings Deposits	22.5	-	29.2	18.1	9.3	-	94.0	-	10,449	-
Cash Balances	103.4	181.9	24.3	292.5	962.4	86.8	-	-	-	-
Other Capital Expenditures	-	-	-	104.0	44.0	147.4	54.5	-	-	-
<u>Amortization (Public Debt)</u>	<u>268.3</u>	<u>336.7</u>	<u>406.5</u>	<u>758.8</u>	<u>1,641.4</u>	<u>2,149.9</u>	<u>3,541.4</u>	<u>4,713.9</u>	<u>13,270</u>	<u>492,755</u>
Internal	137.7	153.3	130.9	275.6	588.4	869.6	1,672.9	3,878.5	5,304	206,070
External	130.6	183.4	275.6	483.2	1,053.0	1,280.3	1,868.5	835.4	7,966	286,685
<u>Other Capital Expenditures</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>128.8</u>	<u>983</u>	<u>1,821</u>
<u>Total Expenditures</u>	<u>7,162.6</u>	<u>10,173.3</u>	<u>13,470.2</u>	<u>19,273.4</u>	<u>28,745.1</u>	<u>42,052.9</u>	<u>66,058.5</u>	<u>121,397.8</u>	<u>555,143</u>	<u>5,254,073</u>

1/ Includes transfers of the Central Government and other public agencies

2/ Transfers to agencies in the public sector not included in these data.

Source: Ministry of Finance

Table 5.16: CHILE - EXPENDITURES OF THE PUBLIC SECTOR, FUNCTIONAL CLASSIFICATION, 1965-74

(Thousands of pesos)

	1965		1966		1967		1968			1969			1970		
	Total	Total	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	
<b>Government</b>	205.7	347.3	490.7	442.0	48.7	749.0	664.8	84.2	1,439.2	1,297.2	142.0	2,145.5	1,853.2	290.3	
Political Administration	37.7	69.2	102.1	102.0	0.1	122.3	116.8	5.5	178.8	163.7	15.1	284.7	265.6	19.1	
Financial Administration	109.5	188.8	271.6	241.2	30.4	432.3	380.8	51.5	976.9	909.4	67.5	1,249.7	1,199.1	50.6	
Community Administration	29.0	46.7	56.6	40.0	16.6	108.6	87.2	21.4	167.7	114.0	53.7	450.8	238.2	212.6	
Legal Administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
External Relations	29.5	42.6	60.4	58.8	1.6	85.8	80.0	5.8	115.8	110.1	5.7	160.3	152.3	8.0	
<b>Protection, Personal &amp; Property</b>	223.3	310.1	405.4	400.0	5.4	550.8	535.8	15.0	771.5	756.2	15.3	1,307.9	1,273.0	34.9	
Justice	57.2	73.9	99.6	96.3	3.3	151.5	139.6	11.9	210.6	199.4	11.2	340.8	315.2	25.6	
Police	156.3	212.6	279.6	277.7	1.9	366.8	363.8	3.0	519.6	515.9	3.7	899.7	891.0	8.7	
Other	16.8	23.6	26.2	26.0	0.2	32.5	32.4	0.1	41.3	40.9	0.4	67.4	66.8	0.6	
<b>Defense</b>	402.7	565.9	697.0	627.2	69.8	939.2	819.7	119.5	1,349.6	1,114.3	235.3	2,436.9	2,026.4	410.5	
Army	112.9	191.9	240.7	219.7	21.0	314.3	274.8	39.5	427.3	370.1	57.2	889.9	693.3	196.6	
Navy	167.2	237.8	289.6	265.3	24.3	392.1	354.0	38.1	574.3	480.6	93.7	942.4	862.6	79.8	
Air force	73.8	107.1	144.8	121.1	23.7	203.1	163.1	40.0	303.4	222.6	80.8	551.0	421.5	129.5	
Other	48.8	29.1	21.9	21.1	0.8	29.7	27.8	1.9	44.6	41.0	3.6	53.6	49.0	4.6	
<b>Public Health, etc.</b>	660.1	802.4	1,069.9	922.9	147.0	1,392.3	1,227.0	105.3	2,073.6	1,774.8	298.8	3,408.4	2,912.6	495.8	
Public Health	600.1	752.0	964.9	872.1	92.8	1,339.7	1,175.2	164.5	1,931.7	1,698.6	233.1	3,190.1	2,785.0	405.1	
Social Assistance, etc.	60.0	60.4	105.0	50.8	54.2	52.6	51.8	0.8	141.9	76.2	65.7	218.3	127.6	90.7	
<b>Housing and Urbanization</b>	658.7	913.3	1,214.2	186.6	1,027.6	1,685.8	225.3	1,460.4	2,278.4	216.4	2,062.0	3,327.9	406.6	2,921.3	
Housing	523.4	776.0	881.2	92.6	788.6	1,205.0	118.3	1,086.7	1,775.3	169.9	1,605.4	2,576.5	285.7	2,290.8	
Urbanization	135.3	137.3	333.0	94.0	239.0	480.8	107.0	373.8	503.1	46.5	456.6	751.4	120.9	630.5	
<b>Social Security</b>	1,669.4	2,353.0	3,146.2	2,923.2	223.0	4,041.5	3,695.1	346.4	5,388.3	4,978.9	409.4	9,407.3	8,671.1	736.2	
<b>Education</b>	683.8	1,019.8	1,406.1	1,161.4	244.7	1,986.6	1,572.6	414.0	2,878.3	2,467.7	410.6	4,649.2	3,983.3	665.9	
Primary	274.7	398.9	506.9	485.4	21.5	647.8	539.3	8.5	1,034.8	946.6	88.2	1,630.3	1,559.6	70.7	
Secondary	59.4	93.2	152.9	136.9	16.0	142.7	142.6	0.1	308.1	275.0	33.1	463.0	428.7	34.3	
Professional & Technical	59.7	106.1	175.9	115.7	60.2	174.1	112.7	61.4	314.3	289.4	24.9	468.9	345.2	123.7	
University	206.5	316.6	368.2	333.3	34.9	651.9	602.3	49.6	775.6	711.6	64.0	1,354.3	1,271.2	83.1	
Construction	76.7	96.3	167.8	55.7	112.1	149.8	20.2	129.6	169.4	13.5	155.9	221.4	45.6	175.8	
Miscellaneous b/	6.8	8.7	34.4	34.4	-	218.6	53.8	164.8	143.4	127.9	15.5	303.0	165.0	138.0	
School Administration	-	-	-	-	-	1.7	1.7	-	-	-	-	2.9	2.9	-	
J.N.A.E.B.	-	-	-	-	-	-	-	-	132.7	103.7	29.0	205.4	165.1	40.3	
<b>Agriculture and Fishing</b>	270.3	426.6	628.9	228.1	400.8	936.2	324.9	611.3	1,317.0	399.3	917.7	1,761.2	643.6	1,117.6	
Irrigation	76.8	90.7	129.7	10.0	119.7	94.7	20.0	74.7	103.6	0.6	103.0	167.9	6.4	161.5	
Technical Assistance	119.2	220.3	226.6	111.1	115.5	492.7	208.2	284.5	407.4	262.4	145.0	619.1	425.7	189.4	
Colonization	4.2	6.1	8.6	8.1	0.5	9.8	9.5	0.3	12.7	12.5	0.2	25.4	25.3	0.1	
Fishing	27.7	6.8	61.8	54.3	7.5	13.5	9.1	4.4	17.4	13.6	3.8	24.6	20.8	3.8	
Agrarian Reform	41.8	97.3	193.4	38.2	155.2	299.5	53.4	246.1	558.8	77.8	481.0	874.7	137.9	736.8	
General Administration	0.7	5.4	8.8	6.4	2.4	26.0	24.7	1.3	32.9	32.4	0.5	28.2	27.5	0.7	
CORFO Agriculture a/	-	-	-	-	-	-	-	-	184.2	-	184.2	25.3	-	25.3	
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Transport &amp; Communication</b>	953.1	1,375.2	1,775.8	1,074.0	701.8	2,476.4	1,487.7	988.7	3,560.7	2,097.0	1,463.7	5,186.1	3,125.7	2,060.4	
Air	100.8	156.1	258.3	129.3	129.2	417.7	185.4	232.3	483.0	326.4	156.6	528.4	458.5	69.9	
Water	158.1	178.4	251.5	208.8	42.7	364.0	292.0	72.0	513.6	417.7	95.9	731.3	586.6	144.7	
Urban	45.4	59.4	95.1	69.0	26.1	94.4	91.3	3.1	109.4	105.1	4.3	162.9	141.7	21.2	
Road	287.5	441.7	413.1	47.6	365.5	572.1	78.2	493.9	651.4	-	631.4	1,096.6	-	1,096.6	
Rail	304.8	432.5	557.6	466.6	91.0	782.5	649.8	132.7	1,048.8	787.6	261.2	1,502.6	1,228.9	273.7	
Mail & Telecommunication	55.6	105.0	178.8	147.6	31.2	233.0	190.1	42.9	369.4	246.0	123.4	525.4	307.7	217.7	
Miscellaneous	-	-	-	-	-	4.5	-	4.5	-	-	-	-	-	-	
General Administration	0.9	2.1	21.2	5.1	16.1	8.2	0.9	7.3	385.1	214.2	170.9	638.9	402.3	236.6	
<b>Mining</b>	254.7	363.3	519.9	316.8	203.1	955.5	478.9	476.6	1,346.7	772.8	573.9	2,007.2	1,187.7	819.5	
<b>Energy and Fuels</b>	349.9	696.1	918.6	424.3	494.3	1,264.7	665.0	599.7	1,887.0	1,139.9	747.1	1,984.4	1,355.7	628.7	
<b>Industry and Commerce</b>	149.2	331.3	474.1	271.3	202.8	754.4	466.2	288.2	1,162.5	654.2	508.3	1,208.3	283.7	924.6	
<b>Other</b>	481.7	669.0	723.2	252.7	470.5	1,541.0	482.4	1,058.6	3,292.3	681.5	2,610.8	3,222.6	933.4	2,289.2	
Public Debt	348.2	461.3	638.9	232.4	406.5	1,086.7	327.9	758.8	2,182.0	540.6	1,641.4	2,889.1	739.2	2,149.9	
Miscellaneous	133.5	207.7	84.3	20.3	64.0	454.3	154.5	299.8	1,110.3 e/	140.9	969.4 e/	333.5 e/	194.2	139.3 e/	
<b>Total</b>	<b>7,162.6</b>	<b>10,173.3</b>	<b>13,470.2</b>	<b>9,230.7</b>	<b>4,239.5</b>	<b>19,273.4</b>	<b>12,645.4</b>	<b>6,628.0</b>	<b>28,745.1</b>	<b>18,350.2</b>	<b>10,394.9</b>	<b>42,052.9</b>	<b>28,658.0</b>	<b>13,394.9</b>	

Table 5.16: CHILE - EXPENDITURES OF THE PUBLIC SECTOR, FUNCTIONAL CLASSIFICATION, 1965-74

(Thousands of pesos)

	1971			1972			1973			1974		
	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital
<b>Government</b>	<b>3,002.1</b>	<b>2,770.7</b>	<b>231.4</b>	<b>6,836.3</b>	<b>6,521.1</b>	<b>315.2</b>	<b>23,597</b>	<b>22,724</b>	<b>863</b>	<b>264,798</b>	<b>145,219</b>	<b>119,579</b>
Political Administration	414.4	406.4	8.0	784.2	715.9	68.3	2,728	2,448	280	22,678	17,050	5,628
Financial Administration	1,721.1	1,630.3	90.8	4,283.9	4,126.7	157.2	12,966	12,672	294	155,074	49,066	106,008
Community Administration	568.5	447.9	120.6	1,338.2	1,256.8	81.4	5,340	5,186	154	59,783	53,030	6,753
Legal Administration	-	-	-	-	-	-	1,027	1,026	1	9,278	9,276	2
External Relations	298.1	286.1	12.0	430.0	421.7	8.3	1,536	1,402	134	17,985	16,797	1,188
<b>Protection, Personal &amp; Property</b>	<b>1,943.5</b>	<b>1,867.6</b>	<b>75.9</b>	<b>3,866.9</b>	<b>3,712.1</b>	<b>154.8</b>	<b>15,479</b>	<b>14,732</b>	<b>747</b>	<b>137,167</b>	<b>125,124</b>	<b>12,043</b>
Justice	550.1	488.3	61.8	966.5	854.2	112.3	2,441	2,041	400	19,647	16,933	2,714
Police	1,282.5	1,270.7	11.8	2,666.0	2,628.3	37.7	12,499	12,164	335	114,064	104,756	9,308
Other	110.9	108.6	2.3	234.4	229.6	4.8	539	527	12	3,456	3,435	21
<b>Defense</b>	<b>3,013.9</b>	<b>2,929.1</b>	<b>84.8</b>	<b>6,553.4</b>	<b>5,961.1</b>	<b>592.3</b>	<b>42,163</b>	<b>38,027</b>	<b>4,136</b>	<b>432,772</b>	<b>372,169</b>	<b>60,603</b>
Army	1,030.6	999.9	30.7	2,522.2	2,240.0	282.2	12,943	11,568	1,375	170,584	137,888	32,696
Navy	1,301.1	1,269.5	31.6	2,640.0	2,487.0	153.2	16,016	14,620	1,396	168,575	155,153	13,422
Air force	568.8	554.1	14.7	1,240.2	1,102.8	137.4	6,520	5,295	1,225	83,525	69,840	13,685
Other	113.4	105.6	7.8	150.8	131.3	19.5	6,684	6,544	140	10,088	9,288	800
<b>Public Health, etc.</b>	<b>5,429.7</b>	<b>4,761.3</b>	<b>668.4</b>	<b>10,845.0</b>	<b>9,677.8</b>	<b>1,167.2</b>	<b>34,142</b>	<b>28,922</b>	<b>5,210</b>	<b>253,319</b>	<b>214,185</b>	<b>39,134</b>
Public Health	5,058.3	4,571.0	487.3	10,191.5	9,295.5	896.0	32,164	27,835	4,329	242,215	207,228	34,987
Social Assistance, etc.	371.4	190.3	181.1	653.5	382.3	271.2	1,978	1,087	891	11,104	6,957	4,147
<b>Housing and Urbanization</b>	<b>6,061.0</b>	<b>835.3</b>	<b>5,225.7</b>	<b>12,308.9</b>	<b>1,428.9</b>	<b>10,880.0</b>	<b>87,876</b>	<b>6,176</b>	<b>81,700</b>	<b>310,020</b>	<b>27,889</b>	<b>282,131</b>
Housing	4,131.9	511.4	3,620.5	8,521.7	983.3	7,538.4	72,200	3,824	68,376	196,330	15,915	180,415
Urbanization	1,929.1	323.9	1,605.2	3,787.2	445.6	3,341.6	15,676	2,352	13,324	113,690	11,974	101,716
<b>Social Security</b>	<b>15,761.6</b>	<b>14,795.9</b>	<b>965.7</b>	<b>28,690.3</b>	<b>26,692.4</b>	<b>1,997.9</b>	<b>82,915</b>	<b>78,834</b>	<b>4,081</b>	<b>628,774</b>	<b>578,393</b>	<b>50,381</b>
<b>Education</b>	<b>7,532.7</b>	<b>6,666.4</b>	<b>866.3</b>	<b>14,899.3</b>	<b>13,441.5</b>	<b>1,457.8</b>	<b>57,891</b>	<b>47,613</b>	<b>10,278</b>	<b>404,363</b>	<b>360,210</b>	<b>44,153</b>
Primary	2,878.4	2,794.3	84.1	6,254.9	6,110.2	144.7	20,172	19,932	240	135,688	134,342	1,346
Secondary	631.0	592.4	38.6	1,070.9	1,069.6	1.3	3,703	3,597	104	22,470	22,449	21
Professional & Technical	678.2	445.3	232.9	905.7	866.7	39.0	4,960	4,343	617	26,333	23,949	2,384
University	2,311.3	2,199.2	112.1	4,995.0	4,653.2	341.8	19,981	17,448	2,533	102,091	90,865	11,226
Construction	391.7	121.5	270.2	435.3	131.0	304.3	2,137	316	1,821	14,840	1,745	13,095
Miscellaneous	270.4	197.5	72.9	1,222.9	596.3	626.6	6,893	1,931	4,962	102,640	86,571	16,069
School Administration	5.2	5.1	0.1	14.6	14.5	0.1	45	44	1	301	289	12
J.N.A.E.B.	366.5	311.1	55.4	-	-	-	-	-	-	-	-	-
<b>Agriculture and Fishing</b>	<b>3,886.9</b>	<b>1,396.1</b>	<b>2,490.8</b>	<b>7,022.4</b>	<b>2,538.6</b>	<b>4,483.8</b>	<b>25,601</b>	<b>11,109</b>	<b>14,492</b>	<b>123,581</b>	<b>60,024</b>	<b>63,557</b>
Irrigation	581.2	71.3	509.9	838.1	122.9	715.2	3,623	523	3,100	33,070	680	32,390
Technical Assistance	1,330.9	844.9	486.0	2,477.9	1,469.5	1,008.4	13,956	7,757	6,199	58,243	41,447	16,796
Colonization	38.9	36.8	2.1	79.3	64.7	14.6	228	209	19	1,486	1,413	73
Fishing	41.5	35.7	5.8	97.4	66.1	31.3	261	193	68	1,797	1,694	103
Agrarian Reform	1,617.7	282.6	1,335.1	2,763.4	611.9	2,151.5	6,841	1,958	4,883	24,154	11,461	12,693
General Administration	124.8	124.8	-	191.1	191.1	-	212	212	-	1,960	1,960	-
CORFO Agriculture & Fishing	336.6	-	336.6	521.7	12.4	509.3	-	-	-	-	-	-
Other	15.3	-	15.3	52.5	-	52.5	-	-	-	2,871	1,369	1,502
<b>Transport &amp; Communication</b>	<b>7,197.4</b>	<b>4,923.8</b>	<b>2,273.6</b>	<b>12,401.6</b>	<b>8,641.9</b>	<b>3,759.7</b>	<b>52,455</b>	<b>32,701</b>	<b>19,754</b>	<b>568,928</b>	<b>316,341</b>	<b>252,587</b>
Air	793.9	679.5	114.4	1,620.4	1,344.2	276.2	7,463	6,373	1,090	76,200	63,148	13,052
Water	1,089.1	903.3	185.8	2,232.1	1,766.7	465.4	9,069	6,935	2,134	72,500	55,102	17,398
Urban	582.4	258.8	323.6	1,087.4	463.3	624.1	8,917	2,692	6,225	81,968	14,076	67,892
Road	1,367.8	244.2	1,123.6	2,118.6	328.7	1,789.9	9,101	1,325	7,776	118,441	-	118,441
Rail	2,311.6	2,015.5	296.1	3,773.9	3,412.6	361.3	12,463	11,237	1,226	105,174	92,273	12,901
Mail & Telecommunication	761.3	565.5	195.8	1,074.3	984.7	89.6	3,421	3,266	155	81,245	66,749	14,496
Miscellaneous	20.8	-	20.8	7.7	-	7.7	219	-	219	-	-	-
General Administration	270.5	257.0	13.5	487.2	341.7	145.5	1,802	873	929	33,400	24,993	8,407
<b>Mining</b>	<b>2,239.9</b>	<b>1,818.9</b>	<b>421.0</b>	<b>3,397.2</b>	<b>2,839.3</b>	<b>557.9</b>	<b>22,464</b>	<b>18,219</b>	<b>4,245</b>	<b>261,624</b>	<b>234,163</b>	<b>27,461</b>
<b>Energy and Fuels</b>	<b>2,378.8</b>	<b>1,831.6</b>	<b>547.2</b>	<b>4,319.0</b>	<b>3,803.7</b>	<b>515.3</b>	<b>22,127</b>	<b>19,567</b>	<b>2,560</b>	<b>615,320</b>	<b>470,254</b>	<b>145,066</b>
<b>Industry and Commerce</b>	<b>1,919.5</b>	<b>639.9</b>	<b>1,279.6</b>	<b>2,060.3</b>	<b>1,293.2</b>	<b>767.1</b>	<b>62,063</b>	<b>54,375</b>	<b>7,688</b>	<b>605,710</b>	<b>476,604</b>	<b>129,106</b>
<b>Other</b>	<b>5,691.6</b>	<b>1,341.4</b>	<b>4,350.2</b>	<b>8,197.2</b>	<b>1,576.6</b>	<b>6,620.6</b>	<b>26,370</b>	<b>5,128</b>	<b>21,242</b>	<b>647,697</b>	<b>150,374</b>	<b>497,323</b>
Public Debt	4,534.7	993.3	3,541.4	5,242.3	528.4	4,713.9	16,226	2,956	13,270	642,749	149,964	492,785
Miscellaneous	1,156.9	348.1	808.8	2,954.9	1,048.2	1,906.7	10,144	2,172	7,972	4,948	380	4,568
<b>Total</b>	<b>66,058.6</b>	<b>46,578.0</b>	<b>19,480.6</b>	<b>121,397.8</b>	<b>88,128.2</b>	<b>33,269.6</b>	<b>555,143</b>	<b>378,137</b>	<b>177,006</b>	<b>5,254,073</b>	<b>3,530,949</b>	<b>1,723,124</b>

ε/ In 1965-68 included in technical assistance.

β/ Includes cultural dissemination and student assistance.

ζ/ Includes pesos 0.96 million cash balances in 1969; pesos 0.09 million in 1970.

Source: Ministry of Finance

Table 5.17: CHILE - PUBLIC SECTOR EXPENDITURES BY FUNCTION, 1965-1974

(Thousands of pesos at December 1969 prices)<sup>d/</sup>

Function	1965		1966		1967		1968		1969		1970			
	Total	Capital	Total	Capital	Total	Capital	Total	Capital	Total	Capital	Total	Capital		
<b>Government</b>	526	723	865	779	86	1,043	926	117	1,534	1,382	152	1,725	1,491	234
Political administration	96	144	180	180	0	170	163	7	190	174	16	229	213	16
Financial administration	280	393	479	425	54	602	530	72	1,041	969	72	1,005	964	41
Community administration	74	97	100	71	29	151	121	30	179	121	58	362	191	171
Legal administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External relations	75	89	106	104	2	119	111	8	123	117	6	129	122	7
<b>Protection, Personal and Property</b>	571	646	715	705	10	767	746	20	822	806	16	1,051	1,023	28
Justice	128	154	176	170	6	211	194	17	224	212	12	274	253	21
Police	400	443	493	490	3	511	506	5	554	550	4	723	716	7
Other	43	49	46	46	0	45	45	0	44	43	1	54	54	1
<b>Defense</b>	1,030	1,179	1,229	1,106	123	1,307	1,141	166	1,438	1,187	251	1,959	1,629	330
Army	289	400	424	387	37	438	383	55	455	394	61	715	557	158
Navy	428	495	511	468	43	546	493	53	612	512	100	758	693	64
Air force	189	223	255	214	42	283	227	56	323	237	86	443	339	104
Other	125	61	39	37	2	41	39	2	48	44	4	43	39	4
<b>Public Health, etc.</b>	1,689	1,671	1,886	1,627	259	1,938	1,708	147	2,209	1,891	318	2,740	2,341	399
Public health	1,535	1,546	1,701	1,538	164	1,865	1,636	229	2,059	1,810	248	2,564	2,238	326
Social assistance, etc.	154	126	185	89	96	73	72	1	151	81	70	175	102	73
<b>Housing and Urbanization</b>	1,686	1,902	2,141	329	1,812	2,347	314	2,033	2,428	231	2,197	2,675	327	2,348
Housing	1,339	1,616	1,554	163	1,390	1,678	165	1,512	1,892	181	1,711	2,071	230	1,841
Urbanization	346	286	587	166	421	669	149	520	536	50	486	604	97	507
<b>Social Security</b>	4,272	4,901	5,547	5,154	393	5,626	5,144	482	5,742	5,306	437	7,562	6,970	592
<b>Education</b>	1,750	2,124	2,479	2,048	431	2,766	2,189	576	3,067	2,629	437	3,737	3,202	535
Primary	703	831	894	856	38	902	890	12	1,103	1,009	94	1,310	1,254	56
Secondary	152	194	270	241	28	199	199	0	328	293	35	372	345	28
Professional and technical	153	221	310	204	106	242	157	85	335	308	27	377	277	100
University	528	659	649	588	61	908	839	69	827	758	68	1,089	1,022	67
Construction b/	196	201	296	98	198	209	28	181	181	14	167	178	37	141
Miscellaneous	17	18	61	61	-	304	75	229	153	136	17	244	133	111
School administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JNAEB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Agriculture and Fishing</b>	692	889	1,109	402	707	1,303	452	851	1,403	425	978	1,416	517	898
Irrigation	197	189	229	18	211	132	28	134	110	1	109	135	5	130
Technical assistance	305	459	400	196	204	686	290	396	434	280	154	495	342	153
Colonization	11	13	15	14	1	14	13	1	14	13	1	20	20	0
Fishing	71	14	109	96	13	19	13	6	19	14	5	20	17	3
Agrarian reform	107	203	341	67	274	417	74	343	395	82	513	703	111	592
General administration	2	11	16	11	5	36	34	2	35	35	1	23	23	1
CORFO agriculture a/	-	-	-	-	-	-	-	-	196	-	196	20	-	20
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Transport and Communication</b>	2,439	2,864	3,131	1,894	1,237	3,448	2,071	1,376	3,794	2,235	1,559	4,159	2,513	1,656
Air	258	325	455	228	228	582	258	323	515	348	167	425	369	56
Water	405	372	443	368	75	507	407	100	547	445	102	588	471	117
Urban	116	124	168	122	46	131	127	4	117	112	5	131	114	17
Road	736	920	728	84	644	796	109	687	694	-	694	882	-	882
Rail	780	901	983	823	160	1,089	905	184	1,118	839	278	1,208	988	220
Rail and telecommunications	142	219	315	260	55	324	265	59	394	262	132	422	247	175
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General administration	2	4	37	9	28	11	1	10	410	228	182	514	323	190
<b>Mining</b>	632	757	916	559	358	1,330	667	663	1,435	824	611	1,613	955	658
<b>Energy and Fuels</b>	1,407	1,450	1,620	748	872	1,761	926	835	2,011	1,215	796	1,595	1,090	505
<b>Industry and Commerce</b>	382	690	836	478	358	1,050	649	401	1,239	697	542	971	228	743
<b>Other</b>	1,233	1,393	1,275	446	829	2,145	672	1,473	3,508	725	2,782	2,590	750	1,840
Publ. debt	891	961	1,126	410	716	1,513	457	1,056	2,325 <sub>e/</sub>	576	1,749 <sub>e/</sub>	2,322 <sub>e/</sub>	594	1,728 <sub>e/</sub>
Miscellaneous	342	432	149	56	113	632	215	417	1,183	150	1,033 <sub>e/</sub>	266	156	112
<b>Total</b>	18,328	21,190	23,739	15,274	7,474	26,831	17,604	9,227	30,632	19,354	11,077	33,804	23,037	10,767

Table 5.17: CHILE - PUBLIC SECTOR EXPENDITURES BY FUNCTION, 1965-1974

(Thousands of pesos at December 1969 prices)<sup>d/</sup>

Function	1971			1972			1973			1974		
	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital
<b>Government</b>	<b>2,011</b>	<b>1,856</b>	<b>155</b>	<b>2,575</b>	<b>2,456</b>	<b>119</b>	<b>1,341</b>	<b>1,292</b>	<b>49</b>	<b>2,602</b>	<b>1,427</b>	<b>1,175</b>
Political administration	278	272	6	295	270	25	155	139	16	223	168	55
Financial administration	1,153	1,092	61	1,613	1,554	59	737	720	17	1,524	482	1,042
Community administration	381	300	81	504	473	31	303	295	8	587	521	66
Legal administration	-	-	-	-	-	-	58	58	0	91	91	0
External relations	200	192	8	162	159	3	87	80	7	177	165	12
<b>Protection, Personal and Property</b>	<b>1,301</b>	<b>1,251</b>	<b>50</b>	<b>1,456</b>	<b>1,398</b>	<b>58</b>	<b>880</b>	<b>838</b>	<b>42</b>	<b>1,348</b>	<b>1,229</b>	<b>118</b>
Justice	368	327	41	364	322	42	139	116	23	193	166	87
Police	859	851	8	1,004	990	14	711	691	19	1,121	1,029	92
Other	74	72	2	88	86	2	31	30	1	34	33	1
<b>Defense</b>	<b>2,019</b>	<b>1,962</b>	<b>57</b>	<b>2,468</b>	<b>2,245</b>	<b>223</b>	<b>2,397</b>	<b>2,161</b>	<b>235</b>	<b>4,252</b>	<b>3,656</b>	<b>595</b>
Army	690	670	20	950	844	106	736	658	78	1,676	1,355	321
Navy	871	850	21	994	937	57	911	831	79	1,656	1,525	131
Air force	381	371	10	467	415	52	371	301	70	821	686	135
Other	76	70	6	57	49	8	380	372	8	99	91	8
<b>Public Health, etc.</b>	<b>3,637</b>	<b>3,189</b>	<b>448</b>	<b>4,085</b>	<b>3,645</b>	<b>440</b>	<b>1,941</b>	<b>1,644</b>	<b>296</b>	<b>2,489</b>	<b>2,104</b>	<b>385</b>
Public health	3,388	3,062	326	3,839	3,501	338	1,829	1,582	246	2,380	2,036	344
Social assistance, etc.	249	127	121	246	144	102	112	62	50	109	68	41
<b>Housing and Urbanization</b>	<b>4,059</b>	<b>559</b>	<b>3,500</b>	<b>4,636</b>	<b>538</b>	<b>4,098</b>	<b>4,996</b>	<b>351</b>	<b>4,645</b>	<b>3,046</b>	<b>274</b>	<b>2,772</b>
Housing	2,767	343	2,425	3,209	370	2,839	4,105	217	3,887	1,929	156	1,773
Urbanization	1,292	216	1,075	1,426	168	1,258	891	134	757	1,117	117	999
<b>Social Security</b>	<b>10,557</b>	<b>9,910</b>	<b>647</b>	<b>10,806</b>	<b>10,054</b>	<b>752</b>	<b>4,714</b>	<b>4,482</b>	<b>232</b>	<b>6,178</b>	<b>5,683</b>	<b>495</b>
<b>Education</b>	<b>5,045</b>	<b>4,465</b>	<b>580</b>	<b>5,612</b>	<b>5,063</b>	<b>549</b>	<b>3,291</b>	<b>2,707</b>	<b>584</b>	<b>3,973</b>	<b>3,539</b>	<b>434</b>
Primary	1,927	1,872	56	2,356	2,301	55	1,147	1,133	14	1,333	1,320	13
Secondary	422	397	26	403	403	1	210	204	6	221	221	0
Professional and technical	454	298	156	341	326	15	282	247	35	259	235	23
University	1,548	1,473	75	1,881	1,753	128	1,136	992	144	1,003	893	110
Construction	262	81	181	164	49	115	121	18	103	146	17	129
Miscellaneous b/	181	132	49	461	225	236	392	110	282	1,008	851	157
School administration	3	3	0	6	5	0	3	3	0	3	3	0
JNABE	245	208	37	-	-	-	-	-	-	-	-	-
<b>Agriculture and Fishing</b>	<b>2,603</b>	<b>935</b>	<b>1,668</b>	<b>2,645</b>	<b>956</b>	<b>1,689</b>	<b>1,455</b>	<b>632</b>	<b>823</b>	<b>1,214</b>	<b>590</b>	<b>624</b>
Irrigation	255	48	208	316	46	269	206	30	176	325	7	318
Technical assistance	891	566	325	933	553	380	793	441	352	572	407	165
Colonization	26	25	1	30	24	6	13	12	1	15	14	1
Fishing	28	24	4	37	25	12	15	11	4	18	17	1
Agrarian reform	1,084	189	894	1,041	230	810	389	111	278	237	113	124
General administration	84	84	-	72	72	-	12	12	-	19	19	-
CORFO agriculture a/	225	-	225	196	5	191	-	-	-	-	-	-
Other	10	-	10	20	-	20	-	-	-	28	13	15
<b>Transport and Communication</b>	<b>4,820</b>	<b>3,298</b>	<b>1,522</b>	<b>4,671</b>	<b>3,255</b>	<b>1,416</b>	<b>2,982</b>	<b>1,859</b>	<b>1,123</b>	<b>5,590</b>	<b>3,108</b>	<b>2,482</b>
Air	532	455	77	610	506	104	424	362	62	749	620	129
Water	729	605	124	841	665	175	516	394	121	712	541	171
Urban	390	173	217	410	175	235	507	153	354	805	138	667
Road	916	164	752	798	124	674	517	75	442	1,164	-	1,164
Rail	1,548	1,350	198	1,421	1,285	136	708	639	69	1,033	907	126
Mail and telecommunications	510	379	131	405	370	34	194	186	9	798	656	142
Miscellaneous	14	-	14	3	-	3	12	-	12	-	-	-
General administration	181	172	9	183	129	54	102	49	52	328	246	82
<b>Mining</b>	<b>1,500</b>	<b>1,213</b>	<b>282</b>	<b>1,280</b>	<b>1,069</b>	<b>211</b>	<b>1,277</b>	<b>1,035</b>	<b>241</b>	<b>2,570</b>	<b>2,301</b>	<b>269</b>
<b>Energy and Fuels</b>	<b>1,593</b>	<b>1,226</b>	<b>367</b>	<b>1,627</b>	<b>1,433</b>	<b>194</b>	<b>1,258</b>	<b>1,112</b>	<b>146</b>	<b>6,046</b>	<b>4,620</b>	<b>1,426</b>
<b>Industry and Commerce</b>	<b>1,286</b>	<b>428</b>	<b>858</b>	<b>776</b>	<b>487</b>	<b>289</b>	<b>3,528</b>	<b>3,091</b>	<b>437</b>	<b>5,952</b>	<b>4,683</b>	<b>1,260</b>
<b>Other</b>	<b>3,812</b>	<b>898</b>	<b>2,914</b>	<b>3,087</b>	<b>594</b>	<b>2,493</b>	<b>1,499</b>	<b>291</b>	<b>1,208</b>	<b>6,364</b>	<b>1,478</b>	<b>4,886</b>
Public debt	3,037	665	2,372	1,974	199	1,775	922	168	754	6,315	1,474	4,841
Miscellaneous	775	233	542	1,113	395	718	577	123	453	49	4	45
<b>Total</b>	<b>44,245</b>	<b>31,197</b>	<b>13,048</b>	<b>45,724</b>	<b>33,193</b>	<b>12,531</b>	<b>31,560</b>	<b>21,497</b>	<b>10,063</b>	<b>51,627</b>	<b>34,695</b>	<b>16,932</b>

a/ In 1965-68 included in technical assistance.

b/ Includes cultural dissemination and student assistance.

c/ Includes pesos 0.96 million cash balances in 1969; 0.09 million in 1970.

d/ 1965-72 deflated by official CPI; 1973 deflated by average of official and IBRD adjusted CPIs; and thereafter by IBRD adjusted CPI.

Source: Table 5.19

Table 5.18: CHILE - FINANCING OF PUBLIC SECTOR CAPITAL EXPENDITURES, 1965-1974

(Thousands of pesos)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>I. Financing</b>										
<b>Public Savings</b>	1,325.0	2,160.3	3,112.9	4,837.6	7,903.4	8,814.6	3,108.2	-6,485.2	94,638	1,586,855
Central Govt. current account surplus	599.8	1,220.1	1,615.9	2,226.7	3,925.7	3,949.0	-2,471.8	-12,424.8	-28,226	159,879
(Revenues)	(3,209.1)	(4,897.9)	(6,312.2)	(8,757.6)	(13,068.6)	(19,309.2)	(23,924.4)	(38,375.1)	(198,178)	(1,924,134)
(Expenditures)	(2,609.3)	(3,677.8)	(4,696.3)	(6,530.9)	(9,142.9)	(15,360.2)	(26,395.7)	(50,799.9)	(226,404)	(1,764,255)
Decent. agencies' current account surplus	496.2	670.3	952.7	1,703.5	2,249.7	2,212.8	3,192.3	3,954.0	31,702	353,714
(Revenues)	(2,658.9)	(3,793.2)	(7,831.9)	(11,383.8)	(16,662.4)	(23,801.5)	(30,943.2)	(53,097.5)	(185,269)	(3,434,422)
(Expenditures)	(2,162.7)	(3,122.9)	(6,879.2)	(9,680.3)	(14,412.7)	(21,588.7)	(27,750.9)	(49,143.5)	(153,567)	(3,080,708)
Pub. enterprises current account surplus	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-863.5	-3,033.5	-23,567	n.a.
(Revenues)	(-)	(-)	(-)	(-)	(-)	(-)	(7,610.7)	(11,629.9)	(95,894)	-
(Expenditures)	(-)	(-)	(-)	(-)	(-)	(-)	(8,474.2)	(14,663.4)	(119,461)	-
Other fiscal revenues	-	-	-	-	104.5	181.0	403.7	4,014.5	4,639	31,403
Other revenues of the decentralized agencies	229.0	269.9	544.3	906.3	1,623.5	2,471.8	2,776.0	842.8	106,630	1,041,859
Other revenues of the public enterprises	-	-	-	-	-	-	71.0	161.8	3,460	-
<b>External Credits</b>	656.0	702.0	596.1	912.3	1,421.9	1,112.8	930.9	692.2	1,566	386,996
To fiscal sector	461.3	500.3	170.5	257.2	258.5	125.4	198.6	97.5	63	323,532
To decentralized agencies	194.7	201.7	425.6	655.1	1,163.4	987.4	696.7	543.5	1,309	63,464
To the public enterprises	-	-	-	-	-	-	35.6	51.2	194	-
<b>Domestic Credits</b>	409.6	510.3	530.5	879.2	1,069.6	3,467.5	17,381.1	43,187.6	189,384	1,038,150
To Central Government	321.3	295.1	401.6	677.2	548.0	2,439.2	11,872.6	27,560.2	133,588	805,822
To decentralized agencies	88.3	215.2	128.9	202.0	521.6	1,028.3	3,855.7	10,504.3	20,892	232,328
To public enterprises	-	-	-	-	-	-	1,652.8	5,123.1	34,904	-
<b>Adjustments</b>	-	-	-	-	-	-	-1,939.5	-4,125.0	-61,972	-380,623
<b>Available Financial Resources for Cap. Exp.</b>	2,390.6	3,372.6	4,239.5	6,628.0	10,394.9	13,394.9	19,480.7	33,269.6	223,616	2,631,378
<b>II. Use of Resources</b>										
<b>Public Investment</b>	2,018.9	2,854.0	3,808.7	5,576.7	7,791.1	11,158.2	15,939.3	28,555.8	210,347	1,906,097
Direct investment <sup>1/</sup>	1,603.4	2,299.8	2,725.8	4,038.5	5,167.6	6,993.4	10,549.6	19,274.8	91,108	1,059,966
Indirect investment <sup>2/</sup>	415.5	554.2	1,082.9	1,538.2	2,623.5	4,164.8	5,389.7	9,281.0	119,239	8,846,131
<b>Amortization of the Public Debt</b>	268.3	336.7	406.5	758.8	1,641.4	2,149.9	3,541.4	4,713.8	13,269	725,281
Domestic debt	137.7	153.3	130.9	275.6	588.4	869.6	1,672.9	3,878.4	5,304	207,871
Foreign debt	130.6	183.4	275.6	483.2	1,053.0	1,280.3	1,868.5	835.4	7,965	517,410
<b>Change in Cash Balances</b>	103.4	181.9	24.3	292.5	962.4	86.8	-	-	-	-
<b>Total Capital Expenditures</b>	2,390.6	3,372.6	4,239.5	6,628.0	10,394.9	13,394.9	19,480.7	33,269.6	223,616	2,631,378

<sup>1/</sup> Corresponds to capital formation, purchases of assets and other capital expenditures.<sup>2/</sup> Corresponds to transfers and financial investment.

Source: Ministry of Finance

Table 5.19: CHILE - SUMMARY OF SOCIAL SECURITY OPERATIONS, 1970-76

(thousands of pesos)

	A c t u a l						
	1970	1971	1972	1973	1974	1975	1976
<u>Revenues</u>							
Employees' contributions	3,468	5,163	8,900	27,441	179,457	802,176	[7,323,200]
Employees' contributions	5,971	9,401	17,628	57,100	568,984	2,292,702	
a. Government	(531)	(707)	(1,561)	(5,125)	(140,384)	(616,324)	
b. Private	(5,440)	(8,694)	(16,067)	(51,975)	(428,600)	(1,676,378)	
Government transfers	5,186	9,325	17,625	60,839	377,931	1,587,465	3,506,900
a. Direct	4,896	(8,856)	16,852	58,513	(362,413)	(1,521,045)	
b. Indirect	(296)	(469)	(773)	(2,326)	(15,518)	(66,420)	
Investment revenues	194	276	501	2,350	11,019	77,519	[5,936,000]
Other revenues	336	924	1,550	3,406	30,571	169,175	
Total Revenues	15,159	25,089	46,204	151,136	1,167,962	4,929,037	16,766,100
<u>Expenditures</u>							
Pensions and services	11,795	20,089	34,581	107,580	793,943	3,513,822	14,130,000
Administrative Expenditures	1,301	1,710	3,510	11,160	71,333	301,117	
Other expenditures	12	427	778	173	22,750	84,962	259,300 <sup>2/</sup>
Total expenditures	13,108	22,226	38,869	118,913	888,026	3,899,901	15,445,700
<u>Surplus</u> <sup>1/</sup>	2,051	2,863	7,335	32,223	279,936	1,029,136	13,204,400

<sup>1/</sup> Includes personal loans, mortgages, bonds, other investments and cash balances.

<sup>2/</sup> Includes personnel and goods and services as reported; the classification is different than the one used in previous years.

Source: Superintendencia de Seguridad Social and Contaduría General de la República



Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

I. State Railroad (Empresa de Ferrocarriles del Estado) <sup>1/</sup>

(Thousands of current pesos)

	1970	1971	1972	1973	1974	1975	1976	Budget 1977
I. <u>Current Revenues</u>	<u>1,330</u>	<u>2,292</u>	<u>3,672</u>	<u>16,963</u>	<u>113,568</u>	<u>366,483</u>	<u>1,156,654</u>	<u>1,989,488</u>
Operating revenues	691	976	1,797	9,583	57,285	212,366	659,654	1,465,601
Retirement fund contributions	68	116	189	552	3,751	14,840	12,762	101,890
Current transfers	571	1,200	1,686	6,827	52,056	137,048	381,088	420,951
(Government)	(571)	(1,200)	(1,686)	(6,827)	(52,056)	(137,048)	(339,255)	(420,951)
(Other)	(-)	(-)	(-)	(-)	(-)	(-)	(41,832)	(-)
Other revenues	-	-	-	-	476	2,229	103,150	1,046
II. <u>Capital Revenues</u>	<u>298</u>	<u>399</u>	<u>385</u>	<u>1,784</u>	<u>23,710</u>	<u>54,739</u>	<u>206,433</u>	<u>19,315</u>
Government transfers	289	380	369	1,498	19,962	43,541	200,703	-
Sales of assets and others	9	20	17	286	3,748	11,198	5,730	19,315
III. <u>Total Revenues</u>	<u>1,628</u>	<u>2,691</u>	<u>4,057</u>	<u>18,747</u>	<u>137,278</u>	<u>421,222</u>	<u>1,363,087</u>	<u>2,008,803</u>
IV. <u>Current Expenditures</u>	<u>1,489</u>	<u>2,337</u>	<u>3,742</u>	<u>14,185</u>	<u>112,072</u>	<u>378,369</u>	<u>1,153,028</u>	<u>1,923,108</u>
Personnel	686	1,058	2,119	8,318	43,593	136,810	460,207	832,827
Goods and services	252	352	280	2,149	34,798	120,172	308,633	511,933
Interest on debt	-	-	-	-	-	3,002	28,031	24,888
Taxes	-	-	-	-	-	-	24,154	59,616
Current transfers	293	464	722	2,468	25,935	106,646	309,178	493,844
(Pensions and other social security)	(293)	(464)	(722)	(2,468)	(25,935)	(106,646)	(280,034)	(480,686)
(Other)	(-)	(-)	(-)	(-)	(-)	(-)	(29,144)	(13,158)
Other	258	464	621	1,250	7,745	11,738	46,980	(-)
V. <u>Capital Expenditures</u>	<u>212</u>	<u>291</u>	<u>356</u>	<u>1,228</u>	<u>22,565</u>	<u>51,729</u>	<u>188,041</u>	<u>85,691</u>
Investment	212	291	356	1,228	13,563	34,209	126,517	24,144
Debt amortization	-	-	-	-	-	-	61,524	61,547
Capital transfers	-	-	-	-	9,002	17,520	-	-
VI. <u>Total Expenditures</u>	<u>1,701</u>	<u>2,628</u>	<u>4,098</u>	<u>15,413</u>	<u>134,637</u>	<u>430,098</u>	<u>1,341,070</u>	<u>2,008,799</u>
VII. <u>Current Surplus (+)</u>	<u>-159</u>	<u>-45</u>	<u>70</u>	<u>2,778</u>	<u>-1,496</u>	<u>11,886</u>	<u>3,626</u>	<u>66,380</u>
VIII. <u>Overall Surplus (+)</u>	<u>-73</u>	<u>63</u>	<u>-41</u>	<u>3,334</u>	<u>2,641</u>	<u>-8,876</u>	<u>-22,017</u>	<u>4</u>

<sup>1/</sup> Cash transactions.

Source: Empresa de Ferrocarriles del Estado

Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

II. Agricultural Marketing Enterprise (ECA)

(Thousands of current pesos)

	1970	1971	1972	1973	1974	1975	1976
I. <u>Revenues</u>	<u>1,137</u>	<u>2,188</u>	<u>5,396</u>	<u>21,440</u>	<u>231,776</u>	<u>1,112,100</u>	<u>2,397,800</u>
Sales	1,137	2,188	5,396	21,440	231,776	1,062,900	2,329,800
Other revenues	-	-	-	-	-	49,200	68,000
II. <u>Expenditures</u>	<u>1,343</u>	<u>2,699</u>	<u>6,008</u>	<u>96,929</u>	<u>337,955</u>	<u>996,800</u>	<u>1,639,100</u>
Sales costs	1,279	2,595	5,788	98,164	334,594	835,600	1,166,800
(Costs of products)	(1,105)	(2,262)	(5,077)	(68,881)	(275,693)	(764,600)	(1,095,500)
(Distribution costs)	(81)	(153)	(320)	(1,739)	(19,628)	1/	1/
(Financial costs)	(41)	(64)	(154)	(4,742)	(27,967)	(71,000)	(71,300)
(Taxes)	(5)	(7)	(15)	(125)	(1,667)	1/	1/
(Other)	(43)	(109)	(222)	(22,677)	(9,639)	1/	1/
Administrative costs	37	66	152	447	2,989	155,200	468,000
Investment	27	38	71	319	1,855	6,000	4,300
III. <u>Balance</u>	<u>-206</u>	<u>-511</u>	<u>-612</u>	<u>-75,489</u>	<u>-106,179</u>	<u>115,300</u>	<u>758,700</u>
Minus:							
Government Transfers	85	200	100	18,294	114,942	-	-
IV. <u>Net Balance</u>	<u>-121</u>	<u>-311</u>	<u>-512</u>	<u>-57,195</u>	<u>8,763</u>	<u>115,300</u>	<u>758,700</u>
V. <u>Financing (net)</u>	<u>121</u>	<u>311</u>	<u>512</u>	<u>57,195</u>	<u>-8,763</u>	<u>-115,300</u>	<u>-758,700</u>
Credit (gross)	515	1,506	4,790	81,305	104,221	319,500	516,300
Banco del Estado	(440)	(1,331)	(4,451)	(39,187)	(103,016)	..	..
Central Bank	(75)	(175)	(305)	(38,040)	(-)	..	..
Other banks	(-)	(-)	(34)	(4,078)	(1,205)	..	..
Amortization	394	1,195	-4,278	-24,110	-112,984	-431,400	-1,267,600
Cash balances	-	-	-	-	-	-3,400	-7,400

1/ Included in administrative costs.

.. not available

Source: Ministry of Finance

Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

III. National Electric Company (ENDESA)

(Thousands of current pesos)

	1970	1971	1972	1973	1974	1975
I. <u>Current Revenues</u>	<u>792</u>	<u>950</u>	<u>1,304</u>	<u>2,698</u>	<u>50,326</u>	<u>319,095</u>
Sales	760	923	1,272	2,538	45,890	303,851
Other	32	27	32	160	4,436	15,244
II. <u>Expenditures</u>	<u>773</u>	<u>1,056</u>	<u>1,544</u>	<u>12,373</u>	<u>82,000</u>	<u>528,137</u>
Sales costs	550	781	984	5,423	59,286	233,545
Administrative expenses	50	72	111	503	3,516	28,515
Financial expenses	81	117	296	5,637	17,660	72,921
Other	92	86	153	810	1,538	13,067
Monetary correction	-	-	-	-	-	180,089
III. <u>Profits (+) or Losses (-)</u>	<u>19</u>	<u>-107</u>	<u>-240</u>	<u>-9,674</u>	<u>-31,674</u>	<u>-209,042</u>

Source: ENDESA

IV. National Petroleum Company (ENAP) - Sources and Uses of Funds

(Thousands of current pesos)

	1970	1971	1972	1973	1974	1975	1976
I. <u>Sources of Funds</u>	<u>761</u>	<u>1,104</u>	<u>1,393</u>	<u>10,493</u>	<u>172,634</u>	<u>1,151,153</u>	<u>2,596,213</u>
Operating revenues	663	833	824	1,451	47,161	119,414	536,027
Fiscal transfers	9	-	-	-	-	-	-
Other	1	10	26	473	34,856	473,386	853,773
Domestic credit	29	29	467	3,926	8,542	132,317	291,164
External credit	59	232	76	4,644	82,075	426,036	915,249
II. <u>Uses of Funds</u>	<u>761</u>	<u>1,104</u>	<u>1,393</u>	<u>10,493</u>	<u>172,634</u>	<u>1,151,153</u>	<u>2,596,213</u>
Investment	539	647	848	2,020	16,091	94,774	411,132
Debt service	-	35	-	388	5,827	33,529	97,736
Loans to employees	10	7	28	14	902	18,761	10,263
Operating losses	-	-	-	4,965	-	38,420	354,390
Stocks	127	128	134	833	60,856	700,924	1,405,247
Transfers to other enterprises	69	88	76	64	-	3,463	40,866
Other	16	200	308	2,109	88,959	261,282	276,579

Source: ENAP

Table 5.20: CHILE - SUMMARY TRANSACTIONS-OF MAJOR PUBLIC ENTERPRISES

V. Chilean Chemical Company (SOQUIMICH)

(Thousands of current US dollars)

	1969/70	1970/71	1971/72 <sup>1/</sup>	1973	1974	1975
I. <u>Revenues</u>	34,313	51,760	81,023	112,066	92,281	61,639
Sales	29,877	41,298	62,399	40,067	89,188	59,238
Drawback (Law 16.528)	4,353	9,751	13,894	7,316	-	-
Other revenues	83	711	4,730	64,683	3,093	2,401
II. <u>Expenditures</u>	47,998	64,366	102,163	59,366	85,075	65,068
Sales costs	35,453	47,221	78,487	37,574	61,968	42,530
Depreciation & depletion allow.	3,230	3,310	5,131	3,543	5,697	8,880
Interest	4,088	6,643	7,231	4,015	6,356	8,234
Other	5,227	7,192	11,314	8,034	8,669	5,424
Profits tax	-	-	-	6,200	2,385	-
III. <u>Profits (+) or losses (-)</u>	-13,685	-12,606	-21,140	52,699	7,206	-3,429

<sup>1/</sup> Eighteen-month period.

Source: SOQUIMICH and Ministry of Finance

VI. Chilean Telephone Company (Compañía de Teléfonos de Chile)

(Millions of current pesos)

	1973	1974	1975	1976	Budget 1977
I. <u>Revenues</u>	3.2	49	208	1,224	2,139
Sales	3.1 <sup>1/</sup>	48	203	1,115	1,814
Other	.1	1	5	59	325
Government transfers	-	-	-	50	-
II. <u>Expenditures</u>	6.3	69	430	1,212	2,139
Sales costs	2/	27	106	367	426
Depreciation, etc.	0.3	4	176	173	515
Interest & foreign exchange		34	56	4/	4/
Wages and salaries		1.4	19	300	461
Administrative costs and others	6.0 <sup>3/</sup>	1.9	3		462
Taxes		0.3	13	236	462
Monetary correction	-	-	57		
Debt service (net)	-	-	-	136	275
III. <u>Profits (+) or Losses (-)</u>	-3.1	-20	-222	12	-

<sup>1/</sup> Net of sales costs.<sup>2/</sup> Deducted from sales revenues.<sup>3/</sup> Breakdown not available.<sup>4/</sup> Included in debt service.

Source: Compañía de Teléfonos de Chile and Ministry of Finance

Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

VII. Pacific Steel Company (CAP)

(Millions of US dollars)

	1973	1974	1975	1976	Budget 1977
I. <u>Revenues</u>	238	261	217	256	265
Sales	140	240	193	212	264
Other	98	21	24	44	1
II. <u>Expenditures</u>	235	246	212	235	247
Sales costs	184	192	159	180 <sup>2/</sup>	181 <sup>1/</sup>
Depreciation and other reserves	16	19	20	20 <sup>2/</sup>	23
Administrative expenses	9	5	4	4 <sup>2/</sup>	1 <sup>1/</sup>
Financial costs	11	21	28	30 <sup>2/</sup>	26
Taxes	2	1	1	1 <sup>2/</sup>	1 <sup>1/</sup>
Other	13	8	-	-	8
III. <u>Profit (+) or Losses (-)</u>	<u>3</u>	<u>15</u>	<u>5</u>	<u>21</u>	<u>17</u>

<sup>1/</sup> Included in sales costs.

<sup>2/</sup> Estimate.

Source: CAP and CORFO

VIII. Chilean Electric Company (CHILECTRA)

(Millions of current pesos)

	1973	1974	1975	1976
I. <u>Revenues</u>	2.9	65	353	1,796
Energy sales	2.9	64	350	1,384
Other	-	1	3	26
Monetary revaluation	-	-	-	386
II. <u>Expenditures</u>	12.6	88	469	1,529
Sales costs	1.6	39	218	787
Wages and salaries	1.9	16	94	308
Depreciation and other allowances	.6	3	29	376
Taxes	.03	0.3	8	26
Interest and amortization	8.5	29	20	32
Other	-	1	-	-
Monetary correction	-	-	101	-
III. <u>Profits (+) or Losses (-)</u>	<u>-9.7</u>	<u>-23</u>	<u>-116</u>	<u>267</u>

Source: CHILECTRA

Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

IX. National Coal Enterprise (ENACAR)

(Millions of current pesos)

	1973	1974	1975
I. <u>Revenues</u>	<u>-1.7</u> <sup>1/</sup>	43.4	177
Sales	-1.7 <sup>1/</sup>	43.0	143
Other	-	.4	4
Monetary correction	-	-	30
II. <u>Expenditures</u>	<u>3.7</u>	49.0	239
Sales costs	<u>1</u>	34.0	134
Depreciation and other reserves	1.3	3.0	11
Other expenses	0.1	1.0	10
Financial expenses	2.2	11.0	80
Other	0.1	1.0	4
III. <u>Profits (+) or Losses (-)</u>	<u>-5.4</u>	<u>-5.6</u>	<u>-62</u>

<sup>1/</sup> Net of sales costs.

Source: ENACAR

X. National Telecommunications Enterprise (ENTEL)

(Millions of pesos)

	1973	1974	1975
I. <u>Revenues</u>	<u>5.6</u>	20	101
Sales	5.4	18	92
Other	0.2	2	9
II. <u>Expenditures</u>	<u>6.3</u>	23	97
Operating expenditures	4.9	16	63
Depreciation and other reserves	1.3	7	1/
Other	-	-	32 <sup>1/</sup>
Monetary correction	-	-	2
III. <u>Profits (+) or Losses (-)</u>	<u>-2.0</u>	<u>-3</u>	<u>4</u>

<sup>1/</sup> No breakdown is available.

Source: ENTEL

Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

XI. National Mining Enterprise (ENAMI)

(Millions of current pesos)

	1975	1976	Budget 1977
I. <u>Revenues</u>	<u>752</u>	<u>2,207</u>	<u>3,119</u>
Operating revenues	611	2,054	2,882
Sales of assets	1	14	54
Loan recuperations	8	15	17
Other revenues	11	2	4
Government transfers	104	58	-
Previous year operations	18	64	163
II. <u>Expenditures</u>	<u>711</u>	<u>2,164</u>	<u>3,285</u>
Personnel	79	190	415
Goods and services	519	1,505	2,293
Current transfers	18	39	106
Real investment	45	188	299
Financial investment	5	4	2
Debt service	46	238	170
III. <u>Balance (I-II)</u>	<u>41</u>	<u>42</u>	<u>-166</u>

Source: Ministry of Finance

XII. National Sugar Institute (IANSA)

(Millions of Current pesos)

	1973	1974	1975
I. <u>Total Revenues</u>	<u>6.2</u>	<u>90.6</u>	<u>500.1</u>
Sales	5.7	69.7	467.9
Other	.5	20.9	32.2
II. <u>Expenditures</u>	<u>9.2</u>	<u>84.6</u>	<u>490.8</u>
Sales costs	3.4	53.6	298.8
Depreciation and other reserves	1.2	5.2	81.5
Other	4.6	25.8	110.5
III. <u>Profits (+) or Losses (-)</u>	<u>-3.0</u>	<u>6.0</u>	<u>9.3</u>

Source: IANSA

Table 5.20: CHILE - SUMMARY TRANSACTIONS OF MAJOR PUBLIC ENTERPRISES

XIII. CODELCO-CHILE: CASH FLOW STATEMENTS, 1973-1976

(Millions of US dollars)

	1973	1974	1975	1976
<b>A. FOREIGN CURRENCY</b>				
1. <u>SOURCES OF FUNDS</u>	<u>295.6</u>	<u>1,696.8</u>	<u>1,229.0</u>	<u>1,446.3</u>
Sales Revenue	834.0	1,532.1	852.0	1,100.0
Loans Revenue	54.0	125.3	356.0	299.0
Other	5.6	18.4	6.8	41.6
Initial Cash	2.0	21.0	14.2	5.7
2. <u>USES OF FUNDS</u>	<u>347.0</u>	<u>710.4</u>	<u>766.6</u>	<u>962.7</u>
Materials and Supplies	63.6	129.4	113.1	65.3
Freight and Insurance	19.7	41.9	38.0	42.9
Refining Costs	20.2	12.7	7.0	5.4
Selling Expenses	4.8	4.6	2.2	3.0
CODELCO Charge	14.6	17.5	15.1	3.5
Copper Chilean Commission	-.-	-.-	-.-	5.5
Miscellaneous	41.8	11.5	6.0	10.2
Taxes	21.2	199.8	188.0	262.3
Anticipated Profits	-.-	-.-	-.-	104.1
Investment	-.-	-.-	44.5	38.9
Debt Servicing	161.1	293.0	342.7	421.6
3. <u>SURPLUS (-=DEFICIT)</u>	<u>548.6</u>	<u>986.4</u>	<u>472.4</u>	<u>483.6</u>
<b>B. LOCAL CURRENCY</b>				
1. <u>SOURCES OF FUNDS</u>	<u>277.8</u>	<u>74.3</u>	<u>65.7</u>	<u>104.8</u>
Sales Revenue	55.9	43.7	42.7	76.0
Loans Revenue	182.2	-.-	-.-	-.-
Company Store	28.8	10.8	7.8	12.8
Other	9.6	18.5	13.9	14.7
Initial Cash	1.3	1.3	1.3	1.3
2. <u>USES OF FUNDS</u>	<u>804.1</u>	<u>1,045.2</u>	<u>531.1</u>	<u>561.5</u>
Salaries	298.8	274.9	138.3	176.0
Salary and Custom Taxes	19.2	82.4	51.8	42.0
Materials and Supplies	217.3	424.7	196.6	191.6
Services	180.6	84.0	75.6	80.7
Refining Costs	-.-	28.7	-.-	-.-
Company Store	44.9	50.4	14.1	16.2
Other	3.3	-.-	4.5	1.3
Investment	33.6	99.5	50.2	53.7
Debt Servicing	6.4	0.6	-.-	-.-
3. <u>SURPLUS (-=DEFICIT)</u>	<u>526.3</u>	<u>970.9</u>	<u>465.4</u>	<u>456.7</u>
Net Cash Flow	22.3	15.5	7.0	26.9

Source: CODELCO-Chile



**Table 5.21: CHILE - PRICE INDEX FOR PUBLIC ENTERPRISE TARIFFS, 1972-1976**

(December 1974=100)

	CAP (Steel)	ENACAR (Coal)	ENAP (Petroleum)	ENDESA (Elect.)	CHILECTRA (Elect.)	C.T.C. (Telephone)	Price Index 1/ Pub. Enterprises (IPE) CPI	Ratio <u>IPE</u> <u>CPI</u>	
<u>1972</u>									
First Semester	1.4	2.9	0.6	1.8	1.8	3.0	0.7	1.5	.47
Second Semester	1.2	2.9	0.6	1.8	2.0	5.4	0.8	2.7	.30
<u>1973</u>									
March	1.2	2.9	1.2	1.8	1.9	5.7	1.0	4.2	.24
June	2.8	11.4	1.2	1.8	1.9	6.0	1.4	6.4	.22
September	2.7	13.5	1.2	1.8	1.9	14.5	1.9	10.1	.19
December	15.5	13.8	13.0	11.4	11.4	33.3	14.1	21.0	.67
<u>1974</u>									
March	24.0	30.8	33.0	24.5	24.1	33.3	30.9	34.1	.91
June	41.0	48.3	54.2	38.9	31.7	46.6	47.8	51.6	.93
September	89.0	60.9	76.4	81.1	80.5	79.2	77.5	72.0	1.08
December	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.00
<u>1975</u>									
March	190.9	145.3	172.6	186.6	180.8	146.0	173.3	160.9	1.08
June	326.9	257.6	341.7	314.1	212.9	224.8	314.2	270.0	1.16
September	369.3	269.1	446.8	472.7	458.1	303.5	424.6	350.9	1.21
December	387.5	304.9	476.5	732.4	616.2	425.7	481.7	440.7	1.09
<u>1976</u>									
March	715.5	473.5	710.7	944.6	800.5	587.7	708.6	608.4	1.16
June	946.8	613.1	835.6	1,367.7	1,123.3	832.4	909.5	840.0	1.08
September	1,038.2	660.3	915.1	1,624.6	1,344.8	942.7	1,031.1	1,038.0	.99
December	1,370.9	940.7	1,202.7	1,987.0	2,186.4	1,118.1	1,384.6	1,208.9	1.15

1/ Includes IANSA, the National Sugar Institute, until September 1974.

Source: Ministry of Finance, Ministry of Economy

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**Table 5.22: PUBLIC PERSONNEL BY MINISTRY AND ENTERPRISE, 1970-1977**

	Sept. 1970	Sept. 1973	Maximum D.L. 785	April 1975	March 1976	Budget 1977
<b>Total</b>	<b>187,772</b>	<b>309,350</b>	<b>248,266</b>	<b>237,881</b>	<b>215,090</b>	<b>208,943</b>
Junta	381	1,035	1,397	965	1,078	1,362
Congress	n.a.	n.a.	549	385	303	361
Judiciary	n.a.	2,384	2,711	2,711	2,647	n.a.
<b>Ministries of:</b>						
Interior	12,382	12,550	10,040	9,920	9,161	9,547
Foreign Affairs	602	791	751	701	704	723
Economy	1,971	3,121	2,847	2,551	2,153	2,178
Finance	9,867	10,643	10,058	9,756	9,417	9,765
Education	n.a.	n.a.	n.a.	n.a.	n.a.	(93,765)
Justice	6,069	7,475	8,368	8,015	7,307	8,248
Defense	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public Works	21,249	36,038	30,199	26,806	21,906	21,557
Agriculture	10,909	27,128	15,771	15,771	13,335	14,360
Land and Colonization	429	489	391	391	381	388
Labor and Welfare	1,922	1,845	1,745	1,743	1,610	1,695
Health	54,380	68,805	68,316	66,375	61,992	65,091
Mining	94	109	106	82	71	98
Housing	8,340	36,458	10,915	10,178	9,094	5,980
Transport	193	175	285	196	206	213
Economic Coordination	-	-	47	23	-	-
Municipalities	n.a.	24,145	22,060	21,142	20,218	20,479
Regions	526	1,562	857	750	750	n.a.
CORFO and Institutes	4,988	11,970	8,826	7,759	4,852	3,157
Retirement Funds	7,052	9,923	8,032	8,032	7,543	8,032
<b>Enterprises:</b>						
ECA (Agri. marketing)	1,623	3,133	1,800	1,800	1,735	1,800
EMPORCHI (Ports)	5,063	5,257	5,000	4,430	4,385	4,412
EMPREMAR (Shipping)	921	1,419	1,348	1,228	1,182	1,205
LANCHILE (Airline)	3,010	3,777	3,800	3,800	3,705	3,200
FFCC del Estado (Rail.)	27,185	27,196	22,050	22,050	20,326	16,000
Agua Pot. Santiago (wat.)	1,264	1,734	1,290	1,280	1,518	1,571
Agua Pot. El Canelo (wat.)	326	414	343	323	-	-
Other	3,442	4,652	4,274	3,813	3,705	3,924

1/ Figures do not cover the entire public sector.

Source: Ministry of Finance

Table 5.23: CHILE - PROJECTED GROWTH OF CURRENT EXPENDITURES AND TAX RECEIPTS OF CENTRAL GOVERNMENT, 1978-1990

	Actual	P R O J E C T E D												
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	(Billions of 1977 pesos)													
Current expenditures <sup>a/</sup>	64.8	68.0	71.4	75.0	78.7	82.7	86.8	91.1	95.7	100.5	105.5	110.8	116.3	122.1
Current tax receipts	65.2	70.8	77.0	87.3	97.2	111.0	119.8	129.5	139.4	149.3	159.7	170.7	182.4	194.6
From copper <sup>b/</sup>	7.5	8.7	11.0	17.3	22.9	32.1	36.0	40.3	44.6	48.4	52.5	56.6	61.0	65.5
Other <sup>c/</sup>	57.7	62.1	66.0	70.0	74.3	78.9	83.9	89.2	94.8	100.8	107.2	114.1	121.4	129.1
Current Balance <sup>d/</sup>	0.4	2.8	5.6	12.3	18.5	28.3	33.1	38.3	43.7	48.8	54.2	59.9	66.1	72.5
	(Percent of GDP)													
Current expenditures <sup>a/</sup>	20.2	19.7	19.6	19.4	19.2	19.1	18.9	18.7	18.5	18.4	18.2	18.0	17.8	17.6
Current tax receipts	20.3	20.5	21.1	22.6	23.8	25.6	26.1	26.6	27.0	27.3	27.5	27.7	27.9	28.1
From copper <sup>b/</sup>	2.3	2.5	3.0	4.5	5.6	7.4	7.8	8.3	8.6	8.8	9.0	9.2	9.3	9.4
Other <sup>c/</sup>	18.0	18.0	18.0	18.1	18.2	18.2	18.3	18.3	18.4	18.4	18.5	18.5	18.6	18.6
Current Balance <sup>d/</sup>	0.1	0.8	1.5	3.2	4.5	6.5	7.2	7.9	8.5	8.9	9.3	9.7	10.1	10.5

a/ Projected to grow at 5.0 percent per annum; includes transfers to rest of public sector and to private sector.

b/  $C_n = C_{n-1} \left[ 1 + .6 \frac{(\bar{X}_n - \bar{X}_{n-1})}{\bar{X}_n} + .9 \frac{(X_n - \bar{X}_n)}{\bar{X}_n} \right]$ , where C = copper tax revenues;  
 $\bar{X}$  = copper exports in constant prices of 1977;  
X = copper exports in current prices; and  
n denotes the year

For the above calculation, the value of  $(X_n - \bar{X}_n)$ , originally expressed in current U.S. dollars, was deflated by the IBRD Index of International Inflation (projected) and converted to 1977 pesos at the exchange rate of 21.54 pesos = US\$1.00.

c/  $NC_n = NC_{n-1} \left[ 1 + 1.05 \frac{(Y_n - Y_{n-1})}{Y_n} \right]$ , where NC = non-copper tax revenues; and  
Y = Gross Domestic Product

d/ Excludes non-tax current revenues.

Source: Appendix Tables 2., 5.7, and mission estimates

VI . MONEY AND BANKING

Table 6.1: CHILE - SUMMARY ACCOUNTS OF THE BANKING SYSTEM, 1971-1977  
(Millions of pesos)

	1971		1972		1973		1974		1975		1976		1977				
	Dec. US\$1=.025 pesos	Dec. US\$1=.065 pesos	Dec. US\$1=.065 pesos	Sept. US\$1=.340 pesos	Sept. US\$1=.340 pesos	Dec. US\$1=.600 pesos	Dec. US\$1=2.315 pesos	Dec. US\$1=2.315 pesos	Mar. US\$1=4.054 pesos	Mar. US\$1=4.054 pesos	June US\$1=5.748 pesos	June US\$1=5.748 pesos	Sept. US\$1=7.50 pesos	Sept. US\$1=7.50 pesos	Dec. US\$1=10.01 pesos		
<b>Net International Reserves</b>	2.74	- 2.99	- 2.77			-78.68	-138.8	-165.9	-639.5	-1,136.2	-1,991.5	-2,326.0	-3,297.8	-2,524.1	-3,293	-4,133	-5,517
<b>Assets</b>	7.44	6.27	16.31			128.35	226.5	251.6	969.6						2,331	3,378	5,378
<b>Liabilities</b>	4.70	9.26	24.08			207.03	365.3	417.4	1,609.2						6,664	8,895	8,895
<b>Domestic Assets, net</b>	33.14	91.30	122.22	244.50	573.30	757.91	1,056.5	2,132.2	4,690.6	5,338.9	8,079.0	8,542.4	11,167.3	11,697.8	14,201	16,041	19,700
To public sector	36.46	72.20	120.35	201.01	542.14	611.35	908.3	1,582.7	4,375.3	5,075.2	8,178.2	7,910.2	10,964.8	11,450.2	14,618	15,488	20,398
Central government, net	(31.80)	(58.21)	(95.10)	(141.99)	(427.43)	(480.97)	(756.8)	(1,453.7)	(5,638.3)	(4,246.2)	(6,777.9)	(6,603.2)	(9,152.9)	(9,180.4)	(11,869)	(12,626)	(16,772)
Rest of public sector, net	(4.66)	(13.99)	(25.25)	(59.02)	(114.71)	(130.38)	(151.5)	(129.0)	(737.0)	(829.0)	(1,400.3)	(1,307.0)	(1,811.9)	(2,269.8)	(2,749)	(2,866)	(3,626)
Decentralized agencies	/	/	/	45.99	62.08	8.99	11.2	42.7	130.1	29.6	102.5	29.6	119.7	176.0	210	347	387
Social security funds	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Public enterprises	/	/	/	6.47	71.48	728.54	714.4	723.9	391.6	601.8	680.7	522.2	224.1	224.7	224.7	224.7	224.7
Large copper companies	/	/	/	8.28	2.75	3.55	10.6	21.8	33.5	31.2	20.0	12.2	74.7	80	117	178	
Public nonbank financial intermediaries (SINAP)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Municipalities	/	/	/	-1.57	-1.00	-5.52	3.0	12.8	13.7	36.8	45.0	45.1	60.7	61	74	74	74
Other public sector	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
To private sector	13.39	30.43	32.00	51.39	57.07	125.17	147.2	414.7	680.9	845.5	1,431.0	1,881.0	2,386.1	2,693.7	3,191	4,005	4,810
Official capital and surplus	- 3.21	-6.28	- 8.10	-10.99	-25.49	-46.45	-78.5										
Revaluation accounts	-10.00	-6.75	- 4.03	4.01	-39.37	-19.82	-74.4										
Net unclassified assets	- 2.79	-18.63	- 4.03	- 2.64	- 2.55	98.39	174.9										
Deposit obligations	(- 0.31)	(-2.76)	(- 4.23)	(- 7.04)	(-23.12)	(-47.67)	(-63.5)	134.8	-365.6	-581.8	-1,530.2	-1,247.8	-2,183.6	-2,446.1	-3,608	-3,452	-5,538
Other assets and liabilities, net	(- 6.48)	( 5.33)	(-14.40)	(- 4.40)	( 20.57)	(146.06)	(198.4)										
Interbank float	- 0.71	-0.87	0.63	1.82	41.50	(-10.73)	(- 1.1)										
<b>Contra-entry SDRs</b>	1.02	1.48	3.86	4.28	22.42	22.42	39.6	40.0	154.2	191.1	279.4	275.3	390.4	365.1	476	480	641
<b>Medium- and long-term foreign liabilities</b>	1.79	8.06	20.95			168.33	297.1	351.7	1,355.9	1,239.1	2,171.8	2,120.6	3,006.7	3,553.0	4,636	3,965	5,230
<b>Liabilities to private nonbank financial intermediaries</b>	--	--	--	--	--	--	--	--	--	--	--	24.6	24.6	95.6	96	70	70
<b>Liabilities to private sector</b>	55.07	78.77	89.64	198.37	331.97	488.48	581.0	1,574.6	2,541.0	2,772.5	3,636.3	3,769.9	4,442.8	5,160	5,700	7,393	8,242
Money	21.52	54.20	54.20	135.08	135.08	290.82	290.8	829.6	829.6	1,102.8	1,102.8	1,369.5	1,369.5	1,958	1,958	2,963	3,963
Currency in circulation	( 8.97)	(28.23)	(28.23)	(76.44)	(76.44)	( 95.66)	( 95.7)	(349.3)	(349.3)	(436.6)	( 436.6)	( 612.6)	( 612.6)	( 722)	( 722)	(1,358)	(1,358)
Demand deposits	(12.55)	(25.97)	(25.97)	(58.64)	(58.64)	(185.16)	(185.2)	(480.2)	(480.2)	(664.2)	( 664.2)	( 753.0)	( 753.0)	(1,236)	(1,236)	(2,605)	(2,605)
Quasi-money	11.55	24.57	35.44	63.29	196.89	207.66	300.2	745.0	1,711.4	1,669.7	2,533.5	2,431.4	3,082.3	3,202	3,742	4,430	5,279
Deposits in local currency	( 8.33)	(17.77)	(17.77)	(31.71)	(31.71)	( 86.60)	( 86.6)	(406.4)	(406.4)	(522.0)	( 522.0)	( 873.8)	( 873.8)	(1,432)	(1,432)	(1,894)	(1,894)
Deposits in foreign currency	( 1.36)	( 1.76)	( 4.56)	( 5.24)	( 27.40)	( 18.19)	( 32.1)	( 37.9)	(145.9)	(137.0)	( 240.1)	( 256.1)	( 363.2)	( 364)	( 475)	( 513)	( 685)
Forward sales of foreign exchange	( 1.86)	( 5.04)	(13.11)	(26.34)	(137.78)	(102.87)	(181.5)	(210.5)	(811.3)	(650.4)	(1,139.9)	( 805.1)	(1,141.5)	( 925)	(1,207)	(1,514)	(2,021)
SEBAC	--	--	--	--	--	--	--	( 90.2)	(347.8)	(360.3)	( 631.5)	( 496.4)	( 703.9)	( 481)	( 628)	( 509)	( 679)

Sources: Central Bank, IMF, Mission estimates

Table 6.1: CHILE - SUMMARY ACCOUNTS OF THE BANKING SYSTEM, 1971-1977

(Millions of pesos)

	1976								1977					
	Mar. US\$1=10.01 pesos	Mar. US\$1=12.53 pesos	June	June US\$1=13.55 pesos	Sept.	Sept. US\$1=16.11 pesos	Dec.	Dec. US\$1=18.43 pesos	Mar.	Mar. US\$1=19.44 pesos	June US\$1=22.26 pesos	Sept.	Sept. US\$-	Dec.
<b>Net International Reserves</b>	-4,149	-5,194	-4,011	-4,337	-2,520	-2,996	-1,545	-1,767	- 872	- 920	- 770	- 881	-2,201	
<b>Assets</b>	3,680	4,606	7,087	7,664	8,378	9,961	12,609	14,425	14,066	14,837	15,052	17,236	15,072	
<b>Liabilities</b>	7,829	9,800	11,098	12,001	10,898	12,957	14,154	16,193	14,938	15,756	15,822	18,117	17,274	
<b>Domestic Assets, net</b>	20,393	23,762	25,488	26,760	26,943	29,431	33,311	38,108	43,299	44,146				
To public sector	21,673	26,847	27,632	29,823	31,246	36,896	36,477	43,703	48,517	50,775				
Central government, net	(17,397)	(21,656)	(21,990)	(23,799)	(24,004)	(28,679)	(30,194)	(34,629)	(37,465)	(39,393)				
Rest of public sector, net	( 4,276)	( 5,191)	( 5,642)	( 6,024)	( 7,242)	( 8,221)	( 6,283)	( 9,074)	(11,052)	(11,382)				
Decentralized agencies	(-597)	(-607)	(-374)	(-373)	(-507)	(-527)	(- 323)	(- 323)	(- 719)	(- 709)				
Social security funds	(-407)	(-407)	(-172)	(-172)	(-707)	(-707)	(-1,047)	(-1,047)	(-1,132)	(-1,132)				
Public enterprises	(1,092)	(2,367)	(2,676)	(2,816)	(2,072)	(2,463)	(2,032)	(2,498)	(2,240)	(2,337)				
Large copper companies	( 295)	( 379)	(- 38)	(- 38)	(-107)	(-122)	(- 48)	(- 507)	(- 295)	(- 306)				
Public nonbank financial intermediaries (SINAP)	(1,107)	(1,107)	(1,842)	(1,842)	(3,182)	(3,182)	(4,147)	(4,147)	(5,011)	(5,011)				
Municipalities	(-132)	(-132)	(-110)	(-110)	(-194)	(-194)	(-181)	(-181)	(- 343)	(- 343)				
Other public sector	(2,908)	(3,483)	(3,123)	(3,398)	(3,502)	(4,118)	(4,120)	(4,679)	(4,290)	(4,522)				
To private sector	5,483	6,421	7,978	8,387	10,890	12,082	15,412	16,643	21,837	22,470				
Official capital and surplus	(	(	(	(	(	(	(	(	(	(				
Revaluation accounts	(	(	(	(	(	(	(	(	(	(				
Net unclassified assets	(-6,763)	-9,506	-10,122	-11,450	-15,193	-19,547	-18,578	-22,238	-27,095	-29,099				
Deposit obligations	(	(	(	(	(	(	(	(	(	(				
Other assets and liabilities, net.	(	(	(	(	(	(	(	(	(	(				
Interbank float	(	(	(	(	(	(	(	(	(	(				
<b>Contra-entry SDRs</b>	639	800	783	846	857	1,018	1,020	1,166	1,168	1,232			1,416	
<b>Medium- and long-term foreign liabilities</b>	9,224	6,475	6,385	6,882	6,945	8,188	9,717	11,067	10,942	11,519			12,348	
<b>Liabilities to private nonbank financial intermediaries</b>	56	56	135	135	194	194	187	187	252	252			-463	
<b>Liabilities to private sector</b>	10,325	11,237	14,174	14,560	16,427	17,035	22,842	23,321	30,025	30,223			39,448	
<b>Money</b>	3,622	3,622	4,459	4,459	5,718	5,718	8,575	8,575	10,924	10,924	12,172	12,172	14,056	18,305
Currency in circulation	(1,571)	(1,571)	(1,986)	(1,986)	(2,661)	(2,661)	(4,480)	(4,480)	(5,144)	(5,144)	(5,699)	(5,699)	(6,978)	(9,340)
Demand deposits	(2,101)	(2,101)	(2,473)	(2,473)	(3,057)	(3,057)	(4,094)	(4,094)	(5,780)	(5,780)	(6,494)	(6,494)	(7,077)	(8,965)
Quasi-money	6,653	7,565	9,715	10,101	10,709	11,317	14,267	14,746	19,101	19,299			25,393	
Deposits in local currency	(3,022)	(3,022)	(4,974)	(4,974)	(7,454)	(7,454)	(10,943)	(10,943)	(15,482)	(15,482)			(22,410)	
Deposits in foreign currency	( 706)	( 883)	(1,018)	(1,101)	(1,296)	(1,654)	( 2,014)	( 2,304)	( 2,396)	( 2,527)			( 2,875)	
Forward sales of foreign exchange	(2,184)	(2,733)	(2,895)	(3,130)	(1,087)	(1,292)	( 272)	( 311)	( 87)	( 92)			( 107)	
CEPAC	( 741)	( 927)	( 828)	( 896)	( 772)	( 917)	( 1,038)	( 1,188)	( 1,136)	( 1,198)			( 1,990)	

Sources: Central Bank, IMF, Mission estimates

Table 6.2: CHILE - CURRENCY AND DEMAND DEPOSITS IN HANDS OF THE PRIVATE SECTOR, 1969-78  
(Millions of pesos)

	Money Supply	Nominal		December 1969 Prices <sup>a/</sup>		
		Percent Change		Real Money Supply	Percent Change	
		During Quarter	From Year Earlier			During Quarter
1969	6.1			6.1		
1970	10.0		63.9	7.4		21.5
1971	21.5		115.0	10.4		40.2
1972	March	25.0	16.3	11.0	5.5	
	June	28.2	12.8	9.5	-13.4	
	September	32.4	14.9	8.3	-12.9	
	December	54.1	67.0	7.4	-10.6	-28.9
1973	March	73.5	35.9	6.9	-7.0	-37.3
	June	97.5	32.7	4.6	-32.5	-51.1
	September	135.1	38.6	5.6	21.3	-31.9
	December	280.8	107.8	7.6	34.9	2.8
1974	March	348.6	24.1	5.8	-4.4	-15.1
	June	429.8	23.3	4.7	-18.4	2.4
	September	580.7	35.1	4.6	-3.2	-18.3
	December	829.6	42.9	4.7	2.8	-37.9
1975	March	1,102.8	32.9	3.9	-17.4	-32.9
	June	1,365.5	23.8	2.9	-26.3	-39.2
	September	1,958.0	43.4	3.2	10.1	-30.9
	December	2,963.3	51.3	3.8	20.5	-19.1
1976	March	3,671.8	23.9	3.4	-10.3	-12.1
	June	4,459.4	21.4	3.0	-12.0	5.8
	September	5,717.8	28.2	3.1	3.7	-1.3
	December	8,574.6	50.0	4.0	28.8	5.6
1977	March	10,924.1	27.4	4.3	7.2	26.1
	June	12,172.2	11.4	4.3	-0.7	42.1
	September	14,055.4	15.5	4.4	3.6	42.3
	December	18,305.0	30.2	5.3	18.6	30.8
1978	March	22,436.7	22.6	6.0	14.3	39.4
	June	22,871.8	1.9	5.7	-4.6	34.0
	September	n.a.	n.a.	n.a.	n.a.	n.a.
	December	30,207.0	n.a.	7.5	n.a.	26.6

<sup>a/</sup> Deflated by IBRD adjusted CPI.

Source: Central Bank

Table 6.3: CHILE - BANKING SYSTEM CREDIT, 1970-1977  
(Millions of pesos)

End of Period	Credits in Local Currency				Credits in Foreign Currency				Exchange Rate (Pesos/US\$)	Dollar	Total				Banking Sectors/	Total					
	Public Sector		Private Sector		Public Sector		Private Sector				Public Sector		Private Sector			Public Sector		Private Sector		Banking Sectors/	Total
	Central Government	Other	Total	Private	Total	Central Government	Other	Total			Private	Total	Central Government	Other		Total	Private	Total			
1970	0.9	1.2	2.1	6.8	8.8	0.01221	7.6	8.4	0.3	9.4	8.5	7.0	10.5	7.7	18.2						
1971	9.3	6.8	16.1	10.8	26.9	0.01460	12.4	14.8	0.8	15.6	21.7	9.2	30.9	11.6	42.5						
1972	35.3	29.5	62.8	24.2	87.0	0.025	23.4	31.1	0.9	32.0	56.7	37.2	93.9	25.1	119.0						
1973 Dec.	179.9	175.2	355.1	103.5	458.6	0.343	363.3	421.4	27.6	449.0	543.2	233.5	776.5	131.1	907.6						
1974 March	184.8	179.4	364.2	127.0	491.1	0.463	541.0	659.4	57.4	716.9	725.8	297.8	1,023.6	184.4	1,208.0						
June	371.7	192.6	564.3	149.4	713.7	0.725	836.2	1,071.4	83.9	1,155.3	1,159.9	427.8	1,587.7	233.3	1,821.0						
Sept.	583.6	219.3	802.9	199.8	1,002.7	1.021	1,269.9	1,583.9	141.8	1,725.7	1,853.5	533.5	2,357.0	341.6	2,728.6						
Dec.	936.0	139.4	1,075.4	320.6	1,396.1	1.613	2,299.4	2,756.6	244.3	3,000.9	3,335.4	496.6	3,832.0	564.9	4,397.0						
1975 March	1,182.7	118.9	1,301.6	349.4	1,651.0	2.786	4,897.1	5,076.5	694.1	5,770.7	5,769.8	848.3	6,618.1	851.5	7,469.7						
June	1,436.1	576.2	2,012.3	669.0	2,681.3	4.580	8,003.2	8,279.4	1,120.1	9,393.3	9,419.3	1,393.3	10,782.6	1,386.6	12,169.2						
Sept.	1,480.5	789.2	2,269.7	1,048.2	3,317.9	6.100	10,876.6	11,760.1	1,466.3	12,226.3	12,357.1	1,672.7	14,029.8	2,014.5	16,044.3						
Dec.	1,454.9	1,118.4	2,573.3	1,452.8	4,026.1	8.225	15,413.6	16,468.1	1,475.3	17,943.3	16,857.5	2,172.9	19,040.4	2,928.1	21,974.4						
1976 March	1,285.7	1,627.3	2,893.0	1,671.1	4,564.1	10.756	20,650.2	22,674.8	2,370.4	24,995.2	21,915.9	3,651.9	25,567.8	3,991.5	29,559.3						
June	1,496.2	2,041.3	3,537.5	2,913.1	6,450.6	13.537	26,952.5	29,677.5	3,695.8	32,725.8	33,448.7	5,318.8	38,767.5	6,008.9	44,776.4						
Sept.	1,728.4	4,521.5	6,249.9	4,478.8	10,728.3	14.330	29,345.7	32,286.7	4,187.9	36,464.6	31,064.1	7,903.6	38,967.7	8,646.7	47,614.4						
Dec.	1,817.3	6,052.1	7,869.4	6,763.5	14,632.9	17.030	35,216.0	37,793.8	5,798.7	43,595.4	37,035.3	8,596.8	45,632.1	12,562.2	58,194.3						
1977 March	1,861.8	9,206.0	11,067.8	10,211.4	21,279.2	18.298	38,260.7	40,753.1	8,065.5	48,318.6	40,132.5	11,698.4	51,830.9	18,276.9	70,107.8						
June	2,137.2	12,643.2	14,780.4	14,581.8	29,163.6	20.229	42,145.1	44,629.2	10,452.7	55,081.9	44,282.3	15,127.3	59,409.6	25,034.5	84,444.1						
Sept.	2,522.2	17,136.8	19,659.0	20,394.2	40,053.2	23.86	51,803.9	54,769.7	14,029.9	69,991.6	51,536.1	20,104.6	71,640.7	35,022.1	106,662.8						
Dec.	3,143.3	18,723.9	21,867.2	26,851.1	48,718.3	27.59	63,441.5	66,407.3	22,212.3	85,619.6	66,594.8	29,695.7	88,280.5	49,063.4	137,343.9						

B/ Includes Central Bank credits to development banks.

Source: Central Bank



Table 6.4: CHILE - BANKING SYSTEM CREDIT, 1970-1977  
(Millions of pesos at December 1969 prices) <sup>b/</sup>

End of Period	Credits in Local Currency						Credits in Foreign Currency						Total					
	Public Sector			Private Sector	Banking Sector <sup>a/</sup>	Total	Public Sector			Private Sector	Total	Public Sector			Private Sector	Banking Sector <sup>a/</sup>	Total	
	Central Government	Other	Total				Central Government	Other	Total			Central Government	Other	Total				
1970	0.7	1.0	1.7	5.5	-	7.1	6.1	0.6	6.8	0.7	7.6	6.8	1.6	8.4	6.2	-	14.6	
1971	4.5	3.3	7.8	5.2	-	13.0	6.0	1.2	7.2	0.4	7.5	10.5	4.4	14.9	5.6	-	20.5	
1972	4.5	4.0	8.6	3.3	-	11.9	3.2	1.1	4.2	0.1	4.4	7.7	5.1	12.8	3.4	-	16.3	
1973 December	4.9	4.7	9.6	2.8	-	12.4	9.8	1.6	11.4	0.7	12.1	14.7	6.3	21.0	3.5	-	24.6	
1974 March	3.1	3.0	6.1	2.1	-	8.2	9.0	2.0	11.0	1.0	12.0	12.1	5.0	17.1	3.1	-	20.1	
June	3.6	2.1	5.7	1.6	-	7.3	9.2	2.6	11.8	0.9	12.7	12.8	4.7	17.5	2.6	-	20.1	
September	4.6	1.7	6.3	1.6	-	7.9	10.0	2.5	12.5	1.1	13.6	14.6	4.2	18.9	2.7	-	21.6	
December	5.3	0.8	6.1	1.8	-	7.9	13.6	2.0	15.7	1.4	17.1	19.0	2.8	21.8	3.2	-	25.0	
1975 March	4.2	1.2	5.4	1.2	-	6.6	16.2	1.7	17.9	2.1	20.0	20.4	2.9	23.3	3.3	-	26.7	
June	3.0	1.2	4.2	1.4	-	5.6	16.9	1.5	18.4	2.4	20.7	19.8	2.7	22.6	3.8	-	26.3	
September	2.4	1.3	3.7	1.7	0.0	5.4	17.6	1.4	19.0	1.6	20.6	20.0	2.7	22.7	3.3	0.0	26.0	
December	1.9	1.4	3.3	1.9	0.0	5.2	19.9	1.4	21.2	1.9	23.1	21.7	2.8	24.5	3.8	0.0	28.3	
1976 March	1.2	1.5	2.7	1.6	0.0	4.3	19.3	1.9	21.2	2.2	23.3	20.5	3.4	23.9	3.7	0.0	27.6	
June	1.0	1.8	2.8	2.0	0.0	4.8	18.2	1.8	20.0	2.1	22.1	19.3	3.6	22.8	4.1	0.0	26.9	
September	0.9	2.5	3.4	2.5	0.0	5.9	16.1	1.6	17.7	2.3	20.0	17.0	4.1	21.1	4.7	0.0	25.9	
December	0.9	2.8	3.7	3.2	0.0	6.9	16.6	1.2	17.7	2.7	20.5	17.4	4.0	21.4	5.9	0.0	27.4	
1977 March	0.7	3.6	4.4	4.0	0.0	8.4	15.1	1.0	16.1	3.2	19.3	15.9	4.6	20.5	7.2	0.0	27.7	
June	0.8	4.5	5.2	5.1	0.0	10.4	14.8	0.9	15.7	3.7	19.4	15.6	5.3	20.9	8.8	0.0	29.8	
September	0.8	5.4	6.2	6.4	0.1	12.7	16.4	0.9	17.3	4.6	21.9	17.2	6.4	23.5	11.1	0.1	34.7	
December	0.9	5.4	6.3	7.7	0.1	14.1	18.3	0.9	19.1	6.4	25.5	19.2	8.6	25.4	14.1	0.1	39.7	

a/ Includes Central Bank Credits to development banks.

b/ Deflated by IBRD adjusted CPI.

Source: Table 6.3

Table 6.5: CHILE - REAL QUARTERLY EXPANSION OF BANK CREDIT, 1973(IV) - 1977 (IV)<sup>a/</sup>  
(Percent)

Year/Quarter	Local Currency			Foreign Currency						Total		
	Public Sector	Private Sector	Total	(Current U.S. dollars)			(Peso equivalent) <sup>b/</sup>			Public Sector	Private Sector	Total
				Public Sector	Private Sector	Total	Public Sector	Private Sector	Total			
1973 ( IV)	n.a.	n.a.	31.9	n.a.	n.a.	-3.2	n.a.	n.a.	152.1	n.a.	n.a.	73.2
1974 ( I)	-36.5	-25.0	-33.9	11.1	47.7	13.4	- 3.5	42.9	-0.8	-18.6	-11.4	-18.3
( II)	- 6.6	-23.8	-11.0	8.2	-2.6	7.4	7.3	-10.0	5.8	2.3	-16.1	-
( III)	10.5	-	8.2	5.0	20.0	6.1	5.9	22.2	7.1	8.0	3.8	7.5
( IV)	- 3.2	12.5	-	9.8	8.6	9.7	25.6	27.3	25.7	15.3	18.5	15.7
1975 ( I)	-11.5	-33.3	-16.5	7.0	41.3	9.8	14.0	50.0	17.0	6.9	3.1	6.8
( II)	-22.2	16.7	-15.2	4.5	14.8	5.6	2.8	14.3	3.5	- 3.0	15.2	- 1.5
( III)	-11.9	21.4	- 3.6	1.3	-35.3	-2.9	3.3	-33.3	-0.5	0.4	-13.2	- 1.1
( IV)	-10.8	11.8	- 3.7	3.5	12.8	4.2	11.6	18.8	12.1	7.9	15.2	8.8
1976 ( I)	-18.2	-15.8	-17.3	5.7	20.7	6.9	-	15.8	0.9	- 2.4	- 2.6	- 2.5
( II)	3.7	25.0	11.6	3.8	6.0	4.0	- 5.7	- 4.5	-5.2	- 4.6	10.8	- 2.5
( III)	21.4	25.0	22.9	3.0	27.2	5.3	-11.5	9.5	-9.5	- 7.5	14.6	- 3.7
( IV)	8.8	28.0	16.9	-1.6	17.1	0.5	-	17.4	2.5	1.4	25.5	5.8
1977 ( I)	18.9	25.0	21.7	0.4	29.5	4.3	- 9.0	18.5	-5.9	- 4.2	22.0	1.1
( II)	18.2	27.5	23.8	-0.9	17.2	2.1	- 2.5	15.6	0.5	2.0	22.2	7.6
( III)	19.2	25.5	22.1	4.0	18.7	6.8	10.2	24.3	12.9	12.4	26.1	16.4
( IV)	1.6	20.3	11.0	4.9	31.3	10.4	10.4	39.1	16.4	8.1	27.0	14.4

<sup>a/</sup> Pesos of December 1969; deflation by IBRD adjusted CPI.

<sup>b/</sup> Conversion at average banking rate of exchange for each period.

Source: Table 6.4

**Table 6.6: BANKING SYSTEM LOCAL CURRENCY CREDITS, BY ECONOMIC SECTORS, Constant Prices, 1950-1977**  
(Millions of Escudos at December 1965 Prices)

Years	Agriculture <u>b/</u>	Industry	(Manufacturing)	(Construction)	(Transport and Storage)	(Mining)	Other Private	Total Private
1950	319.9	456.1					654.0	1,430.0
1951	310.3	447.4					629.4	1,387.1
1952	317.8	421.1					628.4	1,367.3
1953	350.8	465.8					604.8	1,421.4
1954	377.3	409.3					482.8	1,269.4
1955	332.9	341.5					305.3	979.7
1956	311.6	291.3					254.8	857.7
1957	349.6	263.3					279.7	892.6
1958	368.2	293.5					281.9	943.6
1959	332.1	260.3					255.9	848.3
1960	408.9	440.0					453.5	1,302.4
1961	505.2	501.1					588.4	1,594.7
1962	599.9	608.4					639.4	1,847.7
1963	557.3	620.4					507.6	1,685.3
1964	558.5	612.6					381.3	1,552.4
1965 (Fuenzalida & Undurraga)	457.5	717.2					506.2	1,680.9
1965 (INE)	518.0	738.4	(589.2)	(110.4)	(18.1)	(20.7)	444.5	1,700.9
1966	490.5	853.2	(695.7)	(117.9)	(20.7)	(19.0)	525.8	1,869.5
1967	499.5	895.3	(747.8)	(109.4)	(24.0)	(14.0)	546.7	1,941.5
1968	560.6	937.5	(776.9)	(109.5)	(23.4)	(27.8)	529.0	2,027.1
1969	559.0	934.1	(773.7)	(118.6)	(20.9)	(20.8)	542.3	2,035.4
1970	504.2	971.6	(788.1)	(122.5)	(32.3)	(28.8)	578.1	2,053.9
1971	595.6	1,157.0	(936.5)	(139.0)	(35.8)	(45.7)	556.2	2,308.8
1972	341.7	835.5	(699.2)	(56.1)	(41.8)	(38.5)	220.5	1,397.7
1973								
1974	314.4	533.1	(477.1)	(17.1)	(14.3)	(24.5)	229.6	1,077.1
1975								
1976	576.0	1,156.1	(1,001.8)	(54.4)	(60.3)	(39.6)	656.7	2,388.9
1977	815.2	1,263.8	(1,021.2)	(116.2)	(89.6)	(36.8)	1,130.8	3,209.8
1978 (June)	953.0	1,547.1	(1,239.6)	(166.7)	(105.4)	(35.4)	1,684.3	4,184.4

a/ Includes credits to private sector only. Data for 1950-64 are as of June 30 of each year and do not include Central Bank direct credits. Remaining data refer to December 31 unless otherwise noted. Deflation by IBRD adjusted CPI.

b/ Includes fishing and forestry.

Sources: Data for 1950-65 from Javier Fuenzalida and Sergio Undurraga, El Credito y su Distribucion en Chile, Editorial Landa Santiago, 1968. Tables 22 and 23. Data for 1965-70 from INE, Finanzas, Bancos y Cajas Sociales, Santiago, various years. Data from 1971 on are taken from various issues of Superintendencia de Bancos e Instituciones Financieras, Boletin Estadistico.

Table 6.7: CHILE - LEGAL RESERVE REQUIREMENTS, 1971-1977  
(Percent)

Institution and Type of Deposit	EFFECTIVE DATES																									
	May 1 1971	Dec 1 1971	Sept 1 1972	Jan 1 1974	Oct 1 1974	May 1 1975	July 1 1975	Aug 1 1975	Sept 3 1975	Oct 1 1975	Nov 1 1975	May 1 1976	Aug 1 1976	Nov 1 1976	Mar 10 1977	Apr 1 1977	May 1 1977	July 1 1977	Aug 1 1977	Sept 1 1977	Oct 16 1977	Nov 1 1977	Dec 1 1977	Feb 1 1978	Mar 1 1978	
<b>1. Private Commercial Banks</b>																										
a. Local currency																										
Demand deposits (private sector)																										
Basic rate	49 <sup>a/</sup>	62 <sup>a/</sup>	82 <sup>a/</sup>	50 <sup>d/</sup>	100 <sup>a/</sup>	100 <sup>a/</sup>	80	80	80	80	80	85	85	83	75	75	73	68	66	63	61	59	59	54	50	
Marginal rate	75 <sup>a/</sup>	75 <sup>a/</sup>	75 <sup>a/</sup>	95	80	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Demand deposits (public sector)																										
Basic rate	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Time deposits																										
Basic rate																										
30-89 days	18 <sup>b/</sup>	18 <sup>b/</sup>	18 <sup>b/</sup>	40	8	8	9.2	9.2	9.2	9.2	9.2	55	50	47	47	45	35	35	35	32	30	28	20	20	20	
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	20	15	15	15	12	10	8	8	8	8	
Marginal technical reserve	-	-	-	-	-	-	95 <sup>e/</sup>	90 <sup>e/</sup>	90 <sup>e/</sup>	80 <sup>e/</sup>	80 <sup>e/</sup>	-	12 <sup>h/</sup>	12 <sup>h/</sup>	12 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	
Savings deposits																										
Basic rate	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
b. Foreign currency																										
Demand deposits																										
Basic rate	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Time deposits																										
Basic rate	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
<b>2. State Bank</b>																										
a. Local currency																										
Demand deposits (private sector)																										
Savings																										
Basic rate	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Other																										
Basic rate	-	-	-	20	100 <sup>a/</sup>	100 <sup>a/</sup>	80	80	80	80	80	85	85	83	75	75	73	68	66	63	61	59	59	54	50	
Demand deposits (public sector)																										
Consolidated account																										
Basic rate	-	-	-	80	100	100	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	
Other accounts																										
Basic rate	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time deposits																										
Basic rate																										
30-89 days	18	18	18	40	8	8	9.2	9.2	9.2	9.2	55	50	47	47	45	35	35	35	32	30	28	20	20	20		
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	20	15	15	15	12	10	8	8	8	8	
Marginal technical reserve	-	-	-	-	-	-	95 <sup>e/</sup>	90 <sup>e/</sup>	90 <sup>e/</sup>	80 <sup>e/</sup>	80 <sup>e/</sup>	-	12 <sup>h/</sup>	12 <sup>h/</sup>	12 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	8 <sup>h/</sup>	
Savings deposits																										
Basic rate	8	8	8	8	8	8	9.2	9.2	9.2	9.2	9.2	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
b. Foreign currency																										
Demand deposits																										
Basic rate	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Time deposits																										
Basic rate	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
<b>3. Development and Mortgage Banks</b>																										
Less than 90 days																										
Basic reserve	-	-	-	-	-	-	-	-	-	-	9.2	30	35 <sup>i/</sup>	35	35	35	35	35	35	32	30	28	20	20	20	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Basic reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	8	8	8	20	15	15	15	12	10	8	8	8	8	8	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	12	12	12	-	-	-	-	-	-	-	-	-	-	-	
<b>4. Finance Companies</b>																										
Less than 90 days																										
Basic reserve	-	-	-	-	-	4	8	8	8	8	9.2	30	35 <sup>i/</sup>	35	35	35	35	35	35	32	30	28	20	20	20	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Basic reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	8	8	8	20	15	15	15	12	10	8	8	8	8	8	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	12	12	12	-	-	-	-	-	-	-	-	-	-	-	
<b>5. Savings and Loan Associations</b>																										
Less than 90 days																										
Basic reserve	-	-	-	-	-	8	8	8	8	8	9.2	30	35 <sup>i/</sup>	35	35	35	35	35	35	32	30	-	-	-	-	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Basic reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	8	8	8	20	15	15	15	12	10	-	-	-	-	-	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	12	12	12	-	-	-	-	-	-	-	-	-	-	-	
<b>6. Savings Cooperatives and Credit Unions<sup>i/</sup></b>																										
Less than 90 days																										
Basic reserve	-	-	-	-	-	-	-	-	-	-	-	30	35 <sup>i/</sup>	35	35	35	35	35	35	32	30	28	20	20	20	
Technical reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	9.2	8	8	8	20	15	15	15	12	10	8	8	8	8	
Basic reserve																										
90 days - 1 year	-	-	-	-	-	-	-	-	-	-	-	12	12	12	-	-	-	-	-	-	-	-	-	-	-	

a/ Banks in Santiago and Valparaiso only. Others affected by basic and marginal rates of 20 percent and zero, respectively. The basic rate is applied to the average daily deposits of January 1971.  
b/ Banks outside Santiago and Valparaiso affected by rate of 8 percent.  
c/ Applied to deposits above January 1971 base.  
d/ Applied to average daily deposits of December 1973.  
e/ Applied to average daily deposits of September 1974.  
f/ To be invested in either non-adjustable Treasury notes or Central Bank notes.  
g/ Marginal reserve requirement on deposits of 90 days - 1 year.  
h/ An additional 30 percent of deposits are required to be held in indexed securities with maturities of at least 1 year. At least half of these must be instruments determined by the Central Bank to be easily liquidated.  
i/ Effective December 1, 1976.  
j/ Applies only to savings cooperatives and credit unions whose deposits exceed 20,000 Development Units.

Source: Central Bank

**Table 6.8:** CHILE - ANNUAL INTEREST RATES ON INDEXED SAVINGS INSTRUMENTS  
(Percent)

Institution/Instrument	Interest Rate	Form of Payment
Treasury:		
Readjustable Treasury Bills	6.5	Semi-annual
Central Bank:		
Readjustable Savings Certificate (CAR)	7.0	Annual
State Bank:		
Term Savings Deposits	7.0	Annual
SINAP:		
Voluntary Savings Accounts	5.0	Quarterly
Systematic Savings Accounts	From 4.0	Annual
Readjustable Mortgage Securities (VHR)	6.0	Quarterly
Readjustable Mortgage Bonds (BHR)	8.0	Semi-annual
Mortgage and Development Banks:		
Readjustable Development Bonds	From 6.0	Determined issue by issue
CORVI:		
Savings Deposits	3.0	Incorporated into share value
CORFO:		
Readjustable Investment Bonds	7.0	Semi-annual
Debt Amortization Fund:		
Reconstruction Bonds	8.5	Semi-annual
Cooperatives:		
Readjustable Savings Shares	From 7.0	Determined by each cooperative
Private Commercial Banks:		
Deposits in Savings and Investment Depts.	12.0-18.0	Negotiated
Readjustable Term Deposits	13.0-21.0	Negotiated
Other:		
Readjustable Debentures of the Compañía Manufacturera Papeles y Cartones (CMPC)	8.0	Quarterly

Source: Central Bank

**Table 6.9:** CHILE - AVERAGE MONTHLY INTEREST RATES ON NON-INDEXED 30-DAY TIME DEPOSITS, OCTOBER 1974-DECEMBER 1978

(Percent)

Year/Month	Commercial Banks		Finance Companies			Savings and Loan Associations		
	Nominal	Real <sup>a/</sup>	Nominal	Real	<sup>a/</sup>	Nominal	Real	<sup>a/</sup>
1974: October	6.6	-10.3	8.2	-9.0		7.2	-9.9	
November	6.6	- 2.9	8.2	-1.4		7.2	-2.3	
December	9.0	2.3	12.5	5.6		8.8	2.2	
1975: January	9.3	- 4.0	11.1	-2.5		8.8	-4.5	
February	10.4	- 5.2	11.8	-4.0		11.0	-4.7	
March	11.5	- 8.0	13.3	-6.5		12.0	-7.6	
April	12.6	- 6.8	17.1	-3.1		15.6	-4.3	
May	14.5	- 1.3	18.4	2.1		16.9	0.8	
June	15.8	- 3.3	18.1	-1.4		17.9	-1.6	
July	15.2	5.4	18.4	8.3		17.1	7.1	
August	13.0	3.8	14.0	4.7		13.7	4.4	
September	9.5	0.3	12.1	2.7		13.0	3.5	
October	8.0	- 0.4	10.3	1.8		9.0	0.6	
November	8.0	- 0.2	9.0	0.7		8.5	0.3	
December	10.0	2.7	11.0	3.6		11.0	3.6	
1976: January	10.1	- 0.4	11.5	0.9		11.2	0.7	
February	10.2	0.1	11.2	1.0		11.0	0.8	
March	10.0	- 3.2	10.8	-2.4		10.9	-2.3	
April	10.4	- 1.3	11.6	-0.3		11.5	-0.4	
May	12.3	2.3	12.6	2.6		12.7	2.6	
June	11.6	- 0.6	12.2	-0.1		12.0	-0.3	
July	7.9	- 0.9	8.9	-		8.6	-0.3	
August	8.2	2.6	8.7	3.0		8.5	2.8	
September	7.9	0.3	8.1	0.5		8.0	0.4	
October	8.1	1.3	8.5	1.7		8.3	1.5	
November	8.6	4.6	8.9	4.9		8.8	4.8	
December	9.1	3.8	9.5	4.2		9.2	3.9	
1977: January	7.9	1.9	8.6	2.5		7.6	1.6	
February	6.9	1.0	7.6	1.7		6.7	0.9	
March	6.2	0.1	6.8	0.7		-	-	
April	5.7	0.9	6.0	1.2		-	-	
May	5.2	1.4	5.6	1.8		-	-	
June	4.7	1.4	5.1	1.8		-	-	
July	4.5	0.6	5.1	1.2		-	-	
August	4.5	1.0	5.0	1.6		-	-	
September	4.7	1.0	5.1	1.4		-	-	
October	5.6	1.3	5.9	1.6		-	-	
November	6.1	3.8	6.4	4.1		-	-	
December	6.1	2.9	6.4	3.2		-	-	
1978: January	6.0	4.2	6.2	4.4		-	-	
February	4.7	2.2	4.9	2.4		-	-	
March	3.0	0.1	3.2	0.3		-	-	
April	3.4	0.7	3.5	0.8		-	-	
May	4.6	2.4	4.7	2.5		-	-	
June	3.4	1.3	3.5	1.5		-	-	
July	3.2	0.7	3.3	0.8		-	-	
August	3.8	1.0	3.9	1.1		-	-	
September	4.3	1.3	4.5	1.6		-	-	
October	4.6	2.7	4.7	2.8		-	-	
November	4.3	2.9	4.5	3.2		-	-	
December	4.7	3.1	4.9	3.3		-	-	

<sup>a/</sup> Deflated by CPI.

Source: Central Bank

**Table 6.10:** CHILE - AVERAGE MONTHLY INTEREST RATES CHARGED ON SHORT-TERM CREDITS, 1975-DECEMBER 1978

(Percent)

Year/Month	Commercial Banks		b/ a/	Finance Companies		Savings and Loan Associations			
	Nominal	Real		Nominal	Real	a/	Nominal	Real	a/
1975: January	9.6	-3.5		13.9	-0.0		-	-	
February	9.6	-5.9		14.1	-2.1		-	-	
March	9.6	-9.6		15.0	-5.1		-	-	
April	9.6	-9.3		20.0	-0.7		-	-	
May	19.0	2.6		22.2	5.3		23.6	6.6	
June	21.0	1.0		23.7	5.3		23.7	3.3	
July	21.2	10.9		24.6	14.0		22.8	12.4	
August	19.1	9.4		20.7	10.8		18.4	8.7	
September	18.7	8.7		19.0	8.9		17.8	7.9	
October	12.0	3.3		12.0	3.3		12.0	3.3	
November	12.0	3.5		12.0	3.5		12.0	3.5	
December	14.5	6.9		15.5	7.8		15.5	7.8	
1976: January	14.6	3.7		15.5	4.5		15.4	4.4	
February	14.5	3.9		15.3	4.7		14.5	4.0	
March	14.6	1.0		15.3	1.6		15.2	1.5	
April	14.8	2.6		15.3	3.0		14.9	2.7	
May	15.1	4.8		15.8	5.5		15.6	5.3	
June	14.1	1.6		15.4	2.8		15.1	2.5	
July	11.8	2.7		12.2	3.0		11.6	2.5	
August	11.9	6.0		11.8	5.9		11.4	5.6	
September	11.6	3.7		11.3	3.4		11.0	3.2	
October	11.8	4.8		11.8	4.8		11.3	4.3	
November	12.5	8.4		12.9	8.8		12.8	8.7	
December	13.2	7.7		13.5	8.0		13.5	8.0	
1977: January	12.4	6.2		13.1	6.8		-	-	
February	11.5	5.4		11.9	5.8		-	-	
March	10.1	3.8		10.4	4.1		-	-	
April	8.8	3.9		9.2	4.3		-	-	
May	7.8	3.8		8.3	4.3		-	-	
June	6.9	3.5		7.1	3.7		-	-	
July	6.4	2.4		6.8	2.8		-	-	
August	6.2	2.8		6.8	3.3		-	-	
September	6.2	2.4		6.6	2.8		-	-	
October	6.9	2.6		7.4	3.1		-	-	
November	7.5	5.2		7.8	5.5		-	-	
December	7.4	4.2		7.7	4.5		-	-	
1978: January	7.3	5.4		7.6	5.7		-	-	
February	6.1	3.6		6.4	3.9		-	-	
March	4.4	1.5		4.5	1.5		-	-	
April	4.4	1.8		4.6	2.0		-	-	
May	5.7	3.6		5.9	3.7		-	-	
June	4.8	2.8		5.0	3.0		-	-	
July	4.4	1.8		4.5	2.0		-	-	
August	4.7	1.8		4.9	2.1		-	-	
September	5.1	2.1		5.3	2.4		-	-	
October	5.5	3.6		5.8	3.8		-	-	
November	5.3	4.0		5.5	4.2		-	-	
December	5.6	4.0		5.7	4.2		-	-	

a/ Deflated by CPI.

b/ Excluding agricultural credit.

Source: Central Bank

**Table 6.11:** CHILE - NOMINAL INTEREST RATE SPREADS ON SHORT-TERM OPERATIONS,  
MAY 1975-DECEMBER 1978

(Percent)

Year/Month	Commercial Banks		Finance Companies	
	Gross <u>a/</u>	Net <u>b/</u>	Gross <u>a/</u>	Net <u>b/</u>
1975: May	4.5	3.0	3.6	2.0
June	5.2	3.5	5.6	3.1
July	6.0	4.0	6.2	4.2
August	6.1	0.9	6.7	5.0
September	8.8	-0.3	5.6	4.2
October	4.0	-0.0	1.7	1.3
November	4.0	0.3	3.0	1.3
December	4.5	-1.3	4.5	1.6
1976: January	4.5	-0.3	4.0	1.4
February	4.3	0.2	4.1	1.8
March	4.6	0.4	4.5	2.2
April	4.4	-0.0	3.7	1.4
May	2.8	0.9	3.2	0.9
June	2.5	0.8	3.2	1.0
July	3.9	1.3	3.3	1.1
August	3.7	1.0	2.8	0.5
September	3.7	1.0	3.2	0.9
October	3.7	0.9	3.3	0.9
November	3.9	0.9	4.0	1.3
December	4.1	0.8	4.0	1.0
1977: January	4.6	2.1	4.5	1.9
February	4.6	2.1	4.3	1.6
March	3.9	1.8	3.6	1.3
April	3.1	1.5	3.2	1.4
May	2.6	1.5	2.7	1.4
June	2.2	1.4	2.0	1.2
July	1.9	1.3	1.7	0.9
August	1.8	1.2	1.8	1.0
September	1.4	0.9	1.5	0.8
October	1.3	0.6	1.5	0.7
November	1.4	0.6	1.5	0.6
December	1.3	1.1	1.4	1.1
1978: January	1.3	1.0	1.4	1.1
February	1.4	1.4	1.5	1.4
March	1.4	1.3	1.3	1.2
April	1.1	0.8	1.2	0.8
May	1.2	0.6	1.2	0.6
June	1.5	1.2	1.5	1.2
July	1.2	0.9	1.2	0.9
August	0.9	0.6	1.0	0.7
September	0.8	0.5	0.8	0.4
October	0.9	0.6	1.1	0.7
November	1.0	0.8	1.1	0.7
December	0.9	0.6	0.9	0.5

a/ Gross spread is the difference between loan and deposit rates.

b/ Net spread is gross spread less the cost of maintaining legal reserves.

Source: Central Bank



VII. AGRICULTURE

Table 7.1: CHILE - ESTIMATED GROSS VALUE OF MAJOR FARM PRODUCTS, 1964/65-1973/74  
(Millions of pesos at prices of December 1974) <sup>a/</sup>

	C R O P Y E A R S		
	1964/65	1969/70	1973/74
<u>Field crops:</u>			
Wheat	215.9	252.8	142.0
Oats	10.9	14.7	19.9
Barley	12.1	16.0	24.5
Rye	1.1	1.4	1.9
Rice	16.0	15.2	6.8
Corn	35.6	32.8	50.2
Beans	15.3	17.1	19.5
Lentils	4.2	5.0	5.7
Chickpeas	1.8	1.9	1.8
Peas	1.1	1.6	2.7
Potatoes	34.7	33.8	50.0
Sunflower seeds	11.9	7.4	2.7
Rapeseeds	16.6	16.1	8.0
Sugar beet	22.6	46.6	26.5
Tobacco	1.1	2.0	1.2
Subtotal	<u>400.9</u>	<u>464.4</u>	<u>363.4</u>
<u>Tree fruits:</u>			
Apples	n.a.	n.a.	29.3
Peaches and nectarines	n.a.	n.a.	31.3
Table grapes	n.a.	n.a.	13.3
Oranges	n.a.	n.a.	12.9
Lemons	n.a.	n.a.	18.3
Pears	n.a.	n.a.	9.6
Plums	n.a.	n.a.	2.6
Avocados	n.a.	n.a.	13.6
Cherries	n.a.	n.a.	3.6
Apricots	n.a.	n.a.	7.1
Walnuts	n.a.	n.a.	4.7
Cherimoya	n.a.	n.a.	1.2
Quince	n.a.	n.a.	0.9
Almonds	<u>n.a.</u>	<u>n.a.</u>	<u>3.3</u>
Subtotal	<u>n.a.</u>	<u>n.a.</u>	<u>151.7</u>
<u>Livestock products:</u>			
Beef	202.4	250.0	283.6
Mutton	27.9	26.3	25.2
Pork	36.0	44.2	39.8
Poultry	39.4	102.2	92.5
Eggs	59.1	67.1	77.7
Milk	109.0	120.5	121.9
Wool	34.2	31.4	28.3
Subtotal	<u>508.0</u>	<u>641.7</u>	<u>669.0</u>
<u>Garden fruits and vegetables</u>			<u>157.5</u>
<u>Wine</u>	<u>154.0</u>	<u>151.8</u>	<u>196.2</u>
<u>TOTAL</u>			<u>1,537.8</u>

a/ Value of production was calculated by multiplying output by price to producer prevailing during the prime marketing period, deflated by the official CPI base December 1974=100.

Source: Data on field crops, livestock products, tree fruits and wine from: ODEPA, Chile: Estadísticas Agropecuarias 1965-1974, Santiago, 1976; garden fruits and vegetables are taken from AID Sector Overview.

Table 7.2: CHILE - AREA PLANTED OF 14 MAJOR CROPS  
(Thousands of hectares)

Crop	C R O P Y E A R S																		
	1929/30 (census)	1935/36 (census)	1954/55 (census)	1955/56- 1959/60 Average	1960/61- 1963/64 Average	1964/65 (census)	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Wheat	697.9	775.6	792.2	802.6	759.3	727.1	780.0	718.5	700.2	743.0	740.3	727.4	711.8	533.8	591.0	686.2	697.6	628.0	579.6
Barley	61.6	66.0	62.5	53.1	42.1	38.3	38.7	50.4	71.6	44.4	47.4	52.5	67.1	63.9	79.8	66.2	57.8	63.1	63.8
Rye	3.4	9.7	6.7	7.3	6.8	7.1	6.9	6.5	6.8	8.4	8.3	8.9	9.2	6.3	10.6	8.7	9.5	11.4	11.3
Oats	120.4	86.9	94.5	93.2	79.0	70.3	66.1	68.3	105.4	83.1	72.6	75.3	83.8	75.7	96.6	94.4	79.5	75.0	74.8
Rice	-	-	33.9	33.1	31.9	27.5	36.9	33.0	32.5	16.2	25.2	27.3	25.7	18.5	13.2	22.9	28.6	35.5	32.6
Corn	37.9	41.9	71.9	77.3	85.1	87.6	80.7	92.2	88.6	58.4	73.9	77.0	84.5	86.4	107.4	91.6	96.2	115.6	93.9
Beans	66.5	73.7	77.9	78.6	71.8	58.4	64.7	68.4	53.4	47.2	57.2	69.9	79.5	67.6	73.9	68.0	81.6	97.3	111.7
Peas	21.1	22.8	12.4	12.8	10.0	7.3	10.7	8.5	17.0	10.9	10.7	10.1	13.1	11.7	15.4	8.6	8.5	15.7	17.2
Chickpeas	5.9	10.3	7.6	6.9	7.7	8.4	8.7	9.3	16.1	8.7	11.3	16.1	20.3	15.5	13.8	7.8	7.1	8.3	11.0
Lentils	14.5	38.3	25.2	28.1	25.6	24.1	10.6	6.8	7.4	13.7	17.3	18.1	18.3	16.0	19.5	20.6	22.5	30.9	31.8
Potatoes	42.6	42.8	81.5	86.6	90.3	91.1	76.3	77.1	79.2	76.5	71.7	80.0	79.2	66.7	93.3	71.5	68.4	85.9	90.8
Sunflower Seeds	-	-	28.3	38.0	32.3	31.9	42.1	22.4	29.0	24.6	20.2	15.3	14.8	11.9	8.4	13.3	21.5	10.3	20.9
Rapeseeds	-	-	0.1	16.2	37.8	57.6	61.8	45.1	37.4	48.4	53.7	49.4	56.1	30.8	25.0	45.5	59.6	53.7	34.4
Sugar Beets	-	-	1.4	9.8	14.3	18.0	21.0	28.7	30.2	27.6	41.7	35.1	35.0	23.0	26.3	40.3	63.8	56.2	21.0
Total	1,071.8	1,168.0	1,296.1	1,343.6	1,294.0	1,254.6	1,305.2	1,232.2	1,274.8	1,211.1	1,251.5	1,262.4	1,294.7	1,027.8	1,172.2	1,245.6	1,302.1	1,286.8	1,194.7

Source: INE, IANSA

**Table 7.2a:** CHILE - INDEX OF AREA PLANTED, 14 MAJOR CROPS, 1930-1977  
(Average 1960/61-1963/64=100)

Crop	C R O P Y E A R S																		
	1929/30	a/ 1935/36	a/ 1954/55	a/1955/56- 1959/60	b/ 1960/61- 1963/64	b/ 1964/65	a/ 1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Wheat	92	102	104	106	100	96	103	94	92	98	98	96	94	70	78	90	92	83	76
Barley	146	157	148	126	100	91	92	120	170	105	112	125	159	152	190	157	137	150	152
Rye	50	143	99	107	100	104	101	96	100	124	122	131	135	93	156	128	140	168	166
Oats	152	110	120	118	100	89	84	86	133	105	92	95	106	96	122	119	101	95	95
Rice	n.a.	n.a.	106	104	100	86	116	103	102	51	79	86	81	58	41	72	90	111	102
Corn	45	49	84	91	100	103	95	108	104	69	87	90	99	102	126	108	113	136	110
Beans	93	103	108	109	100	81	90	95	74	66	80	97	111	94	103	95	114	136	156
Peas	211	228	124	128	100	73	107	85	170	109	107	101	131	73	117	86	85	157	172
Chickpeas	77	134	99	90	100	109	113	121	209	113	147	209	264	109	201	101	92	108	143
Lentils	57	150	98	110	100	94	41	27	29	54	68	71	71	62	76	80	88	121	124
Potatoes	47	47	90	96	100	101	84	85	88	85	79	89	88	74	103	79	76	95	101
Sunflower seeds	n.a.	n.a.	88	118	100	99	130	69	90	76	63	47	46	37	26	41	67	32	65
Rapeseeds	n.a.	n.a.	0	43	100	152	163	119	99	128	142	131	148	81	66	120	158	142	91
Sugar beets	n.a.	n.a.	10	69	100	126	147	201	211	193	292	245	245	161	184	282	446	393	147
Total	83	90	100	104	100	97	101	95	99	94	97	98	100	79	91	96	101	99	92

a/ Agricultural Census years.  
b/ Annual averages.

Source: Appendix Table 7.2

**Table 7.3: CHILE - PRODUCTION OF 14 MAJOR CROPS**  
(Thousands of metric tons)

Crop	C R O P Y E A R S																		
	1929/30 (census)	1935/36 (census)	1954/55 (census)	1955/56- 1959/60 Average	1960/61- 1963/64 Average	1964/65 (census)	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Wheat	912.5	865.9	1,097.3	1,069.4	1,073.7	1,115.8	1,346.4	1,203.4	1,215.9	1,214.2	1,306.9	1,368.0	1,195.1	746.7	939.0	1,003.1	866.5	1,219.3	892.6
Barley	99.9	106.9	99.9	91.4	73.8	74.0	88.0	117.5	156.9	80.1	97.4	113.6	139.0	107.4	149.6	120.6	89.0	143.1	125.5
Rye	3.3	7.2	6.9	5.9	6.8	8.5	11.1	8.4	7.7	10.2	10.7	12.3	12.4	8.5	14.6	11.1	9.3	16.4	10.8
Oats	151.0	98.5	130.3	100.2	90.7	82.2	107.4	115.2	158.4	97.3	110.6	112.0	111.3	109.1	149.9	131.1	95.9	123.7	92.6
Rice	-	-	91.4	83.3	85.7	80.4	76.7	84.2	93.5	36.7	76.2	67.1	86.3	55.0	34.3	76.4	97.6	120.0	104.8
Corn	59.6	52.2	116.5	157.3	190.3	259.9	285.3	362.2	320.9	153.8	239.1	258.3	283.0	294.0	366.3	329.0	248.0	355.3	256.9
Beans	76.7	69.5	77.7	71.3	69.4	58.9	68.8	89.8	65.1	46.8	65.6	72.2	82.9	65.0	74.8	74.1	70.3	112.4	112.1
Peas	19.6	18.9	11.1	7.9	5.8	5.3	13.9	8.9	11.6	6.7	7.4	8.5	10.7	8.8	12.5	6.3	7.1	13.7	15.7
Chickpeas	4.4	4.4	3.9	3.4	3.6	5.1	4.9	8.0	7.6	3.5	5.4	7.2	9.3	4.1	5.0	4.9	2.7	5.0	5.5
Lentils	13.2	26.1	17.6	17.2	14.0	9.3	4.6	3.9	4.0	7.8	11.2	12.0	10.7	9.8	12.8	12.1	13.5	23.8	19.0
Potatoes	402.3	343.5	725.7	753.4	816.0	703.3	803.0	716.6	724.1	604.6	683.8	835.8	733.1	623.6	1,012.0	737.9	538.9	928.4	980.7
Sunflower Seeds	-	-	40.2	46.9	35.2	45.2	56.0	33.3	43.0	28.2	28.2	20.3	19.9	13.5	10.4	17.8	27.0	15.3	30.0
Rapeseeds	-	-	0.2	12.8	42.5	72.0	77.1	60.7	47.9	63.6	69.9	82.1	78.0	40.0	34.8	61.4	104.8	82.7	52.0
Sugar Beets	-	-	30.1	292.1	508.1	680.6	767.6	1,047.9	1,142.6	1,065.9	1,655.1	1,390.7	1,201.6	855.9	915.3	1,481.0	2,276.2	2,208.4	840.4

Note: Production data described here do not necessarily correspond to implicit output suggested by Table 7.1, which uses a different source.

Source: INE, IANSA

Table 7.3a: CHILE - INDEX OF CROP PRODUCTION, 14 MAJOR CROPS, 1930-1978

(Average 1960/61-1963/64=100)

		C R O P Y E A R S																		
Weights	Crop	1929/30	1935/36	1954/55	1955/56- 1960/61-		1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
					1959/60	1963/64														
.46	Wheat	85	81	102	100	100	104	125	112	113	113	122	137	111	70	87	93	81	114	83
.03	Barley	135	145	135	124	100	100	119	159	213	109	132	154	188	146	219	163	121	194	170
.01	Rye	49	106	101	87	100	125	163	124	113	150	157	181	182	125	278	163	137	241	159
.03	Oats	166	109	144	110	100	91	118	127	175	107	122	123	123	120	173	145	106	136	102
.01	Rice	n.a.	n.a.	107	97	100	94	90	98	109	43	89	78	101	64	31	89	106	140	122
.07	Corn	31	27	61	83	100	137	150	190	169	81	126	136	149	154	193	173	130	187	135
.07	Beans	111	100	112	103	100	85	99	129	94	67	95	104	119	94	105	107	101	162	162
.01	Peas	338	326	191	136	100	91	240	153	200	116	128	147	184	152	233	109	122	236	271
.01	Chickpeas	122	122	108	94	100	142	136	222	211	97	150	200	258	114	183	136	75	139	153
.01	Lentils	94	186	126	123	100	66	33	28	29	56	80	86	76	70	96	86	96	169	136
.12	Potatoes	49	42	89	92	100	86	98	88	89	74	84	102	90	76	114	90	66	114	120
.02	Sunflower seeds	n.a.	n.a.	114	133	100	128	159	95	122	80	80	58	57	38	28	49	77	43	85
.04	Rapeseeds	n.a.	n.a.	0	30	100	169	181	143	113	150	164	193	184	94	80	132	247	195	122
.11	Sugar beets	n.a.	n.a.	6	57	100	134	151	206	225	210	326	274	236	168	180	291	448	435	165
1.00	Total <sup>a/</sup>		70	66	87	100	109	127	130	131	113	139	146	132	95	118	127	134	166	115
	Yield index	84	73	87	84	100	112	126	137	132	120	143	149	132	120	130	132	133	168	125

a/ Weighted by share in value of output during 1969.

Source: Appendix Table 7.3

Table 7.4: CHILE - YIELDS FOR 14 MAJOR CROPS

(Metric tons per hectare)

Crop	C R O P Y E A R S											
	1929/30	1935/36	1954/55	1955/56 <sup>a/</sup> 1959/60	1959/60	1960/61- <sup>a/</sup> 1963/64	1964/65 (Census)	1965/66	1966/67	1967/68	1968/69	1969/70
Wheat	1.31	1.12	1.39	1.33	1.25	1.42	1.53	1.73	1.67	1.74	1.63	1.77
Barley	1.62	1.62	1.60	1.72	1.79	1.76	1.93	2.28	2.33	2.19	1.81	2.06
Rye	0.96	0.74	1.03	0.81	0.77	1.00	1.19	1.61	1.30	1.14	1.21	1.29
Oats	1.25	1.13	1.38	1.07	1.03	1.15	1.17	1.62	1.69	1.50	1.17	1.52
Rice	-	-	2.70	2.51	2.76	2.69	2.92	2.08	2.55	2.88	2.27	3.02
Corn	1.57	1.25	1.62	2.03	1.95	2.23	2.97	3.54	3.93	3.62	2.63	3.24
Beans	1.15	0.94	1.00	0.90	0.91	0.97	1.01	1.06	1.31	1.22	0.99	1.15
Peas	0.93	0.83	0.89	0.62	0.50	0.59	0.73	1.30	1.05	0.68	0.62	0.69
Chickpeas	0.74	0.43	0.52	0.49	0.38	0.47	0.61	0.57	0.86	0.47	0.40	0.48
Lentils	0.91	0.68	0.70	0.61	0.55	0.55	0.39	0.43	0.58	0.54	0.57	0.65
Potatoes	9.44	8.02	8.90	8.72	7.81	9.05	7.72	10.53	9.29	9.14	7.90	9.54
Sunflower seeds	-	-	1.42	1.24	0.98	1.10	1.41	1.33	1.49	1.49	1.14	1.39
Rapeseeds	-	-	1.68	0.80	1.14	1.12	1.25	1.25	1.35	1.28	1.32	1.30
Sugar beets	-	-	21.66	29.57	28.02	35.03	37.94	36.48	36.56	37.87	38.55	39.69

Crop	C R O P Y E A R S							
	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Wheat	1.88	1.68	1.40	1.58	1.46	1.24	1.94	1.54
Barley	2.16	2.07	1.68	1.85	1.82	1.54	2.27	1.97
Rye	1.38	1.35	1.35	1.40	1.27	0.97	1.44	0.96
Oats	1.49	1.33	1.44	1.57	1.39	1.21	1.65	1.24
Rice	2.46	3.36	2.96	2.63	3.34	3.42	3.38	3.21
Corn	3.35	3.35	3.40	3.43	3.59	2.58	3.07	2.74
Beans	1.03	1.04	0.96	1.01	1.09	0.86	1.15	1.00
Peas	0.84	0.81	0.75	0.81	0.73	0.84	0.88	0.91
Chickpeas	0.45	0.46	0.27	0.36	0.63	0.39	0.60	0.50
Lentils	0.66	0.59	0.61	0.65	0.59	0.60	0.77	0.60
Potatoes	10.45	9.26	9.35	10.85	10.32	7.88	10.81	10.80
Sunflower seeds	1.33	1.35	1.13	1.24	1.34	1.25	1.48	1.44
Rapeseeds	1.66	1.39	1.30	1.39	1.35	1.76	1.54	1.51
Sugar beets	39.58	38.22	37.21	34.80	36.72	35.68	39.27	40.02

a/ Unweighted annual average.

Table 7.4a: CHILE - INDEX OF YIELDS PER HECTARE, 14 MAJOR CROPS, 1930-1978  
(Average 1960/61-1963/64=100)

Crop	C R O P   Y E A R S																		
	1929/30	1935/36	1954/55	1955/56- 1959/60	1960/61- 1963/54	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
Wheat	92	79	98	94	100	108	122	118	123	115	125	142	118	99	112	103	87	137	108
Barley	92	92	91	98	100	110	130	132	124	103	118	123	118	95	104	103	88	129	112
Rye	96	74	103	81	100	119	161	130	114	121	129	139	135	135	141	127	97	144	96
Oats	109	98	120	93	100	102	141	147	130	102	132	130	116	125	137	121	105	143	108
Rice	-	-	100	93	100	109	77	95	107	84	112	91	125	110	99	124	118	126	119
Corn	70	56	73	91	100	133	159	176	162	118	145	151	150	152	154	161	116	138	123
Beans	119	97	103	93	100	104	109	135	126	102	119	106	107	99	107	112	89	120	103
Peas	158	141	151	105	100	124	220	178	115	105	117	142	137	127	139	124	142	147	154
Chickpeas	157	91	111	104	100	130	121	183	100	85	102	96	98	57	100	134	83	128	106
Lentils	165	124	127	111	100	71	78	105	98	104	118	120	107	111	116	107	109	140	109
Potatoes	104	89	98	96	100	85	116	103	101	87	105	115	102	103	115	114	87	119	119
Sunflower seeds	-	-	129	113	100	128	121	135	135	104	126	121	123	103	112	117	114	135	131
Rapeseeds	-	-	150	71	100	112	112	121	114	118	116	148	124	116	122	110	157	138	135
Sugar beets	-	-	62	84	100	108	104	104	108	110	113	113	109	106	99	105	102	112	114

Source: Appendix Table 7.4



Table 7.5: CHILE - OUTPUT, AREA PLANTED, AND YIELDS OF MAJOR TREE FRUITS, 1965 and 1974

Species	Area Planted ( '000 has)		Output ( '000 mt)		Yield (mt/ha)	
	1965	1974	1965	1974	1965	1974
Apples	13.8	11.3	121.4	120.3	8.80	10.65
Peaches and nectarines	12.1	14.8	70.1	139.5	5.79	9.46
Table grapes	10.2	4.1	57.8	57.2	5.67	14.02
Oranges	5.2	4.5	48.6	46.2	9.35	10.29
Lemons	4.8	7.4	26.7	63.0	5.56	8.56
Pears	3.4	2.6	24.2	32.5	7.12	12.53
Plums	3.4	1.7	14.7	12.6	4.32	7.49
Avocados	4.7	4.4	11.5	14.2	2.45	3.23
Cherries	2.6	1.0	5.9	4.9	2.27	4.86
Apricots	1.2	1.4	3.8	12.0	3.17	8.81
Walnuts	3.4	3.7	2.2	2.5	0.65	0.69
Cherimoya	0.5	0.4	2.0	1.2	4.00	3.38
Quince	0.1	1.0	1.8	5.1	18.00	5.36
Almonds	2.6	1.6	0.4	0.5	0.15	0.30
Total	68.0	59.6				

Source: ODEPA, Estadísticas Agropecuarias 1965-1974, Santiago, 1976

**Table 7.6:** CHILE - GRAPE CULTIVATION AND WINE PRODUCTION

Year	Area Cultivated ( '000 ha)	Wine Production (Mill. liters)	Other Beverages (Mill. liters)
1953	88.9	364.7	n.a.
1954	91.9	352.6	7.3
1955	91.8	364.0	6.5
1956	98.9	395.4	5.6
1957	92.0	357.9	5.1
1958	95.7	372.0	5.2
1959	100.4	363.8	7.0
1960	98.0	368.8	7.0
1961	101.0	485.3	7.3
1962	102.2	552.9	10.0
1963	101.1	460.6	9.2
1964	103.4	483.7	9.5
1965	103.0	364.8	10.2
1966	102.6	473.6	12.4
1967	101.7	488.8	12.0
1968	103.8	518.2	11.3
1969	102.8	381.2	11.6
1970	104.0	363.6	10.3
1971	105.4	509.8	15.5
1972	105.9	640.2	13.4
1973	108.1	544.6	11.9
1974	110.8	466.5	15.0
1975	110.0	464.9	n.a.
1976	110.7 <sup>a/</sup>	514.3	n.a.

<sup>a/</sup> Assumes area devoted to grapes for other beverages remained constant at 1975 level; i.e. 4,800 ha.

Source: INE; ODEPA; Servicio de Impuestos Internos

**Table 7.7:** CHILE - LIVESTOCK BY TYPE, 1965-1977

(Thousand head)

Year	Cattle	Sheep	Pigs	Egg-Laying Chickens
1965	2,870.2	6,690.3	1,021.6	6,703.4
1966	2,869.4	6,630.4	1,022.3	7,747.6
1967	2,883.5	6,732.6	1,023.1	9,433.8
1968	2,910.7	6,834.7	1,023.8	8,699.1
1969	2,916.5	6,506.5	1,024.5	7,735.8
1970	2,931.1	6,131.2	1,025.3	7,105.8
1971	2,890.8	5,906.7	1,026.0	7,513.3
1972	2,961.5	5,529.8	1,026.8	7,412.7
1973	3,164.6	5,353.3	967.8	7,862.1
1974	3,356.2	5,543.7	866.1	7,827.8
1975	3,332.7	5,644.4	700.6	6,789.0
1976	3,256.9	5,729.1	704.1	6,152.0
1977	3,314.8	5,700.8	908.5	6,496.8

Source: ODEPA

**Table 7.8: CHILE - LIVESTOCK PRODUCTION, 1965-1976**

	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77 <sup>p/</sup>
Beef ('000 mt)	139	159	160	173	168	172	158	160	172	195	206	184	n.a.
Lamb and mutton ('000 mt)	27	30	34	28	27	26	24	23	21	26	27	29	n.a.
Pork ('000 mt)	40	41	43	48	48	49	51	53	47	44	34	35	n.a.
Chicken - broilers ('000 mt)	9	20	27	28	37	46	41	41	35	40	29	31	30
Milk (million liters)	810	812	829	846	889	895	940	880	855	906	956	1,022	n.a.
Eggs (millions)	1,063	1,255	1,563	1,489	1,307	1,206	1,310	1,307	1,394	1,396	1,196	1,067	1,137
Wool ('000 mt)	22	22	22	23	21	20	19	18	18	18	19	19	

<sup>p/</sup> Provisional.

Source: ODEPA

**Table 7.9:** CHILE - FERTILIZER CONSUMPTION, 1950-1977

(Thousands of metric tons of nutrients)

Year	Nitrogen	Phosphates	Potassium
1950	8.5	17.4	7.9
1951	8.1	17.3	3.9
1952	11.8	24.9	5.1
1953	14.9	36.2	7.4
1954	15.4	31.0	12.1
1955	15.2	36.5	5.6
1956	8.9	32.2	4.7
1957	11.6	34.5	7.7
1958	11.9	40.3	7.8
1959	11.4	35.2	5.8
1960	12.9	39.2	6.6
1961	16.6	56.0	10.6
1962	23.8	58.0	12.2
1963	27.3	77.1	12.0
1964	32.8	73.4	13.1
1965	33.1	73.3	15.7
1966	37.5	84.9	20.7
1967	38.2	75.1	12.5
1968	33.9	96.9	9.8
1969	45.1	98.9	13.6
1970	44.4	98.6	15.1
1971	49.7	103.6	16.7
1972	54.7	84.6	18.9
1973	60.7	121.2	15.5
1974	53.0	103.5	16.2
1975	37.5	57.5	8.4
1976	49.9	64.3	14.8
1977	37.9	32.1	9.9

Source: 1950-60 data are from Pierre R. Crosson, Agricultural Development and Productivity: Lessons from the Chilean Experience, The Johns Hopkins Press, Baltimore, 1970, Table 16. Data for 1961-76 are from ODEPA.

**Table 7.10:** CHILE - SALES OF PESTICIDES, 1952-1975<sup>a/</sup>

(Thousands of Kg or liters of active ingredients)

Years	Herbicides	Fungicides	Insecticides
1952	104		2,141
1958	347	5,334	1,106
1961	178	7,266	587
1962	171	6,700	709
1963	292	6,687	789
1970	410	977	1,760
1971	419	714	1,137
1972	478	4,521	2,670
1973	597	7,344	2,454
1974	450	5,226	1,354
1975	653	4,083	1,454
1976	407	3,072	2,062
1977	364	999	1,887

Source: 1952-63 from Crosson (*op. cit.*), Table 17; 1970-75 from the Servicio Agrícola y Ganadera (SAG) and ODEPA

Table 7.11: CHILE - SALES OF COMMERCIAL SEEDS, 1964-1974

Seeds	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Wheat	58.8	65.8	59.5	43.9	48.7	49.7	55.3	56.0	57.9	61.2	64.8
Barley	3.8	3.9	3.3	3.9	4.5	5.7	5.8	4.7	6.1	7.8	7.2
Oats	1.9	1.8	1.6	2.1	1.3	2.1	2.3	1.5	3.0	3.3	2.8
Rice	3.7	3.4	3.8	2.9	2.0	2.4	3.3	3.0	2.6	0.5	2.2
Corn	0.9	1.0	1.2	0.8	0.8	0.7	0.7	1.0	1.4	1.3	1.0
Beans	2.7	3.4	2.1	1.4	1.3	1.3	1.7	3.3	3.2	2.7	3.0
Potatoes	2.5	1.5	1.6	1.7	2.3	1.4	2.4	2.4	9.6	14.5	15.9
Rapeseeds	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Sugar beets	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.3	0.4	0.4

Source: AID Sector Overview, (op. cit.), Table 4.11

**Table 7.12:** CHILE - AGRICULTURAL CREDIT BY MAJOR LENDING INSTITUTIONS, 1965-1976

(Millions of escudos at December 1969 prices)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<u>Production Credit</u>	796.5	1,106.7	1,237.2	1,340.8	1,375.0	1,519.4	1,780.5	1,276.8	1,122.0	996.2	905.1	1,174.4
BECH	271.6	616.8	706.5	722.7	718.3	839.6	1,198.8	1,003.2	998.4	707.8	662.1	754.2
Private commercial banks	341.1	268.0	245.3	265.3	253.9	239.6	221.8	170.6	56.5	60.1	95.8	306.8
Central Bank	110.3	107.4	125.0	136.8	132.8	133.1	78.4	16.1	2.0	-	-	-
CORA	8.4	32.7	75.8	117.0	146.5	196.9	170.5	32.4	5.5	3.3	-	-
INDAP	39.7	30.8	30.1	29.5	31.9	30.8	61.3	34.9	49.9	97.4	87.6	66.4
IANSA/COMARSA	25.4	51.0	54.4	69.5	91.7	79.4	49.7	19.5	9.8	127.6	59.7	47.0
<u>Investment Credit</u>	83.0	251.0	275.3	259.5	281.0	231.7	347.0	414.9	138.0	152.3	180.8	396.0
BECH	18.7	123.6	129.3	111.6	92.4	65.2	131.1	226.4	81.9	51.1	96.6	180.0
Private commercial banks	-	-	-	-	-	-	-	-	-	-	0.5	18.4
CORA	-	23.0	32.5	21.6	56.6	54.8	123.3	113.3	31.7	6.7	-	-
INDAP	0.5	7.0	13.2	27.1	32.5	22.3	43.3	32.3	18.0	14.5	5.6	34.4
CORFO	63.8	97.0	95.5	92.8	92.1	78.4	39.7	38.4	4.4	79.9	51.5	69.5
IFICOOP	-	0.4	4.7	6.5	7.5	11.0	9.7	4.4	2.0	0.2	26.6	93.7
<u>Total Credit</u>	879.5	1,357.7	1,512.4	1,600.4	1,656.1	1,751.1	2,127.6	1,691.6	1,260.0	1,148.6	1,086.0	1,570.4
BECH	290.3	740.4	835.8	834.3	810.7	904.8	1,329.9	1,229.6	1,080.3	758.9	758.7	934.2
Private commercial banks	341.1	268.0	245.3	265.3	253.9	239.6	221.8	170.6	56.5	60.1	96.3	325.2
Central Bank	110.3	107.4	125.0	136.8	132.8	133.1	78.4	16.1	2.0	-	-	-
CORA	8.4	55.7	108.3	138.6	203.1	251.7	293.8	145.7	37.2	10.0	-	-
INDAP	40.2	37.8	43.3	56.6	64.4	53.1	104.6	67.2	67.9	111.9	93.2	100.8
CORFO	63.8	97.0	95.5	92.8	92.1	78.4	39.7	38.4	4.4	79.9	51.5	69.5
IANSA/COMARSA	25.4	51.0	54.4	69.5	91.7	79.4	49.7	19.5	9.8	127.6	59.7	47.0
IFICOOP	-	0.4	4.7	6.5	7.5	11.0	9.7	4.4	2.0	0.2	26.6	93.7

Source: AID Sector Overview, op. cit.; ODEPA



Table 7.13: CHILE - EXPORTS OF AGRICULTURAL, FISHERIES, AND AGROINDUSTRIAL PRODUCTS (ex. Forestry products), 1960-1976

(SITC classification, millions of U.S. dollars)

	1929	1933	1939	1946- 1950	1951- 1955	1956- 1960	Average 1960- 1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<b>Agricultural</b>	<u>16.3</u>	<u>10.1</u>	<u>17.9</u>	<u>35.4</u>	<u>32.8</u>	<u>26.9</u>	<u>25.3</u>	<u>21.8</u>	<u>19.7</u>	<u>18.8</u>	<u>24.0</u>	<u>24.6</u>	<u>30.1</u>	<u>32.8</u>	<u>18.2</u>	<u>21.5</u>	<u>49.2</u>	<u>76.4</u>	<u>111.0</u>
Field, orchard and garden crops	13.2	5.2	12.2	26.2	20.0	17.1	16.6	15.0	11.6	12.3	16.4	14.8	22.4	27.8	17.2	20.1	43.3	59.7	86.2
Cereals	(5.4)	(1.0)	(2.4)	(9.2)	(4.8)	(2.2)	(1.0)	(0.1)	(0.2)	(-)	(0.2)	(0.5)	(0.6)	(0.8)	(0.4)	(0.4)	(0.3)	(2.5)	(1.0)
Beans	(2.7)	(0.4)	(1.9)	(6.5)	(4.5)	(3.5)	(3.5)	(2.3)	(1.4)	(2.2)	(2.1)	(1.2)	(2.6)	(6.7)	(3.6)	(2.9)	(14.6)	(8.1)	(6.2)
Lentils	(1.2)	(1.0)	(2.0)	(2.4)	(2.6)	(3.8)	(3.5)	(0.9)	(0.5)	(0.1)	(0.6)	(0.4)	(1.9)	(1.7)	(0.5)	(0.6)	(5.2)	(4.1)	(3.8)
Onions and garlic	(1.9)	(1.1)	(1.8)	(1.7)	(2.2)	(2.2)	(2.4)	(2.1)	(1.1)	(2.1)	(2.7)	(2.6)	(4.4)	(3.1)	(0.2)	(1.9)	(2.8)	(2.2)	(8.4)
Fresh fruits	(1.2)	(1.1)	(2.6)	(3.3)	(3.9)	(4.4)	(5.8)	(8.8)	(7.9)	(7.0)	(9.8)	(9.9)	(11.8)	(13.5)	(12.2)	(14.0)	(19.4)	(37.7)	(53.8)
Seeds, fibers and other	(0.9)	(0.4)	(1.6)	(3.1)	(2.0)	(1.0)	(0.4)	(0.5)	(0.5)	(0.9)	(1.0)	(0.2)	(0.2)	(2.0)	(0.3)	(0.3)	(1.0)	(5.2)	(13.0)
Animal products	3.1	4.9	7.9	9.2	12.8	9.8	8.7	6.8	8.1	6.5	7.6	9.8	7.7	5.0	1.0	1.4	5.9	16.7	24.8
Sheep wool	(0.0)	(3.0)	(5.7)	(6.9)	(10.7)	(7.8)	(7.1)	(5.5)	(6.8)	(5.2)	(6.0)	(7.9)	(6.4)	(3.6)	(0.0)	(0.0)	(3.7)	(8.4)	13.3
Wax and honey	(0.4)	(0.1)	(0.2)	(0.5)	(0.8)	(0.9)	(0.9)	(0.5)	(0.6)	(0.5)	(0.8)	(0.7)	(0.4)	(0.5)	(0.6)	(0.8)	(1.0)	(1.9)	(2.1)
Live animals	(0.0)	(0.0)	(0.1)	(0.1)	-	-	(0.3)	(0.4)	(0.4)	(0.5)	(0.6)	(0.7)	(0.5)	(0.4)	(0.4)	(0.5)	(0.3)	(0.7)	(1.0)
Hair and bristles	(0.5)	(0.0)	(0.2)	(0.2)	(0.3)	(0.2)	(0.3)	(0.2)	(0.2)	(0.1)	(0.1)	(0.3)	(0.2)	(0.1)	(0.0)	(0.0)	(0.2)	(0.1)	(0.3)
Hides and skins (uncured)	(2.1)	(1.6)	(1.6)	(1.5)	(1.0)	(0.9)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)	(0.4)	(0.0)	(0.1)	(0.7)	(1.8)	(4.6)
Other	(0.0)	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(3.8)	(3.5)
<b>Fisheries</b>							<u>0.3</u>	<u>0.7</u>	<u>1.0</u>	<u>3.5</u>	<u>0.6</u>	<u>1.1</u>	<u>1.4</u>	<u>1.3</u>	<u>1.4</u>	<u>1.5</u>	<u>4.7</u>	<u>6.0</u>	<u>6.9</u>
Algae							0.3	0.7	1.0	3.5	0.6	1.1	1.4	1.3	1.4	1.5	4.7	6.0	6.1
Fresh fish & other							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
<b>Agroindustry</b>							<u>15.5</u>	<u>18.7</u>	<u>37.6</u>	<u>25.5</u>	<u>30.7</u>	<u>30.8</u>	<u>30.5</u>	<u>45.7</u>	<u>30.9</u>	<u>24.4</u>	<u>58.8</u>	<u>105.7</u>	<u>117.0</u>
Agricultural							6.0	6.6	6.3	6.4	5.7	5.5	6.0	6.1	5.6	4.6	11.8	62.6	33.1
Meat & byproducts	(3.0)	(1.0)	(1.4)	(1.2)	(0.3)	(0.7)	(1.7)	(0.9)	(0.9)	(1.3)	(0.4)	(0.3)	(0.2)	(0.2)	(0.0)	(0.0)	(0.5)	(0.8)	(2.3)
Canned & preserved fruit							(0.9)	(1.8)	(1.1)	(1.1)	(0.8)	(0.9)	(1.2)	(0.5)	(1.0)	(0.2)	(1.5)	(2.0)	(4.9)
Dried fruit							(1.3)	(0.7)	(0.6)	(0.5)	(0.9)	(0.6)	(0.9)	(1.6)	(0.6)	(1.2)	(2.6)	(2.4)	(3.7)
Bran							(0.7)	(1.2)	(1.6)	(0.9)	(0.3)	(0.2)	(0.3)	(0.0)	(0.0)	(-)	(0.0)	(2.2)	(5.8)
Malted barley							(0.6)	(1.1)	(1.1)	(1.3)	(1.6)	(0.8)	(1.1)	(1.3)	(1.6)	(-)	(2.5)	(6.9)	(5.3)
Bottled wine	(-)	(0.3)	(0.7)	(1.9)	(1.3)	(1.4)	(0.3)	(0.5)	(0.5)	(0.5)	(0.8)	(1.1)	(1.5)	(1.4)	(2.1)	(2.8)	(3.7)	(3.7)	(6.7)
Other beverages							(0.4)	(0.3)	(0.4)	(0.3)	(0.3)	(0.4)	(0.3)	(0.4)	(0.0)	(0.1)	(0.1)	(0.2)	(0.3)
Other agricultural							(0.1)	(0.1)	(0.1)	(0.5)	(0.6)	(1.2)	(0.5)	(0.7)	(0.3)	(0.3)	(1.9)	(44.4)	(4.1)
Fisheries							9.5	12.1	31.3	19.1	25.0	25.3	24.5	39.6	25.3	19.8	47.0	43.1	83.9
Fishmeal							(7.5)	(8.4)	(25.5)	(13.3)	(18.4)	(17.9)	(15.5)	(28.5)	(18.0)	(13.6)	(35.2)	(29.2)	(61.1)
Frozen seafood							(1.5)	(3.2)	(5.5)	(5.6)	(6.3)	(6.1)	(6.2)	(8.0)	(3.0)	(1.8)	(3.8)	(12.9)	(19.9)
Canned & preserved fish							(0.5)	(0.5)	(0.3)	(0.2)	(0.3)	(1.3)	(2.8)	(3.1)	(4.3)	(4.4)	(8.0)	(1.0)	(2.9)
<b>TOTAL</b>	<u>41.1</u>	<u>41.2</u>	<u>58.3</u>	<u>47.8</u>	<u>55.3</u>	<u>56.5</u>	<u>62.0</u>	<u>79.8</u>	<u>50.5</u>	<u>47.4</u>	<u>112.7</u>	<u>188.1</u>	<u>234.9</u>						

Source: 1929-1960 = Ministry of Agriculture, *La Agricultura Chilena en el Quinquenio, 1951-1955*, Santiago 1957; and *La Agricultura Chilena en el Quinquenio, 1956-1970*, Santiago, 1963  
1960-1976 = Central Bank of Chile

Table 7.14: CHILE - IMPORTS OF AGRICULTURAL, FISHERIES, AND AGROINDUSTRIAL PRODUCTS  
(ex. Forestry products), CIF

(SITC classification, millions of U.S. dollars)

	Average 1962-64	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Capital goods (livestock)	<u>0.6</u>	<u>2.1</u>	<u>2.5</u>	<u>6.2</u>	<u>1.6</u>	<u>2.5</u>	<u>8.2</u>	<u>6.7</u>	<u>3.4</u>	<u>8.9</u>	<u>3.2</u>
Consumer goods	<u>34.5</u>	<u>40.2</u>	<u>53.3</u>	<u>52.4</u>	<u>51.8</u>	<u>55.9</u>	<u>53.9</u>	<u>88.5</u>	<u>180.4</u>	<u>180.1</u>	<u>70.9</u>
Agriculture and livestock	3.6	3.2	5.1	8.0	9.2	13.3	10.7	16.4	49.1	7.2	7.6
Processed foods	30.4	36.7	47.8	44.2	42.2	42.2	42.8	71.9	131.1	172.8	63.1
Beverages	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Intermediate goods	<u>100.2</u>	<u>97.1</u>	<u>105.3</u>	<u>115.4</u>	<u>111.8</u>	<u>109.3</u>	<u>84.7</u>	<u>103.7</u>	<u>158.0</u>	<u>336.4</u>	<u>374.6</u>
Agriculture and livestock	78.7	75.9	93.2	101.8	106.3	91.3	76.8	91.0	145.7	290.1	314.5
Fisheries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Processed foods	21.5	21.2	12.1	13.6	5.5	18.0	7.8	12.7	12.3	46.3	60.1
TOTAL	135.3	139.4	161.1	174.0	165.2	167.7	146.8	198.9	341.8	525.4	448.7

Source: Central Bank of Chile

**Table 7.15:** CHILE - AVERAGE PRICES TO PRODUCER OF SELECTED COMMODITIES DURING MARKETING SEASON, 1965-1977

(Pesos of December 1974) <sup>a/</sup>

Commodity	Unit	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Wheat	Pesos/mt	78	82	80	79	83	82	83	59	23	138	183	203	195
Oats	"	65	84	80	50	51	78	78	64	81	95	64	110	114
Barley	"	75	85	77	60	75	83	81	60	77	117	111	198	152
Rye	"	66	71	70	66	68	71	72	51	19	91	79	86	
Corn	"	71	78	78	71	64	66	91	63	112	98	110	149	122
Rice	"	64	95	86	91	90	95	98	64	44	142	229	271	201
Beans	"	238	237	218	131	217	365	340	228	254	186	446	721	394
Lentils	"	119	226	298	235	241	235	288	309	382	318	353	604	410
Chickpeas	"	138	172	173	143	207	226	234	178	226	251	222	582	416
Peas	"	34	28	85	127	209	199	205	161	171	154	157	271	
Potatoes	"	48	48	40	40	29	31	34	39	91	29	52	100	68
Sugar beets	"	16	18	19	20	20	21	21	13	12	23	39	43	28
Sunflower seeds	"	133	126	126	121	137	130	146	101	58	195	308	318	253
Rapeseeds	"	138	140	128	134	149	140	151	109	123	180	294	301	269
Wines	Pesos/1,000 lts	133	104	100	93	90	99	129	91	135	285	216	251	222
Beef	Pesos/mt	591	568	591	652	795	844	794	641	492	1,039	650	735	1,370
Mutton	"	611	625	650	635	745	811	1,240	770	506	726	426	565	1,135
Pork	"	536	549	723	702	699	744	822	556	440	651	542	687	1,342
Poultry	"	941	918	866	952	962	881	857	666	666	1,185	980	1,162	1,406
Milk	Pesos/1,000 lts	64	79	87	89	91	90	91	59	72	96	139	151	200
Eggs	Pesos/1,000 units	37	41	38	39	44	44	43	48	50	40	43	60	53
Wool	Pesos/mt	925	840	783	674	706	764	732	667	501	1,122	610	835	1,422

a/ Original data were deflated by official CPI and were converted here to IBRD adjusted CPI for years 1971-77.

Source: ODEPA

Table 7.15a: CHILE - INDEX OF PRICES TO PRODUCER OF SELECTED COMMODITIES, 1965-1977

(1970 = 100)

Commodity	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Wheat	95	100	97	96	101	100	101	72	28	168	223	248	238
Oats	83	107	102	64	65	100	100	81	103	121	82	141	146
Barley	90	102	93	72	90	100	98	72	92	141	134	239	183
Rye	93	100	98	93	95	100	101	72	27	128	111	121	
Corn	108	120	118	108	98	100	139	96	171	149	167	226	185
Rice	68	101	91	96	95	100	103	67	46	149	241	285	212
Beans	65	65	60	36	60	100	93	62	70	51	122	198	108
Lentils	51	96	127	100	103	100	123	131	163	136	150	257	174
Chickpeas	61	76	76	63	91	100	103	79	100	94	83	219	156
Peas	17	14	43	64	105	100	103	81	86	77	79	136	
Potatoes	156	155	128	129	92	100	110	127	294	94	168	323	219
Sugar beets	77	86	91	92	95	100	97	62	56	107	186	205	133
Sunflower seeds	102	97	98	93	106	100	112	78	44	150	237	245	195
Rapeseeds	99	100	92	96	107	100	108	78	40	129	210	215	192
Wines	133	104	100	93	90	100	130	91	136	288	218	254	224
Beef	70	67	70	77	94	100	94	76	58	123	77	87	162
Mutton	75	77	80	78	92	100	153	95	62	90	53	70	140
Pork	72	74	97	94	94	100	111	75	59	88	73	92	180
Poultry	107	104	98	108	109	100	97	76	76	134	111	132	160
Milk	71	88	97	99	102	100	101	66	81	107	154	168	222
Eggs	83	92	85	89	99	100	96	108	112	91	98	136	120
Wool	121	110	103	88	92	100	96	87	66	147	80	109	186
Weighted average - crops <sup>a/</sup>	96	103	98	94	95	100	104	80	84	136	190	240	202 <sup>b/</sup>

<sup>a/</sup> Weights from Table 7.5

<sup>b/</sup> Excluding rye and peas.

Source: Table 7.15

Table 7.16: CHILE - RELATIVE PRICES TO PRODUCER OF AGRICULTURAL COMMODITIES, 1965-1977 <sup>a/</sup>

(Price of wheat = 100)

Product	Unit	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Wheat	Pesos/mt	100	100	100	100	100	100	100	100	100	100	100	100	100
Oats	"	83	103	100	64	61	96	95	109	349	69	35	54	58
Barley	"	96	104	97	76	91	101	99	102	331	85	61	98	78
Rye	"	85	87	87	84	82	87	87	87	82	66	43	42	n.a.
Corn	"	91	96	97	90	77	80	110	107	484	71	80	73	63
Rice	"	82	117	108	115	109	115	118	109	188	103	125	134	103
Beans	"	306	290	273	166	262	445	411	389	1,098	134	244	355	202
Lentils	"	152	277	374	297	291	286	349	526	1,651	230	193	298	210
Chickpeas	"	177	210	217	181	249	276	284	303	978	181	121	287	213
Peas	"	44	34	106	161	252	242	249	273	737	112	86	134	n.a.
Potatoes	"	62	59	50	51	34	38	41	67	393	26	28	49	35
Sugar beets	"	21	22	24	25	24	26	25	22	51	16	21	21	14
Sunflower seeds	"	170	153	159	153	165	158	176	172	249	141	168	157	130
Rapeseeds	"	177	172	161	170	180	170	183	186	240	130	161	148	138
Wines	Pesos/1,000 lts	170	127	125	117	108	121	156	154	585	206	118	124	114
Beef	Pesos/mt	758	694	742	824	959	1,028	962	1,091	2,123	752	355	362	703
Mutton	"	785	764	816	802	898	988	1,501	1,311	2,183	526	233	278	582
Pork	"	688	671	910	887	843	907	995	947	1,898	471	296	338	688
Poultry	"	1,208	1,122	1,087	1,203	1,161	1,074	1,037	1,135	2,874	858	536	572	721
Milk	Pesos/1,000 lts	82	97	109	112	110	109	110	101	312	70	76	74	103
Eggs	Pesos/1,000	47	50	47	50	53	54	52	82	214	29	24	30	27
Wool	Pesos/mt	1,188	1,027	983	852	852	930	885	1,136	2,165	812	333	411	729

a/ Prices prevailing during marketing season.

b/ Deflated by IBRD adjusted CPI. Original data were deflated by official CPI; adjustment from 1971 on was calculated by mission.

Source: Table 7.15

Table 7.16a: CHILE - INDICES OF AGRICULTURAL COMMODITY PRICE RATIOS TO THE WHEAT PRICE, 1965-1976 <sup>a/</sup>

(1965 = 100)

Product	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Oats	100	124	120	77	73	116	114	131	420	83	42	65	70
Barley	100	108	101	79	95	105	103	106	345	89	64	102	81
Rye	100	102	102	99	96	102	102	102	96	78	51	49	n.a.
Corn	100	105	107	99	85	88	121	118	532	78	66	80	69
Rice	100	143	132	140	133	140	144	133	229	126	152	163	126
Beans	100	95	89	54	86	145	134	127	359	44	80	116	66
Lentils	100	182	246	195	191	188	230	346	1,086	151	127	196	138
Chickpeas	100	119	123	102	141	156	160	171	553	102	68	162	120
Peas	100	77	241	366	573	550	566	620	1,675	255	195	305	n.a.
Potatoes	100	95	81	82	55	61	66	108	634	42	45	79	56
Sugar beets	100	105	114	119	114	124	119	105	243	76	100	100	67
Sunflower seeds	100	90	94	90	97	93	104	101	146	83	99	92	76
Rapeseeds	100	97	91	96	102	96	103	105	136	73	91	84	78
Wines	100	75	74	69	64	71	92	91	344	118	69	73	67
Beef	100	92	98	109	127	136	127	144	280	99	47	48	93
Mutton	100	97	104	102	114	126	191	167	278	67	30	35	74
Pork	100	98	132	129	123	132	145	138	276	68	43	49	100
Poultry	100	93	90	100	96	89	86	94	238	71	44	47	60
Milk	100	118	133	137	134	133	134	123	380	85	93	90	126
Eggs	100	106	100	106	113	115	111	174	455	62	51	64	57
Wool	100	86	83	72	72	78	74	96	182	68	28	35	61

<sup>a/</sup> Prices prevailing during marketing season.

Source: Table 7.16

Table 7.17: CHILE - DOMESTIC PRICES OF SELECTED FERTILIZERS, ANNUAL AVERAGES 1961-1977  
(December 1969 pesos/metric ton) <sup>a/</sup>

Year	Sodium Crystal	Potassium 14%	Urea	Super- Phosphate 25%
1961-64 (average)	.372	.427	-	-
1965	.407	.476	-	-
1966	.450	.540	-	-
1967	-	.536	.987	.548
1968	-	.571	1.058	.433
1969	.478	.598	.897	.514
1970	.498	.694	.836	.617
1971	.369	.515	.644	.562
1972	.180	.252	-	.287
1973	.698	.883	.739	.400
1974	1.346	1.726	2.652	1.411
1975	1.032	1.609	3.100	1.318
1976	.802	1.309	1.814	.820
1977 <sup>p/</sup>	.753	1.104	1.526	.595

<sup>a/</sup> Deflated by IBRD adjusted CPI.

<sup>p/</sup> Preliminary.

Source: ODEPA

Table 7.17a: CHILE - INDICES OF SELECTED REAL FERTILIZER AND SEED PRICES<sup>a/</sup>  
(1968 = 100)

Year	Fertilizers				Seeds	
	Sodium Crystal <sup>b/</sup>	Potassium 14%	Urea	Super Phosphate	Wheat	Corn
1961						
1962	72	66				
1963	81	77				
1964	86	81				
1965	88	83			100	125
1966	97	95			110	105
1967	-	94	93	127	102	104
1968	-	100	100	100	100	100
1969	103	122	85	119	109	101
1970	107	105	79	142	113	106
1971	80	90	61	130	98	94
1972	39	44	-	66	50	50
1973	150	155	70	92	58	29
1974	290	302	251	326	137	-
1975	222	282	293	304	265	119
1976	173	229	171	189	341	146
1977 <sup>p/</sup>	162	193	144	137	267	

<sup>a/</sup> Deflated by adjusted CPI.

<sup>b/</sup> Averages of years 1966 and 1969=100.

<sup>p/</sup> Preliminary.

Source: Table 7.17 and ODEPA



Table 7.18: CHILE - DESCRIPTION OF SAMPLE FOR SECOND ICIRA STUDY OF LAND REFORM BENEFICIARIES

Region	Estates Distributed Oct. 1973 - Dec. 1974				Estates Distributed during 1975				Total			
	Universe		Sample		Universe		Sample		Universe		Sample	
	No. of Estates	No. of UAFs <sup>a/</sup>	No. of Estates	No. of UAFs <sup>a/</sup>	No. of Estates	No. of UAFs <sup>a/</sup>	No. of Estates	No. of UAFs <sup>a/</sup>	No. of Estates	No. of UAFs <sup>a/</sup>	No. of Estates	No. of UAFs <sup>a/</sup>
IV	23	635	3	9	27	502	4	10	50	1,137	7	19
V	24	637	4	18	90	1,573	14	37	114	2,210	18	55
Gr. Santiago	31	798	5	12	199	3,049	30	94	230	3,847	35	106
VI	45	1,117	7	32	127	1,937	19	48	172	3,054	26	80
VII	26	1,003	4	26	303	4,827	45	92	329	5,830	49	118
VIII	13	485	2	9	74	1,282	11	30	87	1,767	13	39
IX	11	391	2	12	55	1,066	8	20	66	1,457	10	32
X	-	-	-	-	155	1,834	23	50	155	1,834	23	50
Total <sup>b/</sup>	173	5,066	27	118	1,030	16,070	154	381	1,203	21,136	181	499

<sup>a/</sup> Family farm units assigned and titled.

<sup>b/</sup> Does not include 11 estates divided into 117 family farms in Region I; no land was distributed in Regions II, III, XI and XII during the period covered.

Source: ICIRA, Análisis de la situación de los Asignatarios de Tierras a diciembre de 1976 (2° diagnóstico), Santiago, noviembre de 1977

Table 7.19: CHILE - SITUATION OF FORMER ASENTADOS OF SAMPLED ESTATES

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Total former <u>asentados</u>	<u>4,123</u>
Assigned land from same estate	<u>2,614</u>
Not assigned land from same estate	<u>1,509</u>
Assigned land from other estate	117
Not assigned land	728
Working as agricultural laborer or sharecropper	(476)
Working other land as owner, renter, or family worker	(107)
Working in Minimum Employment Program	( 47)
Unemployed	( 32)
Deceased or retired	( 21)
Other	( 45)
Situation unknown	664

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Source: See Table 7.18

Table 7.20: CHILE - ORIGIN OF TITLE RECIPIENTS OF LAND FROM SAMPLED ESTATES

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Total Titled Recipients	<u>3,178</u>
Former <u>asentados</u> on same estate	2,614
Beneficiaries from outside estate	564
<u>Asentados</u> from other estate	(377)
Former administrators, foremen, or custodians of estate	( 85)
Sharecroppers and farm laborers	( 66)
Professionals and white-collar workers	( 27)
Landowners	( 9)

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Source: See Table 7.18

Table 7.21: CHILE - LAND USE BY SAMPLED REFORMED SECTOR FARMERS, CROP YEAR 1976/77

(Percent)

	Individual Farmers	Farmer Associations	Total
Garden crops	18.3	3.5	12.0
Wheat	8.8	13.7	10.9
Industrial crops	3.6	7.5	5.3
Orchards and vineyards	3.3	0.4	2.1
Vegetables	3.2	0.5	2.1
Improved pasture	2.4	2.5	2.4
Other cereals	2.1	3.4	2.6
Other crops	2.2	5.3	3.5
Natural pasture	40.7	52.1	45.6
Abandoned	6.7	4.6	5.8
Unusable	<u>8.7</u>	<u>6.5</u>	<u>7.8</u>
Totals	100.0	100.0	100.0

Source: See Table 7.18

Table 7.22: CHILE - MARKETING CHANNELS USED BY SAMPLED REFORMED SECTOR FARMERS,<sup>a/</sup> BY TYPE OF CROP, CROP YEAR 1975/76

(Percent)

Marketing Channel	Cereals	Garden Crops and Vegetables	Industrial Crops	Fruits and Vineyards
On-farm sale to private merchant	17.1	64.8	4.5	47.6
Off-farm sale to private merchant	11.8	23.9	6.8	23.8
Agroindustrial enterprise	57.9	-	84.1	-
State enterprise	6.6	1.4	4.5	-
Cooperative	6.6	3.5	-	28.6
Exporting firm	-	6.3	-	-
Totals	100.0	100.0	100.0	100.0

Source: See Table 7.18

Table 7.23: CHILE - EQUIPMENT OWNED BY SAMPLED REFORMED SECTOR FARMERS

Equipment	Percent of Farmers Who Own		Total
	Farmers Working Individually	Farmers Working in Association	
None	17.5	32.3	19.5
Simple tools only	6.9	10.8	7.4
Above plus animal-powered equipment	51.2	38.5	49.5
Above plus machinery	22.8	4.6	20.4
Unknown	<u>1.6</u>	<u>13.8</u>	<u>3.2</u>
Total	100.0	100.0	100.0

Source: See Table 7.18

Table 7.24: CHILE - USE OF INPUTS BY SAMPLED REFORMED SECTOR FARMERS,  
CROP YEAR, 1976/77

(Percent that used inputs)

<u>Land Use</u>	<u>Inputs</u>	<u>Individual Farmers</u>	<u>Farmer Associations</u>
Cereals	Fertilizer	81.8	90.9
	Pesticides	76.4	90.9
	Commercial seeds	62.2	84.8
Garden crops, industrial crops, and vegetables	Fertilizer	71.1	77.7
	Pesticides	44.7	55.6
	Commercial seeds	61.0	50.0
Orchards and vineyards	Fertilizer	61.7	50.0
	Pesticides	76.7	100.0
Pastures	Fertilizer	3.5	18.1
	Pesticides	1.0	15.1
	Commercial seeds	80.0	50.0
Livestock	Concentrated feed	2.2	-
	Veterinary products	32.9	52.6

Source: See Table 7.18

Table 7.25: CHILE - EXPERIENCE OF SAMPLED REFORMED SECTOR FARMERS WITH CREDIT, CROP YEAR 1976/77

(Percent)

	Individual Farmers	Farmer Associations
Sought credit	<u>69.1</u>	<u>81.0</u>
Obtained in total	<u>62.0</u>	<u>76.2</u>
Obtained in part	3.9	2.4
Failed to obtain	1.8	2.4
Response unknown	1.4	-
Did not seek credit because:	<u>30.9</u>	<u>19.0</u>
Did not need	<u>16.6</u>	<u>14.3</u>
Too costly	4.4	2.4
In default on prior loans	2.8	-
Preferred to sell animals or other possessions	1.2	-
Procedural difficulties or delays	0.2	-
Other reasons	3.7	2.4
No reason given	2.1	-

Source: See Table 7.18



Table 7.26: CHILE - AREA FORESTED BY PRIVATE AND PUBLIC SECTORS, BY REGION, 1970-1976

(Hectares)

	REGIONS a/												Total
	I	II	III- IV	V	M.A. b/	VI	VII	VIII	IX	X	XI	XII	
<u>Area Planted By</u>													
<u>CONAF:</u>													
1970	-	-	-	-	-	6,080	869	-	-	-	-	-	6,949
1971	-	-	-	-	-	5,000	4,283	4,522	2,005	837	-	-	16,647
1972	-	-	-	723	270	2,104	3,433	11,438	3,180	3,278	360	-	24,786
1973	-	-	240	1,624	84	2,396	6,464	11,106	3,857	1,095	550	-	27,416
1974	-	-	283	1,751	535	3,087	6,365	13,401	3,886	2,643	3,220	-	35,171
1975	-	-	83	1,273	1,121	2,424	7,600	15,119	6,770	5,483	4,200	-	44,073
1976	30	-	610	1,474	2,963	12,650	6,652	7,355	10,327	10,192	1,807	-	44,570
<u>Area Planted By</u>													
<u>Private Sector:</u>													
1974	-	-	-	125	-	15	2,800	15,154	2,549	409	-	-	21,052
1975	-	-	63	282	-	-	2,692	29,004	4,345	2,130	5	-	38,521
1976	-	-	44	587	-	-	4,233	37,750	7,623	3,352	54	-	46,642
<u>Total Area Planted:</u>													
1974	-	-	283	1,876	535	3,102	9,165	28,556	6,435	3,052	3,220	-	56,223
1975	-	-	146	1,555	1,121	2,424	10,294	44,123	11,115	7,613	4,205	-	82,594
1976	30	-	654	2,061	2,963	12,650	10,885	45,105	17,950	13,544	1,869	-	93,212

a/ The provincial composition of the several Regions is as follows: I-Tarapacá; II-Antofagasta; III-Atacama; IV-Coquimbo; V-Aconcagua, Valparaíso; VI-O'Higgins, Colchagua; VII-Curicó, Talca, Maule, Linares; VIII-Ñuble, Concepción, Arauco, Bío-Bío; IX-Malleco, Cautín; X-Valdivia, Osorno, Llanquihue, Chiloé; XI-Aysen; XII-Magallanes.

b/ Metropolitan Area of Santiago.

Source: CONAF

Table 7.27: CHILE - ESTIMATED NET ADDITIONS TO STOCK OF PINUS RADIATA, 1970-1976  
(Hectares)

Year	Gross Area Planted All Species	Gross Area Planted Pinus Radiata <sup>a/</sup>	Adjusted Gross Area Planted Pinus Radiata <sup>b/</sup>	Lost to Fire <sup>c/</sup>	Net Additions - Pinus Radiata (4) - (5)
1970	23,446	21,101	16,881	2,818	14,063
1971	28,046	25,241	20,193	3,831	16,362
1972	31,042	27,938	22,351	1,952	20,399
1973	30,313	27,282	21,825	1,878	19,947
1974	56,223	50,601	40,480	480	40,000
1975	82,594	74,335	59,468	4,553	54,915
1976	107,703	96,933	77,546	949	76,597

a/ Assumes that 90 percent of plantings were of Pinus Radiata.

b/ Assumes that 20 percent of gross area was unplatable because of steep inclines, ravines, roads, etc.

c/ Based on data from the Agricultural and Livestock Service (SAG) and CONAF.

Source: Emil Jones and Bert Husch, "The Present Status of Pinus Radiata Plantation in Chile," Chile Forestal, No. 21, May 1977.

Table 7.28: CHILE - ESTIMATED AREA OF PINUS RADIATA PLANTATION AVAILABLE FOR EXPLOITATION BY AGE OF TREES, 1976

(Hectares)

Age of Trees (Years)	Years Planted	Plantings Before 1965 <sup>a/</sup>	Plantings, Since 1965 <sup>b/</sup>	Estimated Fire Losses	Available for Exploitation (3) + (4) - (5)	Cumulative Exploitation		Exploitable Area in 1976	
						Assumption A <sup>c/</sup>	Assumption B <sup>d/</sup>	High Estimate (6) - (8)	Low Estimate (6) - (9)
0-5	1972-76		221,670	6,092	215,578	-	-	215,578	215,578
6-10	1967-71		84,549	15,231	69,318	-	-	69,318	69,318
11-15	1962-66	29,947	31,650	7,615	53,982	-	-	53,982	53,982
16-20	1957-61	59,874		1,523	58,351	-	5,835	58,351	52,516
21-25	1952-56	66,452		-	66,452	33,226	49,839	33,226	16,613
26-30	1947-51	46,664		-	46,664	37,331	41,998	9,333	4,666
31-35	1942-46	13,637		-	13,637	12,273	13,637	1,364	-
35+	Before 1941	3,345		-	3,345	3,345	3,345	-	-
TOTALS								441,152	412,673

a/ Estimated from inventory data.

b/ Estimated from data on new plantings, less adjustment for roads, ravines, etc.

c/ Assumes no trees were cut before age 20; the assumed cutting rate for trees in older age groups are: 20 to 25 - 50 percent; 26 to 30 - 80 percent; 31 to 35 - 90 percent; above 35 - 100 percent.

d/ Assumes no trees were cut before age 16; the assumed cutting rates of trees in other age groups are: 16 to 20; 10 percent; 21 to 25 - 75 percent; 26 to 30 - 90 percent; 31 and above - 100 percent.

Source: Emil Jones and Bert Husch, op. cit.

Table 7.29: CHILE - PRODUCTION OF SAWWOOD BY MAJOR VARIETIES, 1964-1976

(Thousands of board inches)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975 <sup>p/</sup>	1976 <sup>p/</sup>
Alamo	1,410	1,290	1,550	1,158	1,401	1,200	1,294	1,266	1,713	1,487	389	358	
Coihue	4,064	3,082	3,204	2,273	2,304	2,107	1,993	2,124	2,461	2,600	2,340	2,148	
Eucalyptus	648	1,016	1,022	600	913	823	438	738	1,278	379	300		
Laurel	790	857	781	590	641	788	577	931	681	950	1,889		
Lenga	635	745	625	1,064	916	1,302	1,197	636	1,754	2,114	750		
Pino Insigne (Radiata pine)	19,934	20,616	24,519	19,860	22,109	22,573	27,063	31,107	31,176	26,725	46,000		
Raulí	3,550	1,964	1,295	1,619	2,920	2,537	2,423	811	1,592	1,350	657		
Roble	2,887	4,080	2,695	2,369	2,722	1,862	2,183	2,057	1,967	2,044	1,697		
Tepa	1,870	2,199	2,115	1,824	1,287	2,141	1,818	1,701	1,544	2,375	1,098		
Other	8,020	7,259	7,222	4,711	4,083	4,221	3,377	3,014	3,051	3,751	3,880		
Total	43,808	43,108	45,028	36,068	39,296	39,554	42,363	44,385	47,217	43,775	59,000	47,061	57,620

p/ Preliminary.

Sources: INE, FAO resident mission

Table 7.30: CHILE - PRODUCTION, FOREIGN TRADE AND APPARENT CONSUMPTION OF WOOD PULP, 1965 to 1976

(Thousand metric tons)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976 <sup>a/</sup>
<u>Mechanical Pulp</u>												
Production	102.4	112.3	103.0	106.9	110.6	114.8	112.3	102.3	108.2	119.0	78.7	--
Imports	--	--	0.3	0.1	0.5	1.3	0.1	0.0	0.5	0.0	--	--
Exports	--	--	--	--	--	--	--	0.2	--	1.4	2.6	--
Apparent consumption	102.4	112.3	103.3	107.0	111.1	116.1	112.4	102.2	108.7	117.7	76.1	--
<u>Chemical Wood Pulp</u>												
Production	96.6	198.5	204.4	231.2	219.1	210.7	233.1	242.8	242.0	313.8	325.8	--
Imports	0.5	--	2.3	3.5	2.4	0.2	6.2	6.0	3.9	2.2	--	--
Exports	18.2	59.4	76.7	118.2	121.1	105.3	109.3	120.7	97.3	179.1	174.8	292.1
Apparent consumption	78.9	139.1	130.0	116.4	100.4	105.6	130.0	128.1	148.7	136.8	--	--
<u>Total, Wood Pulp</u>												
Production	199.0	310.8	307.4	338.0	329.7	325.5	345.4	345.1	350.2	432.8	404.5	450.0
Imports	0.5	--	2.6	3.6	2.9	1.5	6.3	6.1	4.4	2.2	--	--
Exports	18.2	59.4	76.7	118.2	121.1	105.3	109.3	120.9	97.3	180.5	177.4	236.0
Apparent consumption	181.3	251.4	233.3	223.4	211.5	221.7	242.4	230.3	257.4	254.5	--	214.0

a/ Provisional figures.

Sources: 1965 to 1968: FAO Development of forest industries in Latin America, E/CN.12/858/Rev. 1  
 1969 to 1975: Instituto Forestal and foreign trade yearbooks  
 1976: estimated

Table 7.31: CHILE - PRODUCTION, FOREIGN TRADE AND APPARENT CONSUMPTION OF PAPER AND PAPERBOARDS, 1965 to 1976

(Thousand metric tons)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976 <sup>a/</sup>
<u>Newsprint</u>												
Production	96.6	112.0	106.1	115.2	118.4	118.2	111.2	94.7	105.1	118.2	119.7	
Imports	5.2	6.5	1.6	1.1	0.7	0.5	0.5	0.0	0.0	-		
Exports	61.4	64.7	66.9	61.1	71.9	78.3	63.9	34.0	32.7	77.5	78.3	81.8
Apparent consumption	40.4	53.8	40.9	55.2	47.1	40.4	47.8	60.7	72.4	40.7		
<u>Printing &amp; Writing</u>												
Production	27.5	34.2	36.9	28.9	26.8	28.2	40.7	54.1	44.9	86.4	76.0	
Imports	1.4	2.4	5.2	5.7	7.9	7.9	6.3	7.5	3.2	1.3		
Exports	-	-	0.6	-	-	0.0	0.0	0.0	-	2.5	2.7	
Apparent consumption	28.9	36.7	41.5	34.5	34.7	36.1	47.0	61.6	48.1	85.1		
<u>Other Paper &amp; Paperboard</u>												
Production	62.3	69.6	84.4	81.8	102.2	116.1	125.8	123.2	101.1	102.4	69.8	
Imports	2.2	3.5	2.0	3.9	2.5	8.5	5.6	3.0	7.7	3.6		
Exports	0.0	1.8	14.3	10.8	14.0	18.2	15.9	12.5	10.8	14.3	13.8	
Apparent consumption	64.5	71.3	72.1	74.9	90.7	106.5	114.4	113.6	98.0	91.7		
<u>Total, Paper &amp; Paperboard</u>												
Production	186.4	215.8	227.4	225.9	247.4	262.5	277.7	272.0	251.1	307.0	265.5	274.0
Imports	8.7	12.4	8.8	10.6	11.1	16.9	11.3	10.5	10.9	4.9	4.3	7.0
Exports	61.4	66.5	81.7	71.8	85.9	96.5	79.9	46.6	43.5	94.3	94.8	106.0
Apparent consumption	133.7	161.8	154.5	164.7	172.5	183.0	209.2	235.9	218.5	217.6	175.0	175.0

a/ Estimated on the basis of information for eleven months.

Sources: 1965 to 1968: FAO . Development of Forest Industries in Latin America, E/CN.12/858/Rev.1  
1969 to 1975: FAO. Instituto Forestal, and Foreign Trade Yearbook

Table 7.32: CHILE - EXPORTS OF FOREST PRODUCTS, 1961-1977

(Millions of US dollars)

Product	1961-64 (Average)	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Soapbark	0.4	0.2	0.3	0.4	0.3	0.4	1.0	2.3	0.3	0.6	2.2	3.4	0.4	0.6
Sawnwood and panels	2.4	3.6	4.0	2.9	4.1	7.7	8.9	7.0	3.0	4.6	13.1	25.2	29.3	70.4
Pine	(0.5)	(1.7)	(0.8)	(0.8)	(1.1)	(2.7)	(3.7)	(3.8)	(1.9)	(2.5)	(9.7)	(21.5)	(20.9)	(54.6)
Other	(1.9)	(1.9)	(3.2)	(2.1)	(3.0)	(5.0)	(5.2)	(3.2)	(1.1)	(2.1)	(3.4)	(3.7)	( 8.4)	(15.8)
Paper (incl. newsprint)	4.2	7.3	7.9	8.4	7.2	8.4	9.6	8.4	5.0	5.4	25.2	25.8	33.1	33.6
Pulp	2.6	2.5	8.1	11.0	13.3	15.3	16.4	17.0	17.4	20.8	78.0	57.9	88.3	85.5
Cardboard	-	-	1.0	3.5	3.0	4.0	5.4	5.3	4.4	3.6	7.1	7.0	8.9	9.8
Other	0.2	0.1	0.3	0.7	0.3	0.5	0.4	2.5	1.5	1.4	1.4	4.3	3.3	3.3
Total	9.8	13.7	21.6	26.9	28.2	36.3	41.7	42.5	31.6	36.4	127.0	125.6	163.3	203.2

Source: Central Bank

Table 7.33: CHILE - PROJECTED EXPORTS OF FOREST-BASED PRODUCTS IN 1996

(Millions of U.S. dollars at 1976 prices)

Product	Domestic	Projected	Log	Total Wood		Wood Available for		Product for		Export Value	
	Consump- tion 1976	Consump- tion 1996 <sup>a/</sup>	Equivalent of (2) (Million m <sup>3</sup> ) <sup>b/</sup>	Available, 1996 <sup>c/</sup> b/High	Low	Export Product High (4)-(3)	Low Product Low (5)-(3)	Export b/ High	e/ Low	High	Low
Sawnwood (million m <sup>3</sup> )	1.5	4.8	9.6			9.9	6.5	4.95	3.25	320	210
Pulp (thousand mt)	214	685	3.1			) 9.9	) 6.5	1.52	1.00	450	295
Paper (thousand mt)	175	560	<u>2.0</u>	—	—	—	—	0.67	0.44	<u>250</u>	<u>160</u>
Totals			14.7	34.5	27.6	19.8	12.9			1,020	665

a/ Assumes a 6 percent average annual rate of increase.

b/ Assumes 50 percent wastage in sawmills and a constant coefficient of 4.5 m<sup>3</sup> of wood per ton of pulp.

c/ Total from Table F.11.

d/ Distribution assumes that half goes to sawnwood and half to pulp and paper.

e/ Assumes pulp and paper exported in same ratios as in 1976.



Table 7.34: CHILE - ANNUAL CATCH OF FISH AND OTHER SEAFOOD, BY MAJOR SPECIES, 1955-1976

(Thousand metric tons - live weight)

	1955-59 (Ave.)	1960-64 (Ave.)	1965-69 (Ave.)	1970	1971	1972	1973	1974	1975	1976 <sup>p/</sup>
<u>Total</u>	<u>222.8</u>	<u>666.2</u>	<u>1,126.6</u>	<u>1,209.4</u>	<u>1,506.0</u>	<u>817.5</u>	<u>691.0</u>	<u>1,158.2</u>	<u>929.5</u>	<u>1,264.2</u>
Hake			99.4	88.3	66.0	66.9	46.5	43.1	32.4	29.5
Jack mackerel			19.9	112.0	158.4	87.0	121.6	194.4	261.2	323.1
Sardine			88.9	68.1	174.7	131.7	187.5	398.8	231.8	314.6
Anchoveta			801.0	782.9	960.9	367.9	191.8	383.4	239.8	413.0
Other saltwater fish			38.5	29.7	22.4	35.7	31.1	28.3	39.0	66.5
Squat lobster (langostino)			18.9	40.4	37.6	33.1	25.3	27.5	35.9	56.1
Other crustaceans			12.3	3.6	2.7	5.9	12.0	9.7	10.4	7.6
Miscellaneous mollusks			25.8	38.0	41.3	47.2	40.2	38.8	43.5	20.0
Other seafoods			21.9	46.4	42.0	42.1	35.0	34.2	35.5	33.7

p/ Preliminary.

Source: FAO Yearbook of Fishery Statistics

Table 7.35: CHILE - FISHERIES EXPORTS, 1960-1977

(Millions of US dollars)

	1960-64 (Ave.)	1965-69 (Ave.)	1970	1971	1972	1973	1974	1975	1976	1977
<u>Unprocessed</u>	<u>0.3</u>	<u>1.4</u>	<u>1.4</u>	<u>1.3</u>	<u>1.4</u>	<u>1.5</u>	<u>4.7</u>	<u>5.9</u>	<u>6.9</u>	<u>8.5</u>
Seaweeds	0.3	1.4	1.4	1.3	1.4	1.5	4.7	5.8	6.1	7.2
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	1.3
<u>Processed</u>	<u>9.5</u>	<u>22.5</u>	<u>24.5</u>	<u>39.6</u>	<u>25.3</u>	<u>19.8</u>	<u>47.0</u>	<u>41.2</u>	<u>83.8</u>	<u>119.4</u>
Fishmeal	7.5	16.7	15.5	28.5	18.0	13.6	35.2	25.3	61.1	86.5
Frozen seafoods	1.5	5.3	6.2	8.0	3.0	1.8	3.8	7.3	19.9	26.2
Fish preserves	0.5	0.5	2.8	3.1	4.3	4.4	8.0	8.6	2.8	6.7
Total	9.8	23.9	25.9	40.9	26.7	21.3	51.7	47.1	90.7	127.9
(Percent of non-copper exports)	(5.6)	(9.7)	(9.5)	(13.8)	(11.6)	(8.4)	(9.9)	(6.7)	(10.8)	(12.8)

Source: Central Bank

VIII. OTHER SECTORS

Table 8.1: CHILE - PRODUCTION OF COPPER, 1900-1978  
(1,000 mt of fine copper)

Year	Large Mines <sup>a/</sup>	Small and Medium Mines <sup>b/</sup>	Total	Share of World Output (%) <sup>c/</sup>
1900-1909 (ave.)			32	
1910-1919 (ave.)			62	
1920-1929 (ave.)			191	
1930-1939 (ave.)			260	
1940-1949	418	20	438	21 <sup>d/</sup>
1950	345	18	363	15
1951	360	21	381	15
1952	374	35	409	16
1953	325	38	363	14
1954	323	41	364	14
1955	391	42	433	15
1956	444	44	488	16
1957	435	45	480	15
1958	419	46	465	15
1959	497	48	545	17
1960	479	53	532	14
1961	481	65	547	14
1962	510	76	586	15
1963	507	94	601	15
1964	528	94	622	15
1965	479	105	585	14
1966	525	100	625	14
1967	536	124	660	16
1968	519	138	657	14
1969	540	148	688	14
1970	541	151	692	13
1971	571	137	708	14
1972	593	124	717	13
1973	615	120	735	12
1974	763	139	902	15
1975	682	146	828	15
1976	854	158	1,012	16
1977	897	159	1,056	-
1978	882	167	1,049	-

<sup>a/</sup> Includes Chuquicamata, El Salvador, El Teniente, Exótica, and Andina.

<sup>b/</sup> Exports.

<sup>c/</sup> Excludes centrally planned economies.

<sup>d/</sup> 1945-49.

Source: Corporación del Cobre; Metallgesellschaft

Table 8.2: CHILE - LARGE MINE PRODUCTION BY MINE, 1940-1977

(1,000 mt of fine copper)

Year	Chuqui- camata (1915)	Potrerrillos- El Salvador (1927)	El Teniente (1912)	Exótica Andina (1970)	(1970)	Total
1940	151.0	73.1	109.2			333.2
1941	216.8	94.3	131.7			442.9
1942	225.7	90.9	146.8			463.4
1943	238.0	86.7	149.0			473.8
1944	241.2	74.9	158.5			474.6
1945	237.6	63.8	149.6			451.0
1946	210.4	63.1	85.0			358.6
1947	221.0	59.1	125.6			405.7
1948	208.0	67.8	149.0			424.9
1949	175.1	48.9	126.6			350.7
1950	156.3	45.8	143.3			343.3
1951	163.5	41.1	155.4			360.0
1952	159.2	46.8	167.7			373.6
1953	156.8	40.9	127.3			325.0
1954	186.2	38.3	98.1			322.6
1955	209.3	40.5	141.3			391.1
1956	241.3	39.2	163.2			443.7
1957	239.0	39.3	156.7			434.9
1958	212.8	32.6	173.1			418.5
1959	278.0	54.7	164.3			497.1
1960	231.1	78.8	169.2			479.2
1961	249.7	72.6	158.9			481.1
1962	275.8	82.5	152.0			510.2
1963	274.8	88.2	144.4			507.4
1964	288.1	76.5	163.1			527.6
1965	252.7	74.1	152.4			479.2
1966	303.5	76.8	144.6			524.9
1967	276.9	78.0	181.5			536.4
1968	278.9	86.2	154.1			519.3
1969	283.4	77.1	179.9			540.4
1970	263.0	93.0	176.6	1.9	6.0	540.5
1971	250.2	84.9	147.3	35.3	53.6	571.3
1972	234.3	82.9	190.3	31.2	53.9	592.6
1973	265.3	84.0	178.1	31.8	56.1	615.3
1974	356.8	80.0	225.5	32.2	68.4	762.9
1975	304.6	81.3	234.0	-	62.4	682.3
1976	445.5	82.7	268.8	-	56.9	853.0
1977						896.2

Note: Dates in parentheses indicate first year of production.

Source: CODELCO

Table 8.3: CHILE - PRODUCTION OF COPPER BY TYPE, 1940-1977<sup>a/</sup>

(1,000 mt of fine copper)

Year	Refined Copper				Blister	Concen- trate	Cement	Ore	Slag	Total Production
	Electro- lytic	Three- Stars <sup>b/</sup>	Fire Refined	Total						
1940-1944 (ave.)	244	122	-	367	71	-	-	-	-	438
1945-1949 (ave.)	227	99	-	326	73	-	-	-	-	398
1950	156	125	-	281	64	-	-	-	-	345
1951	164	135	-	299	61	-	-	-	-	360
1952	151	157	-	308	66	-	-	-	-	374
1953	90	121	-	211	114	-	-	-	-	325
1954	110	68	-	178	145	-	-	-	-	323
1955	128	113	-	241	150	-	-	-	-	391
1956	140	101	-	241	203	-	-	-	-	444
1957	155	66	-	221	215	-	-	-	-	435
1958	128	60	-	188	231	-	-	-	-	419
1959	177	83	-	260	237	-	-	-	-	497
1960	147	78	1	226	280	21	4	1	-	532
1961	154	62	10	226	297	16	6	1	-	546
1962	180	66	17	263	295	19	8	1	-	586
1963	179	62	18	259	297	29	12	4	-	601
1964	178	79	21	278	309	23	12	1	-	622
1965	191	77	20	289	268	10	17	0	-	584
1966	258	74	25	357	238	14	16	1	-	625
1967	262	70	21	353	277	15	13	1	-	660
1968	266	57	27	350	273	17	15	2	-	657
1969	304	69	27	400	248	19	18	3	-	688
1970	311	65	28	404	243	30	12	3	-	692
1971	324	48	26	398	221	79	6	4	-	708
1972	364	74	24	461	169	71	8	3	4	717
1973	337	55	23	415	175	110	18	1	17	735
1974	426	85	27	538	186	128	16	2	32	902
1975	410	101	24	535	189	87	12	-	5	828
1976	490	117	25	632	224	130	18	-	0	1,005
1977				676	212					1,056

a/ 1940-59 includes Large Mines only; small and medium mine production (exports) are included thereafter.

b/ Refers to copper refined at Chuquicamata, Potrerillos, and Ventanas by a combination of firing and electrolysis.

Source: CODELCO

Table 8.4: CHILE - COPPER DELIVERIES TO CHILEAN MANUFACTURING INDUSTRY, 1960-1977

(Thousands of metric tons)

	Total			Domestic Consumption			Used in Manufacture of Exports		
	Total	Electro-lytic	Three Stars	Total	Electro-lytic	Three Stars	Total	Electro-lytic	Three Stars
1960	13.0	8.4	4.6	8.3	5.1	3.2	4.7	3.3	1.4
1961	12.3	8.9	3.4	8.2	5.9	2.3	4.1	3.0	1.1
1962	13.3	8.3	5.0	9.7	5.0	4.7	3.6	3.3	0.3
1963	16.2	10.5	5.7	13.0	7.6	5.4	3.2	2.9	0.3
1964	65.2	36.9	28.3	13.2	8.4	4.8	52.0	28.5	23.5
1965	72.9	42.5	30.4	10.6	7.8	2.8	62.3	34.7	27.6
1966	39.7	35.4	4.3	10.7	8.8	1.9	29.0	26.6	2.4
1967	17.2	13.5	3.7	8.6	5.1	3.5	8.6	8.4	0.2
1968	22.8	19.6	3.2	11.8	9.0	2.8	11.0	10.6	0.4
1969	19.7	14.0	5.7	11.5	7.3	4.2	8.2	6.7	1.5
1970	20.6	16.0	4.6	11.8	8.0	3.8	8.8	8.0	0.8
1971	26.7	19.4	7.3	15.9	10.8	5.1	10.8	8.6	2.2
1972	36.3	26.4	9.9	19.6	11.6	8.0	16.7	14.8	1.9
1973	34.2	26.8	7.4	18.3	13.6	4.7	15.9	13.2	2.7
1974	29.4	19.5	9.9	12.1	7.2	4.9	17.3	12.3	5.0
1975	26.8	21.5	5.3	4.5	3.6	0.9	22.3	17.9	4.4
1976	46.3	41.2	5.1	6.5	6.1	0.4	39.8	35.1	4.7
1977	48.4								

Source: CODELCO

Table 8.5: CHILE - COPPER EXPORTS, BY TYPE AND DESTINATION - 1960-1976

(Thousands of metric tons)

	1960	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
<b>Total Copper Exports</b>	<b>512.8</b>	<b>518.7</b>	<b>582.9</b>	<b>631.8</b>	<b>635.9</b>	<b>656.4</b>	<b>668.8</b>	<b>684.0</b>	<b>630.8</b>	<b>656.5</b>	<b>858.2</b>	<b>787.8</b>	<b>981.9</b>
<b>I. Electrolytic Copper</b>	<b>138.4</b>	<b>149.5</b>	<b>221.2</b>	<b>276.2</b>	<b>296.7</b>	<b>340.1</b>	<b>347.9</b>	<b>369.5</b>	<b>316.9</b>	<b>319.8</b>	<b>386.1</b>	<b>389.3</b>	<b>454.8</b>
Western Europe	137.8	128.2	186.6	213.5	225.2	261.0	287.6	277.7	201.7	184.2	202.4	248.1	246.1
European Community	119.3	109.5	185.5	184.4	193.5	229.2	258.0	297.6	180.4	157.0	178.7	213.1	223.8
(Germany)	(23.0)	(63.7)	(85.4)	(70.3)	(80.0)	(82.1)	(108.6)	(104.1)	(79.0)	(59.5)	(58.9)	(74.1)	(56.6)
(France)	(14.4)	(13.2)	(15.6)	(27.4)	(21.4)	(31.7)	(27.7)	(31.1)	(15.8)	(15.5)	(30.3)	(31.3)	(31.1)
(Italy)	(11.6)	(14.0)	(17.9)	(35.1)	(32.3)	(44.4)	(46.6)	(51.1)	(39.2)	(36.9)	(43.8)	(41.6)	(56.6)
(U.K.)	(23.6)	(17.0)	(44.9)	(49.5)	(57.6)	(58.8)	(53.9)	(50.6)	(39.4)	(42.4)	(40.8)	(53.0)	(48.7)
Japan	-	-	7.7	17.0	23.2	22.2	17.8	29.3	29.4	21.3	50.6	32.1	32.1
United States	0.6	12.3	20.4	25.9	25.6	23.5	13.1	16.6	30.1	38.5	34.6	16.0	25.0
China, People's Republic	-	-	-	-	-	-	-	8.3	15.0	20.0	16.0	5.8	-
Centrally-Planned Economies	-	-	-	-	-	-	-	1.3	10.0	19.1	17.1	21.4	11.0
Latin America	-	9.0	6.5	19.8	22.7	33.4	29.4	34.4	30.1	36.7	65.4	62.6	133.0
(Argentina)	(-)	(3.3)	(5.1)	(14.1)	(16.0)	(23.3)	(19.9)	(25.6)	(23.7)	(25.6)	(26.9)	(24.0)	(14.2)
(Brazil)	(-)	(5.7)	(1.4)	(5.7)	(6.7)	(10.0)	(9.5)	(8.8)	(6.4)	(9.8)	(36.3)	(38.6)	(118.8)
Other	(-)	(-)	(-)	(-)	(-)	(-)	(-)	1.9	0.6	-	-	3.3	7.6
<b>II. Fire Refined</b>	<b>74.7</b>	<b>67.3</b>	<b>95.8</b>	<b>85.1</b>	<b>81.0</b>	<b>88.1</b>	<b>92.1</b>	<b>65.3</b>	<b>89.1</b>	<b>68.0</b>	<b>101.7</b>	<b>114.9</b>	<b>139.9</b>
Western Europe	73.6	53.3	85.1	71.6	72.7	81.7	84.8	59.3	70.9	55.0	72.3	82.5	68.2
European Community	73.5	51.2	77.5	68.1	60.9	70.7	74.7	52.7	64.5	53.2	65.8	74.6	62.8
(Germany)	(15.3)	(9.0)	(14.1)	(11.9)	(13.1)	(13.9)	(16.7)	(11.9)	(18.4)	(18.9)	(27.4)	(28.6)	(28.1)
(France)	(0.2)	(4.5)	(19.8)	(12.7)	(12.5)	(19.3)	(22.2)	(15.8)	(16.2)	(4.8)	(4.4)	(13.7)	(10.6)
(Italy)	(10.5)	(10.4)	(21.6)	(18.5)	(16.5)	(19.1)	(18.2)	(12.5)	(14.6)	(9.0)	(19.2)	(14.1)	(14.7)
(U.K.)	(43.8)	(27.0)	(21.9)	(18.4)	(17.5)	(17.2)	(16.4)	(11.3)	(11.2)	(15.8)	(12.8)	(13.1)	(7.3)
United States	1.1	-	0.1	3.1	1.4	-	1.0	-	10.5	3.5	9.5	10.9	38.6
Latin America	-	10.0	5.9	5.3	6.6	6.4	6.3	6.0	6.1	9.5	16.9	19.5	29.8
Other	-	4.0	4.7	5.1	0.3	-	-	-	1.6	-	3.0	2.0	3.3
<b>III. Blister</b>	<b>272.5</b>	<b>274.1</b>	<b>235.1</b>	<b>240.7</b>	<b>224.4</b>	<b>188.0</b>	<b>190.1</b>	<b>170.3</b>	<b>149.9</b>	<b>159.5</b>	<b>214.5</b>	<b>179.8</b>	<b>231.0</b>
Western Europe	89.4	93.8	72.3	121.1	72.6	75.0	72.0	94.7	80.5	80.2	82.8	135.3	158.3
European Community	88.8	91.6	67.0	112.1	64.3	64.0	66.1	86.7	66.5	54.6	65.2	108.4	122.1
(Germany)	(44.9)	(46.7)	(20.8)	(45.9)	(18.6)	(25.1)	(28.4)	(37.8)	(30.9)	(25.7)	(23.1)	(53.0)	(83.2)
(France)	(-)	(-)	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(3.7)	(11.5)	(2.0)
(Italy)	(2.4)	(-)	(0.8)	(1.4)	(1.4)	(1.8)	(1.9)	(2.1)	(0.7)	(-)	(4.4)	(2.1)	(1.6)
(U.K.)	(41.5)	(38.4)	(32.5)	(33.6)	(35.6)	(36.2)	(28.3)	(39.5)	(31.4)	(24.3)	(33.5)	(38.8)	(30.1)
Japan	-	-	1.5	-	17.7	26.0	30.9	31.9	14.1	13.0	16.3	-	9.2
United States	183.1	180.3	161.3	119.6	134.1	87.0	87.2	35.2	24.9	16.3	61.6	26.5	35.6
China, People's Republic	-	-	-	-	-	-	-	8.0	30.4	35.5	25.5	8.0	22.9
Centrally-Planned Economies	-	-	-	-	-	-	-	0.5	-	14.5	20.9	10.0	5.0
Other	-	-	-	-	-	-	-	-	-	-	7.4	-	-
<b>IV. Ores and Concentrates</b>	<b>27.2</b>	<b>27.8</b>	<b>30.8</b>	<b>29.8</b>	<b>33.8</b>	<b>40.2</b>	<b>38.7</b>	<b>78.9</b>	<b>74.9</b>	<b>109.2</b>	<b>155.9</b>	<b>103.8</b>	<b>156.2</b>
Western Europe	6.1	10.7	12.8	10.6	19.4	26.8	22.9	22.3	34.1	29.8	34.2	37.6	52.8
European Community	5.8	10.1	11.9	6.2	13.6	15.1	16.8	16.9	16.7	20.4	21.6	19.4	28.1
(Germany)	(5.8)	(9.9)	(11.8)	(6.1)	(13.6)	(15.0)	(15.4)	(12.9)	(15.5)	(15.2)	(18.2)	(15.0)	(22.4)
Japan	9.2	14.8	14.5	17.3	12.2	13.0	14.5	51.6	37.1	58.9	58.6	54.7	57.7
United States	10.9	0.9	0.6	0.3	-	-	-	-	0.1	0.5	-	-	-
Other	1.0	1.4	2.9	1.6	2.2	0.4	1.3	5.0	3.6	20.0	63.1	11.5	45.7

Source: CODELCO



Table 8.6: CHILE - AVERAGE ANNUAL PRICE OF COPPER;<sup>a/</sup> 1950-1978

(U.S. cents per pound)

Year	Current Price		Chile (CIF)	Constant 1975 Cents		Chile (CIF)
	LME <sup>b/</sup>	N.Y. <sup>c/</sup>		LME <sup>b/</sup>	N.Y.	
1950	22.4	21.2		61.4	58.3	
1951	27.5	24.2		63.0	55.4	
1952	32.4	24.2	34.2	73.0	54.6	77.0
1953	30.1	28.8	34.7	70.7	67.6	81.5
1954	31.1	29.7	29.9	74.5	71.3	71.7
1955	43.9	37.5	38.8	114.6	97.9	101.3
1956	41.1	41.8	40.3	103.5	105.3	101.5
1957	27.4	29.6	27.2	66.7	72.0	66.2
1958	24.7	25.8	24.4	60.0	62.6	59.2
1959	29.7	31.2	29.7	72.3	75.9	72.3
1960	30.8	32.1	30.8	73.5	76.6	73.5
1961	28.7	29.9	28.7	67.8	70.7	67.8
1962	29.3	30.6	29.3	69.3	72.3	69.3
1963	29.3	30.6	29.3	68.9	72.0	68.9
1964	43.9	32.0	31.7	101.6	74.1	73.4
1965	58.5	35.0	36.1	131.8	78.8	81.3
1966	69.4	36.2	54.2	154.6	80.6	120.7
1967	51.6	38.2	49.6	113.2	83.8	108.8
1968	56.3	41.9	53.3	131.5	97.9	124.5
1969	66.5	47.6	66.6	153.9	110.2	154.2
1970	64.1	57.7	64.1	133.5	120.2	133.5
1971	49.0	51.5	49.3	94.2	99.0	94.8
1972	48.6	50.6	48.6	84.5	88.0	84.5
1973	80.9	58.9	80.9	116.7	85.0	116.7
1974	93.4	76.7	93.4	107.7	88.5	107.7
1975	56.1	63.6	56.1	56.1	63.6	56.1
1976	63.5	68.8	63.5	62.9	68.1	62.9
1977	59.4	-	59.4	53.6	-	53.6
1978	61.9	-	61.9	46.5	-	46.5

a/ Electrolytic wirebar.

b/ London Metal Exchange.

c/ New York market.

d/ Deflated by IBRD Index of Unit Values (CIF) of Manufactured Exports from Developed to Developing Countries. Note that this deflator is slightly different from that used in Table 9.8.

Source: LME and NY prices from IBRD, Commodity Trade and Price Trends (1977 edition), Report No. EC-166/77, Washington, 1977; Chile prices 1952-1959 from Ricardo Ffrench-Davis (op. cit.); Chile prices since 1960 from CODELCO

Table 8.7: CHILE - EXCHANGE RATE FOR LOCAL EXPENDITURES OF LARGE COPPER COMPANIES, 1931-1975

(Escudos per U.S. dollar)

	Nominal Exchange Rates <sup>a/</sup>			(1) ÷ (2)	(1) ÷ (3)
	Copper	Other Exports	Average Legal Rate		
1931-51	0.019	n.a.	0.030	n.a.	0.63
1952	0.029	0.113	0.066	0.26	0.44
1953	0.044	0.110	0.076	0.40	0.58
1954	0.066	0.123	0.104	0.54	0.63
1955	0.125	0.205	0.181	0.61	0.69
1956	0.369	0.441	0.351	0.84	1.05
1957	0.620	0.621	0.624	1.00	0.99
1958	0.788	0.789	0.715	1.00	1.10
1959	1.045	1.047	1.049	1.00	1.00
1960	1.049	1.051	1.049	1.00	1.00
1961	1.049	1.051	1.049	1.00	1.00
1962	1.142	1.142	1.153	1.00	0.99
1963	1.872	1.998	1.871	0.94	1.00
1964	2.372	2.796	2.418	0.85	0.98
1965	3.128	3.337	3.237	0.94	0.97
1966	3.955	4.081	4.000	0.97	0.99
1967	5.031	5.132	5.030	0.98	0.99
1968	6.787	6.923	6.860	0.98	0.99
1969	8.974	9.153	9.040	0.98	0.99
1970	11.552	11.783	11.830	0.98	0.98
1971	12.409		13.470		0.92
1972	17.550		21.870		0.80
1973 Jan.-Sept.	31.491		58.770		0.54
Oct.-Dec.	117.333		405.180		0.29
1974	661.425		863.650		0.77
1975	4903.0		4903.0		1.00

<sup>a/</sup> Annual averages. From 1948 to 1955, local investment expenditures of the copper companies were given a preferred rate relative to other production costs.

Source: Behrman, *op. cit.*, Table A.7, French-Davis, *op. cit.*, Table 42

Table 8.8: PURCHASING POWER OF COPPER EXPORTS AND CHILE'S RETAINED VALUE OF GRAN MINERIA OUTPUT, 1952-1970

(Millions of U.S. dollars at prices of 1969)<sup>a/</sup>

	Real Copper Price <sup>b/</sup>	Copper Exports			Retained Value		
		Gran Minería	Small and Medium Mines	Total	Taxes <sup>c/</sup>	Local Costs <sup>d/</sup>	Total
1952	24.6	185.4	24.4	209.8	109.4	32.1	141.5
1953	26.1	137.8	16.8	154.6	82.1	35.7	117.8
1954	22.0	160.0	15.2	175.2	79.5	33.7	113.2
1955	39.4	336.9	29.1	366.0	186.2	50.4	236.6
1956	40.0	328.5	33.4	361.9	141.5	67.2	208.7
1957	26.8	229.9	24.3	254.2	74.3	80.6	154.9
1958	24.7	197.4	21.2	218.6	55.0	76.4	131.4
1959	30.5	288.3	28.5	316.8	89.9	102.7	192.6
1960	31.6	299.4	32.6	332.0	90.5	119.7	210.2
1961	30.0	281.2	39.8	321.0	79.3	122.5	201.8
1962	30.7	300.1	49.6	349.7	89.0	132.8	221.8
1963	30.1	294.3	56.5	350.7	96.3	116.3	212.6
1964	31.7	320.2	78.7	398.9	122.8	119.7	242.5
1965	35.8	358.8	120.4	479.2	134.7	143.2	277.9
1966	53.2	505.0	117.9	622.9	221.4	163.4	384.8
1967	48.8	521.4	128.0	649.4	209.1	182.5	391.6
1968	54.4	557.5	151.0	708.5	205.6	222.4	428.0
1969	66.6	726.4	205.7	932.1	357.8	262.0	619.8
1970	58.9	620.4	163.7	784.1	275.1	242.4 <sup>e/</sup>	517.5 <sup>e/</sup>

a/ All deflations are by IBRD index of Chile import prices (see Table 9.4).

b/ CIF prices received by Gran Minería del Cobre.

c/ Includes exchange rate differential, Central Bank earnings on copper sales, profits to state-owned shares, as well as taxes on profits, etc.; does not include import duties.

d/ Includes dollar expenditures in Chile and duties on imported inputs.

e/ Does not include dollar expenditures in Chile.

Sources: CODELCO; Banco Central de Chile; Ricardo French-Davis, "La Importancia del Cobre en la Economía Chilena," Table 4.

Table 8.8a: CHILE - INDEX OF PURCHASING POWER OF COPPER EXPORTS AND RETAINED VALUE, 1952-1970

(1965 = 100)

	Real Copper Price	Copper Exports			Retained Value		
		Gran Minería	Small and Medium Mines	Total	Taxes	Local Costs	Total
1952	68.7	51.7	20.3	43.8	81.2	22.4	50.9
1953	72.9	38.4	14.0	32.3	61.0	24.9	42.4
1954	61.5	44.6	12.6	36.6	59.0	23.5	40.7
1955	110.1	93.9	24.2	76.4	138.2	35.2	85.1
1956	111.7	91.6	27.7	75.5	105.0	46.9	75.1
1957	74.9	64.1	20.2	53.0	55.2	56.3	55.7
1958	69.0	55.0	17.6	45.6	40.8	53.4	47.3
1959	85.2	80.4	23.7	66.1	66.7	71.7	69.3
1960	88.3	83.4	27.1	69.3	67.2	83.6	75.6
1961	83.8	78.4	33.1	67.0	58.9	85.5	72.6
1962	85.8	83.6	41.2	73.0	66.1	92.7	79.8
1963	84.1	82.0	46.9	73.2	71.5	81.2	76.5
1964	88.5	89.2	65.4	83.2	91.2	83.6	87.3
1965	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1966	148.6	140.7	97.9	130.0	164.4	114.1	138.5
1967	136.3	145.3	106.3	135.5	155.2	127.4	140.9
1968	152.0	155.4	125.4	147.9	152.6	155.3	154.0
1969	186.0	202.5	170.8	194.5	265.6	183.0	223.0
1970	164.5	172.9	136.0	163.6	204.2	169.3 <sup>a/</sup>	186.2 <sup>a/</sup>
Average annual rate of change							
1952-1969 (%)	5.6	8.4		9.2	7.2		9.1

a/ Does not include dollar expenditures in Chile.

Source: Table 8.8

Table 8.8b: CHILE - YEAR-TO-YEAR CHANGES OF PURCHASING POWER OF COPPER EXPORTS  
AND RETAINED VALUE, 1952-1970

(Percent)

	Real Copper Price	Copper Exports.			Retained Value		
		Gran Minería	Small and Medium Mines	Total	Taxes	Local Costs	Total
1953	+ 6.1	-25.7	-31.2	-26.4	-25.0	+11.2	-16.7
1954	-15.7	+16.1	- 9.6	+13.3	- 3.2	- 5.6	- 3.9
1955	+79.1	+110.6	+91.4	+108.9	+134.2	+49.6	+109.0
1956	+ 1.5	- 2.5	+14.8	- 1.2	-24.0	+33.3	-11.8
1957	-33.0	-30.1	-27.3	-29.8	-47.5	+19.9	-25.8
1958	- 7.8	-14.2	-12.8	-24.1	-26.0	- 5.2	-15.2
1959	+23.5	+46.0	+34.4	+44.9	+63.5	+34.4	+46.6
1960	+ 3.6	+ 3.8	+14.4	+ 4.8	+ 0.7	+16.6	+ 9.1
1961	- 5.1	- 6.1	+22.1	- 3.4	-12.4	+ 2.3	- 4.0
1962	+ 2.3	+ 6.7	+24.6	+ 8.9	+12.2	+ 8.4	+ 9.9
1963	- 2.0	- 1.9	+13.9	+ 0.3	+ 8.2	-12.4	- 4.1
1964	+ 5.3	+ 8.8	+39.3	+13.7	+27.5	+ 2.9	+14.1
1965	+12.9	+12.0	+53.0	+20.1	+ 9.7	+19.6	+14.6
1966	+48.6	+40.7	- 2.1	+30.0	+64.4	+14.1	+38.5
1967	- 8.3	+ 3.2	+ 8.6	+ 4.3	- 5.6	+11.7	+ 1.8
1968	+11.5	+ 6.9	+18.0	+ 9.1	- 1.7	+21.9	+ 9.3
1969	+22.4	+30.3	+36.2	+31.6	+74.0	+17.8	+44.8
1970	-11.6	-14.6	-20.2	-25.9	-23.1	n.a.	n.a.
Average annual % change (absolute value)	16.7	21.1	26.3	22.9	31.3	16.9 <sup>a/</sup>	22.3 <sup>a/</sup>

a/ 1952-1969.

Source: Table 8.8

**Table 8.9:** CHILE'S RETAINED SHARE OF GROSS CIF VALUE OF COPPER PRODUCTION,  
BY SOURCE, 1925-1970  
(Percent)

Year	Fiscal Revenues <sup>a/</sup>	Exchange Rate Differential <sup>b/</sup>	Local Operating Expenditures <sup>c/</sup>	Total
1925	4.9	-	33.1	38.1
1930	5.1	-	40.9	46.0
1935	8.2	-	24.8	33.0
1940	15.2	-	24.8	40.0
1945	16.9	-	41.2	58.0
1950	27.3	18.6	24.1	70.0
1952	39.7	16.0	16.3	72.0
1953	32.4	18.8	22.3	73.5
1954	34.8	15.7	21.4	71.9
1955	47.6	6.9	14.8	69.2
1956	37.8	3.4	19.5	60.7
1957	27.7	0.0	30.0	57.7
1958	23.6	0.0	32.7	56.3
1959	25.9	0.0	29.6	55.6
1960	25.5	0.1	33.7	59.2
1961	25.2	0.1	39.0	64.3
1962	25.5	0.0	37.9	63.4
1963	26.0	2.0	33.9	61.9
1964	27.1	5.1	31.4	63.6
1965	29.9	2.5	34.5	66.9
1966	38.7	0.8	29.2	68.7
1967	34.4	0.6	30.6	65.6
1968	30.9	0.6	34.1	65.5
1969	42.3	0.6	31.4	74.3
1970	39.5	0.7	35.4 <sup>d/</sup>	75.6 <sup>d/</sup>

<sup>a/</sup> Includes taxes on income, over-price, and share of profits accruing to government. Does not include import duties.

<sup>b/</sup> Before 1950, included in local operating expenditures. Differential calculated on basis of the exchange rate applied to general exports.

<sup>c/</sup> Includes dollar expenditures in Chile and import duties. Also includes exchange rate differential before 1950.

<sup>d/</sup> Does not include local dollar expenditures.

Sources: Data for 1925-1950 are calculated from information in Clark W. Reynolds, "Development Problems of an Export Economy: The Case of Chile and Copper," in Markos Mamalakis and Clark Reynolds, Essays on the Chilean Economy, Irwin, 1965; Data on exchange rate differential for 1950 from Theodore H. Moran, Multinational Corporations and the Politics of Dependence: Copper in Chile, Princeton University Press, 1974; Data underlying calculations for 1952-1970 from Ricardo Ffrench-Davis, "La Importancia del Cobre en la Economía Chilena," in Ricardo Ffrench-Davis and Ernesto Tironi, El Cobre en el Desarrollo Nacional, CEPLAN, Santiago, 1974.

Table 8.10: CHILE - EMPLOYMENT IN THE LARGE MINING SECTOR, 1960-1977

(Average number of persons per year)

	Total	Chuquicamata <sup>1/</sup>	Salvador	Teniente	Andina	Central Office
1960	17,444	6,816	3,650	6,978		
1961	18,654	6,990	4,335	7,309		
1962	17,690	7,013	3,777	6,900		
1963	18,249	7,137	3,914	7,198		
1964	18,887	7,206	4,017	7,664		
1965	19,346	7,252	4,240	7,854		
1966	19,067	7,288	4,409	7,370		
1967	20,769	8,090	4,677	8,002		
1968	22,338	8,353	4,730	9,255		
1969	22,981	8,373	4,742	9,866		
1970	23,697	8,711	4,882	10,104		
1971	26,127	9,357	5,112	10,491	1,167	
1972	29,169	10,013	5,496	11,959	1,701	
1973	31,484	10,839	5,929	12,695	2,021	
1974	32,902	11,428	6,242	12,921	2,311	
1975	31,597	10,617	5,877	12,731	2,372	
1976	31,157	10,355	5,678	12,228	2,298	538
1977 (Feb.)	30,987	10,232	5,641	12,213	2,285	616

<sup>1/</sup> Includes Exotica.

Source: 1960-1974 CODELCO; 1975-1977 Ministry of Finance

Table 8.11: CHILE - LABOR PRODUCTIVITY AT LARGE COPPER MINES, 1960-1976

(Average annual output per worker in metric tons of copper content)

	Total	Chuquicamata <sup>1/</sup>	Salvador	Andina	Teniente
1960	27.46	33.91	21.58		24.25
1961	25.79	35.71	16.66		21.74
1962	28.84	39.32	21.83		22.02
1963	27.80	38.50	22.53		20.05
1964	27.93	39.97	19.03		21.27
1965	24.73	34.84	17.33		19.39
1966	27.52	41.64	17.41		19.61
1967	25.82	34.22	16.67		22.68
1968	23.24	33.39	18.21		16.65
1969	23.50	33.83	16.25		18.22
1970	22.81	30.41	19.05		17.49
1971	21.86	30.50	16.60	45.91	14.03
1972	20.31	26.51	15.08	31.72	15.91
1973	19.54	27.40	14.17	27.74	14.03
1974	23.18	34.03	12.81	29.58	17.45
1975	21.59	28.69	13.83	26.31	18.38
1976	27.41	43.03	14.58	24.75	21.99

<sup>1/</sup> Includes Exotica.

Source: CODELCO



Table 8.12: CHILE - NON-COPPER MINING PRODUCTION, 1963-1977

(Thousands of metric tons)

	Iron	Coal	Molybdenum	Nitrate	Iodine	Manganese	Calcium Carbonate	Sodium Sulfate
1963	8,510	1,786	3	1,136	2,158	47		
1964	9,888	1,782	4	1,173	2,161	20		
1965	12,131	1,680	4	1,158	2,280	17		
1966	12,222	1,652	5	1,063	2,931	18	2,238	
1967	10,784	1,496	5	871	2,216	15	1,911	
1968	11,916	1,631	4	679	1,964	24	1,776	
1969	11,534	1,704	5	782	2,449	24	2,304	52
1970	11,265	1,510	6	674	2,250	27	2,091	31
1971	11,228	1,626	6	830	2,564	24	2,088	45
1972	8,640	1,457	6	706	2,101	16	1,989	41
1973	9,416	1,390	5	796	2,168	15	1,848	36
1974	10,297	1,520	10	738	2,273	29	2,659	32
1975	11,007	1,515	9	726	1,962	20	1,577	23
1976	10,055	1,300	11	619	1,259	18	1,794	28
1977 <sup>p/</sup>	7,756	1,310	11	564	1,852	21	1,599	30

<sup>p/</sup> Preliminary.

Source: Central Bank

Table 8.13: CHILE - STRUCTURE OF MANUFACTURING, 1967 <sup>a/</sup>

Industry/No. of Workers	No. of Establish- ments <sup>b/</sup>		Total Employ- ment		Motor Capacity (HP)	Motor Capacity Per Worker (5) ÷ (3)		Gross Value of Output (E <sup>o</sup> Million)	Value- Added (E <sup>o</sup> Million)		
	Percent	Percent	Percent	Percent		Percent	Percent		Percent	Percent	
<u>Processed foods (ex. beverages)</u>	<u>2,284</u>	<u>100.0</u>	<u>59,150</u>	<u>100.0</u>	<u>171,565</u>	<u>100.0</u>	<u>2.9</u>	<u>4,690.1</u>	<u>100.0</u>	<u>1,589.5</u>	<u>100.0</u>
5- 9	910	39.8	5,872	9.9	7,309	4.3	1.2	333.5	7.1	72.6	4.6
10- 19	711	31.1	9,666	16.3	12,654	7.4	1.3	537.0	11.4	141.4	8.9
20- 49	451	19.7	13,021	22.0	25,734	15.0	2.0	1,163.8	24.8	291.1	18.3
50- 99	109	4.8	7,353	12.4	21,350	12.4	2.9	770.1	16.4	204.5	12.9
100-199	62	2.7	8,931	15.1	32,894	19.2	3.7	640.5	13.7	242.0	15.2
200-499	35	1.5	10,943	18.5	42,185	24.6	3.9	922.8	19.7	550.4	34.6
500-999	6	0.3	3,364	5.7	29,443	17.2	8.8	322.4	6.9	87.4	5.5
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Beverages</u>	<u>1,037</u>	<u>100.0</u>	<u>13,601</u>	<u>100.0</u>	<u>39,977</u>	<u>100.0</u>	<u>2.9</u>	<u>1,003.9</u>	<u>100.0</u>	<u>495.4</u>	<u>100.0</u>
5- 9	662	63.8	2,291	16.8	9,636	24.1	4.2	89.8	8.9	31.1	6.3
10- 19	225	21.7	1,966	14.5	5,462	13.7	2.8	121.0	12.1	43.0	8.7
20- 49	95	9.2	2,291	16.8	6,341	15.9	2.8	215.0	21.4	95.3	19.2
50- 99	31	3.0	2,115	15.6	5,236	13.1	2.5	177.1	17.6	95.6	19.3
100-199	16	1.5	2,053	15.1	6,044	15.1	2.9	148.1	14.8	66.6	13.4
200-499	6	0.6	1,626	12.0	6,484	16.2	4.0	119.4	11.9	64.1	12.9
500-999	2	0.2	1,259	9.3	774	1.9	0.6	133.4	13.3	99.7	20.1
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Tobacco</u>	<u>4</u>	<u>100.0</u>	<u>1,501</u>	<u>100.0</u>	<u>1,278</u>	<u>100.0</u>	<u>0.9</u>	<u>337.2</u>	<u>100.0</u>	<u>257.3</u>	<u>100.0</u>
5- 9	0	-	-	-	-	-	-	-	-	-	-
10- 19	0	-	-	-	-	-	-	-	-	-	-
20- 49	1	25.0	20	1.3	1	0.1	0.1	0.6	0.2	0.5	0.2
50- 99	0	-	-	-	-	-	-	-	-	-	-
100-199	0	-	-	-	-	-	-	-	-	-	-
200-499	2	50.0	547	36.4	150	11.7	0.3	48.1	14.3	37.7	14.7
500-999	1	25.0	934	62.2	1,127	88.2	1.2	288.5	85.6	219.0	85.1
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Textiles</u>	<u>805</u>	<u>100.0</u>	<u>48,073</u>	<u>100.0</u>	<u>103,599</u>	<u>100.0</u>	<u>2.2</u>	<u>1,838.5</u>	<u>100.0</u>	<u>992.5</u>	<u>100.0</u>
5- 9	238	29.6	1,599	3.3	1,105	1.1	0.7	38.9	2.1	16.8	1.7
10- 19	185	23.0	2,560	5.3	4,754	4.6	1.9	79.8	4.3	37.6	3.8
20- 49	212	26.3	6,565	13.7	9,033	8.7	1.4	247.5	13.5	118.0	11.9
50- 99	88	10.9	6,034	12.6	7,576	7.3	1.3	221.9	12.1	112.9	11.4
100-199	36	4.5	5,065	10.5	12,523	12.1	2.5	196.4	10.7	103.0	10.4
200-499	30	3.7	9,037	18.8	17,772	17.2	2.0	332.8	18.1	192.6	19.4
500-999	9	1.1	6,273	13.0	13,876	13.4	2.2	270.5	14.7	163.7	16.5
1,000 and over	7	0.9	10,940	22.8	36,920	35.6	3.4	450.7	24.5	247.8	25.0
<u>Clothing (ex. shoes)</u>	<u>721</u>	<u>100.0</u>	<u>18,566</u>	<u>100.0</u>	<u>7,491</u>	<u>100.0</u>	<u>0.4</u>	<u>626.9</u>	<u>100.0</u>	<u>287.0</u>	<u>100.0</u>
5- 9	336	46.6	2,190	11.8	371	5.0	0.2	61.3	9.8	26.0	9.1
10- 19	192	26.6	2,644	14.2	981	13.1	0.4	67.0	10.7	26.8	9.3
20- 49	122	16.9	3,680	19.8	694	9.3	0.2	117.3	18.7	47.9	16.7
50- 99	38	5.3	2,636	14.2	720	9.6	0.3	94.9	15.1	40.5	14.1
100-199	23	3.2	3,256	17.5	1,398	18.7	0.4	116.8	18.6	60.7	21.2
200-499	7	1.0	2,119	11.4	3,017	40.3	1.4	84.1	13.4	44.0	15.3
500-999	3	0.4	2,041	11.0	310	4.1	0.2	85.5	13.6	41.1	14.3
1,000 and over	0	-	-	-	-	-	-	-	-	-	-

Table 8.13: CHILE - STRUCTURE OF MANUFACTURING, 1967 <sup>a/</sup>

Industry/No. of Workers	No. of Establish- ments		Total Employ- ment		Motor Capacity (HP)	Motor Capacity Per Worker		Gross Value of Output (E <sup>o</sup> Million)	Value- Added (E <sup>o</sup> Million)		
	(1)	(2) Percent	(3)	(4) Percent		(5) Percent	(6) (3) (E <sup>o</sup> )		(7) Percent	(8) (E <sup>o</sup> Million)	(9) Percent
<u>Leather Goods</u>	<u>167</u>	<u>100.0</u>	<u>5,056</u>	<u>100.0</u>	<u>18,192</u>	<u>100.0</u>	<u>3.6</u>	<u>244.1</u>	<u>100.0</u>	<u>106.2</u>	<u>100.0</u>
5- 9	61	36.5	415	8.2	502	2.8	1.2	8.0	3.3	3.8	3.6
10- 19	43	25.7	622	12.3	1,886	10.4	3.0	19.9	8.1	9.6	9.0
20- 49	39	23.4	1,256	24.8	3,586	19.7	2.9	50.3	20.6	15.7	14.7
50- 99	13	7.8	840	16.6	4,292	23.6	5.1	41.9	17.2	17.2	16.2
100-199	7	4.2	951	18.8	4,129	22.7	4.3	54.2	22.2	27.1	25.5
200-499	4	2.4	972	19.2	3,797	20.9	3.9	69.7	28.6	32.9	31.0
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Shoes (ex. rubber or plastic)</u>	<u>342</u>	<u>100.0</u>	<u>13,694</u>	<u>100.0</u>	<u>9,449</u>	<u>100.0</u>	<u>0.7</u>	<u>389.5</u>	<u>100.0</u>	<u>213.6</u>	<u>100.0</u>
5- 9	120	35.1	784	5.7	363	3.8	0.5	12.2	3.1	5.5	2.6
10- 19	102	29.8	1,386	10.1	969	10.3	0.7	28.0	7.2	11.7	5.5
20- 49	64	18.7	1,861	13.6	1,027	10.9	0.6	41.6	10.7	18.7	8.8
50- 99	27	7.9	1,841	13.4	1,663	17.6	0.9	46.6	12.0	24.9	11.7
100-199	12	3.5	1,714	12.5	877	9.3	0.5	43.2	11.1	23.4	11.0
200-499	15	4.4	4,478	32.7	3,725	39.4	0.8	140.3	36.0	83.3	39.0
500-999	1	0.3	581	4.2	267	2.8	0.5	21.6	5.5	11.4	5.3
1,000 and over	1	0.3	1,049	7.7	558	5.9	0.5	56.0	14.4	34.7	16.2
<u>Wood Products (ex. furniture)</u>	<u>2,376</u>	<u>100.0</u>	<u>27,285</u>	<u>100.0</u>	<u>87,337</u>	<u>100.0</u>	<u>3.2</u>	<u>566.4</u>	<u>100.0</u>	<u>287.4</u>	<u>100.0</u>
5- 9	1,308	55.1	3,710	13.6	18,037	20.7	4.9	49.3	8.7	24.0	8.4
10- 19	672	28.3	4,823	17.7	19,058	21.8	4.0	120.1	21.2	60.2	20.9
20- 49	291	12.2	5,792	21.2	19,074	21.8	3.3	139.0	24.5	67.1	23.3
50- 99	58	2.4	3,659	13.4	11,446	13.1	3.1	93.8	16.6	46.6	16.2
100-199	28	1.2	3,724	13.6	11,009	12.6	3.0	85.1	15.0	44.9	15.6
200-499	17	0.7	3,896	14.3	7,190	8.2	1.8	61.9	10.9	33.1	11.5
500-999	1	0.0	540	2.0	0	-	-	4.6	0.8	3.1	1.1
1,000 and over	1	0.0	1,141	4.2	1,523	1.7	1.3	12.6	2.2	8.2	2.9
<u>Furniture (nonmetal)</u>	<u>488</u>	<u>100.0</u>	<u>8,558</u>	<u>100.0</u>	<u>10,915</u>	<u>100.0</u>	<u>1.3</u>	<u>176.3</u>	<u>100.0</u>	<u>99.7</u>	<u>100.0</u>
5- 9	275	56.4	1,766	20.6	1,968	18.0	1.1	25.2	14.3	13.5	13.5
10- 19	116	23.8	1,544	18.0	2,116	19.4	1.4	27.3	15.5	14.3	14.3
20- 49	69	14.1	1,941	22.7	2,277	20.9	1.2	38.9	22.1	19.1	19.2
50- 99	15	3.1	1,043	12.2	1,278	11.7	1.2	24.7	13.7	13.7	13.7
100-199	11	2.3	1,577	18.4	2,009	18.4	1.3	31.3	17.8	20.4	20.5
200-499	2	0.4	687	8.0	1,267	11.6	1.8	29.0	16.4	18.7	18.8
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Paper and Paper Products</u>	<u>86</u>	<u>100.0</u>	<u>5,679</u>	<u>100.0</u>	<u>143,569</u>	<u>100.0</u>	<u>25.3</u>	<u>476.6</u>	<u>100.0</u>	<u>240.2</u>	<u>100.0</u>
5- 9	13	15.1	97	1.7	200	0.1	2.1	1.1	0.2	0.6	0.2
10- 19	32	37.2	446	7.9	896	0.6	2.0	14.5	3.0	8.9	3.7
20- 49	22	25.6	661	11.6	1,645	1.1	2.5	19.6	4.1	10.2	4.2
50- 99	11	12.8	786	13.8	9,175	6.4	11.7	74.1	15.5	28.1	11.7
100-199	3	3.5	388	6.8	3,639	2.5	9.4	42.9	9.0	26.8	11.2
200-499	2	2.3	632	11.1	38,852	27.0	61.4	62.9	13.2	36.1	15.0
500-999	2	2.3	1,240	21.8	61,500	42.8	49.6	124.1	26.0	53.5	22.3
1,000 and over	1	1.2	1,429	25.2	27,682	19.3	19.4	137.5	28.8	76.0	31.6

Table 8.13: CHILE - STRUCTURE OF MANUFACTURING, 1967<sup>a/</sup>

Industry/No. of Workers	No. of Establishments	Percent	Total Employment	Percent	Motor Capacity (HP)	Motor Capacity Per Worker		Gross Value of Output (E° Million)	Percent	Value-Added (E° Million)	
						(5)	(3)			(E° Million)	Percent
<b>Printing and Publishing</b>	<b>427</b>	<b>100.0</b>	<b>11,412</b>	<b>100.0</b>	<b>18,710</b>	<b>100.0</b>	<b>1.6</b>	<b>426.7</b>	<b>100.0</b>	<b>266.9</b>	<b>100.0</b>
5- 9	223	52.2	1,417	12.4	980	5.2	0.7	44.0	10.3	27.2	10.2
10- 19	95	22.2	1,305	11.4	898	4.8	0.7	36.8	8.6	23.5	8.8
20- 49	67	15.7	1,966	17.2	1,834	9.8	0.9	64.7	15.2	40.0	15.0
50- 99	20	4.7	1,439	12.6	1,571	8.4	1.1	57.9	13.6	35.2	13.2
100-199	14	3.3	2,238	19.6	5,738	30.7	2.6	85.9	20.1	55.1	20.6
200-499	6	1.4	1,693	14.8	3,909	20.9	2.3	59.5	13.9	38.7	14.5
500-999	2	0.5	1,354	11.9	3,780	20.2	2.8	77.9	18.3	47.3	17.7
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<b>Industrial Chemicals</b>	<b>102</b>	<b>100.0</b>	<b>5,690</b>	<b>100.0</b>	<b>31,033</b>	<b>100.0</b>	<b>5.5</b>	<b>359.1</b>	<b>100.0</b>	<b>202.7</b>	<b>100.0</b>
5- 9	24	23.5	170	3.0	531	1.7	3.1	6.5	1.8	3.1	1.5
10- 19	23	22.5	327	5.7	3,805	12.3	11.6	28.9	8.0	15.1	7.5
20- 49	33	32.4	1,073	18.9	5,012	16.2	4.7	75.3	21.0	41.9	20.7
50- 99	13	12.7	906	15.9	3,941	12.7	4.3	68.8	19.1	39.9	19.7
100-199	5	4.9	705	12.4	1,507	4.9	2.1	39.4	11.0	12.9	6.4
200-499	2	2.0	671	11.8	6,527	21.0	9.7	30.2	8.4	11.7	5.8
500-999	1	1.0	755	13.3	7,122	23.0	9.4	34.2	9.5	21.8	10.8
1,000 and over	1	1.0	1,083	19.0	2,590	8.3	2.4	75.7	21.1	56.2	27.7
<b>Other Chemical Products</b>	<b>238</b>	<b>100.0</b>	<b>12,385</b>	<b>100.0</b>	<b>19,610</b>	<b>100.0</b>	<b>1.6</b>	<b>822.5</b>	<b>100.0</b>	<b>465.2</b>	<b>100.0</b>
5- 9	62	26.0	415	3.4	521	2.7	1.3	17.4	2.1	9.4	2.0
10- 19	57	24.0	780	6.3	1,402	7.1	1.8	45.8	5.6	21.4	4.6
20- 49	58	24.4	1,790	14.5	2,884	14.7	1.6	117.9	14.3	62.6	13.5
50- 99	31	13.0	2,436	19.7	3,085	15.7	1.3	150.3	18.3	92.0	19.8
100-199	18	7.6	2,466	19.9	3,710	18.9	1.5	207.8	25.3	119.3	25.6
200-499	9	3.8	2,607	21.0	4,742	24.2	1.8	146.3	17.8	93.2	20.0
500-999	3	1.3	1,891	15.3	3,261	16.6	1.7	136.9	16.6	67.3	14.5
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<b>Petroleum Refining</b>	<b>12</b>	<b>100.0</b>	<b>2,020</b>	<b>100.0</b>	<b>21,124</b>	<b>100.0</b>	<b>10.5</b>	<b>575.1</b>	<b>100.0</b>	<b>158.2</b>	<b>100.0</b>
5- 9	0	-	-	-	-	-	-	-	-	-	-
10- 19	1	8.3	10	0.5	89	0.4	8.9	7.6	1.3	3.9	2.5
20- 49	5	41.7	217	10.7	6,409	30.3	29.5	95.5	16.6	48.6	30.7
50- 99	3	25.0	186	9.2	435	2.1	2.3	23.0	4.0	12.5	7.9
100-199	0	-	-	-	-	-	-	-	-	-	-
200-499	0	-	-	-	-	-	-	-	-	-	-
500-999	1	8.3	572	28.3	10,191	48.2	17.8	161.9	28.2	37.5	23.7
1,000 and over	2	16.7	1,035	51.2	4,000	18.9	3.9	287.2	49.9	55.7	35.2
<b>Petroleum and Coal Derivatives</b>	<b>6</b>	<b>100.0</b>	<b>364</b>	<b>100.0</b>	<b>1,554</b>	<b>100.0</b>	<b>4.3</b>	<b>74.2</b>	<b>100.0</b>	<b>21.7</b>	<b>100.0</b>
5- 9	1	16.7	9	2.5	18	1.2	2.0	0.5	0.6	0.3	1.2
10- 19	1	16.7	10	2.7	83	5.3	8.3	1.5	2.1	0.8	3.6
20- 49	2	33.3	73	20.1	297	19.1	4.1	6.0	8.1	3.2	14.7
50- 99	1	16.7	72	19.8	245	15.8	3.4	4.3	5.8	3.1	14.1
100-199	0	-	-	-	-	-	-	-	-	-	-
200-499	1	16.7	200	54.9	911	58.6	4.6	61.9	83.3	14.4	66.4
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	0	-	-	-	-	-	-	-	-	-	-

Table 8.13: CHILE - STRUCTURE OF MANUFACTURING, 1967 <sup>a/</sup>

Industry/No. of Workers	No. of Establish- ments <sup>b/</sup>	Percent	Total Employment		Motor Capacity (HP)	Motor Capacity Per Worker		Gross Value of Output		Value-Added	
			Employment	Percent		Percent (5)	Per Worker (3)	(E <sup>0</sup> Million)	Percent	(E <sup>0</sup> Million)	Percent
<b>Rubber Products</b>	<b>77</b>	<b>100.0</b>	<b>3,964</b>	<b>100.0</b>	<b>10,492</b>	<b>100.0</b>	<b>2.6</b>	<b>262.7</b>	<b>100.0</b>	<b>156.0</b>	<b>100.0</b>
5- 9	37	48.1	230	5.8	364	3.5	1.6	4.0	1.5	2.1	1.3
10- 19	18	23.4	244	6.2	884	8.4	3.6	7.4	2.8	4.0	2.6
20- 49	9	11.7	286	7.2	1,041	9.9	3.6	9.1	3.5	4.7	3.0
50- 99	8	10.4	559	14.1	943	9.0	1.7	16.0	6.1	9.5	6.1
100-199	2	2.6	297	7.5	1,165	11.1	3.9	10.8	4.1	6.8	4.3
200-499	0	-	-	-	-	-	-	-	-	-	-
500-999	3	3.9	2,348	59.2	6,095	58.1	2.6	215.4	82.0	128.9	82.6
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<b>Plastics</b>	<b>117</b>	<b>100.0</b>	<b>5,381</b>	<b>100.0</b>	<b>11,736</b>	<b>100.0</b>	<b>2.2</b>	<b>222.1</b>	<b>100.0</b>	<b>131.1</b>	<b>100.0</b>
5- 9	24	20.5	175	3.3	194	1.7	1.1	3.7	1.7	1.9	1.4
10- 19	26	22.2	354	6.6	711	6.1	2.0	13.6	6.1	6.8	5.2
20- 49	42	35.9	1,290	24.0	1,953	16.6	1.5	51.9	23.4	28.4	21.7
50- 99	13	11.1	953	17.7	1,351	11.5	1.4	35.6	16.0	22.0	16.8
100-199	7	6.0	1,037	19.3	4,579	39.0	4.4	58.0	26.1	35.5	27.1
200-499	5	4.3	1,572	29.2	2,948	25.1	1.9	59.3	26.7	36.4	27.8
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<b>Objects of Clay, China and Porcelain</b>	<b>20</b>	<b>100.0</b>	<b>2,539</b>	<b>100.0</b>	<b>5,339</b>	<b>100.0</b>	<b>2.1</b>	<b>62.3</b>	<b>100.0</b>	<b>45.8</b>	<b>100.0</b>
5- 9	5	25.0	31	1.2	22	0.4	0.7	0.2	0.4	0.2	0.4
10- 19	7	35.0	99	3.9	65	1.2	0.7	1.1	1.8	0.8	1.7
20- 49	5	25.0	164	6.5	277	5.2	1.7	7.6	12.3	4.3	9.3
50- 99	1	5.0	80	3.2	126	2.4	1.6	2.1	3.4	1.9	4.1
100-199	0	-	-	-	-	-	-	-	-	-	-
200-499	0	-	-	-	-	-	-	-	-	-	-
500-999	1	5.0	699	27.5	1,771	33.2	2.5	14.4	23.2	10.2	22.2
1,000 and over	1	5.0	1,466	57.7	3,078	57.7	2.1	36.8	59.0	28.5	62.3
<b>Glass and Glass Products</b>	<b>71</b>	<b>100.0</b>	<b>4,945</b>	<b>100.0</b>	<b>9,415</b>	<b>100.0</b>	<b>1.9</b>	<b>137.3</b>	<b>100.0</b>	<b>84.1</b>	<b>100.0</b>
5- 9	31	43.7	186	3.8	70	0.7	0.4	3.6	2.7	1.6	2.0
10- 19	12	16.9	150	3.0	120	1.3	0.8	2.4	1.7	1.3	1.6
20- 49	5	7.0	132	2.7	60	0.6	0.5	3.8	2.8	1.6	1.9
50- 99	10	14.1	599	12.1	640	6.8	1.1	17.1	12.5	6.7	8.0
100-199	7	9.9	1,271	25.7	3,679	39.1	2.9	34.8	25.3	22.9	27.3
200-499	4	5.6	1,207	24.4	1,631	17.3	1.4	35.1	25.6	28.1	33.4
500-999	2	2.8	1,400	28.3	3,215	34.1	2.3	40.5	29.5	21.8	25.9
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<b>Other Nonmetallic Minerals Products</b>	<b>254</b>	<b>100.0</b>	<b>8,092</b>	<b>100.0</b>	<b>45,117</b>	<b>100.0</b>	<b>5.6</b>	<b>342.5</b>	<b>100.0</b>	<b>185.1</b>	<b>100.0</b>
5- 9	106	41.7	680	8.4	640	1.4	0.9	9.0	2.6	4.9	2.6
10- 19	66	26.0	836	10.3	1,647	3.7	2.0	15.2	4.4	9.0	4.9
20- 49	53	20.9	1,524	18.8	2,774	6.1	1.8	31.2	9.1	17.3	9.3
50- 99	18	7.1	1,264	15.6	3,556	7.9	2.8	47.0	13.7	25.7	13.9
100-199	5	2.0	588	7.3	1,814	4.0	3.1	25.9	7.6	14.8	8.0
200-499	3	1.2	692	8.6	7,523	16.7	10.9	32.7	9.5	23.3	12.6
500-999	3	1.2	2,508	31.0	27,163	60.2	10.8	181.5	53.0	90.3	48.8
1,000 and over	0	-	-	-	-	-	-	-	-	-	-

Table 8.13: CHILE - STRUCTURE OF MANUFACTURING, 1967 <sup>a/</sup>

Industry/No. of Workers	No. of Establish- ments <sup>b/</sup>		Total Employ- ment		Motor Capacity (HP)	Motor Capacity Per Worker (5) ↓ (3)		Gross Value of Output (E <sup>0</sup> Million)		Value- Added (E <sup>0</sup> Million)	
		Percent		Percent		Percent		Percent	Percent	Percent	
<u>Basic Iron and Steel</u>	63	100.0	11,158	100.0	195,748	100.0	17.5	703.7	100.0	330.2	100.0
5- 9	10	15.9	72	0.6	136	0.1	1.9	1.4	0.2	0.7	0.2
10- 19	11	17.5	147	1.3	326	0.2	2.2	5.2	0.7	2.5	0.8
20- 49	23	36.5	692	6.2	4,636	2.4	6.7	37.1	5.3	15.5	4.7
50- 99	4	6.3	270	2.4	1,592	0.8	5.9	46.2	6.6	21.5	6.5
100-199	8	12.7	1,119	10.0	6,343	3.2	5.7	46.2	6.6	27.5	8.3
200-499	4	6.3	1,655	14.8	8,097	4.1	4.9	128.8	18.3	47.6	14.4
500-999	1	1.6	540	4.8	1,700	0.9	3.1	17.1	2.4	10.0	3.0
1,000 and over	2	3.2	6,663	59.7	172,918	88.3	26.0	421.7	59.9	204.8	62.0
<u>Basic Nonferrous Metals</u>	36	100.0	5,905	100.0	53,394	100.0	9.0	3,892.7	100.0	1,282.3	100.0
5- 9	10	27.8	63	1.1	102	0.2	1.6	1.8	0.0	0.9	0.1
10- 19	5	13.9	67	1.1	49	0.1	0.7	1.3	0.0	0.8	0.1
20- 49	5	13.9	167	2.8	321	0.6	1.9	8.1	0.2	3.9	0.3
50- 99	3	8.3	227	3.8	390	0.7	1.7	12.5	0.3	6.5	0.5
100-199	4	11.1	656	11.1	3,739	7.0	5.7	146.8	3.8	49.2	3.8
200-499	5	13.9	1,671	28.3	16,525	30.9	9.9	1,573.7	40.4	496.7	38.7
500-999	2	5.6	915	15.5	8,260	15.5	9.0	1,554.7	39.9	546.0	42.6
1,000 and over	2	5.6	2,139	36.2	24,008	45.0	11.2	593.9	15.3	178.2	13.9
<u>Metal Goods (ex. machinery &amp; equipment)</u>	803	100.0	25,728	100.0	43,473	100.0	1.7	814.6	100.0	454.5	100.0
5- 9	341	42.5	2,165	8.4	2,201	5.1	1.0	34.7	4.3	17.4	3.8
10- 19	193	24.0	2,688	10.4	4,071	9.4	1.5	67.4	8.3	33.5	7.4
20- 49	169	21.0	5,141	20.0	7,099	16.3	1.4	138.8	17.0	75.5	16.6
50- 99	43	5.4	3,067	11.9	5,330	12.3	1.7	127.7	15.7	70.0	15.4
100-199	34	4.2	4,646	18.1	9,611	22.1	2.1	165.4	20.3	87.0	19.1
200-499	21	2.6	5,618	21.8	12,341	28.4	2.2	202.8	24.9	118.6	26.1
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	2	0.2	2,403	9.3	2,820	6.5	1.2	77.9	9.6	52.7	11.6
<u>Machinery and Equipment (Nonelectric)</u>	351	100.0	16,725	100.0	53,246	100.0	3.2	574.5	100.0	357.0	100.0
5- 9	113	32.2	734	4.4	1,109	2.1	1.5	12.4	2.2	7.2	2.0
10- 19	82	23.4	1,154	6.9	1,910	3.6	1.7	29.7	5.2	16.2	4.5
20- 49	87	24.8	2,690	16.1	5,484	10.3	2.0	108.8	18.9	68.1	19.1
50- 99	43	12.3	3,078	18.4	6,100	11.5	2.0	103.7	18.1	68.2	19.1
100-199	13	3.7	1,761	10.5	2,479	4.7	1.4	50.5	8.8	34.2	9.6
200-499	7	2.0	2,106	12.6	10,695	20.1	5.1	71.2	12.4	44.7	12.5
500-999	4	1.1	2,760	16.5	4,831	9.1	1.8	94.6	16.5	55.6	15.6
1,000 and over	2	0.6	2,442	14.6	20,638	38.8	8.5	103.5	18.0	62.8	17.6
<u>Electrical Machinery and Appliances</u>	113	100.0	8,156	100.0	16,016	100.0	2.0	519.4	100.0	371.3	100.0
5- 9	27	23.9	177	2.2	153	1.0	0.9	4.9	0.9	2.7	0.9
10- 19	19	16.8	264	3.2	349	2.2	1.3	8.8	1.7	4.6	1.4
20- 49	30	26.5	833	10.2	1,058	6.6	1.3	46.5	9.0	23.6	7.4
50- 99	12	10.6	816	10.0	968	6.0	1.2	32.9	6.3	22.7	7.2
100-199	12	10.6	1,571	19.3	2,767	17.3	1.8	107.6	20.7	67.5	21.3
200-499	12	10.6	3,986	48.9	3,111	19.4	0.8	268.2	51.7	173.6	54.7
500-999	1	0.9	509	6.2	7,610	47.5	15.0	50.5	9.7	22.3	7.0
1,000 and over	0	-	-	-	-	-	-	-	-	-	-

Table 8.13: CHILE - STRUCTURE OF MANUFACTURING, 1967<sup>a/</sup>

Industry/No. of Workers	No. of Establishments <sup>b/</sup>		Total Employment		Motor Capacity (HP)	Motor Capacity Per Worker (5) ↓ (3)		Gross Value of Output (B <sup>o</sup> Million)		Value-Added (B <sup>o</sup> Million)	
		Percent		Percent		Percent		Percent		Percent	
<u>Transport Materiel</u>	222	100.0	22,604	100.0	41,610	100.0	1.8	929.0	100.0	317.3	100.0
5- 9	50	22.5	330	0.2	643	1.5	1.9	10.7	1.2	6.2	1.0
10- 19	58	26.1	813	3.6	825	2.0	1.0	24.3	2.6	13.6	2.2
20- 49	51	23.0	1,528	6.8	2,814	6.8	1.8	45.2	4.9	28.1	4.6
50- 99	22	9.9	1,539	6.8	2,453	5.9	1.6	70.5	7.6	40.9	6.7
100-199	14	6.3	1,754	7.8	2,414	5.8	1.4	106.8	11.5	52.3	8.6
200-499	19	8.6	5,592	24.7	9,839	23.6	1.8	468.9	50.5	301.2	49.7
500-999	2	0.9	1,169	5.2	1,390	3.3	1.2	18.2	2.0	15.0	2.5
1,000 and over	6	2.7	9,879	43.7	21,232	51.0	2.1	184.5	19.9	149.1	24.6
<u>Professional Equipment &amp; Instruments</u>	35	100.0	1,104	100.0	1,283	100.0	1.2	38.2	100.0	22.3	100.0
5- 9	13	37.1	84	7.6	29	2.3	0.3	3.7	9.8	2.5	11.2
10- 19	2	5.7	31	2.8	24	1.9	0.8	0.7	1.9	0.5	2.2
20- 49	15	42.9	493	44.7	388	30.2	0.8	16.4	42.8	9.1	40.7
50- 99	3	8.6	178	16.1	735	57.3	4.1	8.1	21.3	4.8	21.6
100-199	2	5.7	318	28.8	107	8.3	0.3	9.2	24.2	5.4	24.3
200-499	0	-	-	-	-	-	-	-	-	-	-
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Other Manufactures</u>	211	100.0	4,059	100.0	3,635	100.0	0.9	100.2	100.0	60.7	100.0
5- 9	118	55.9	719	17.7	296	8.1	0.4	11.3	11.3	6.3	10.4
10- 19	55	26.1	764	18.8	442	12.2	0.6	16.6	16.6	10.2	16.8
20- 49	20	9.5	621	15.3	468	12.9	0.8	17.7	17.7	11.7	19.3
50- 99	11	5.2	748	18.4	466	12.8	0.6	20.4	20.4	12.5	20.6
100-199	6	2.8	779	19.2	1,123	30.9	1.4	23.3	23.3	14.3	23.6
200-499	1	0.5	428	10.5	840	23.1	2.0	10.9	10.9	5.6	9.2
500-999	0	-	-	-	-	-	-	-	-	-	-
1,000 and over	0	-	-	-	-	-	-	-	-	-	-
<u>Total Manufacturing</u>	11,468	100.0	333,394	100.0	1,175,871	100.0	3.3	21,206.6	100.0	9,716.3	100.0
5- 9	5,118	44.6	26,381	7.5	47,500	4.0	1.8	789.3	3.7	288.5	3.0
10- 19	3,009	26.2	35,700	10.1	66,474	5.7	1.9	1,329.2	6.3	522.3	5.4
20- 49	2,045	17.8	57,768	16.3	114,221	9.7	2.0	2,915.0	13.7	1,171.8	12.1
50- 99	649	5.7	44,724	12.7	96,663	8.2	2.2	2,389.2	11.3	1,079.7	11.1
100-199	349	3.0	48,865	13.8	125,297	10.7	2.6	2,476.9	11.7	1,219.8	12.6
200-499	219	1.9	64,635	18.3	214,058	18.2	3.3	5,020.6	23.7	2,526.6	26.0
500-999	51	0.4	33,652	9.5	193,691	16.5	5.8	3,848.4	18.1	1,752.8	18.0
1,000 and over	28	0.2	41,669	11.8	317,967	27.0	7.6	2,437.9	11.5	1,154.9	11.9

a/ Refers only to establishments employing 5 or more persons.

b/ An establishment is defined as a single economic unit--factory, shop, etc.--dedicated to the production of a particular good or homogeneous group of goods (in accordance with SITC categories) at a single location and under a single administrative control. An enterprise may be composed of more than one establishment at the same or at different locations.

Source: INE, IV Censo Nacional de Manufacturas, Tomo Tercero, Santiago, April 1971

Table 8.14: CHILE - REGIONAL DISTRIBUTION OF MANUFACTURING ACTIVITY, 1967

(Percent)

Region/Province	No. of Establishments	Employment	Value of Fixed Assets	Gross Value of Production	Value-Added
I Tarapacá	1.7	2.6	3.8	3.7	5.1
II Antofagasta	1.3	2.0	3.4	9.2	7.5
III Atacama	0.7	0.5	1.0	2.9	1.9
Coquimbo	1.9	1.2	0.4	0.5	0.9
IV Aconcagua	1.5	1.1	0.4	0.7	0.6
Valparaíso	7.0	9.0	12.2	11.9	11.1
V Santiago	45.7	58.4	38.0	44.6	49.6
VI O'Higgins	3.1	1.5	4.5	6.8	5.9
Colchagua	1.5	0.7	0.5	0.7	0.8
VII Curicó	1.3	0.4	0.3	0.3	0.2
Talca	2.7	1.5	2.5	1.6	1.2
Maule	1.1	0.4	0.2	0.2	0.2
Linares	2.5	0.8	4.4	0.8	0.6
VIII Ñuble	3.2	1.2	2.0	0.9	0.7
Concepción	4.7	9.8	14.5	7.8	8.1
Arauco	0.8	0.2	0.1	0.1	0.1
Bío-Bío	2.0	1.2	6.1	1.6	1.4
Malleco	1.4	0.7	0.3	0.4	0.2
IX Cautín	3.7	1.5	0.7	0.8	0.6
X Valdivia	4.4	2.6	1.7	1.3	1.4
Osorno	2.6	0.9	0.8	1.1	0.7
XI Llanquihue	2.6	1.0	1.1	0.9	0.8
Chiloé	0.9	0.2	0.1	0.1	0.1
Aysén	0.7	0.1	0.0	0.1	0.1
XII Magallanes	<u>1.0</u>	<u>0.6</u>	<u>0.8</u>	<u>0.6</u>	<u>0.4</u>
Total Country	100.0	100.0	100.0	100.0	100.0

Source: INE, IV Censo de Manufacturas, Tomo Tercero



Table 8.15: RATES OF EFFECTIVE PROTECTION, SELECTED PRODUCTS, 1967  
(percent)

Sector/Product	Effective Protection Rate
Agriculture	
Sunflower seeds	-39
Potatoes	-21
Pork	-18
Rapeseeds	-13
Wheat	-11
Beef	4
Corn	13
Poultry	39
Processed Foods and Beverages	
Canned fruits and vegetables	33
Canned peaches	81
Sardines in oil	20
Tuna in oil	38
Natural salmon	47
Wheat flour	0
Milled rice	524
Sugar	1078
Spaghetti	-5
Vegetable oil	1830
Wine (bottled)	-21
Beer	-25
Cigarettes	-13
Textiles	
Combed wool fabric	63
Carded wool fabric	83
Polyester yarn	140
Combed wool yarn	152
Dyed linen	547
Carded wool yarn	821
Cotton thread (retail)	1641
Shoes and Clothing	
Ladies' shoes	26
Children's shoes	32
Sewn men's shoes	33
Glued men's shoes	46
Men's shirts	-35
Men's jackets	-5
Men's suits	1
Men's pants	33

Table 8.15:

Forest Products	
Sawnwood	-4
Common furniture	-5
Paper, cardboard and pulp	95
Calf leather	18
Tires	304
Chemical Products	
Anti-corrosion paints	85
Oil-based paint	103
Enamel paint	102
Latex paint	113
Tooghpaste	-62
Cosmetics and perfumes	42
Petroleum and Coal Products	
Refined petroleum	900
Carbides	1380
Non-metallic Mineral Products	
Plane, cathedral and mosaic glass	3500
Porcelain bathroom supplies	-6
Porcelain table service	18
Glazed, tiles	46
Electric insulators (ceramic)	56
Cement and lime	29
Cement sheets, rippled	-46
Cement sheets, plane	-17
T-5 pressure pipes	-15
Cement moldings	12
Basic Metals	
Cast iron	35
Flat steel bars	34
Metal Products	
Liquid gas cylinder, 15 kg	61
Nuts and bolts	9
Water heater	80
4-burner stove	117
Non-electrical Machinery	
Eccentric press, 20 t	58
Winch (1.5 mm x 180 mm)	59
8-speed drill	102
Electrical Machinery	
5HP, 1,500 rpm engine	701
2HP, 1,500 rpm engine	780
Television set, 23 in.	113
Radio	607

Table 8.15:

Record player	1400
Household food mixer	116
Refrigerator, 9 cu. ft.	121
Vacuum cleaner	132
Refrigerator, 6 cu. ft.	190
Washing machine	580
Transport Equipment	
Barges, 370 t	-14
Bicycles	555
Overall average	217

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Source: Sergio de la Cuadra, "Towards a New Trade Policy for Chile",  
U.S. Agency for International Development, (mimeo), Santiago, 1971.

Table 8.16: CHILE - MONTHLY INDEX OF INDUSTRIAL PRODUCTION (INE), 1970-1978

(Average 1968 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	95.0	92.9	111.4	108.8	112.7	90.9	78.1	83.4	84.4
February	80.3	81.4	97.1	98.5	90.4	73.0	61.5	66.2	68.9
March	105.8	113.1	127.6	131.6	121.3	95.9	86.2	95.2	101.7
April	108.0	109.4	125.4	115.8	117.9	98.5	85.4	92.8	103.1
May	101.8	119.2	126.5	118.7	122.2	84.8	82.4	93.7	111.0
June	110.9	121.8	127.4	116.3	112.9	73.7	84.8	96.7	107.2
July	115.7	124.7	128.3	120.8	117.6	69.0	85.0	93.8	100.5
August	110.3	129.3	130.6	110.9	112.8	65.2	89.2	101.3	104.1
September	100.3	130.6	119.1	91.7	100.2	71.6	84.8	102.6	102.1
October	106.8	129.3	118.6	138.0	120.8	85.0	91.8	99.5	108.9
November	106.0	138.6	126.4	131.7	117.3	80.4	95.3	100.0	107.5
December	<u>107.6</u>	<u>141.3</u>	<u>132.6</u>	<u>125.2</u>	<u>109.1</u>	<u>86.0</u>	<u>97.5</u>	<u>99.8</u>	<u>101.7</u>
Annual Average	104.0	119.3	122.6	117.3	112.9	81.2	85.2	93.8	100.1
Year-to-Year Change (%)	-0.3	+14.7	+2.8	-4.3	-3.7	-28.1	+4.9	+10.1	+6.7

Source: INE

Table 8.17: CHILE - INE INDEX OF INDUSTRIAL PRODUCTION BY SUBSECTORS, 1969-1978  
(1968=100)

	Weight	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Foodstuffs	15.10	99.1	99.6	107.7	105.9	102.0	108.5	101.8	106.1	102.3	103.9
Beverages	4.16	94.0	91.1	114.9	123.3	134.3	92.2	87.2	100.5	120.6	129.8
Tobacco	3.18	103.5	97.7	123.1	126.3	131.3	139.4	120.8	131.3	140.9	146.2
Textiles	9.68	104.0	96.0	110.1	113.1	101.5	98.3	62.4	61.5	67.9	73.3
Shoes and clothing	6.81	108.5	104.8	118.9	123.5	117.1	105.1	86.8	74.4	87.9	85.2
Wood Ind. excluding furniture	4.37	107.0	108.1	131.7	146.7	93.1	89.2	54.4	79.5	86.6	74.6
Furniture and wooden accessories	1.49	96.2	113.4	109.1	155.6	120.8	113.7	61.8	72.2	59.8	58.5
Cellulose, paper and paper products	2.55	94.7	88.3	91.8	90.1	104.5	114.9	101.0	109.2	124.8	120.2
Printing and publishing	3.30	110.5	109.5	173.8	126.4	96.0	64.6	55.6	57.8	54.6	56.8
Leather, leather products (ex. shoes)	1.36	96.8	103.9	119.7	90.0	85.8	74.5	70.6	65.8	57.5	64.1
Rubber products	2.51	103.9	111.0	135.5	138.8	127.5	124.7	35.8	77.2	99.3	78.2
Chemicals and chemical products	9.62	112.2	120.9	144.0	150.4	147.6	129.1	79.7	87.9	110.7	109.6
Petroleum and coal derivatives	0.87	107.7	105.4	128.6	138.5	129.6	128.3	110.9	115.1	119.5	136.2
Nonmetallic minerals products	3.86	108.7	102.9	120.9	123.2	126.5	136.1	76.1	79.1	87.3	96.3
Basic metals industries	9.59	109.3	108.0	116.7	124.2	119.7	131.6	119.8	118.2	122.0	144.5
Metal products except machinery and trans. equipment	5.70	102.2	98.6	109.1	117.8	121.4	111.0	59.7	63.9	67.7	97.6
Nonelectric machinery	2.38	108.5	94.2	126.3	151.5	189.3	112.5	77.4	104.3	145.2	77.6
Electrical appliances and accessories	4.88	100.1	99.5	113.3	104.2	89.1	105.2	75.8	65.3	72.7	98.0
Transportation materiel	5.76	105.6	127.0	111.9	120.3	130.8	129.2	50.0	36.8	59.2	99.4
Misc. manufacturing	2.83	97.9	81.0	108.6	123.1	119.6	134.0	63.6	88.5	79.4	84.4
General Index	100.0	104.3	104.0	119.3	122.6	117.3	112.9	81.2	85.2	93.8	101.1

Source: INE

Table 8.18: CHILE - MONTHLY INDEX OF INDUSTRIAL PRODUCTION (SOFOFA), 1970-1978

(Average 1969=100)

Month	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	98.6	94.2	111.6	101.6	107.8	88.5	82.5	91.4	94.9
February	85.3	79.1	88.5	83.8	83.9	76.0	73.8	74.7	83.3
March	105.6	112.2	123.7	120.8	115.9	96.2	96.9	108.8	112.8
April	106.3	108.0	121.6	108.1	116.6	100.2	96.1	105.3	114.4
May	98.4	111.7	124.4	110.7	120.0	90.5	93.5	106.9	121.8
June	109.8	121.5	124.5	106.3	111.4	80.7	96.2	110.7	122.1
July	111.9	119.4	125.8	112.3	119.4	75.1	95.7	104.8	
August	108.7	120.3	124.6	109.7	114.1	71.8	100.5	110.2	
September	97.8	122.7	113.3	84.3	102.6	75.4	97.4	111.4	
October	99.7	122.2	113.6	135.3	118.7	91.6	102.4	107.1	
November	107.6	131.4	120.7	126.3	114.7	84.8	102.6	109.3	
December	112.2	134.1	119.2	120.1	108.4	89.0	107.7	110.5	
Annual average	103.5	114.7	117.6	109.9	111.1	85.0	95.4	104.2	
Year-to-year change (%)		+10.8	+2.5	-6.5	+1.1	-23.5	+12.2	+9.2	

Source: Sociedad de Fomento Fabril

Table 3.19: CHILE - SOFOFA MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY SUBSECTORAL AGGREGATES, 1970-1978

(Average 1969=100)

Subsectoral Aggregate/Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Average
<b>Consumer Nondurables:</b>													
1970													104.5
1971													117.8
1972													116.6
1973	105.7	82.1	121.9	109.4	115.9	115.2	118.6	107.4	82.5	131.7	119.1	111.0	110.0
1974	97.3	81.3	110.6	108.5	111.5	103.2	111.1	103.4	93.9	116.7	111.6	103.3	104.3
1975	80.2	68.7	90.9	100.0	89.8	79.2	76.1	69.0	78.0	98.6	90.5	94.4	84.6
1976	78.9	69.2	102.7	100.6	97.0	94.6	97.5	104.9	97.5	99.6	103.8	108.2	96.2
1977	87.4	63.6	102.8	104.0	109.1	110.5	100.7	109.2	110.5	102.5	106.1	112.7	101.6
1978	92.8	76.4	109.6	110.2	119.8								
<b>Consumer Durables:</b>													
1970													115.6
1971													141.2
1972													128.3
1973	96.4	62.4	128.3	119.8	123.7	108.6	129.6	113.3	76.1	140.4	124.2	112.1	111.2
1974	87.6	64.7	126.5	128.2	133.6	135.0	145.1	144.1	120.4	140.4	135.1	125.2	123.9
1975	98.5	52.5	111.0	118.4	105.7	90.0	88.6	80.7	74.2	94.6	78.5	64.6	88.1
1976	78.8	52.2	83.6	75.7	69.3	84.0	81.4	75.8	64.2	76.4	86.0	83.3	75.9
1977	79.0	50.7	82.2	82.3	94.7	95.3	85.8	86.5	88.7	84.5	80.2	79.6	82.5
1978	56.8	35.7	107.8	108.7	114.3								
<b>Transport Materiel:</b>													
1970													100.0
1971													91.4
1972													105.9
1973	62.8	43.5	90.9	75.3	86.7	67.6	57.4	53.2	53.8	101.2	91.9	75.1	71.6
1974	95.6	42.7	77.1	75.3	97.3	76.4	66.9	62.9	68.1	69.6	59.7	81.5	72.8
1975	75.2	48.2	65.2	63.1	55.0	41.7	40.1	38.1	42.5	58.6	61.0	53.9	53.6
1976	58.0	38.7	45.9	43.6	36.7	43.7	39.1	51.1	50.3	58.1	59.5	70.2	49.6
1977	54.1	38.3	56.2	64.3	57.3	60.4	65.9	62.5	70.2	66.3	77.4	64.8	61.5
1978	60.8	46.6	84.9	80.1	87.6								
<b>Intermediate Goods for Industry:</b>													
1970													100.6
1971													111.1
1972													115.5
1973	98.2	101.9	121.5	98.4	92.2	90.6	104.3	125.7	98.6	144.7	142.4	145.3	113.8
1974	124.9	109.7	130.5	138.8	141.7	132.4	145.8	146.4	132.4	136.9	129.9	126.7	132.9
1975	121.5	114.2	126.6	124.5	106.9	107.6	104.9	107.2	105.4	114.3	107.7	115.9	113.1
1976	117.4	112.6	128.2	129.2	131.6	133.3	127.3	130.2	134.1	142.0	135.3	144.9	130.5
1977	124.9	121.3	141.9	138.1	136.9	140.6	140.1	144.0	145.6	147.5	145.7	142.0	139.0
1978	132.2	126.5	137.5	146.1	147.2								
<b>Intermediate Goods for Construction:</b>													
1970													104.1
1971													113.2
1972													123.5
1973	110.1	82.1	122.5	111.7	116.1	115.5	121.2	120.1	89.0	142.7	144.0	138.1	117.8
1974	119.4	84.2	132.0	126.2	126.0	112.8	118.0	108.6	95.9	132.1	119.9	106.0	113.4
1975	86.0	55.5	81.8	80.4	77.0	69.9	48.4	48.3	50.4	58.6	56.2	61.4	65.1
1976	98.5	59.1	74.5	73.4	70.7	81.6	81.1	85.9	85.3	88.1	81.7	89.8	77.5
1977	74.7	66.8	97.3	96.2	90.3	98.8	96.1	100.7	100.0	93.9	100.4	105.0	93.4
1978	84.4	81.5	114.1	113.4	121.0								
<b>Miscellaneous Manufactures:</b>													
1970													97.2
1971													105.9
1972													120.5
1973	106.7	97.6	125.9	133.8	124.7	110.6	112.3	101.0	81.0	140.0	124.9	113.8	114.4
1974	114.4	80.5	102.6	110.5	104.0	108.4	116.4	110.9	98.5	112.6	109.5	98.7	105.6
1975	67.6	76.7	81.0	83.3	86.0	57.8	50.4	50.1	49.7	69.0	63.4	73.3	67.4
1976	72.3	71.1	81.1	79.2	75.8	82.1	82.4	81.5	85.0	94.0	91.0	86.6	81.8
1977	90.7	75.8	135.1	93.7	92.1	104.5	94.9	99.0	95.6	98.1	96.2	88.3	96.4
1978	84.8	79.9	95.6	88.7	100.9								

Source: Sociedad de Fomento Fabril

Table 8.20: CHILE - SOFOFA INDICES OF INDUSTRIAL PRODUCTION BY SUBSECTORS, 1970-1977

(1969 = 100)

	Weights	1970	1971	1972	1973	1974	1975	1976	1977
Food products	16.3	109.7	115.4	106.8	100.4	104.2	92.6	108.6	109.5
Beverages	5.1	101.7	125.3	127.0	110.8	92.0	88.1	109.0	124.7
Tobacco	2.6	97.4	119.4	122.5	127.4	135.1	117.1	127.1	136.6
Textiles	10.2	106.6	120.4	125.3	119.2	100.1	68.7	71.6	81.0
Clothing	2.9	97.5	110.7	117.3	106.8	93.5	72.1	61.2	70.9
Leather products (ex. shoes)	1.1	96.5	102.2	96.2	88.1	85.8	76.9	69.9	79.4
Shoes	1.8	91.5	116.9	119.6	117.1	98.1	64.2	70.0	70.8
Wood and cork	3.0	111.3	120.5	148.8	132.2	109.1	63.3	98.7	128.7
Furniture and accessories	1.0	107.8	121.0	116.1	116.4	84.5	68.8	78.2	79.7
Paper and products	2.1	98.2	101.0	97.9	90.9	97.3	89.7	99.9	106.1
Printing and publishing	2.7	95.1	98.8	144.3	141.9	106.7	68.9	68.5	92.3
Industrial chemicals	2.7	105.3	110.6	112.0	105.8	96.7	52.6	58.0	59.3
Other chemical products	4.8	100.6	119.6	119.7	117.3	123.5	87.0	113.1	109.8
Petroleum refining	1.6	96.2	123.7	132.0	123.7	126.7	104.4	110.8	117.8
Petroleum derivatives	0.2	91.8	108.8	106.7	108.4	96.3	55.5	65.4	74.4
Rubber products	1.6	113.3	133.1	132.3	124.4	120.4	44.6	76.0	98.8
Plastic products	1.3	86.0	105.6	119.1	102.1	111.1	59.8	81.2	88.1
Ceramics and brick products	0.5	94.5	99.6	106.8	105.2	110.5	69.2	64.1	72.9
Glass products	0.8	90.4	106.0	119.3	136.4	109.8	54.3	101.5	132.3
Other non-metallic mineral products	1.9	96.6	108.7	105.6	100.1	117.6	60.8	56.5	63.8
Basic iron and steel	3.4	95.3	103.9	98.1	87.3	94.6	75.8	61.0	69.6
Basic non-ferrous metals	13.1	101.7	111.6	118.8	122.8	151.6	136.8	166.9	177.1
Metal products	4.3	108.3	111.6	120.2	114.3	112.1	67.7	68.1	79.3
Nonelectric machinery	3.2	98.2	115.4	122.4	113.8	120.5	79.9	67.8	58.7
Electric equipment	1.0	90.5	111.4	115.3	116.8	155.1	70.8	80.9	96.5
Electronic equipment	2.0	148.1	196.3	146.3	106.9	142.4	118.5	74.7	83.2
Domestic electric appliances	1.8	110.5	126.5	119.0	111.6	109.3	69.0	87.3	123.8
Transport materiel	6.2	100.4	91.4	105.9	71.6	72.8	53.6	49.6	61.5
Professional and scientific equipment	0.2	100.4	106.8	94.4	70.9	97.0	56.8	51.7	66.2
Other manufactures	0.6	83.1	82.1	72.5	87.1	81.3	62.9	105.9	101.8
Total	100.0	103.5	114.7	117.6	109.9	111.1	85.0	95.4	104.2

Source: Sociedad de Fomento Fabril



Table 8.21: CHILE - INDEX OF INDUSTRIAL SALES (SOFOFA), 1970- 1978

(Average 1969 = 100)

Year/Quarter	Product Groups						
	General Index	Consumer Nondurables	Consumer Durables	Transport Materiel	Intermediates for Industry	Intermediates for Construction	Miscellaneous Manufactures
1970 (average)	99.7	97.5	115.0	102.6	99.2	101.4	95.6
1971 ( " )	114.0	116.1	140.7	91.0	110.9	118.4	105.4
1972 ( " )	116.7	115.8	128.9	90.4	117.3	123.2	118.5
1973 ( " )	106.1	103.5	108.9	70.8	113.4	116.6	109.5
1974 ( " )	107.7	99.4	114.0	75.5	134.3	112.3	98.4
1975 I	90.6	83.7	100.9	60.1	120.2	85.4	74.6
II	84.6	86.4	88.5	48.1	108.7	66.4	66.3
III	79.0	80.8	91.2	45.8	125.1	58.0	58.0
IV	<u>89.2</u>	<u>92.9</u>	<u>87.3</u>	<u>60.9</u>	<u>115.1</u>	<u>65.2</u>	<u>65.2</u>
(average)	<u>85.9</u>	<u>86.0</u>	<u>92.0</u>	<u>53.8</u>	<u>117.3</u>	<u>67.8</u>	<u>64.8</u>
1976 I	82.7	81.7	64.7	43.8	117.6	66.4	70.1
II	90.7	87.7	73.7	35.5	132.2	75.8	80.2
III	93.5	90.7	81.0	49.8	130.5	78.7	79.8
IV	<u>99.7</u>	<u>96.2</u>	<u>77.3</u>	<u>60.5</u>	<u>140.4</u>	<u>82.5</u>	<u>88.4</u>
(average)	<u>91.9</u>	<u>89.5</u>	<u>74.3</u>	<u>47.3</u>	<u>130.2</u>	<u>76.6</u>	<u>79.5</u>
1977 I	91.0	85.7	65.8	35.3	128.2	81.1	101.5
II	103.0	100.6	87.9	57.2	139.0	96.4	82.8
III	102.1	97.9	82.3	60.4	142.4	89.3	88.3
IV	<u>107.7</u>	<u>105.5</u>	<u>80.7</u>	<u>66.4</u>	<u>145.0</u>	<u>97.5</u>	<u>91.5</u>
(average)	<u>101.0</u>	<u>97.4</u>	<u>79.2</u>	<u>54.8</u>	<u>138.6</u>	<u>91.1</u>	<u>91.0</u>
1978 I	99.3	98.2	71.9	61.2	132.2	90.5	86.9

Source: SOFOFA

Table 8.22: CHILE - SOFOFA INDEX OF PHYSICAL SALES BY MANUFACTURING SUBSECTOR, 1970-1977

(1969 = 100)

Industry	1970	1971	1972	1973	1974	1975	1976	1977
<u>Consumer Goods</u>	<u>97.0</u>	<u>115.0</u>	<u>116.7</u>	<u>104.8</u>	<u>97.6</u>	<u>83.0</u>	<u>88.0</u>	<u>95.1</u>
Processed foods	100.4	116.9	108.9	98.9	101.8	94.5	101.1	101.6
Beverages	95.7	118.6	123.5	107.8	85.3	89.9	102.4	121.5
Tobacco	98.5	120.1	121.4	128.7	133.7	123.4	125.4	132.7
Textiles	93.2	114.7	118.0	97.0	89.8	66.6	67.8	76.5
Clothing	96.9	112.3	115.4	102.3	93.9	69.5	60.1	68.8
Shoes	96.7	113.8	119.2	115.4	96.2	63.2	67.4	72.4
Furniture and accessories	108.4	131.2	125.0	113.2	83.0	69.8	85.5	77.6
Brick and clay products	87.8	112.9	107.6	106.3	113.4	63.7	65.5	78.7
Printing and publishing	92.3	97.9	149.0	138.4	101.5	64.9	64.9	87.1
Other manufacturing	83.0	82.6	77.5	84.9	76.9	59.1	115.9	124.0
<u>Intermeditate Goods</u>	<u>99.7</u>	<u>113.3</u>	<u>117.4</u>	<u>110.7</u>	<u>119.0</u>	<u>91.6</u>	<u>104.6</u>	<u>117.4</u>
Leather products (ex. shoes)	97.6	114.7	95.0	92.3	86.5	70.4	69.4	77.2
Other chemical products	98.7	116.4	126.9	113.0	115.9	95.8	94.0	114.3
Domestic elec. appliances	105.9	132.4	121.2	107.1	108.0	84.0	85.0	127.4
Industrial chemicals	102.7	117.7	117.2	97.9	104.5	54.2	56.5	58.6
Petroleum refining	99.4	121.6	130.2	121.5	126.9	108.0	108.8	113.5
Petroleum derivatives	95.5	105.7	100.8	106.6	107.0	62.6	66.0	73.2
Basic iron and steel	87.9	103.1	104.8	87.1	94.8	69.1	62.0	68.8
Nonferrous basic metals	101.4	110.4	119.2	122.4	152.0	136.7	166.7	177.3
Wood and cork	89.2	99.4	119.6	107.7	77.5	57.2	82.5	106.3
Glass	95.4	108.0	111.7	126.8	103.3	67.4	85.5	117.3
Other nonmetallic minerals	91.1	111.0	102.0	97.5	109.4	57.0	55.4	68.4
Metal products	114.8	126.4	130.0	122.3	120.3	70.2	73.3	85.7
Paper goods	101.0	102.3	91.4	86.8	94.7	79.6	103.3	100.2
Rubber products	101.1	128.9	120.7	113.1	98.8	55.9	70.2	86.4
Plastics	89.8	107.4	117.9	97.5	108.0	55.3	75.6	81.6
Professional scientific equipment	113.4	106.3	101.6	80.8	96.0	60.3	56.0	71.4
<u>Machinery and Transport</u>								
<u>Equipment</u>	<u>109.4</u>	<u>118.1</u>	<u>113.5</u>	<u>93.8</u>	<u>104.5</u>	<u>75.6</u>	<u>61.5</u>	<u>63.1</u>
Nonelectric machinery	106.6	123.9	129.4	116.0	120.9	85.9	74.2	61.2
Electronic equipment	136.9	175.0	136.5	99.0	108.4	109.1	65.0	64.4
Transport materiel	102.6	91.0	90.4	70.8	75.5	53.8	47.3	54.8
Electric equipment	105.0	153.4	159.8	154.9	224.4	110.5	102.7	117.2
General Index	<u>99.7</u>	<u>114.0</u>	<u>116.7</u>	<u>106.1</u>	<u>107.7</u>	<u>85.9</u>	<u>91.9</u>	<u>101.0</u>

Source: SOFOFA

Table 8.23: CHILE - UTILIZATION OF PRODUCTIVE CAPACITY, BY MANUFACTURING SUBSECTORS, 1969-1977

(Percent)

	1969	1970	1971	1972	1973	1976	1977
Processed foods	64.2	63.2	66.1	64.1	61.8	61.9	62.4
Beverages	46.9	45.5	57.4	61.6	67.1	49.5	56.6
Tobacco	69.9	66.0	83.2	85.3	88.7	88.7	95.4
Textiles	85.5	78.9	90.5	93.0	83.5	50.4	57.0
Clothing and shoes	72.2	69.7	79.1	82.2	77.9	48.8	53.7
Wood products	63.5	64.2	43.8	87.1	55.3	47.2	61.5
Furniture and accessories	38.6	54.5	89.1	62.4	48.5	29.0	29.6
Paper and pulp	76.9	77.3	78.2	64.9	65.2	82.0	87.1
Printing and publishing	56.7	56.2	72.5	64.8	49.2	31.4	42.3
Leather goods	62.9	68.6	79.1	59.5	56.7	50.0	56.8
Rubber products	63.0	67.3	82.1	84.1	77.3	46.8	60.8
Chemicals	65.6	70.7	84.2	88.0	86.3	51.5	50.9
Petroleum derivatives	82.9	78.8	95.0	84.2	77.8	70.7	75.7
Nonmetallic minerals	75.1	70.0	81.1	81.8	80.7	50.0	57.4
Basic metals	65.6	64.8	70.0	74.6	71.8	61.3	66.0
Metal products	77.5	74.7	82.7	89.3	92.0	47.9	55.8
Nonelectric machinery	49.0	42.6	57.1	68.5	85.5	47.1	40.8
Electric appliances	79.5	79.0	90.0	82.8	70.8	51.9	64.6
Transport materiel	58.7	70.6	62.3	66.9	72.8	26.0	32.2
Miscellaneous industry	50.7	41.9	56.2	63.7	61.9	45.9	47.8
Total	67.2	66.6	75.6	77.0	73.1	56.0	61.2

Source: CORFO ; mission estimates based on physical production indices

Table 8.24: CHILE - COMPOSITION OF INDUSTRIAL EXPORTS

(Millions of US dollars)

Industries	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>Total exports</b>	<b>469.7</b>	<b>465.4</b>	<b>500.7</b>	<b>504.0</b>	<b>592.1</b>	<b>684.0</b>	<b>866.5</b>	<b>873.2</b>	<b>910.9</b>	<b>1,171.9</b>	<b>1,111.7</b>	<b>996.8</b>	<b>847.4</b>	<b>1,310.5</b>	<b>2,238.9</b>	<b>1,535.3</b>	<b>2,082.6</b>	<b>2,190.3</b>
<b>Total manuf. exports</b>	<b>59.0</b>	<b>44.9</b>	<b>36.9</b>	<b>38.4</b>	<b>83.2</b>	<b>103.3</b>	<b>116.4</b>	<b>83.7</b>	<b>91.2</b>	<b>100.9</b>	<b>124.9<sup>a/</sup></b>	<b>139.8</b>	<b>103.0</b>	<b>102.7</b>	<b>308.2</b>	<b>395.0</b>	<b>520.1</b>	<b>627.6</b>
<b>Consumption goods</b>	<b>8.8</b>	<b>10.4</b>	<b>15.5</b>	<b>18.0</b>	<b>26.0</b>	<b>20.8</b>	<b>40.0</b>	<b>28.6</b>	<b>34.0</b>	<b>34.8</b>	<b>35.0</b>	<b>49.3</b>	<b>32.7</b>	<b>25.9</b>	<b>61.2</b>	<b>115.2</b>	<b>140.8</b>	<b>196.6</b>
Food processing	7.5	9.0	13.3	15.5	23.5	17.9	36.7	24.7	29.6	29.3	28.7	43.9	28.8	21.5	56.0	102.1	110.0	169.1
Beverages	0.3	0.4	0.5	1.1	1.0	0.8	0.9	0.8	1.1	1.5	1.8	1.8	2.1	2.9	3.8	4.5	7.0	7.9
Tobacco	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Textiles & clothing	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.2	0.1	3.8	--	--
Furniture	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Printing	0.1	0.1	0.1	0.4	0.5	0.8	0.9	1.8	2.2	1.9	1.8	1.2	0.6	0.5	0.5	2.2	2.9	2.8
Others	0.7	0.8	1.5	0.9	0.8	1.2	1.4	1.3	1.1	2.1	2.6	2.4	1.2	0.8	0.8	2.6	20.9	16.8
<b>Intermediate goods</b>	<b>28.6</b>	<b>28.7</b>	<b>19.8</b>	<b>18.5</b>	<b>53.7</b>	<b>77.4</b>	<b>69.1</b>	<b>50.9</b>	<b>48.9</b>	<b>54.9</b>	<b>72.7</b>	<b>79.8</b>	<b>62.2</b>	<b>67.3</b>	<b>233.1</b>	<b>257.3</b>	<b>321.8</b>	<b>383.1</b>
Wood	1.7	2.9	2.2	1.7	2.6	3.6	4.0	2.9	4.1	7.7	8.9	7.0	3.0	4.6	13.1	24.9	29.3	70.4
Pulp and paper	5.6	8.6	6.5	5.7	6.6	9.8	17.0	22.9	23.5	27.8	31.5	30.8	26.9	29.8	110.4	97.3	133.0	131.6
Leather and rubber	0.9	1.1	0.8	1.2	1.3	1.0	1.1	1.1	1.1	1.6	1.0	0.1	0.0	0.0	1.3	3.4	--	--
Chemicals	2.2	2.8	3.6	2.0	3.1	3.0	4.3	2.4	3.8	4.2	6.9	10.7	7.9	3.9	31.6	27.6	50.3	65.5
Petroleum derivatives	0.7	0.8	0.6	1.1	1.7	0.9	0.8	1.2	0.9	0.7	0.4	0.9	2.8	0.7	19.9	14.2	14.3	12.4
Nonmetallic minerals	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.2	1.0	0.5	0.1	0.0	0.0	0.3	4.1	--	--
Basic metals	17.5	12.5	6.1	6.8	38.4	59.0	41.7	20.4	15.3	11.9	23.5	30.2	21.6	28.3	56.5	85.8	94.9	103.2
<b>Capital goods</b>	<b>1.6</b>	<b>5.8</b>	<b>1.6</b>	<b>1.9</b>	<b>3.5</b>	<b>5.2</b>	<b>7.3</b>	<b>4.2</b>	<b>8.3</b>	<b>11.2</b>	<b>16.3</b>	<b>10.5</b>	<b>8.1</b>	<b>9.5</b>	<b>13.9</b>	<b>22.5</b>	<b>57.5</b>	<b>47.9</b>
Metallic products and machinery	1.3	0.9	0.8	1.1	1.0	1.4	1.9	1.8	2.9	3.8	5.5	3.9	3.9	6.7	8.2	17.1	49.0	31.9
Electrical apparatus	0.2	0.6	0.2	0.4	1.0	0.6	3.7	0.6	0.6	1.7	2.2	1.8	1.3	0.8	1.1	2.6	3.6	4.7
Transport equipment	0.0	0.1	0.1	0.3	0.1	0.1	0.4	1.1	4.1	5.1	5.3	3.6	2.8	1.9	4.6	2.7	4.9	11.3
Used equipment	0.1	4.2	0.5	0.1	1.4	3.1	1.3	0.7	0.7	0.6	3.3	1.2	0.1	0.1	0.0	0.1	--	--

a/ Includes \$0.9 million of noncommercial exports.

Source: Central Bank

**Table 8.25:** THE HUNDRED LARGEST CHILEAN NONFINANCIAL ENTERPRISES, 1976  
(Millions of U.S. dollars of December 1976) <sup>a/</sup>

Ranking	Enterprise	Total Assets	Sales	Profit or (Loss)	
				Net during Worth	Fiscal Year
*1	CODELCO	2,041.9	1,177.9	1,416.5	178.6
*2	ENDESA	864.4	98.4	612.3	56.0
*3	CHILECTRA	761.8	112.0	666.3	16.1
*4	CAP	722.0	202.8	350.6	( 5.7)
*5	ENAP	643.9	522.8	458.1	(24.5)
*6	EMPORCHI	554.8	36.5	544.2	( 1.8)
*7	Cia. Telefonos de Chile	454.7	57.5	406.1	( 2.3)
*8	Ferrocarriles del Estado	346.2	54.7	319.6	(15.0)
*9	IANSA	272.5	113.0	176.7	(21.4)
*10	ENAMI	259.8	148.0	209.1	9.5
11	Papeles y Cartones	160.7	146.4	96.6	6.2
*12	Soc. Const. Est. Hospitalarios	150.8	0.3	143.1	0.0
13	COPEC	142.5	284.2	122.1	( 0.2)
*14	SOQUIMICH	132.4	61.3	40.8	(16.5)
*15	Celulosa Constitucion <sup>b/</sup>	125.3	-	40.0	-
*16	ECA	124.4	176.2	1.1	(23.2)
*17	ENTEL-CHILE	98.7	26.9	60.4	10.1
*18	Minera Disputada	90.5	57.1	51.9	( 1.5)
19	Sudamericana de Vapores	90.4	114.3	72.2	6.9 <sup>c/</sup>
*20	ENACAR	88.9	42.7	2.5	(21.3)
*21	LAN-CHILE	85.1	81.3	19.7	(14.0)
22 <sup>d/</sup>	Celulosa Arauco	84.9	54.5	39.6	6.6
*23	CORFO-INSA	82.9	55.6	37.8	(10.1)
24	Mantos Blancos	73.5	41.5	58.7	8.0
*25	Soc. Const. Est. Educacionales	68.6	1.5	64.4	0.1
26	Cia. Tecno-Industrial (CTI)	68.3	31.1	26.6	( 7.5)
27	Cia. Chilena de Tabacos	58.8	39.1 <sup>e/</sup>	48.9	( 2.3)
28	Electricidad Industrial	58.7	23.1	55.6	0.6
29 <sup>d/</sup>	Forestal Arauco Ltda.	56.8	12.3	43.5	1.0
30	CRAV	56.6	24.6	27.9	( 0.4)
31	Cervecerias Unidas	54.6	44.3 <sup>e/</sup>	34.0	3.1
32	INFORSA	53.3	32.4	38.0	3.9
*33	EMPREMAR	51.9	43.0	46.1	3.2
34	Compañia Industrial	51.2	24.7	27.0	0.4
*35	Ind. Nac. del Cemento (INACESA)	50.1	5.3	28.7	1.5
36	MADECO	48.0	62.7	17.6	0.8
*37	Cia. Chilena de Navegacion Interoceanica	47.9	42.3	15.7	1.7
38	YARUR S.A.	47.0	20.3	27.8	( 1.8)
39	ESSO-Chile Petrolera	46.6	133.7	32.6	4.5
40	Gildemeister	44.5	28.2	13.5	( 1.0)

Table 8.25: THE HUNDRED LARGEST CHILEAN NONFINANCIAL ENTERPRISES, 1976

(Millions of U.S. dollars of December 1976) <sup>a/</sup>

Ranking	Enterprise	Total Assets	Sales	Profit or (Loss)	
				Net during Fiscal Worth	Year
*41	E.T.C. del Estado	43.2	13.3	38.3	(38.6)
42	SODIMAC	43.1	57.3	14.4	(0.3)
43	CHIPRODAL	40.5	62.4	25.2	0.3
*44	CONAF	37.1	0.9 <sup>f/</sup>	36.3	(7.7)
45	Indus Level	35.6	50.3	30.7	1.8
46	Cia. Sudamericana de Fosfatos (COSAF)	35.5	8.1	20.8	(0.3)
*47	Petroquimica Chilena	35.2	15.3	17.4	2.1
48	Petroquimica DOW	33.5	33.3	18.3	1.8
49	CIC	32.0	11.5	30.1	(3.7)
50	Pizarreño	31.0	16.1	20.9	0.2
51	SUMAR	30.4	30.4	20.8	(0.5)
52	Shell-Distribuidora	29.3	121.9	20.4	(0.9)
53	Firestone	28.8	8.9	16.6	(4.1)
54	EPERVA	27.7	22.2	25.5	9.3
55	Forestal S.A.	27.5	11.8	18.5	0.4
56	COIA	27.3	12.9	14.2	2.5
*57	SOCOAGRO	27.2	14.3	12.7	(1.8)
58	CAROZZI	26.0	20.4	6.9	(0.8)
59	Soc. de Renta Urbana Pasaje Matte <sup>g/</sup>	25.1	0.9	23.6	0.9
60	SONAP	24.1	14.4	10.1	1.6
<u>h/</u> *61	Cemento Melon	24.0	9.9	16.2	0.4
62	Cia. Minera Valparaiso	23.8	2.0	22.6	1.0
63	El Mercurio S.A.P.	23.1	30.8	8.4	0.7
64	Armat Metalurgica	21.9	24.6	8.2	1.3
65	Lucchetti	21.5	18.3	10.3	(0.3)
*66	Soc. Austral de Electricidad	20.9	5.6	18.7	0.2
67	PANAL	20.0	23.8	2.6	0.7
68	SINDELEN	20.0	9.1	14.9	(4.2)
69	Philips-Chilena	19.8	20.6	8.6	1.0
70	Tejidos Caupolican	18.1	15.9	6.2	(2.6)
71	Viña Concha y Toro	17.7	12.3	13.5	1.3
72	Pesquera Indo	17.3	19.5	15.7	6.3
73	Pesquera Coloso	17.2	26.2	7.2	6.7
74	Wagner Stein	16.9	12.3	3.7	(0.1)
*75	CORMECANICA	16.8	4.0	3.9	1.6
76	ELECMETAL	16.5	5.6	11.7	0.6
77	Shell-Industria Quimica	16.4	17.6	15.9	(1.2)
78	Ind. Quimicas Generales	16.0	9.6	11.8	(0.8)
79	INCHALAM	15.8	16.4	12.3	1.1
*80	FRONTEL	15.6	3.1	12.0	0.1

Table 8.25: THE HUNDRED LARGEST CHILEAN NONFINANCIAL ENTERPRISES, 1976

(Millions of U.S. dollars of December 1976) <sup>a/</sup>

Ranking	Enterprise	Total Assets	Sales	Profit or (Loss)	
				Net Worth	during Fiscal Year
81	Cemento Polpaico	15.6	13.0	9.5	0.2
82	IBM-Chile S.A.C.	15.3	22.4	8.7	2.4
*83	Automotriz Arica	14.6	8.2	8.9	5.9
*84	Emp. de Viv. Econ. Prefabr. el Belloto Ltda.	14.3	3.1	12.6	0.1
85	Fiat-Chile	14.3	11.6	7.8	0.1
86	Fiap-Tome	14.2	7.8	7.7	( 1.2)
87	CATECU S.A.	14.1	27.5	5.2	( 0.5)
88	FANALOZA	14.1	10.5	5.7	( 1.8)
89	Maderas y Sinteticos Masisa	14.1	5.8	8.5	0.5
*90	IRT-Colorado	14.0	18.9	5.8	0.5
91 <sup>d/</sup>	DINAC	14.0	12.3	5.2	( 0.9)
92	Soc. El Tattersall	13.9	9.1	3.6	0.1
93	Automotores Franco-Chilena	13.7	15.3	4.8	2.1
94	Maderas Cholguan	13.6	4.7	12.4	( 0.4)
95	Pesquera Guanaye	13.4	19.7	7.2	3.9
96	Forestal, Constr. y Comercial del Pacifico Sur	13.3	0.9	10.7	( 0.2)
97	Cristal-Chile	12.8	11.4	9.1	0.6
98	Naviera Interoceangas	12.8	9.3	7.5	3.1
99	Cia. Ind. Met. Cimet	12.4	2.9	8.1	( 0.5)
100	McKay	12.3	10.8	6.6	( 1.3)

\* Enterprises with more than 50 percent state ownership.

<sup>a/</sup> Peso data deflated by official CPI and converted to dollars at rate of 17.42 pesos = US\$1.00.

<sup>b/</sup> Not yet operating in 1976.

<sup>c/</sup> Before taxes.

<sup>d/</sup> Former state enterprises divested to private sector in late 1976 or early 1977.

<sup>e/</sup> Sales net of tax.

<sup>f/</sup> Includes only sales of wood and miscellaneous sales.

<sup>g/</sup> Enterprise in process of liquidation.

<sup>h/</sup> Repossessed from private sector during 1977.

Source: Colocadora Nacional de Valores, Informe Económico, No. 18, September 1977

Table 8.26: CHILE - ENERGY SUPPLY, CONVERSION AND DEMAND, 1975

(Thousands of tons of petroleum equivalent-KTpe) <sup>a/</sup>

	PRIMARY ENERGY SUPPLY			NET OUTPUT, ENERGY CONVERSION FACILITIES						FINAL DOMESTIC DEMAND				BALANCE	
	Domestic Production	Net Imports	Total	ENAP-Magallanes Plants	Concon & Concepción Refineries	Public Electric Utilities	Industrial Electricity Generation	Gas Manufacturing <sup>b/</sup>	Total	NET PRODUCT EXPORTS	Residential Commercial, Public Service	Transportation	Industry & Mining		Total Consumption
CRUDE OIL	1159 <sup>d/</sup>	2564	3723	- 41	-585 <sup>e/</sup>	0	0	0	-3837					-150	
NATURAL GAS															
Wet <sup>a/</sup>	6982 <sup>e/</sup>	0	6982	-4324 <sup>f/</sup>	0	0	0	0	-4324					2658	
Dry <sup>a/</sup>	-3024 <sup>f/</sup>	0	-3024	n.a.	0	-17	-10	0	n.a.		66	0	0	n.a.	
PETROLEUM PRODUCTS				508	564 <sup>g/</sup>	-55	-42 <sup>g/</sup>	-1	347 <sup>g/</sup>	87	894	1577	1124 <sup>h/</sup>	3595 <sup>i/</sup>	-210 <sup>e/</sup>
Automobile gasoline				11	930	0	0	0	941	40	0	927	0	927	- 26
Aviation gasoline				0	13	0	0	0	13	0	0	15	0	15	- 2
Domestic kerosene				1	333	0	0	0	334	0	370	0	32	402	- 68
Jet fuel				0	99	0 <sup>j/</sup>	0	0	99	0	0	100	0	100	- 1
Diesel fuel				8	831	-42 <sup>k/</sup>	-72 <sup>k/</sup>	0	722	0	25	423	509	757	- 35
Fuel oils				0	1126	-15	-354 <sup>k/</sup>	0	759	0	12	110	705	827	- 68
LPG				288	228	negl.	negl.	-19	497	47	434	0	28	462	- 12
Manufactured gas <sup>b/</sup>				0	0	0	0	69	69	0	51	0	18	69	0
Naphtha				0	54	0	0	-51	3	0	0	0	3	3	0
Vacuum bottoms fuel				0	14	0	0	0	14	0	0	0	13	13	1
Solvents <sup>l/</sup>				0	14 <sup>m/</sup>	0	0	0	14	0	21 <sup>m/</sup>	21 <sup>m/</sup>	92 <sup>m/</sup>	13	1
Other non-fuels				0	7 <sup>n/</sup>	0	0	0	7	0	n.a.	n.a.	n.a.	n.a.	n.a.
COAL	1015 <sup>o/</sup> 1	108 <sup>o/</sup>	1123	0	0	-169	0	-21	-190	0	5	72	514	591	342
WATER POWER	1651	0	1651	0	0	-1431	-219	0	-1650	0					1
ELECTRICITY	----	----	----	-10 <sup>o/</sup>	-11	1669	680	negl.	2328	-1	668	282 <sup>o/</sup>	1380	2330	-1
WOOD	n.a.	n.a.	n.a.	0	0	0	-17	0	-17	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	7800 <sup>a/</sup>	2672 <sup>a/</sup>	10472 <sup>a/</sup>	-950 <sup>e/</sup>	-194	-3	5	-22	-1104 <sup>e/</sup>	86 <sup>a/</sup>	1633 <sup>q/</sup>	1931 <sup>q/</sup>	3018 <sup>q/</sup>	6582 <sup>q/</sup>	2640

SOURCES: Comisión de Política Energética, ENAP, ENDESA, and ENACAR, Mission estimates

a/ "dry" gas is gas from which the more easily liquified substances, often used as LPG or petro-chemical feedstocks, have been removed. "Wet" gas is raw gas, as it comes from the well. See also note d/.

b/ "Gas de cañeria" is produced from coal and naphtha and piped on a limited scale to consumers and light industry in Santiago and Valparaíso.

c/ Including "white" gasoline and turpentine.

d/ About 10 percent of the crude oil production reported by ENAP is actually natural gasoline extracted from natural gas and added to conventional oil production.

e/ Assuming 10,526 kcal/m<sup>3</sup> (Mexican data).

f/ Reinjection.

g/ Of which: Lota-Schwager 755, Arauco 262, Valdivia 12, and Magallanes 6.

h/ Assuming 0.674 KTpe/MT (average for domestic coal).

i/ Energy value of fuel used to produce equal amount of electricity in a thermal plant, at 1975 Chilean average heat rate 269 KTpe.

j/ Division between industrial and public utilities fuel use based on 1974 ratio. Mining operations account for almost all of industrial generation with these fuels.

k/ Assuming 1.0 KTpe/thousand m<sup>3</sup>.

l/ Assuming 0.755 KTpe/thousand m<sup>3</sup> (naphtha data).

m/ Sectoral distribution arbitrary.

n/ Consisting of:

(thousand m <sup>3</sup> )	(product)	(KTpe)
1	hydrogen	0.0
7	asphalt	7
79	ethylene	0.1
2	refinery gas	0.0

o/ Figure includes all of ENAP's Magallanes operations.

p/ Of which, electricity transmission and distribution losses are 235.

q/ Neglecting wood other than that reported used in electricity generation, assumed domestically produced.

r/ Assuming supply-demand balance where data are unavailable, "other non-fuels" consumption entirely in industry.

s/ Based on 10.7 million kcal per ton, with water-power and electricity evaluated at national average. Fuel consumption rate of thermal generating plants, 2880 kcal/kwh.

t/ Changes in stocks, statistical discrepancies, and, in the case of natural gas, flaring.



Table 8.27: CHILE - COMMERCIAL ENERGY CONSUMPTION BY FUEL AND CONSUMING SECTOR, 1975

(Million Barrels Oil Equivalent)

	Oil <sup>a/</sup>	Gas	Coal	Total Electricity	Hydro <sup>c/</sup>	Total Primary Energy
Transportation <sup>d/</sup>	10.9	-	0.8	0.4	-	12.2
Aircraft	0.7	-	-	-	-	0.7
Railroads	0.3	-	0.8	0.0	-	1.1
Trucks, Ag. equipment	4.6	-	-	-	-	4.6
Private cars	1.7	-	-	-	-	1.7
Taxis, busses, trolleys	2.3	-	-	0.4	-	2.7
Ships	1.3	-	-	0.0	-	1.3
Domestic, Commercial, Public	5.9	0.5	0.2	5.6	-	12.2
Selected Mining and Min. Ind.	5.5	-	2.2	6.3	-	14.0
Copper	4.4	-	-	4.2	-	8.6
Nitrate	0.2	-	-	0.6	-	0.8
Coal	-	-	-	0.3	-	0.3
Oil	-	-	-	0.3	-	0.3
Petrochemicals	0.1	-	-	0.3	-	0.4
Iron	-	-	-	0.1	-	0.1
Steel	0.8	-	2.2	0.5	-	3.5
Other Industrial	2.5	-	1.6	4.7	-	8.8
Pulp and Paper	0.9	-	-	1.5	-	2.4
Cement	-	-	0.5	0.4	-	0.9
Sugar	-	-	0.6	0.1	-	0.7
Other	1.6	-	0.5	2.7	-	4.8
Electricity Generation	3.5	0.2	1.4	-	12.0	17.1
Total	28.4	0.7	6.3	17.1	12.0	47.4 <sup>b/</sup>
(Imports)	(19.8)	(-)	(-)	(0.0)	(-)	(19.8)

Notes: <sup>a/</sup> Includes natural gas liquids.

<sup>b/</sup> Excludes electricity generated in thermal plants to avoid double counting.

<sup>c/</sup> Hydropower has been converted to oil equivalent at the average thermal electric generation heat rate for 1975: 2880 kcal/kwh.

<sup>d/</sup> Transportation sub-sector demands estimated on the basis of 1974 proportions.

Source: ENDESA, ODEPLAN, mission estimates.

Table 8.28: CHILE - DOMESTIC PRODUCTION OF PRIMARY COMMERCIAL ENERGY, 1965-1976  
(thousands of tons of oil equivalent)<sup>1/</sup>

	Total	<sup>2/</sup> Hydro	<sup>3/</sup> Coal	<sup>4/</sup> Oil & Gas
1965	3,956	1,064	1,024	1,868
1966	3,929	1,122	969	1,838
1967	3,842	1,145	896	1,801
1968	3,905	960	931	1,975
1969	3,979	1,083	983	1,945
1970	3,875	1,159	919	1,796
1971	4,082	1,183	989	1,910
1972	4,282	1,407	883	1,992
1973	4,167	1,432	895	1,840
1974	4,271	1,628	947	1,696
1975	4,194	1,651	960	1,583
1976	4,043	1,702	827	1,514

<sup>1/</sup> Ton of oil equivalent defined as 10.7 million Kcal.

<sup>2/</sup> ENDESA data converted at 1975 national average heat rate for thermo-electric generation as reported by ENDESA: 2,880 Kcal/Kwh.

<sup>3/</sup> Estimates constructed from ENDESA, ENACAR, Ministry of Mines, and U.N. data on bases that vary from year to year according to availability of data. Benchmark estimates (obtained for 1955, 1960, and 1965-1972) made using ENDESA figures for gross production in tons and average energy value by mining region and correcting with ratio of net to gross output reported by Ministry of Mines.

<sup>4/</sup> ENAP data (except 1976 figure, which was computed from ENAP data with a methodology that gives the same figure for 1975) corrected for difference in definition of oil equivalence and for oil obtained from Argentina as an in-kind transfer fee. ENAP data use a conversion rate of 796 tons of oil equivalent per million Kwh, which implies 10.80 million Kcal per ton of oil equivalent. Argentina crude converted at 0.876 ton oil equivalent per cubic meter.

Source: ENDESA, ENACAR, Ministry of Mines, United Nations and mission calculations

Table 8.29: CHILE - DOMESTIC CONSUMPTION OF PRIMARY COMMERCIAL ENERGY, 1965-76  
(thousands of tons of oil equivalent)<sup>1/</sup>

	Total	Hydro <sup>2/</sup>	Coal <sup>3/</sup>	Oil & Gas <sup>4/</sup>
1965	5,228	1,064	1,068	3,096
1966	5,641	1,122	1,061	3,458
1967	5,885	1,145	1,122	3,618
1968	5,974	960	1,147	3,867
1969	6,312	1,083	1,155	4,074
1970	6,777	1,159	1,222	4,396
1971	7,380	1,183	1,220	4,977
1972	7,524	1,407	1,014	5,103
1973	7,323	1,432	1,015	4,876
1974	7,518	1,628	1,036	4,854
1975	6,561	1,651	820	4,090
1976	6,848	1,702	924	4,222 <sup>5/</sup>

1/ Ton of oil equivalent defined as 10.7 million Kcal.

2/ Assumed to equal production.

3/ Production plus imports less exports plus inventory changes. Data for adjustments for 1965-1974 from UN; 1975 adjustments are based on ENDESA data in tons and approximated conversion factors; 1976 conversion uses ENACAR data in tons for changes in stocks of domestic coal and assumes exports of 1,000 tons of oil equivalent and use of 200,000 tons of oil equivalent of ore of imported coal (estimated from CAP's electricity purchases in 1976 and historical ratios).

4/ ENAP data (except 1976 figure, which was computed from ENAP data with a methodology that gives the same figure for 1975) corrected for difference in definition of oil equivalence and for oil obtained from Argentina as an in-kind transfer fee. ENAP data use a conversion rate of 796 tons of oil equivalent per million Kwh, which implies 10.80 million Kcal per ton of oil equivalent. Argentina crude converted at 0.876 ton oil equivalent per cubic meter.

5/ Computed using sales data for naphtha from the Ministry of Economy.

Source: ENAP, ENDESA, ENACAR, U.N., Ministry of Economy and mission calculations

Table 8.30: CHILE - GENERATION OF ELECTRICITY--PUBLIC AND PRIVATE BY TYPE, 1965-1976

(Millions of kilowatt-hours)

	National Total			Private Producers			Public Suppliers						
	Total	Thermal	Hydro	Total	Thermal	Hydro	Total	ENDESA		Other Enterprises			
								Total	Thermal	Hydro	Total	Thermal	Hydro
1965	6,131.0	2,176.7	3,954.3	2,534.0	1,712.2	821.8	3,597.0	2,618.9	125.1	2,493.8	978.1	339.4	638.7
1966	6,661.8	2,493.6	4,168.2	2,702.1	1,921.9	780.2	3,959.7	2,871.5	155.5	2,716.0	1,088.2	416.2	672.0
1967	6,891.6	2,636.6	4,255.0	2,625.3	1,826.1	799.2	4,266.3	2,976.4	147.5	2,828.9	1,289.9	663.0	626.9
1968	6,917.7	3,353.1	3,564.6	2,569.9	1,898.5	671.4	4,347.8	2,529.5	157.2	2,372.3	1,818.3	1,297.4	520.9
1969	7,214.3	3,189.9	4,024.3	2,641.2	1,925.0	716.2	4,573.0	2,979.9	172.2	2,807.7	1,593.1	1,092.7	500.4
1970	7,550.5	3,243.5	4,307.0	2,654.4	1,859.5	794.9	4,896.1	3,350.1	433.7	2,916.4	1,546.0	950.3	595.7
1971	8,524.2	4,127.2	4,397.0	2,832.9	2,091.5	741.4	5,691.3	3,889.7	819.0	3,070.7	1,801.6	1,216.7	584.9
1972	8,933.7	3,708.2	5,225.5	2,790.0	1,994.6	795.4	6,143.7	4,631.0	818.3	3,812.7	1,512.7	895.3	617.4
1973	8,766.3	3,447.4	5,318.9	2,608.0	1,858.6	749.4	6,158.3	4,817.6	895.4	3,922.2	1,340.7	693.4	647.3
1974	9,297.3	3,248.8	6,048.5	2,784.3	1,982.4	801.9	6,513.0	5,243.3	645.7	4,597.6	1,269.7	620.7	649.0
1975	8,732.0	2,597.4	6,134.6	2,529.1	1,714.7	814.4	6,202.9	4,910.1	240.4	4,669.7	1,292.8	642.3	650.5
1976	9,276.2	3,041.7	6,234.5	2,671.9	1,890.9	781.0	6,604.3	5,282.4	425.3	4,857.1	1,321.9	725.5	596.4

Source: ENDESA

Table 8.31: CHILE - INTERNATIONAL MOVEMENTS OF ELECTRICAL ENERGY AND FUELS, 1970-1976

	1970	1971	1972	1973	1974	1975	1976
<b>IMPORTS</b>							
<u>Oil Products (thousand m<sup>3</sup>)</u>	<u>1,028.0</u>	<u>747.3</u>	<u>415.0</u>	<u>406.2</u>	<u>96.0</u>	<u>0</u>	<u>0</u>
LPG (propane)	166.3	160.1	12.2	69.0	2.7	0	0
Gasolines	86.6	78.2	5.6	63.5	0.0	0	0
Kerosene	68.2	53.2	9.4	73.1	0.0	0	0
Diesel fuel	85.0	68.6	52.4	81.2	0.0	0	0
Fuel oils	621.9	387.2	335.4	119.4	93.3	0	0
Crude oil (thousand m <sup>3</sup> ) <sup>1/</sup>	2,352.7	3,699.1	4,275.1	3,886.9	4,823.2	3,150.2	4,016.1
Electricity (GWh)	0.1	1.7	2.0	2.6	2.8	2.5	2.3
Coal (thousand tons)	300	270	323	256	208	164	n.a.
<b>EXPORTS</b>							
<u>Oil Products (thousand m<sup>3</sup>)</u>	<u>24.8</u>	<u>70.5</u>	<u>156.6</u>	<u>83.5</u>	<u>237.0</u>	<u>128.6</u>	<u>153.8</u>
LPG (propane)	24.8	70.5	156.6	53.6	133.0	76.6	79.8
Gasolines	0	0	0	29.9	104.3	52.0	74.0
Crude oil (thousand m <sup>3</sup> )	0	0	0	69.1	0	0	0
Natural gas (million m <sup>3</sup> )	0	0	0	0	0	0	357.1
Coal (thousand tons)	1	1	1	1	1	1	n.a.
<b>TRANSIT</b>							
<u>Crude oil (thousand m<sup>3</sup>)</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>				
Received	197	175	140	244.1	408.1	438.3	448.0
Shipped	224.2	135.4	136.2	207.7	388.8	367.3	n.a.
Taken as fee <sup>5/</sup>	27.1	24.0	19.2	33.5	56.1	4.5 <sup>4/</sup>	0 <sup>4/</sup>
<u>LPG mix (thousand tons)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>15.5</u>	<u>40.9</u>	<u>48.1</u>

1/ Includes Argentine oil taken as a fee during transit. (See transit section of table.)

2/ Argentine oil produced near the Chilean border is carried through Chilean pipelines to Terminal Gregorio (Chile) and shipped from there. Argentine LPG mixture is similarly taken to Cabo Negro (Chile), separated into butane and propane, and shipped.

3/ Estimated from 1973-74 ratio of oil received to amount retained as a fee.

4/ In early 1975, Argentina began paying in dollars rather than in kind. The fee is about US\$1.00 per barrel.

5/ Received. The tariff was raised in June 1975 from US\$29 to US\$35 per metric ton.

Source: ENAP and ENDESA

Notes to Tables 8.32 - 8.37

1. The projections of fuel consumption by types of fuels (Table 8.32) assume a GDP growth rate of 6.0 percent per year. The relationship between fuel consumption and GDP is derived from the historical experience reported in Table 8.31, assuming some continued restraint on the growth of overall demand via price increases and conservation measures, and a gradual shift from fuel oil to coal. It is further assumed that hydroelectric projects will be completed as scheduled at the time of the mission.
2. Projections of domestic oil and LPG production are from ENAP.

Table 8.32: CHILE - RATIOS OF DIRECT FUEL CONSUMPTION AND ELECTRICITY CONSUMPTION TO GDP, 1971-1976

	1971	1972	1973	1974	1975	1976
<b>1. Total Consumption</b> (Thousands of m <sup>3</sup> )						
LPG	634	685	735	778	738	779
Gasolines and Naphthas	1,948	1,943	1,759	1,563	1,301	1,262
Kerosenes	658	755	763	647	522	592
Diesel Fuel	906	909	918	1,032	987	1,011
HFO 5 and 6	1,833	1,826	1,662	1,730	1,298	1,441
Natural Gas (Millions of m <sup>3</sup> )	19	40	65	97	108	121
Coal (Thousands of mt)	1,976	1,629	1,630	1,656	1,312	
<b>a. Used for Thermal Generation</b>						
Diesel Fuel <sup>a/</sup>	137	132	98	110	137	
HFO 5 and 6 <sup>b/</sup>	762	743	680	609	399	
Natural Gas	29	32	n.a.	31	32	
Coal	534	359	519	378	262	
<b>b. Direct Consumption</b>						
Diesel Fuel	769	777	820	922	850	
HFO 5 and 6	1,071	1,083	982	1,111	899	
Natural Gas	n.a.	8	n.a.	66	76	
Coal	1,442	1,270	1,111	1,278	1,050	
<b>2. Direct Consumption Ratios to GDP</b>						
LPG	26	28	31	31	33	34
Gasolines and Naphthas	80	80	75	63	59	55
Kerosenes	27	31	32	26	24	26
Diesel Fuel	32	32	35	37	39	
HFO 5 and 6	44	44	42	45	41	
Natural Gas	-	0.3	n.a.	2.7	3.4	
Coal	59	52	47	51	48	
<b>3. Electricity Consumption</b> (GWh) <sup>c/</sup>						
(Ratio to GDP)	8,524 349	8,934 366	8,766 372	9,297 374	8,732 396	9,276 404

<sup>a/</sup> Assumes specific gravity = .84

<sup>b/</sup> Assumes specific gravity = .95

<sup>c/</sup> Including plant and transmission losses.

Table 8.33: CHILE - FUEL CONSUMPTION PROJECTIONS

	1977	1978	1979	1980	1981	1982	1983	1984	1985
1. GDP (Millions of 1965 pesos)	24939	26435	28021	29703	31485	33374	35376	37499	39749
2. Direct consumption ratios									
LPG	35	34	34	34	34	34	34	34	34
Gasolines and naphthas	55	54	53	52	51	51	50	50	50
Kerosenes	28	28	28	28	28	28	28	28	28
Diesel fuel	44	46	46	46	46	46	46	46	46
Fuel oils	44	44	43	43	42	42	41	41	40
Natural gas	4.0	4.2	4.6	4.8	4.8	4.8	4.8	4.8	4.8
Coal	52	53	54	55	56	57	58	59	60
Electricity	414	424	434	444	454	464	474	484	494
3. Direct consumption <sup>a,b/</sup>									
LPG	863	899	953	1010	1070	1135	1203	1275	1351
Gasolines and naphthas	1372	1427	1485	1545	1606	1702	1769	1875	1987
Kerosenes	698	740	785	832	882	934	991	1050	1113
Diesel fuel	1097	1216	1289	1366	1448	1535	1627	1725	1828
Fuel oils	1097	1163	1205	1277	1322	1402	1450	1537	1590
Natural gas	100	111	129	143	151	160	170	180	191
Coal	1297	1401	1513	1634	1763	1902	2052	2212	2385
Electricity	10325	11208	12161	13188	14294	15486	16768	18150	19636
4. Electric utilities consumption <sup>c/</sup>									
Diesel fuel	137	137	137	137	137	137	137	137	137
Fuel oils	547	555	439	650	691	749	796	731	688
Natural gas	32	32	32	32	32	32	32	32	32
Coal	641	821	1286	1419	1447	1486	1889	1854	1833
5. Total consumption <sup>d/</sup>									
LPG	863	899	953	1010	1070	1135	1203	1275	1351
Gasolines and naphthas	1372	1427	1485	1545	1606	1702	1769	1875	1987
Kerosenes	698	740	785	832	882	934	991	1050	1113
Diesel fuel	1234	1353	1426	1503	1585	1672	1764	1862	1965
Fuel oils	1644	1718	1644	1927	2013	2151	2246	2268	2278
(Subtotal: gasolines through fuel oils)	(4948)	(5238)	(5340)	(5807)	(6086)	(6459)	(6770)	(7055)	(7343)
Natural gas	132	143	161	175	183	192	202	212	223
Coal	1938	2222	2799	3053	3210	3383	3941	4066	4218
Memo item: ENAP projections									
LPG	790	830	878	932	981	1053	1125	1206	1286
Gasolines	1150	1200	1250	1370	1490	1585	1690	1800	1920
Kerosenes	587	627	642	674	699	724	752	778	806
Diesel fuel	1167	1223	1192	1267	1343	1414	1495	1589	1682
Fuel oils	1590	1674	1537	1621	1710	1727	1834	1935	1836
(subtotal: gasolines through fuel oils)	(4494)	(4724)	(4621)	(4932)	(5242)	(5454)	(5771)	(6102)	(6244)

a/ Units: Liquid petroleum fuels - thousand cubic meters; coal - thousand metric tons; natural gas - million cubic meters.

b/ Line 1 times line 2.

c/ From Table 8.32.

d/ Line 3 plus line 4.



Table 8.34: CHILE - THERMAL-ELECTRIC GENERATION FUEL CONSUMPTION PROJECTIONS

	1977	1978	1979	1980	1981	1982	1983	1984	1985
1. Total generation (GWh) <sup>a/</sup>	10325	11208	12161	13188	14294	15486	16768	18150	19636
2. Hydro generation (GWh) <sup>b/</sup>	<u>6185</u>	<u>6536</u>	<u>6535</u>	<u>6535</u>	<u>7435</u>	<u>8335</u>	<u>8335</u>	<u>10015</u>	<u>11695</u>
1975 levels	<u>6135</u>	<u>6135</u>	<u>6135</u>	<u>6135</u>	<u>6135</u>	<u>6135</u>	<u>6135</u>	<u>6135</u>	<u>6135</u>
Antuco	-	-	-	-	900	1800	1800	1800	1800
Alto Polcura	50	400	400	400	400	400	400	400	400
Colbun-Machicura I	-	-	-	-	-	-	-	1680	3360
3. Thermal generation (GWh) <sup>c/</sup>	<u>4140</u>	<u>4672</u>	<u>5626</u>	<u>6653</u>	<u>6859</u>	<u>7151</u>	<u>8433</u>	<u>8135</u>	<u>7941</u>
Wood and LPG	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>
Diesel and natural gas	500	500	500	500	500	500	500	500	500
Coal (Ventana II)	800	1290	1290	1290	1290	1290	1290	1290	1290
Coal (Tocopilla)	-	-	907	907	907	907	1537	1537	1537
Coal (other)	1012	1028	1435	1811	1890	2001	2508	2411	2352
Fuel oil	1688	1714	1354	2005	2132	2313	2458	2257	2122
4. Fuel consumption									
LPG (10 <sup>6</sup> m <sup>3</sup> )	1	1	1	1	1	1	1	1	1
Diesel fuel (10 <sup>3</sup> m <sup>3</sup> )	137	137	137	137	137	137	137	137	137
Natural gas (10 <sup>6</sup> m <sup>3</sup> )	32	32	32	32	32	32	32	32	32
Coal (10 <sup>3</sup> T)	641	821	1286	1419	1447	1486	1889	1854	1833
Fuel oil (10 <sup>3</sup> m <sup>3</sup> )	547	555	439	650	691	749	796	731	688

a/ From Table 8.32, line 3.

b/ ENDESA projections.

c/ Line 1 minus line 2.

Source: ENDESA, Mission estimates.

Table 8.35: CHILE - ENAP PROJECTIONS OF OIL PRODUCTION AND IMPORTS

(In thousands of cubic meters)

Year	LPG		Crude Oil <sup>1/</sup>			Product Imports	Total Demand	Demand Growth Rate (%)
	Domestic <sup>2/</sup>	Imports	Total Domestic	Off-Shore Program <sup>4/</sup>	Imports			
1977	316	-	1,300	-	4,032	-	5,435	9.5
1978	311	-	1,250	-	4,380	-	5,716	5.2
1979	361	-	1,500	320	4,024	-	5,664	-0.9 <sup>3/</sup>
1980	397	14	1,800	865	4,064	-	6,043	6.7
1981	394	52	1,800	1,255	4,432	-	6,429	6.4
1982	391	127	1,900	880	4,557	-	6,717	4.5
1983	388	202	1,900	615	4,902	-	7,120	6.0
1984	385	286	2,000	430	5,000	152	7,543	5.9
1985	382	368	2,000	300	5,000	537	7,783	3.2 <sup>3/</sup>

<sup>1/</sup> Refinery yields given as 96%.

<sup>2/</sup> Excludes LPG derived from crude oil.

<sup>3/</sup> Assumes conversion of major oil-burning units to coal in these years. Without such conversions, growth rates would be 4.2% in 1979 and 9.8% in 1985.

<sup>4/</sup> Yield projected from Straits of Magellan.

Source: ENAP

Table 8.36: CHILE - OIL SUPPLY PROJECTIONS

	1977	1978	1979	1980	1981	1982	1983	1984	1985
1. Consumption <sup>b/</sup>									
Gasolines and naphtha	1372	1427	1485	1545	1606	1702	1769	1875	1987
Kerosenes and diesel fuel	1932	2093	2211	2335	2467	2606	2755	2912	3078
Fuel oils	1644	1718	1644	1927	2013	2151	2246	2268	2278
Total	4948	5238	5340	5807	6086	6459	6770	7055	7343
2. Crude oil refined <sup>c/</sup>	5926	6273	6395	6954	7000	7000	7000	7000	7000
3. Domestic production <sup>d/</sup>	1132 <sup>a/</sup>	1250	1500	1800	1800	1900	1900	2000	2000
4. Crude oil imports <sup>e/</sup>	4794	5023	4895	5154	5200	5100	5100	5000	5000
5. Product imports <sup>f/</sup>	-	-	-	-	241	614	925	1210	1498
6. LPG balance									
Refineries (8% of crude)	547	502	512	556	560	560	560	560	560
Magallanes (ENAP)	316	311	361	397	394	391	388	385	382
Domestic Supply	863 <sup>a/</sup>	813	873	953	954	951	948	945	942
7. Demand <sup>g/</sup>	863	899	953	1010	1070	1135	1203	1275	1351
8. LPG Imports <sup>a,h/</sup>	-	86	80	57	116	184	255	330	409

a/ Actual

b/ From Table 8.32, line 5.

c/ .835 times line 1.

d/ From Table 8.34.

e/ Line 2 minus line 3.

f/  $.835 \times \left( \frac{\text{line 1}}{.835} - 7000 \right)$

g/ From Table 8.32, line 5.

h/ Line 6 minus line 7.

Table 8.37: CHILE - OIL IMPORT PROJECTIONS

IMPORTS	1977	1978	1979	1980	1981	1982	1983	1984	1985
(Thousands of cubic meters)									
Crude oil <sup>a/</sup>	4794	5023	4895	5154	5200	5100	5100	5000	5000
LPG <sup>b/</sup>	--	86	80	57	116	184	255	330	409
Other products <sup>c/</sup>	--	--	--	--	241	614	925	1210	1498
(Millions of US dollars)									
Crude oil	407.0	426.5	415.6	437.6	441.5	433.0	433.0	424.5	424.5
LPG	--	10.2	9.5	6.8	13.8	21.9	30.3	39.2	48.6
Other products	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>28.3</u>	<u>72.2</u>	<u>108.8</u>	<u>142.3</u>	<u>176.2</u>
Total	<u>407.0</u>	<u>436.7</u>	<u>425.1</u>	<u>444.4</u>	<u>483.6</u>	<u>527.1</u>	<u>572.1</u>	<u>606.0</u>	<u>649.3</u>

a/ From Table 8.35, line 4.

b/ From Table 8.35, line 8.

c/ From Table 8.35, line 5.

Table 8.38: NUMBER OF TRANSPORT VEHICLES - HIGHWAY, RAIL AND AIR, 1971-1975

	1970	1971	1972	1973	1974	1975
<u>Highway Vehicles</u>		<u>383,716</u>	<u>415,291</u>	<u>431,811</u>	<u>446,708</u>	<u>472,852</u>
<u>Passenger</u>		<u>209,683</u>	<u>231,864</u>	<u>240,726</u>	<u>251,017</u>	<u>271,280</u>
Private cars & stat. wagons		171,025	193,468	204,729	216,122	237,174
Taxis		22,889	22,623	20,518	19,213	18,543
Buses		15,769	15,773	15,479	15,682	15,563
<u>Cargo Vehicles</u> <sup>1/</sup>		<u>135,692</u>	<u>142,568</u>	<u>746,231</u>	<u>149,642</u>	<u>153,145</u>
<u>Other Motorized Vehicles</u>		<u>38,341</u>	<u>40,859</u>	<u>44,854</u>	<u>46,049</u>	<u>48,427</u>
<u>Farm Vehicles</u>		<u>57,634</u>	<u>59,587</u>	<u>63,592</u>	<u>71,173</u>	<u>70,904</u>
Animal Traction Vehicles		48,116	48,706	49,952	55,641	55,328
Tractors		9,518	10,881	13,640	15,532	15,576
<u>Airplanes</u> <sup>2/</sup>	<u>21</u>		<u>20</u>		<u>20</u>	<u>17</u>
Boeing 707	2		2		3	4
Boeing 727	2		3		3	4
HS-748 (Avro)	9		9		9	9
Caravelle 6R	3		3		3	-
DC-3	5		3		2	-
<u>Rail Vehicles</u>					<u>17,953</u>	<u>17,701</u>
<u>Locomotives</u>					<u>776</u>	<u>769</u>
Steam					332	323
Electric					128	131
Diesel					316	315
<u>Self-Propelled Cars</u>					<u>54</u>	<u>51</u>
Electric					33	32
Diesel					21	19
<u>Passenger Coaches</u>					<u>818</u>	<u>815</u>
<u>Cargo Cars</u>					<u>16,305</u>	<u>16,066</u>

1/ Includes trucks, panel trucks and pick-ups. Breakdown available for 1975 includes 73,914 trucks and 79,222 panels and pick-ups.

2/ Carriers belonging to LAN-Chile.

Source: Ministry of Transport, Department of Planning and Chilean National Airlines

Table 8.39: CHILE - NATIONAL CARGO MOVEMENT BY MODE OF TRANSPORT, 1968-1976

(Thousands of metric tons)

	1968	1969	1970	1971	1972	1974	1974	1975	1976
Rail	n.d.	n.d.	n.d.	n.d.	19,904	21,357	22,769	19,878	n.d.
State	13,316	13,536	13,967	14,112	(12,338)	(12,389)	(12,848)	(11,066)	10,768
Private	n.d.	n.d.	n.d.	n.d.	(7,514)	(8,873)	(9,891)	(8,792)	n.d.
Coastal Shipping	4,631	4,782	4,633	4,561	4,795	5,294	6,234	4,901	5,214
Highways <sup>1/</sup>	12,445	12,861	14,255	15,898	14,903	11,511	11,445	9,343	n.d.
Air	15	16	15	15	16	14	10	7	7
Pipelines (SONACOL)	2,194	2,546	2,767	2,923	2,927	2,884	2,751	2,460	2,733
T O T A L	-	-	-	-	42,545	41,060	43,209	36,589	-

<sup>1/</sup> Estimate based on AADT and its composition as toll stations around Santiago. Assumes: (1) load factors as follows: 1968-1972 60%; 1973-1975 50%; and (2) metropolitan area covered by toll stations accounts for 60% of AADT.

n.d. = no data

Source : ODEPLAN, Ministry of Transport, and mission estimates

Table 8.40: CHILE - NATIONAL PASSENGER MOVEMENT BY MODE OF TRANSPORT, 1970-1975

(Thousands of Passengers)

	1970	1971	1972	1973	1974	1975
Rail	21,165 <sup>1/</sup>	20,692 <sup>1/</sup>	24,966	28,321	26,990	20,622
Buses <sup>2/</sup>	17,410	21,460	19,937	16,160	14,989	14,132 <sup>3/</sup>
Air	<u>430</u>	<u>558</u>	<u>613</u>	<u>585</u>	<u>380</u>	<u>306</u>
T o t a l	39,005	42,710	45,516	45,066	42,359	35,060

1/ State Railways only for 1970 and 1971. Includes private railways from 1972 on.

2/ Includes only inter-urban and rural traffic; excludes urban traffic.

3/ Estimated on the basis of the first semester's movement.

Source: ODEPLAN

Table 8.41: CHILE - HIGHWAY VEHICLE FLEET 1968-1975 AND TRUCK CAPACITY (1975)

<u>Year</u>	<u>Automobiles and Station Wagons</u>	<u>Buses</u>	<u>Service<sup>1/</sup> Vehicles</u>	<u>Trucks</u>	<u>Total</u>
1968	130,228	12,614	57,211	54,463	254,557
1969	150,853	13,384	61,522	60,544	286,303
1970	176,066	15,956	71,293	71,293	334,618
1971	193,914	15,769	73,643	73,642	356,368
1972	216,091	15,773	77,778	77,778	387,360
1973	225,247	15,479	80,649	80,648	402,023
1974	235,335	15,682	83,429	83,429	417,875
1975	255,717	15,563	77,669	71,987	412,823

Distribution of Truck Capacity, 1975:

<u>Capacity in Tons</u>	<u>Number</u>	<u>Percent</u>
1.0 - 4.9	14,370	20
5.0 - 7.4	30,895	43
7.5 - 9.9	15,088	21
Over 10	<u>11,496</u>	<u>16</u>
	71,849	100

Annual Average Growth Rate (Percent):

1968 - 1975 -- 10.2

1971 - 1975 -- 3.7

<sup>1/</sup> Includes vans, four-wheel drive vehicles, ambulances, pick-ups, garbage and water trucks.

Source: Luis Erazo y Asociados Informe Final Préstamo 558-CH, 1977



Table 8.42: GROWTH OF THE HIGHWAY SYSTEM, 1970-1977  
(kilometers)

	1970	1971	1972	1973	1974	1975	1976	1977
Concrete	3,284	3,400	3,412	3,804	3,444	3,614	3,611	3,697
Asphalt	4,450	4,963	5,118	5,217	5,417	5,415	5,398	5,552
Stabilized Gravel	25,302	25,605	26,472	28,760	28,798	31,590	32,263	32,956
Natural Gravel or Earth	13,522	13,683	13,254	14,062	12,470	17,503	19,120	18,521
SUB-TOTAL	46,558	47,652	48,258	51,444	50,129	58,122	60,392	60,726
Track	14,042	14,427	15,398	14,624	19,987	17,197	15,418	14,174
Total	60,600	62,079	63,656	66,069	70,116	75,319	75,810	74,900

Source: Ministry of Public Works; and Luis Erazo y Asociados Informe Final Préstamo 558-CH, 1977

Table 8.43: CHILE - ANNUAL AVERAGE DAILY TRAFFIC BY TOLL STATION, 1968-1977

(No. of vehicles)

Toll Station	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Legunillas	802	907	1,012	1,176	1,045	911	790	608	594	486
Chacabuco	665	642	619	730	960	1,121	1,128	994	1,132	1,229
Lampa	2,964	2,929	3,184	3,504	3,357	2,949	2,719	2,221	2,135	2,302
Zapate	3,110	3,256	4,051	5,589	5,461	5,293	4,683	3,538	3,546	4,014
Pomaire	3,919	3,687	3,945	4,419	4,384	4,169	3,695	3,131	3,169	3,554
Angostura	4,788	5,260	5,741	6,549	6,471	6,302	5,755	4,696	4,670	5,274
Perquillauquen	<u>1,600</u>	<u>1,750</u>	<u>1,901</u>	<u>2,123</u>	<u>2,098</u>	<u>1,936</u>	<u>1,717</u>	<u>1,534</u>	<u>1,458</u>	<u>1,668</u>
TOTAL	17,848	18,431	20,426	24,090	23,776	22,681	20,487	16,722	16,704	18,527
Annual % Change	-	+ 3.2%	+10.8%	+17.9%	- 1.3%	- 4.6%	- 9.7%	-18.4%	- 0.0%	+10.9%
Composition of Vehicles (Percent)										
Passenger Cars	n.d.	n.d.	60	63	65	66	63	n.d.	59	60
Buses	n.d.	n.d.	10	9	8	6	8	n.d.	11	11
Two-Axle Trucks	n.d.	n.d.	25	23	22	22	22	n.d.	19	19
Three-Axle Trucks	n.d.	n.d.	2	2	2	2	3	n.d.	4	4
Four-Axle Trucks	n.d.	n.d.	3	3	3	3	3	n.d.	6	6

Source IEA y Asociados, Informe Final Préstamo 558 CH, 1977; Ministry of Transport, Boletín Estadístico, 1970/74.

n.d. = no data

Table 8.44: CHILE - ESTIMATED ROAD USER CHARGES, 1970-1976

(Millions of 1976 US dollars)

	1970	1971	1972	1973	1974	1975	1976
Vehicle Registration Fees	7.3	9.4	11.5	9.5	7.3	8.6	6.5
Tolls	4.0	4.0	2.8	1.5	4.8	11.2	11.5
Import Duties	4.6	4.0	11.8	19.7	29.9	50.0 <sup>1/</sup>	100.0 <sup>1/</sup>
Fuel Taxes	<u>38.5</u>	<u>38.7</u>	<u>39.8</u>	<u>50.6</u>	<u>156.0</u>	<u>205.6</u>	<u>240.0</u>
Total	<u>54.4</u>	<u>56.1</u>	<u>65.9</u>	<u>81.3</u>	<u>198.0</u>	<u>275.4</u>	<u>358.0</u>

<sup>1/</sup> Estimate

Source: Controller General of the Republic

Table 8.45: CHILE - SOURCES AND USES OF PUBLIC HIGHWAYS EXPENDITURES, 1970-1976

(Millions of 1976 US dollars)

	1970	1971	1972	1973	1974	1975	1976
<u>Sources of Funds:</u>							
Central Budget Funds )					165.4	47.7	36.2
Regional Budget Allocations )	68.3	66.9	52.5	51.3	-	16.9	13.0
Highway Tolls	4.0	4.0	2.8	1.5	4.8	11.2	11.5
Foreign Borrowings	<u>8.5</u>	<u>5.0</u>	<u>8.6</u>	<u>5.7</u>	<u>2.7</u>	<u>3.0</u>	<u>2.6</u>
Total Funds	<u>80.8</u>	<u>75.9</u>	<u>63.9</u>	<u>58.5</u>	<u>172.9</u>	<u>68.8</u>	<u>63.3</u>
<u>Expenditures:</u>							
Investment in Roads	58.8	49.6	26.7	22.4	122.4	39.1	35.9
Maintenance <sup>a/</sup>	10.6	15.5	17.8	17.8	36.8	21.3	19.9
Debt Service	2.0	2.5	3.5	4.0	5.2	5.2	5.6
Other (Studies, Equipment, etc.)	9.4	8.3	15.9	14.3	8.5	3.2	1.9
Total Expenditures	<u>80.8</u>	<u>75.9</u>	<u>63.9</u>	<u>58.5</u>	<u>172.9</u>	<u>68.8</u>	<u>63.3</u>

<sup>a/</sup> Excludes allowances for depreciation of equipment.

Source: Ministry of Public Works

Table 8.46: CHILE - HIGHWAY VEHICLE FUEL CONSUMPTION, 1968-1976  
(Millions of US Gallons)

Year	Gasoline	Diesel	Total
1968	364.84	203.16	568.00
1969	404.06	218.22	622.28
1970	437.34	227.54	664.88
1971	485.58	242.36	727.94
1972	479.82	242.09	721.91
1973	431.04	202.83	633.87
1974	391.82	221.47	613.29
1975	317.74	216.19	533.93
1976	313.19	233.18	546.37

Annual Rate of Growth

1968-1976 = -0.5% (Total for gasoline and diesel)

Source: - Ministries of Mining and Public Works

Table 8.47: CHILE - RAILROAD OPERATING STATISTICS, 1969-1977

	1969	1970	1971	1972	1973	1974	1975	1976	1977 <sup>p/</sup>
(Millions of Pesos of December 1969)									
<u>Revenues</u>	<u>636.4</u>	<u>567.5</u>	<u>580.7</u>	<u>439.3</u>	<u>434.4</u>	<u>692.1</u>	<u>483.0</u>	<u>458.7</u>	<u>530.5</u>
Passenger	145.1	151.1	162.1	144.4	102.7	166.3	162.0	155.1	131.9
Cargo	428.1	366.6	369.2	268.2	299.7	494.9	287.6	282.4	322.8
Other	63.2	49.8	49.3	26.7	32.1	30.9	33.4	21.3	75.8
<u>Expenses</u>	<u>876.5</u>	<u>1035.6</u>	<u>1351.4</u>	<u>867.3</u>	<u>608.6</u>	<u>1101.3</u>	<u>782.7</u>	<u>764.5</u>	<u>614.4</u>
Personnel	642.8	776.8	967.6	729.5	468.4	683.2	503.6	494.1	375.4
Remunerations	(413.6)	(492.6)	(616.6)	(514.0)	(339.5)	(428.4)	(283.0)	(245.9)	(na)
Pensions and social security	(229.2)	(284.2)	(351.0)	(215.5)	(128.9)	(254.8)	(220.6)	(248.2)	(na)
Materials	164.0	198.5	250.7	85.6	96.9	364.6	203.8	156.2	152.7
Interest	32.0	37.4	108.9	39.3	31.9	13.2	30.5	18.6	4.5
Other	37.7	22.9	24.3	12.9	11.4	40.3	44.8	95.6	81.8
Loss before depreciation	240.1	468.1	770.7	428.0	174.2	409.2	299.7	305.8	83.9
Cargo traffic (Millions of ton-km)	2174	2096	2251	2158	2157	1923	1468	1657	
Cargo revenue per ton- km (Dec 1969 pesos)	.197	.175	.164	.124	.138	.257	.195	.171	
Passenger traffic (Millions of pass.-km)	2209	2253	2480	3030	3463	2875	2095	2199	
Passenger revenue per pass. -km (Dec 1969 pesos)	.066	.067	.065	.048	.030	.058	.077	.066	

p/ Projected

Source: FFCCE; Mission estimates

Table 8.48: CHILE- INTERNATIONAL CARGO MOVEMENT THROUGH CHILEAN PORTS, 1970-1976

(Millions of tons)

	1970	1971	1972	1973	1974	1975	1976
Ports Administered by EMPORCHI							
International Commerce	<u>2.49</u>	<u>2.64</u>	<u>2.76</u>	<u>3.23</u>	<u>3.30</u>	<u>2.83</u>	<u>3.72</u>
Loaded	0.93	1.08	0.75	0.76	1.25	1.32	1.98
Unloaded	1.56	1.56	2.01	2.47	2.05	1.51	1.74
Transit	<u>0.18</u>	<u>0.29</u>	<u>0.29</u>	<u>0.21</u>	<u>0.33</u>	<u>0.41</u>	<u>0.33</u>
Loaded	0.09	0.12	0.12	0.13	0.12	0.13	0.14
Unloaded	0.09	0.17	0.17	0.08	0.21	0.28	0.19
Privately Owned Ports	<u>13.86</u>	<u>15.45</u>	<u>n.a.</u>	<u>13.84</u>	<u>15.12</u>	<u>13.54</u>	<u>n.a.</u>
Loaded	<u>11.00</u>	<u>11.49</u>		<u>9.49</u>	<u>11.13</u>	<u>10.51</u>	
Unloaded	2.86	3.96		4.35	3.99	3.04	
T O T A L	<u>16.53</u>	<u>18.38</u>	<u>-</u>	<u>17.28</u>	<u>18.75</u>	<u>16.78</u>	

1/ Privately owned ports are dedicated mainly to minerals and petroleum.

Source: Ministry of Transport and EMPORCHI

Table 8.49: CHILE - TRAFFIC HANDLED BY EMPORCHI PORTS, 1970-1977

(Thousands of metric tons)

	1970	1971	1972	1973	1974	1975	1976	1977
Imports	1,563	1,562	2,012	2,468	2,045	1,505	1,743	1,647
Exports	933	1,081	753	759	1,247	1,319	1,977	2,566
Coastal	1,095	1,182	964	1,046	1,245	883	911	917
Transit	<u>178</u>	<u>290</u>	<u>295</u>	<u>206</u>	<u>323</u>	<u>404</u>	<u>333</u>	<u>405</u>
Total	3,769	4,115	4,024	4,479	4,860	4,111	4,964	5,535
<u>By Port:</u>								
Arica	237	257	222	160	252	247	215	
Iquique	133	160	106	171	343	192	274	
Antofagasta	628	712	643	698	911	747	802	
Coquimbo	78	103	117	189	58	41	44	
Valparaiso	1,408	1,488	1,430	1,383	1,479	1,187	1,226	
San Antonio	849	834	942	1,169	920	939	1,344	
Talcahuano	N/A	N/A	N/A	N/A	N/A	275	344	
San Vicente	202	218	243	296	501	288	511	
Puerto Mott	88	109	134	225	198	122	128	
Cuaca Buco	51	64	58	59	56	46	69	
Punta Arenas	142	151	144	124	137	97	90	

Source: Empresa Portuaria de Chile



Table 8.50: COASTAL SHIPPING BY TYPE OF CARGO, 1968-1975

(Thousands of metric tons)

	General Cargo	Solid Bulk Cargo	Liquid Bulk Cargo	Coal	Total All Ports	Total for Ports Administered by EMPORCHI
1968	348	1,304	2,282	696	4,630	1,347
1969	297	1,187	2,762	536	4,782	1,132
1970	251	1,313	2,448	620	4,632	1,095
1971	276	1,382	2,418	484	4,560	1,182
1972	247	1,271	3,044	233	4,795	964
1973	265	1,315	3,319	396	5,295	1,044
1974	298	1,814	3,617	504	6,233	1,246
1975	144	1,350	3,007	401	4,902	881

Source: Asociación Nacional de Armadores

Table 8.51: CHILE - NATIONAL AND INTERNATIONAL AIRLINES TRAFFIC, 1970-1976

Year	P a s s e n g e r s				C a r g o			
	National		International		National		International	
	Passenger (thousand)	Passenger km (million)	Passenger (thousand)	Passenger km (million)	Tons (thousand)	Ton-km (million)	Tons (thousand)	Ton-km (million)
1970	430	431	145	437	15	24	20	24
1971	541	559	156	595	15	24	16	26
1972	563	613	136	570	16	26	21	34
1973	510	584	127	563	14	22	19	37
1974	342	380	200	842	10	15	15	44
1975	318	401	227	914	7	12	12	47
1976	284	375	225	884	7	12	15	66

Source: Ministry of Transport

Table 8.52: CHILE - HOUSING STARTS - PUBLIC AND PRIVATE SECTORS, 1965-77 <sup>a/</sup>

Year	Public Sector	Percent of Total	Private Sector	Percent of Total	Total
1964	6,938	37	11,838	63	18,776
1965	36,486	72	13,861	28	50,347
1966	13,433	51	13,132	49	26,565
1967	28,285	67	14,191	33	42,476
1968	32,730	65	17,728	35	50,458
1969	14,460	42	20,286	58	34,746
1970	5,914	25	17,792	75	23,706
1971	76,079	87	10,893	13	86,969
1972	20,312	60	13,752	40	34,064
1973	20,877	59	14,484	41	35,361
1974	3,297	16	17,084	84	20,381
1975	3,758	23	12,740 <sup>b/</sup>	77	16,498
1976	24,022	68	11,519 <sup>b/</sup>	32	35,538
1977	14,057	60	9,456	40	23,513
Annual Av.	21,474	60	14,196	40	35,670

<sup>a/</sup> Private sector housing permits in 60 municipalities believed to account for more than 90 percent of total construction.

<sup>b/</sup> Sample raised to 80 municipalities.

Source: INE

IX. PRICES

Table 9.1: CONSUMER PRICE INDEX, END OF YEAR, 1951-1970  
(December 1969=100)

<u>Year</u>	<u>Index</u>	<u>% Change</u>
1951	0,675	
1952	0,818	21.2
1953	1,22	49.8
1954	1,94	58.7
1955	3,67	88.7
1956	5,30	44.6
1957	6,56	23.7
1958	8,18	24.6
1959	10,88	33.1
1960	11,47	5.4
1961	12,55	9.4
1962	16,14	28.6
1963	23,54	45.9
1964	33,05	40.4
1965	42,07	27.3
1966	49,61	17.9
1967	60,47	21.9
1968	77,34	27.9
1969	100,0	29.3
1970	134,9	34.9

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Sources: Ricardo Ffrench-Davis, op. cit.; INE.

Table 9.2: CONSUMER AND WHOLESALE PRICE INDICES, ANNUAL AVERAGES 1951-1970  
(December 1969=100)

<u>Year</u>	<u>Consumer Index</u>	<u>Prices % Change</u>	<u>Wholesale Prices Index</u>	<u>Wholesale Prices % Change</u>
1951	0.648		0.643	
1952	0.789	21.8	0.800	24.4
1953	0.994	26.0	0.986	23.2
1954	1.58	59.0	1.54	56.2
1955	2.79	76.6	2.75	78.6
1956	4.59	64.5	4.53	64.7
1957	5.94	29.4	6.29	38.9
1958	7.43	25.1	7.97	26.7
1959	10.33	39.0	10.63	33.4
1960	11.51	11.4	11.20	5.4
1961	12.35	7.3	11.29	0.8
1962	14.06	13.8	12.22	8.2
1963	20.60	46.5	18.79	53.8
1964	30.33	47.2	28.29	50.6
1965	39.08	28.8	35.18	24.4
1966	48.01	22.9	43.23	22.9
1967	56.72	18.1	51.58	19.3
1968	71.83	26.6	67.32	30.5
1969	93.84	30.6	91.89	36.5
1970	124.4	32.6	125.0	36.0

Source: Ricardo Ffrench-Davis, Políticas Economicas en Chile: 1952-1970, CEPLAN, Santiago, 1973.

Table 9.3a: CHILE - IBRD ADJUSTED CONSUMER PRICE INDEX, 1970-1978

(December 1969 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	106.8	136.9			4,218	20,035	85,709	225,204	353,396
February	112.2	137.8			5,251	23,341	94,366	238,266	361,877
March	116.2	139.5	228.2	1,070	5,996	28,289	107,105	252,800	372,372
April	119.0	143.0			6,912	34,173	119,851	264,682	382,054
May	121.5	147.0			7,511	39,641	131,596	274,740	390,077
June	123.9	150.0	297.1	2,100	9,073	47,490	147,783	283,806	398,028
July	126.3				10,120	51,907	160,935	294,875	408,208
August	129.5				11,221	56,530	169,787	304,900	419,729
September	132.9	175.0	391.7	2,400	12,660	61,747	182,691	316,182	431,886
October	134.1			2,703	15,056	66,934	194,931	329,461	439,919
November	134.9			3,469	16,516	72,423	202,338	336,709	445,716
December	134.9	206.9	731.9	3,696	17,590	77,565	212,657	347,147	452,307
Annual Average	124.4	167.8	412.2	2,316	10,177	48,339	150,812	289,064	404,839
Percent Change		34.9	145.6	461.9	339.4	375.0	212.0	91.7	40.1
December - December Change (%)	34.9	53.4	253.7	405.0	375.9	341.0	174.2	63.2	30.3

Source: IBRD Report No. 966-CH, December 24, 1975; INE

Table 9.3b: CHILE - IMPLICIT UC ADJUSTED CONSUMER PRICE INDEX, 1970-1978

(December 1969 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	107.1	142.6	191.2	628	4,546	21,598	92,362	242,686	381,397
February	112.8	144.2	206.4	661	5,660	25,161	101,691	256,761	390,492
March	117.2	146.6	219.8	706	6,464	30,495	115,419	272,424	401,909
April	120.4	150.7	231.8	817	7,453	36,838	129,154	285,228	412,401
May	123.3	155.3	243.8	998	8,101	42,733	141,811	296,066	421,018
June	126.1	159.0	257.2	1,215	9,786	51,194	159,254	305,836	429,398
July	128.9	159.9	273.2	1,398	10,912	55,955	173,428	317,764	439,723
August	132.6	162.3	337.0	1,643	12,101	60,935	182,966	328,568	452,535
September	136.5	164.6	471.3	1,916	13,650	66,541	196,872	340,725	465,388
October	138.1	167.8	473.3	3,592	16,230	72,130	210,062	355,036	474,007
November	139.3	172.6	509.2	3,804	17,805	78,045	218,045	362,846	480,362
December	139.9	178.0	556.0	3,984	18,962	83,586	229,165	374,095	487,522
Annual Average	126.9	158.6	326.3	1,789	10,972	52,101	162,519	311,503	436,346
Percent Change	35.3	25.0	105.7	448.3	513.3	374.9	211.9	91.7	40.1
December - December Change (%)	39.9	27.2	212.4	616.5	375.9	340.8	174.2	63.2	30.3

Source: Mission estimates derived from real wage data presented in various issues of Comentarios Sobre la Situación Económica and other publications of the Department of Economics of the University of Chile.



Table 9.3c: CHILE - OFFICIAL CONSUMER PRICE INDEX, 1970-1978

(December 1969 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	106.8	136.9	171	479	3,012	14,308	61,189	160,859	252,757
February	112.2	137.8	182	499	3,750	16,669	67,369	170,230	258,814
March	116.2	139.5	187	530	4,282	20,203	76,464	180,620	266,320
April	119.0	143.0	198	584	4,937	24,405	85,563	189,109	273,245
May	121.5	147.0	206	697	5,367	28,310	93,948	196,340	278,983
June	123.9	150.0	210	806	6,483	33,915	105,504	202,879	284,670
July	126.3	150.4	220	929	7,229	37,069	114,893	210,800	291,950
August	129.5	152.0	269	1,088	8,017	40,368	121,213	217,966	300,190
September	132.9	153.6	329	1,271	9,043	44,082	130,425	226,096	308,885
October	134.1	156.2	379	2,384	10,752	47,785	139,163	235,592	314,630
November	134.9	160.4	401	2,520	11,795	51,704	144,451	240,772	318,720
December	134.9	164.8	434	2,640	12,562	55,374	151,866	248,288	323,501
Annual Average	124.4	149.3	265.5	1,202	7,269	34,510	107,645	206,630	289,389
Percent Change		20.1	77.8	352.8	504.7	374.8	211.9	92.0	40.1
December - December Change (%)	34.9	22.1	163.4	508.1	375.9	340.8	174.2	63.5	30.3

Source: INE

Table 9.4: CHILE - WHOLESALE PRICE INDEX, 1965-1978

(December 1969 = 100)

Years	Annual Average	Percent Change	Dec.-Dec. Change	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1965	35.18														
1966	43.23	22.9													
1967	51.58	19.3													
1968	67.32	30.5	33.1												
1969	91.89	36.5	39.4												
1970	125.0	36.0	33.7	108.8	115.0	117.2	120.8	123.3	125.3	127.5	130.7	132.3	132.7	133.2	133.7
1971	147.5	18.0	21.4	137.6	137.9	140.2	141.9	144.5	146.6	147.3	149.1	150.8	155.4	156.8	162.4
1972	250.8	70.0	143.3	170.8	180.1	186.1	196.8	201.9	207.6	212.1	253.7	305.2	340.6	360.3	395.1
1973	1,534	511.6	1,147.1	440	456	492	506	600	653	729	805	948	3,244	4,625	4,927
1974	17,313	1,028.6	570.6	6,723	7,917	8,833	10,673	11,324	14,242	17,776	19,462	22,314	25,267	30,186	33,044
1975	100,767	482.0	410.9	39,821	46,010	52,722	66,458	77,260	93,062	107,558	118,284	130,223	146,530	162,454	168,822
1976	323,621	221.2	151.5	191,117	212,843	234,252	260,357	297,079	329,079	353,743	373,397	397,870	403,365	405,780	424,572
1977	602,080	86.0	65.0	453,116	494,771	533,786	563,275	585,659	603,499	622,354	645,425	656,918	674,322	691,066	700,678
1978	860,731	42.9	38.9	715,905	743,959	776,600	805,494	829,209	852,661	871,615	903,321	933,095	953,623	970,265	973,027

Source: Instituto Nacional de Estadísticas

Table 9.5: CHILE - INDEX OF WHOLESALE PRICES BY SECTORS, ANNUAL AVERAGES, 1960-1978  
(1970 = 100)

Year	General Index	Domestic Products				Imported Products
		Agricultural	Mining	Industry	Total	
1960	9.0	8.5	10.7	8.1	8.4	10.3
1961	9.0	8.5	10.6	8.2	8.5	10.5
1962	9.8	9.6	11.0	8.9	9.3	10.9
1963	15.0	13.8	16.6	13.3	13.7	18.3
1964	22.6	21.0	23.3	20.4	20.8	27.2
1965	28.1	28.8	34.2	26.1	27.8	29.1
1966	34.6	36.2	42.6	33.4	35.2	32.9
1967	41.2	41.9	49.3	41.1	42.1	39.1
1968	53.8	52.2	60.0	53.7	53.7	54.2
1969	73.5	73.6	77.5	72.8	73.2	74.4
1970	100.0	100.0	100.0	100.0	100.0	100.0
1971	117.9	125.5	132.7	113.9	116.7	122.2
1972	200.5	261.9	228.1	189.4	203.4	190.8
1973	1,225.8	1,435.8	1,367.2	1,145.7	1,204.8	1,298.4
1974	13,838	10,627	21,924	12,250	12,372	18,824
1975	80,532	70,907	126,899	63,826	72,505	102,752
1976	258,618	245,286	370,218	201,398	236,459	309,859
1977	481,158	439,731	641,378	377,234	432,261	619,175
1978	687,813	592,272	969,260	576,090	626,896	835,116

Source: INE

Table 9.6: IMPLICIT GDP DEFLATORS BY SECTOR, 1966-1977  
(1965 = 100)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<u>GDP at Market Prices</u>	<u>130.4</u>	<u>167.2</u>	<u>218.9</u>	<u>307.9</u>	<u>427.3</u>	<u>528.0</u>	<u>978.7</u>	<u>5,155</u>	<u>38,849</u>	<u>190,802</u>	<u>638,600</u>	<u>1287,894</u>
Agriculture, Forestry and Fishing	116.5	144.4	156.3	236.1	345.6	452.4	807.8	4,497	25,821	111,157	531,722	1306,343
Mining	149.8	177.5	239.5	371.0	444.6	378.9	824.5	4,840	34,786	140,808	419,478	545,218
Manufacturing	124.3	165.5	238.1	331.6	478.8	525.8	920.6	5,309	38,020	201,503	690,937	1274,444
Construction	133.0	159.0	201.3	261.3	353.6	537.1	1,130.9	4,193	29,347	129,690	472,957	982,271
Electricity, Gas, Water and Sanitary Services	127.7	147.3	206.1	320.4	432.9	437.8	566.1	1,231	16,845	115,429	496,218	977,627
Transport, Storage and Communications	141.0	186.3	241.2	331.1	430.7	524.4	1,077.7	5,106	35,663	173,431	541,331	1118,838
Wholesale and Retail Commerce	130.9	170.9	209.5	285.9	397.8	510.6	1,070.2	6,227	55,222	311,637	966,511	1828,226
Banking, Insurance and Real Estate	128.9	167.0	227.3	306.6	425.3	524.8	682.1	5,287	42,362	190,933	658,792	1641,619
Housing	124.1	154.5	197.7	253.2	321.1	431.3	616.4	3,162	20,695	98,259	315,745	585,874
Public Administration and Defense	138.4	175.3	233.4	317.2	541.1	799.7	1,579.1	6,204	41,594	196,435	643,419	1540,410
Services	134.2	181.9	240.1	340.3	483.1	747.8	1,297.5	5,528	44,373	194,434	675,717	1540,488

Source: Calculated from Tables 2.1 and 2.2

Table 9.6a: RATIO OF IMPLICIT SECTORAL DEFLATORS TO OVERALL GDP DEFLATOR, 1966-1977

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Agriculture, Forestry and Fishing	.89	.86	.71	.77	.81	.86	.83	.87	.66	.58	.83	1.01
Mining	1.15	1.06	1.09	1.20	1.04	.72	.84	.94	.90	.74	.66	.42
Manufacturing	.95	.99	1.09	1.08	1.12	1.00	.94	1.03	.98	1.06	1.08	.99
Construction	1.02	.95	.92	.85	.83	1.02	1.16	.81	.76	.68	.74	.76
Electricity, etc.	.98	.88	.94	1.04	1.01	.83	.58	.24	.43	.60	.78	.76
Transport, etc.	1.08	1.11	1.10	1.08	1.01	.99	1.10	.99	.92	.91	.85	.87
Wholesale and Retail Commerce	1.00	1.02	.96	.93	.93	.97	1.09	1.21	1.42	1.63	1.51	1.42
Banking, etc.	.99	1.00	1.04	1.00	1.00	.99	.70	1.03	1.09	1.00	1.03	1.27
Housing	.95	.92	.90	.82	.75	.82	.63	.61	.53	.51	.49	.45
Public Administration and Defense	1.06	1.05	1.07	1.03	1.27	1.51	1.61	1.20	1.07	1.03	1.01	1.20
Services	1.03	1.09	1.10	1.11	1.13	1.42	1.33	1.07	1.14	1.02	1.06	1.20
GDP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Table 9.6

Table 9.7: IMPLICIT GDP DEFLATORS BY EXPENDITURE CATEGORY, 1966-1977  
(1965 = 100)

Expenditure	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Consumption	126.1	164.9	214.7	295.2	417.4	523.9	958.4	4,877	38,083	206,294	678,574	1381,472
Personal	(124.8)	(163.4)	(212.6)	(292.4)	(406.7)	(499.5)	(911.5)	(4,870)	(38,002)	(211,080)	(697,828)	(1410,539)
General Government	(135.0)	(174.9)	(228.7)	(313.9)	(486.8)	(684.2)	(1,268.9)	(4,916)	(38,534)	(180,168)	(582,045)	(1216,211)
Gross Domestic Investment	129.7	161.9	211.7	288.4	389.7	487.1	993.5	5,557	37,787	142,199	467,928	n.a.
Fixed Investment	(130.8)	(161.9)	(212.0)	(291.4)	(390.5)	(486.7)	(991.5)	(5,699)	(37,213)	(181,210)	(570,537)	(1085,878)
Change in Inventories	(124.0)	(162.8)	(207.4)	(264.3)	(383.3)	(491.7)	(1,037.7)	(3,604)	(46,142)	(328,546)	(897,091)	a/
Exports	146.3	173.0	231.3	374.1	478.3	467.0	886.5	5,765	43,835	208,970	640,009	1062,436
Imports	119.6	153.3	198.2	277.9	377.6	413.5	808.2	4,358	38,409	271,011	800,205	1354,300
GDP at Market Prices	130.3	167.2	218.9	307.9	427.3	528.0	978.7	5,155	38,849	190,802	638,600	1287,894

a/ Inventory change is included in personal consumption in 1977.

Source: Tables 2.3 and 2.4

Table 9.8: IBRD INDEX OF CHILE IMPORT PRICES, 1955-1977 <sup>a/</sup>

(1969 = 100).

Year	Index
1955	98.6
1956	100.7
1957	101.6
1958	98.6
1959	97.4
1960	97.4
1961	95.8
1962	95.3
1963	97.4
1964	100.0
1965	100.9
1966	101.9
1967	101.6
1968	97.9
1969	100.0
1970	108.9
1971	114.0
1972	124.7
1973	163.8
1974	227.3
1975	233.6
1976	247.7
1977	286.4
1978	310.8

a/ Calculated from IBRD price indices for manufactured exports (SITC 5-8) of developed countries, agricultural commodities, 34 commodities excluding petroleum, and petroleum with the weights 0.6, 0.2, 0.1, and 0.1, respectively.

Source: IBRD, Memo of October 21, 1977, entitled "Commodity Price Forecasts - Mid-Year Updating," Table 4; Monthly Commodity Price Data and Memo of April 12, 1979, entitled "Annual Review of Commodity Price Forecasts;" and mission estimates

Table 9.9: CHILE - MINIMUM WAGES AND SALARIES, 1953-1970 <sup>a/</sup>

(Current escudos)

Year	Vital Salary (SV) <sup>b/</sup>	Agricultural Minimum wage (SMA) <sup>c/</sup>	Minimum Wage (SMI) <sup>d/</sup>	SMA/SV (%)	SM/SV (%)
1952	72.84	-	-	-	-
1953	90.60	- <sup>e/</sup>	-	- <sup>e/</sup>	-
1954	139.20	36.53	-	26	-
1955	220.80	54.76	-	25	-
1956	323.47	81.38	146.00	25	45
1957	421.03	109.55	189.80	26	45
1958	505.24	135.53	233.60	27	46
1959	690.60	203.80	321.20	30	47
1960	690.60	247.47	321.20	36	47
1961	860.04	293.83	411.72	34	48
1962	970.92	339.45	464.28	34	48
1963	1,239.84	444.94	592.76	36	48
1964	1,802.76	662.48	861.40	37	48
1965	2,495.04	1,043.17	1,191.36	42	48
1966	3,141.24	1,421.31	1,497.96	45	48
1967	3,675.24	1,752.00	1,752.00	48	48
1968	4,480.08	2,135.62	2,135.62	48	48
1969	5,730.00	2,731.29	2,731.29	48	48
1970	7,404.00	4,380.00	4,380.00	59	59

<sup>a/</sup> The SV is legally a monthly rate, while the SMA and SM are hourly rates. The numbers shown are annualized weighted averages of the respective minima prevailing during the year.

<sup>b/</sup> Sueldo vital for industry and commerce, Department of Santiago.

<sup>c/</sup> Salario mínimo agrícola for Province of Santiago. The SMA for 1959 is adjusted for introduction of the semana corrida (literally, the "continuous week") by which a person working six days is paid for seven. Workers in industry and commerce had enjoyed this benefit since 1948.

<sup>d/</sup> Salario mínimo for industry and commerce nationwide.

<sup>e/</sup> Did not exist for entire year.

Source: Ricardo Ffrench-Davis (op. cit.), Table 71



Table 9.9a: CHILE - REAL MINIMUM WAGES AND SALARIES, 1953-1970<sup>a/</sup>

(Escudos of December 1969)

Year	SV	SMA	SM
1952	9,048	-	-
1953	8,979	-	-
1954	8,009	2,102	-
1955	7,251	1,798	-
1956	6,810	1,713	3,074
1957	6,656	1,732	3,000
1958	6,657	1,786	3,078
1959	6,563	1,937	3,052
1960	5,881	2,108	2,735
1961	6,802	2,324	3,256
1962	6,742	2,357	3,324
1963	5,968	2,142	2,853
1964	5,945	2,185	2,840
1965	6,386	2,670	3,049
1966	6,543	2,961	3,120
1967	6,480	3,089	3,089
1968	6,238	2,973	2,973
1969	6,106	2,911	2,911
1970	5,954	3,522	3,522

a/ Average nominal rates shown in Table 9.9 deflated by CPI.

Table 9.10: CHILE - FAMILY ALLOWANCES PER DEPENDENT BY MAJOR FUNDS, 1952-1970  
(Current escudos)

Year	Net Annual Equivalent <sup>a/</sup>			SSS/EMPART (%)	CEPP/EMPART (%)
	SSS	CEPP	EMPART		
1952	-	7.44	9.60	-	78
1953	-	7.94	10.80	-	74
1954	2.19	11.88	15.72	14	76
1955	8.11	18.84	24.60	33	77
1956	15.60	38.40	40.56	38	95
1957	21.87	53.88	60.00	36	90
1958	23.23	56.40	76.80	30	73
1959	33.63	67.20	95.82	35	70
1960	33.63	67.20	109.56	31	63
1961	38.84	77.28	126.72	31	63
1962	39.49	78.49	128.70	31	61
1963	45.08	88.92	157.20	29	57
1964	58.94	132.06	222.06	27	59
1965	114.43	180.00	310.80	37	58
1966	159.51	234.00	404.52	39	59
1967	208.05	288.00	512.52	41	56
1968	260.06	348.00	648.00	40	53
1969	346.75	444.00	925.02	37	48
1970	520.12	816.00	1,237.02	42	66

<sup>a/</sup> In several years, retroactive adjustments or bonuses were declared late in the year, and in the case of EMPART an additional end-of-year distribution was made when the account out of which family allowances were paid was found to be in surplus. In these cases, the amounts received were divided among the year received and the year when the benefits were accrued.

Source: Ricardo Ffrench-Davis (op. cit.), Table 72

Table 9.10a: CHILE - REAL FAMILY ALLOWANCES PER DEPENDENT PER YEAR, 1952-1970  
(Escudos of December 1969)

Year	Net Annual Equivalent <sup>a/</sup>		
	SSS	CEPP	EMPART
1952	-	924	1,193
1953	-	787	1,070
1954	126	684	904
1955	266	619	808
1956	328	808	854
1957	346	852	948
1958	306	743	1,012
1959	320	639	911
1960	286	589	933
1961	307	627	1,002
1962	274	545	894
1963	217	428	757
1964	194	435	732
1965	293	461	795
1966	332	487	843
1967	367	508	904
1968	362	468	902
1969	370	473	986
1970	418	656	994

<sup>a/</sup> See note, Table 9.9

Source: Ricardo Ffrench-Davis, (op. cit.)

Table 9.11: CHILE - MINIMUM WAGES AND SALARIES, BY MONTH OF ADJUSTMENT, 1969-78  
(Current escudos/pesos)<sup>a/</sup>

Year	Month	Vital Salary (per Month)	Minimum Wage (per Month) <sup>b/</sup>	Minimum Income (per Month)
1969	January	477.50	224.49	
1970	January	617.41	360.00	
1971	January	832.98	600.00	
1972	January	1,017.00	900.00	
	October	2,033.92	1,900.80	
1973	March	(3,270.54) <sup>c/</sup>	(3,056.49) <sup>c/</sup>	
	October			12,000
1974	January			18,000
	May			29,000
	July			39,000
	October			48,400
	December			64,900
1975	March			106,400 <sup>d/</sup>
	June			182,200
	September			225,680
	December			288.90
1976	March			381.35
	April			431.35
	June			599.58
	September			755.47
	December			891.45
1977	March			1,150.08
	May			1,196.08
	July			1,411.37
	December			1,665.42
1978	January			2,000.00
	March			2,160.00
	July			2,376.00
	December			2,661.12

a/ Data through September 1975 are given in escudos; subsequent data are in pesos (1 peso = 1,000 escudos).

b/ Daily rate multiplied by 30.

c/ Includes 60.8 percent general wage and salary adjustment.

d/ Includes E 20,000.

Note: Data for 1976-78 are only for the month when an adjustment was made.

Source: INE

Table 9.12a: CHILE - REAL MINIMUM WAGE, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month,<sup>a/</sup> prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	337.08	438.28	420.56	224.95	426.74	323.93	337.07	395.65	565.94
February	320.86	435.41	407.24	198.62	342.79	278.05	306.15	373.96	552.64
March	309.81	430.11	394.39	285.65	300.20	376.12	356.05	454.94	580.07
April	302.52	419.58	358.57	216.31	260.42	311.36	359.91	434.51	565.37
May	296.30	408.16	328.47	173.96	386.10	268.41	327.78	435.35	553.74
June	290.56	400.00	302.93	145.55	319.63	383.66	405.72	421.44	542.68
July	285.04	379.75	274.39	138.93	385.38	351.01	372.56	478.63	582.06
August	277.99	361.45	250.00	132.89	347.56	322.31	353.14	462.90	566.08
September	270.88	342.86	229.77	127.35	308.06	365.49	413.52	446.38	550.15
October	268.46	324.32	376.40	443.95	321.47	337.17	387.56	428.39	540.10
November	266.86	306.12	307.57	345.92	293.05	311.61	373.37	419.17	533.08
December	266.86	290.00	259.74	324.68	368.96	372.46	419.20	479.74	588.34
Average	291.10	378.00	325.84	229.90	338.36	333.47	367.67	435.92	560.02

<sup>a/</sup> Daily rate multiplied by 30.

Table 9.12b: CHILE - REAL MINIMUM WAGE, 1970- 78 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month,<sup>a/</sup> prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	336.13	420.76	470.71	302.58	395.92	300.46	312.99	367.33	524.39
February	319.15	416.09	436.05	287.69	318.06	257.83	284.41	347.19	512.17
March	307.17	409.28	409.46	432.75	278.50	348.86	330.64	422.17	537.44
April	299.00	398.14	388.27	374.29	241.52	287.96	334.22	403.21	523.76
May	291.97	386.35	369.16	306.23	358.05	249.08	304.27	403.99	513.04
June	285.49	377.36	349.92	251.56	296.38	356.13	376.49	391.09	503.03
July	279.29	375.23	329.43	218.62	357.43	325.82	345.72	444.16	540.34
August	271.49	369.69	267.06	186.04	322.32	299.18	327.70	429.55	525.04
September	263.74	364.52	215.67	159.51	285.74	339.27	383.74	414.23	510.54
October	260.68	357.57	401.61	334.06	298.26	312.95	359.64	397.53	501.26
November	258.44	347.62	373.29	315.50	271.87	289.28	346.47	388.97	494.63
December	257.33	337.08	341.87	301.20	342.31	345.77	389.00	445.19	545.82
Average	285.82	379.97	362.71	289.17	313.86	309.38	341.27	404.55	519.28

<sup>a/</sup> Daily rate multiplied by 30.

Table 9.12c: CHILE - REAL MINIMUM WAGE, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Escudos per month,<sup>a/</sup> prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	337.08	438.28	526.32	396.83	597.61	453.59	472.17	554.18	791.27
February	320.86	435.41	494.51	380.92	480.00	389.35	428.86	523.67	772.76
March	309.81	430.11	481.28	576.70	420.36	526.65	498.76	636.74	811.06
April	302.52	419.58	454.55	523.37	364.59	435.98	504.17	608.16	790.50
May	296.30	408.16	436.89	438.52	540.34	375.99	459.17	609.19	774.24
June	290.56	400.00	428.57	379.22	447.32	537.43	568.30	589.55	758.77
July	285.04	398.94	409.09	329.01	539.49	491.71	521.86	669.53	813.84
August	277.99	394.74	334.57	280.93	486.47	451.49	494.65	647.52	791.50
September	270.88	390.62	273.56	240.48	431.27	511.99	579.24	624.23	769.22
October	268.46	384.12	501.53	503.36	450.15	472.31	542.87	599.07	755.17
November	266.86	374.06	474.01	476.19	410.34	436.52	522.99	586.19	745.48
December	266.86	364.08	437.97	454.55	516.64	521.75	587.00	670.76	822.56
Average	291.10	403.18	437.74	415.01	473.71	467.06	515.00	609.90	783.03

<sup>a/</sup> Daily rate multiplied by 30.

Table 9.13a: CHILE - INDEX OF REAL MINIMUM WAGE, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	151	144	77	147	111	116	136	194
February	110	150	140	68	118	96	105	128	190
March	106	148	135	98	103	129	122	156	199
April	104	144	123	74	89	107	124	149	194
May	102	140	113	60	133	92	113	150	190
June	100	137	104	50	110	132	139	145	186
July	98	130	94	48	132	121	128	164	200
August	95	124	86	46	119	111	121	159	194
September	93	118	79	44	106	126	142	153	190
October	92	111	129	153	110	116	133	147	186
November	92	105	106	119	101	107	128	144	183
December	92	100	89	112	127	128	144	165	202
Average	100	130	112	79	116	115	126	150	192



Table 9.13b: CHILE - INDEX OF REAL MINIMUM WAGE, 1970-78 (DEFLATED BY UC ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	118	147	165	106	139	105	110	129	183
February	112	146	153	101	111	90	100	121	179
March	107	143	143	151	97	122	116	148	188
April	105	139	136	131	85	101	117	141	183
May	102	135	129	107	125	87	106	141	179
June	100	132	122	88	104	125	132	137	176
July	98	131	115	76	125	114	121	155	189
August	95	129	93	65	113	105	115	150	184
September	92	128	75	56	100	119	134	145	179
October	91	125	141	117	104	109	126	139	175
November	90	122	131	110	95	101	121	136	173
December	90	118	120	105	120	121	136	156	191
Average	100	133	127	101	110	108	119	142	182

Table 9.13c: CHILE - INDEX OF REAL MINIMUM WAGE, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	151	181	136	205	156	162	190	272
February	110	150	170	131	165	134	147	180	265
March	106	148	165	198	144	181	171	219	279
April	104	144	156	180	125	150	173	209	272
May	102	140	150	151	186	129	158	209	266
June	100	137	147	130	154	185	195	203	261
July	98	137	141	113	185	169	179	230	280
August	95	136	115	97	167	155	170	222	272
September	93	134	94	83	148	176	199	214	264
October	92	132	172	173	155	162	186	206	259
November	92	128	163	164	141	150	180	201	255
December	92	125	150	156	177	179	202	230	283
Average	100	139	150	143	163	160	177	210	269

Table 9.14a: CHILE - REAL MINIMUM SALARY, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	578.10	608.46	475.23	240.70	426.74	323.93	337.07	395.65	565.94
February	550.28	604.48	460.18	212.53	342.79	278.05	306.15	373.96	552.64
March	531.33	597.12	445.66	305.66	300.20	376.12	356.05	454.94	580.07
April	518.83	582.50	405.18	231.46	260.42	311.36	359.91	434.51	565.37
May	508.16	566.65	371.17	186.14	386.10	268.41	327.78	435.35	553.74
June	498.31	555.32	342.31	155.74	319.63	383.66	405.72	421.44	542.68
July	488.84	527.20	310.06	148.66	385.38	351.01	372.56	478.63	582.06
August	476.76	501.80	282.50	142.20	347.56	322.31	353.14	462.90	566.08
September	464.57	475.99	259.64	136.27	308.06	365.49	413.52	446.38	550.15
October	460.41	450.26	402.76	443.95	321.47	337.17	387.56	428.39	540.10
November	457.68	424.99	329.11	345.92	293.05	311.61	373.37	419.17	533.08
December	457.68	402.60	277.90	324.68	368.96	372.46	419.20	479.74	588.34
Average	499.25	524.78	363.47	239.49	338.36	333.47	367.67	435.92	560.02

Table 9.14 b: CHILE - REAL MINIMUM SALARY, 1970-78 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	576.48	584.14	531.90	323.77	395.92	300.46	312.99	367.33	524.39
February	547.35	577.66	492.73	307.84	318.06	257.83	284.41	347.19	512.17
March	526.80	568.20	462.69	463.05	278.50	348.86	330.64	422.17	537.44
April	512.80	552.74	438.74	400.51	241.52	287.96	334.22	403.21	523.76
May	500.74	536.37	417.15	327.68	358.05	249.08	304.27	403.99	513.04
June	489.62	523.89	395.41	269.18	296.38	356.13	376.49	391.09	503.03
July	478.98	520.94	372.25	233.93	357.43	325.82	345.72	444.16	540.34
August	465.62	513.23	301.78	199.07	322.32	299.18	327.70	429.55	525.04
September	452.32	506.06	243.71	170.68	285.74	339.27	383.74	414.23	510.54
October	447.07	496.41	429.73	334.06	298.26	312.95	359.64	397.53	501.26
November	443.22	482.61	399.43	315.50	271.87	289.28	346.47	388.97	494.63
December	441.32	467.97	365.81	301.20	342.31	345.77	389.00	445.19	545.82
Average	490.19	527.52	404.28	303.87	313.86	309.38	341.27	404.55	519.28

Table 9.14c: CHILE - REAL MINIMUM SALARY, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	578.10	608.46	594.74	424.62	597.61	453.59	472.17	554.18	791.27
February	550.28	604.48	558.79	407.60	480.00	389.35	428.86	523.67	772.76
March	531.33	597.12	543.85	617.08	420.36	526.65	498.76	636.74	811.06
April	518.83	582.50	513.64	560.02	364.59	435.98	504.17	608.16	790.50
May	508.16	566.65	493.69	469.23	540.34	375.99	459.17	609.19	774.24
June	498.31	555.32	484.29	405.77	447.32	537.43	568.30	589.55	758.77
July	488.84	553.84	462.27	352.05	539.49	491.71	521.86	669.53	813.84
August	476.76	548.01	378.07	300.60	486.47	451.49	494.65	647.52	791.50
September	464.57	542.30	309.12	257.32	431.27	511.99	579.24	624.23	769.22
October	460.41	533.28	536.65	503.36	450.15	472.31	542.87	599.07	755.17
November	457.68	519.31	507.21	476.19	410.34	436.52	522.99	586.19	745.48
December	457.68	505.45	468.65	454.55	516.64	521.75	587.00	670.76	822.56
Average	499.25	559.73	487.58	435.70	473.71	467.06	515.00	609.90	783.03

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Table 9.15a: CHILE - INDEX OF REAL MINIMUM SALARY, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	122	95	48	85	65	68	79	113
February	110	121	92	43	69	56	61	75	107
March	106	120	89	61	60	75	71	91	116
April	104	117	81	46	52	62	72	87	113
May	102	114	74	37	77	54	66	87	111
June	100	111	69	31	64	77	81	84	109
July	98	106	62	30	77	70	75	96	117
August	95	101	57	28	70	65	71	93	113
September	93	95	52	27	62	73	83	89	110
October	92	90	81	89	64	68	78	86	108
November	92	85	66	69	59	62	75	84	107
December	92	81	56	65	74	75	84	96	118
Average	100	105	73	48	68	67	74	87	112

Table 9.15b: CHILE - INDEX OF REAL MINIMUM SALARY, 1970-78 (DEFLATED BY UC ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	118	119	109	66	81	61	64	75	107
February	112	118	101	63	65	53	58	71	104
March	107	116	94	94	57	71	67	86	110
April	105	113	90	82	49	59	68	82	107
May	102	109	85	67	73	51	62	82	105
June	100	107	81	55	60	73	77	80	103
July	98	106	76	48	73	66	71	91	110
August	95	105	62	41	66	61	67	88	107
September	92	103	50	35	58	69	78	85	104
October	91	101	88	68	61	64	73	81	102
November	90	98	81	64	55	59	71	79	101
December	90	95	75	61	70	71	79	91	111
Average	100	108	82	62	64	63	70	83	106

Table 9.15c: CHILE - INDEX OF REAL MINIMUM SALARY, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	122	119	85	120	91	95	111	158
February	110	121	112	82	96	78	86	105	155
March	106	120	109	124	84	105	100	128	162
April	104	117	103	112	73	87	101	122	158
May	102	114	99	94	108	75	92	122	155
June	100	111	97	81	90	108	114	118	152
July	98	111	93	71	108	98	105	134	163
August	95	110	76	60	97	90	99	130	159
September	93	109	62	52	86	103	116	125	154
October	92	107	107	101	90	95	109	120	151
November	92	104	102	95	82	87	105	117	149
December	92	101	94	91	103	105	118	134	165
Average	100	112	98	87	95	94	103	122	157



Table 9.16: CHILE - RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR WORKER,<sup>a/</sup> 1968-1977

(Escudos per month)

Year	Month of Adjustment or Bonus	Minimum Wage <sup>b/</sup> or Income	Family Allowance <sup>c/</sup>	Transportation Allowance	Other Bonuses, etc.	Total <sup>w/</sup>
1968	January	175.50	74.83	-	-	250.33
1969	January	224.50	99.75	-	-	324.25
1970	January	360.00	149.62	-	-	509.62
1971	January	600.00	299.25	-	-	899.25
1972	January	900.00	413.98	-	-	1,313.98
	October	1,900.80	829.92	-	-	2,730.72
1973	March	3,056.49 <sup>d/</sup>	829.92	-	-	3,886.41
	October	12,000 <sup>e/</sup>	3,150	720	-	15,870.00
	November	12,000	3,150	720	3,056.49 <sup>f/</sup>	18,926.49
	December	12,000	3,150	720	13,056.49 <sup>g/</sup>	28,926.49
1974	January	18,000	6,300	720	-	25,020
	February	18,000	6,300	1,700	7,700 <sup>h/</sup>	33,700
	May	29,000	14,000	5,000	-	48,000
	June	29,000	14,000	5,000	10,000 <sup>i/</sup>	58,000
	July	39,000	17,500	5,000	-	61,500
	September	39,000	17,500	5,000	22,500 <sup>j/</sup>	84,000
	October	48,400	21,700	6,200	15,000 <sup>k/</sup>	91,300
	November	48,400	21,700	6,200	-240 <sup>l/</sup>	76,060
	December	64,900	32,900	8,400	18,270 <sup>m/</sup>	124,470
1975	January	64,900	32,900	8,400	-3,630 <sup>n/</sup>	102,570
	February	64,900	32,900	8,400	-	106,200
	March	86,400	44,100	11,200	20,000 <sup>o/</sup>	161,700
	April	86,400	44,100	11,200	20,000 <sup>p/</sup>	161,700
	May	86,400	44,100	11,200	20,000 <sup>q/</sup>	161,700
	June	182,000	75,600	19,200	-10,000 <sup>r/</sup>	266,800
	July	182,000	75,600	19,200	-10,000 <sup>r/</sup>	266,800
	August	182,000	75,600	19,200	-	276,800
	September	225,680	93,800	23,200	-	342,680
	December	288,900	120,050	30,590	- <sup>s/</sup>	439,540 <sup>s/</sup>
1976	March	381,350	158,480	40,380	-	580,210
	April	431,350 <sup>t/</sup>	158,480	40,380	-	630,210
	June	599,580	220,290	56,130	-	876,000
	September	755,470	277,550	70,720	-	1,103,740
	December	891,450	327,495	83,450	450,000 <sup>u/</sup>	1,752,395
1977	March	1,150,080	389,725	99,310	-	1,639,115
	May	1,196,080	389,725	99,310	-	1,685,115
	July	1,411,370	459,865	117,190	-	1,988,425
	November	1,411,370	459,865	117,190	450,000 <sup>v/</sup>	2,438,425
	December	1,665,420	542,640	138,200	450,000 <sup>v/</sup>	2,796,260

<sup>a/</sup> The average worker is assumed to have 3.5 dependents.<sup>b/</sup> Minimum daily wage multiplied by 30 (for period before October 1973 when replaced by minimum monthly income).<sup>c/</sup> Allowance per dependent multiplied by 3.5.<sup>d/</sup> Includes 60.8 percent general wage increase.

Table 9.16

- e/ In October 1973, a minimum income for all workers replaced the sueldo vital and salario mínimo.
- f/ Bonus equivalent to wage of April 1973.
- g/ Repeats November bonus plus Christmas bonus of E<sup>o</sup>10,000.
- h/ Bonus of E<sup>o</sup>2,200 per dependent paid in February, March and April
- i/ One-time only bonus of E<sup>o</sup>10,000 per worker.
- j/ One-time only bonus of E<sup>o</sup>5,000 per worker and per dependent.
- k/ A E<sup>o</sup>15,000 advance paid in October to be deducted in equal installments from November and December earnings.
- l/ Includes an advance paid in November equivalent to 15 percent of the October 1974 wage, less the first installment due on the October advance. The November advance was to be deducted in equal installments from earnings in December and January.
- m/ Includes Christmas bonus of E<sup>o</sup>8,400 per dependent, less the second installment repayment of the October advance and the first installment repayment of the November advance.
- n/ Second installment repayment of November 1974 advance.
- o/ Bonus of E<sup>o</sup>20,000 paid to lower-wage workers (workers whose earnings totaled less than E<sup>o</sup>150,000 after regular March adjustment).
- p/ E<sup>o</sup>20,000 bonus paid all workers.
- q/ Advance of E<sup>o</sup>20,000 paid in May, repayable from June and July earnings.
- r/ Repayment of May advance.
- s/ Does not include Christmas bonus (for lack of information).
- t/ Special 13.1 percent adjustment declared for low-wage workers.
- u/ Christmas bonus of 100 pesos per worker and per dependent.
- v/ Bonus of 100 pesos per worker and per dependent.
- w/ Does not include meal allowance which is compulsory only for public sector employees.

Table 9.17a: CHILE - REAL RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR WORKER, 1970-1977 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	477.17	656.87	614.01	323.16	593.17	511.95	512.83	646.58
February	454.21	652.58	594.56	285.34	641.78	454.99	465.78	611.13
March	438.57	644.62	575.80	363.22	562.04	571.60	541.72	648.38
April	428.25	628.85	523.50	275.05	487.56	473.18	525.83	619.28
May	419.44	611.73	479.55	221.20	639.06	407.91	478.90	613.35
June	411.32	599.50	442.27	185.07	639.26	561.80	592.76	593.76
July	403.50	569.15	400.60	176.66	607.71	514.00	544.32	674.33
August	393.53	541.72	364.99	168.97	548.08	489.65	515.94	652.16
September	383.46	513.86	335.46	161.93	663.51	554.97	604.16	628.89
October	380.03	486.08	540.74	587.13	606.40	511.97	566.22	603.54
November	377.78	458.80	441.86	545.59	460.52	473.16	545.50	724.19
December	377.78	434.63	373.10	782.64	707.62	566.67 <sup>a/</sup>	824.05	805.50
Average	412.09	566.53	473.87	339.66	596.39	507.65 <sup>a/</sup>	554.29	651.76

a/ Does not include Christmas bonus.

Source: Table 9.14

Table 9.17b: CHILE - REAL RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR WORKER, 1970-1977 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	475.84	630.61	687.23	434.69	550.33	474.86	476.20	600.00
February	451.79	623.61	636.62	413.31	595.48	421.90	432.71	567.11
March	434.83	613.40	597.81	550.25	521.41	530.17	503.05	601.68
April	423.27	596.72	566.86	475.93	452.17	437.63	488.30	574.67
May	413.32	579.04	538.96	389.38	592.64	378.54	444.55	569.17
June	404.14	565.57	510.88	319.87	592.78	521.49	550.06	550.99
July	395.36	562.38	480.96	277.98	563.65	477.11	505.11	625.76
August	384.33	554.07	389.91	236.56	508.27	454.51	478.78	605.18
September	373.35	546.32	314.88	202.82	615.43	515.15	560.64	583.59
October	369.02	535.91	576.95	441.79	562.63	475.19	525.44	560.06
November	365.84	521.00	536.28	497.61	427.23	439.25	506.20	672.03
December	364.27	505.20	491.14	726.07	656.51	526.06 <sup>a/</sup>	764.69	747.47
Average	404.61	569.49	527.37	413.86	553.21	470.99 <sup>a/</sup>	519.64	604.81

<sup>a/</sup> Does not include Christmas bonus.

Source: Table 9.14

Table 9.18 CHILE - RECEIPTS OF MINIMUM-INCOME WHITE-COLLAR WORKER,<sup>a/</sup> 1969-1977  
(Escudos per month)

Year	Month of Adjustment or Bonus	Minimum Salary	Family Allowance <sup>b/</sup>	Transportation Allowance	Other Bonuses, etc.	Total <sup>c/</sup>
1969	January	477.50	270.10	-	-	747.60
1970	January	617.41	388.50	-	-	1,005.91
1971	January	832.89	560.00	-	-	1,392.89
1972	January	1,016.96	805.00	-	-	1,821.96
	October	2,033.92	1,610.00	-	-	3,643.92
1973	March	3,270.54 <sup>d/</sup>	1,610.00	-	-	4,880.54
	October	12,000 <sup>e/</sup>	3,150	720	-	15,870.00
	November	12,000	3,150	720	3,056.49 <sup>f/</sup>	18,926.49
	December	12,000	3,150	720	13,056.49 <sup>g/</sup>	28,926.49
1974	January	18,000	6,300	720	-	25,020
	February	18,000	6,300	1,700	7,700 <sup>h/</sup>	33,700
	May	29,000	14,000	5,000	-	48,000
	June	29,000	14,000	5,000	10,000 <sup>i/</sup>	58,000
	July	39,000	17,500	5,000	-	61,500
	September	39,000	17,500	5,000	22,500 <sup>j/</sup>	84,000
	October	48,400	21,700	6,200	15,000 <sup>k/</sup>	91,300
	November	48,400	21,700	6,200	-240 <sup>l/</sup>	76,060
	December	64,900	32,900	8,400	18,270 <sup>m/</sup>	124,470
1975	January	64,900	32,900	8,400	-3,630 <sup>n/</sup>	102,570
	February	64,900	32,900	8,400	-	106,200
	March	86,400	44,100	11,200	20,000 <sup>o/</sup>	161,700
	April	86,400	44,100	11,200	20,000 <sup>p/</sup>	161,700
	May	86,400	44,100	11,200	20,000 <sup>q/</sup>	161,700
	June	182,000	75,600	19,200	-10,000 <sup>r/</sup>	266,800
	July	182,000	75,600	19,200	-10,000 <sup>r/</sup>	266,800
	August	182,000	75,600	19,200	-	276,800
	September	225,680	93,800	23,200	-	342,680
	December	288,900	120,050	30,590	- <sup>s/</sup>	439,540 <sup>s/</sup>
1976	March	381,350	158,480	40,380	-	580,210
	April	431,350 <sup>t/</sup>	158,480	40,380	-	630,210
	June	599,580	220,290	56,130	-	-
	September	755,470	277,550	70,720	-	1,103,740
	December	891,450	327,495	83,450	450,000 <sup>w/</sup>	1,752,395
1977	March	1,150,080	389,725	99,310	-	1,639,115
	May	1,196,080	389,725	99,310	-	1,685,115
	July	1,411,370	459,865	117,190	-	1,988,425
	November	1,411,370	459,865	117,190	450,000 <sup>v/</sup>	2,438,425
	December	1,665,420	542,640	138,200	450,000 <sup>v/</sup>	2,796,260

<sup>a/</sup> The average worker is assumed to have 3.5 dependents.

<sup>b/</sup> Allowance per dependent multiplied by 3.5

<sup>c/</sup> Does not include meal allowance which is only compulsory for public sector.

<sup>d/</sup> Includes 60.8 percent general wage increase.

- e/ In October 1973, a minimum income for all workers replaced the sueldo vital and salario mínimo.
- f/ Bonus equivalent to wage of April 1973.
- g/ Repeats November bonus plus Christmas bonus of E<sup>o</sup>10,000.
- h/ Bonus of E<sup>o</sup>2,200 per dependent paid in February, March and April.
- i/ One-time only bonus of E<sup>o</sup>10,000 per worker.
- j/ One-time only bonus of E<sup>o</sup>5,000 per worker and per dependent.
- k/ A E<sup>o</sup>15,000 advance paid in October to be deducted in equal installments from November and December earnings.
- l/ Includes an advance paid in November equivalent to 15 percent of the October 1974 wage, less the first installment due on the October advance. The November advance was to be deducted in equal installments from earnings in December and January.
- m/ Includes Christmas bonus of E<sup>o</sup>8,400 per dependent, less the second installment repayment of the October advance and the first installment repayment of the November advance.
- n/ Second installment repayment of November 1974 advance.
- o/ Bonus E<sup>o</sup>20,000 paid to lower-wage workers (workers whose earnings totaled less than E<sup>o</sup>150,000 after regular March adjustment).
- p/ E<sup>o</sup>20,000 bonus paid all workers.
- q/ Advance of E<sup>o</sup>20,000 paid in May, repayable from June and July earnings.
- r/ Repayment of May advance
- s/ Does not include Christmas bonus (for lack of information).
- t/ Special 13.1 percent adjustment declared for low-wage workers.
- u/ Christmas bonus of 100 pesos per worker and per dependent.
- v/ Bonus of 100 pesos per worker and per dependent.

Table 9.19a: CHILE - REAL RECEIPTS OF MINIMUM-INCOME WHITE-COLLAR WORKER, 1970-1977 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	941.86	1,017.45	851.38	431.23	593.17	511.95	512.83	646.58
February	896.53	1,010.81	824.42	380.76	641.78	454.99	465.78	611.13
March	865.67	998.49	798.40	456.13	562.04	571.60	541.72	648.38
April	845.30	974.05	725.88	345.40	487.56	473.18	525.83	619.28
May	827.91	947.54	664.95	277.78	639.06	407.91	478.90	613.35
June	811.87	928.59	613.25	232.41	639.26	561.80	592.76	593.76
July	796.44	881.58	555.48	221.84	607.71	514.00	544.31	674.33
August	776.76	839.09	506.10	212.20	548.08	489.65	515.88	652.16
September	756.89	795.94	465.14	203.36	663.51	554.97	604.16	628.89
October	750.12	752.91	721.57	587.13	606.40	511.97	566.22	603.54
November	745.67	710.66	589.63	545.59	460.52	473.16	545.50	724.19
December	745.67	673.22	497.87	782.64	707.62	566.67 <sup>a/</sup>	824.05	805.50
Average	813.39	877.53	651.17	389.71	596.39	507.65 <sup>a/</sup>	554.29	651.76

<sup>a/</sup> Does not include Christmas bonus in 1975.

Source: Table 9.16

Table 9.19b: CHILE - REAL RECEIPTS OF MINIMUM-INCOME WHITE-COLLAR WORKER, 1970-1977 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	939.23	976.78	952.91	580.06	550.33	474.86	476.20	600.00
February	891.76	965.94	882.73	551.52	595.48	421.90	432.71	567.11
March	858.28	950.13	828.92	691.00	521.41	530.17	503.05	601.68
April	835.47	924.28	786.01	597.67	452.17	437.63	488.30	574.67
May	815.82	896.90	747.32	488.98	592.64	378.54	444.55	569.17
June	797.71	876.03	708.38	401.69	592.78	521.49	550.06	550.99
July	780.38	871.10	666.90	349.08	563.65	477.11	505.11	625.76
August	758.60	858.22	540.64	297.07	508.27	454.51	478.78	605.18
September	736.93	846.23	436.61	254.70	615.43	515.15	560.64	583.59
October	728.39	830.09	769.90	441.79	562.63	475.19	525.44	560.06
November	722.12	807.00	715.62	497.61	427.23	439.25	506.20	672.03
December	719.02	782.52	655.38	726.07	656.51	526.06 <sup>a/</sup>	764.69	747.47
Average	798.64	882.10	724.28	489.77	553.21	470.99 <sup>a/</sup>	519.64	604.81

<sup>a/</sup> Does not include Christmas bonus in 1975.

Source: Table 9.16



Table 9.20: CHILE - NOMINAL AVERAGE WAGE AND SALARY INDICES, 1959-1978

(April 1969 = 100)

Year/Month	Aggregate Indices			Sectoral Indices				
	Wages	Salaries	Wages	Mining	Manufacturing	Public Utilities	Government	
			and Salaries				Central Government	Autonomous Agencies
1959 April	6.6	6.9	6.8	5.2	6.6	4.6	6.8	8.4
1960 April	n.a.	n.a.	7.8	n.a.	n.a.	n.a.	n.a.	n.a.
1961 April	n.a.	n.a.	9.0	n.a.	n.a.	n.a.	n.a.	n.a.
1962 April	n.a.	n.a.	10.2	n.a.	n.a.	n.a.	n.a.	n.a.
1963 April	13.3	14.5	13.9	11.9	13.9	11.1	14.2	15.6
1964 April	18.7	18.4	18.6	16.4	20.7	16.0	16.3	18.9
1965 April	28.6	28.5	28.6	24.9	29.6	22.1	26.1	32.7
1966 April	39.3	38.5	38.9	32.5	42.6	34.9	34.7	40.7
1967 April	54.1	56.4	55.3	52.9	54.7	50.9	57.3	57.3
1968 April	71.3	62.0	66.6	71.0	72.0	61.2	59.4	64.9
1969 April	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1970 January	125.4	131.4	128.4	134.4	125.4	118.5	133.5	129.4
April	138.7	148.8	143.8	138.1	140.4	122.3	157.8	148.5
July	151.6	156.7	154.1	141.6	152.3	155.2	161.4	157.5
October	168.3	163.3	165.8	194.9	159.2	155.7	165.1	165.1
1971 January	182.9	185.0	183.9	218.4	176.4	166.6	170.7	194.1
April	210.9	229.0	220.1	229.0	207.3	201.1	234.6	230.6
July	233.9	243.4	238.7	243.6	227.6	219.2	241.5	257.1
October	250.0	253.5	251.8	256.0	256.3	236.3	245.0	252.2
1972 January	284.4	276.7	280.5	289.9	286.6	239.0	242.6	306.1
April	317.4	300.1	308.7	278.7	327.7	318.5	262.5	324.0
July	349.3	342.7	346.0	290.4	362.3	324.4	371.3	336.8
October	562.8	551.4	557.1	431.8	618.9	425.8	514.0	593.0
1973 January	801.4	729.9	765.2	788.8	803.9	791.0	670.9	715.0
April	919.1	787.4	852.4	796.7	987.8	786.6	760.8	760.8
July	1,328	1,130	1,228	979.2	1,439	912.1	1,240	1,111
October	1,699	1,307	1,501	1,471	1,821	1,108	1,235	1,497
1974 January	4,336	4,009	4,170	2,876	5,070	3,656	4,987	2,978
April	5,590	5,429	5,508	4,499	6,359	4,302	6,167	4,590
July	9,657	9,610	9,633	9,362	10,316	7,337	11,919	7,776
October	12,775	13,550	13,167	11,197	14,029	9,659	16,758	11,260
1975 January	17,597	19,602	18,612	16,464	19,611	14,345	23,733	15,727
April	27,347	28,963	28,165	27,631	29,098	19,290	36,643	23,579
July	43,191	48,435	45,846	43,875	45,713	34,978	61,995	38,645
October	56,814	60,393	58,626	57,315	61,191	44,410	73,787	48,640
1976 January	74,875	79,097	77,012	73,040	82,764	60,253	93,547	63,124
April	105,130	109,406	107,294	103,161	116,085	81,541	129,094	87,728
July	150,803	153,255	152,042	147,643	167,025	112,059	184,637	119,530
October	198,848	198,661	198,750	203,100	218,419	142,211	239,193	153,958
1977 January	248,885	255,817	252,391	261,911	275,015	172,144	305,611	198,339
April	301,298	311,623	306,522	314,507	332,987	203,671	374,766	243,216
July	363,065	385,263	374,299	361,696	404,003	243,957	468,531	305,425
October	379,735	394,602	387,243	380,260	429,740	249,792	471,840	304,923
1978 January	446,377	470,502	450,647	416,201	513,916	301,125	..	..
April	500,552	519,579	510,171	479,779	573,001	326,670	..	..
July	569,566	581,276	575,449	511,191	657,045	417,848	..	..
October	597,682	595,945	596,456	555,894	687,571	435,307	..	..

Source: INE

Table 9.21: CHILE - INDICES OF REAL WAGES AND SALARIES, 1959-1978

(April 1969 = 100)

Year/Month	IBRD Deflator <sup>a/</sup>			UC Deflator <sup>b/</sup>			Official Deflator <sup>c/</sup>		
	Wages	Salaries	Wages and Salaries	Wages	Salaries	Wages and Salaries	Wages	Salaries	Wages and Salaries
1959	April						60.0	62.7	61.8
1960	"						n.a.	n.a.	63.6
1961	"						n.a.	n.a.	68.4
1962	"						n.a.	n.a.	68.1
1963	"						60.6	66.1	63.3
1964	"						57.9	56.9	57.5
1965	"						68.7	68.4	68.7
1966	"						76.8	77.8	76.0
1967	"						89.5	93.3	91.5
1968	"						93.1	81.0	87.0
1969	"						100.0	100.0	100.0
1970	Jan.			109.9	115.1	112.5	110.2	115.5	112.8
	April			108.1	116.0	112.1	109.4	117.3	113.4
	July			110.4	114.0	112.3	112.6	116.4	114.6
	Oct.			114.4	111.0	112.7	117.8	114.3	116.0
1971	Jan.	125.4	126.8	126.1	120.4	121.7	121.0	125.4	126.8
	April	138.4	150.3	144.4	131.3	142.6	137.1	138.4	144.4
	July	138.9	144.6	141.8	137.3	142.8	140.1	145.9	148.9
	Oct.	126.8	128.6	127.7	139.8	141.8	140.8	150.2	151.3
1972	Jan.	124.7	121.3	123.0	139.6	135.8	137.7	151.8	153.9
	April	118.7	112.2	115.4	128.5	121.5	125.0	150.4	146.3
	July	99.9	98.0	99.0	120.0	117.7	118.8	149.0	147.6
	Oct.	104.6	102.5	103.5	111.6	109.3	110.5	139.3	137.9
1973	Jan.	89.0	81.1	85.0	119.7	109.0	114.3	157.0	143.0
	April	61.0	52.3	56.6	105.6	90.5	98.0	147.7	126.5
	July	56.6	48.2	52.4	89.1	75.8	82.4	134.1	114.1
	Oct.	59.0	45.4	52.1	44.4	34.1	39.2	66.9	51.4
1974	Jan.	96.5	89.2	92.8	89.5	82.7	86.1	133.1	124.9
	April	75.9	73.7	74.8	70.4	68.4	69.4	106.3	103.2
	July	89.5	89.1	89.3	83.1	82.6	82.8	125.4	124.7
	Oct.	79.6	84.5	82.1	73.9	78.4	76.1	111.5	118.3
1975	Jan.	82.4	91.8	87.2	76.4	85.2	80.9	115.4	128.6
	April	75.1	79.5	77.3	69.5	73.6	71.5	105.2	111.4
	July	78.1	87.6	82.9	72.5	81.3	76.9	109.4	122.7
	Oct.	79.7	84.7	82.3	73.9	78.6	76.4	111.6	118.6
1976	Jan.	82.0	86.6	84.3	76.1	80.4	78.3	114.8	121.3
	April	82.3	85.7	84.0	76.4	79.5	78.0	115.3	120.0
	July	87.9	89.4	88.7	81.6	82.9	82.3	123.2	125.2
	Oct.	95.7	95.6	95.7	88.9	88.8	88.8	134.1	134.0
1977	Jan.	103.7	106.5	105.1	96.2	98.9	97.6	145.2	149.2
	April	106.8	110.4	108.6	99.1	102.5	100.8	149.6	154.7
	July	115.5	122.5	119.1	107.1	113.6	110.4	161.8	171.7
	Oct.	108.1	112.3	110.3	100.3	104.1	102.2	151.5	157.4
1978	Jan.	119.3	124.0	121.8	110.7	114.9	112.8	167.3	173.8
	April	122.8	127.6	125.3	114.0	118.3	116.1	172.1	178.8
	July	130.9	133.6	132.3	121.5	124.0	122.8	183.1	186.8
	Oct.	127.5	127.1	127.2	118.3	118.0	118.1	178.3	177.9

<sup>a/</sup> Adjusted CPI, Appendix Table 9.3a.<sup>b/</sup> Implicit University of Chile price index, Appendix Table 9.3b.<sup>c/</sup> Official CPI, Appendix Table 9.3c.

Source: Table 9.20

X. OTHER STATISTICS

Table 10.1 : CHILE - DISTRIBUTION OF INCOME AMONG RECIPIENTS, BY SOCIOECONOMIC CHARACTERISTICS, 1967<sup>a/</sup>

(Percent)

Characteristics	D E C I L E S										Gini Coefficient
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
Blue-collar employees	2.6	4.2	5.1	6.2	7.2	8.9	10.3	12.7	15.5	27.4	0.36
Agricultural	3.3	5.4	6.5	7.1	8.1	9.6	10.2	12.4	14.6	22.8	0.28
Industrial	3.3	5.0	6.2	7.1	8.2	9.2	10.4	11.9	14.5	24.3	0.36
Service	2.6	3.8	4.6	5.4	6.6	7.9	9.8	12.3	16.2	30.9	0.44
White-collar employees	2.5	4.1	4.6	5.5	6.5	7.8	9.1	11.2	15.3	33.6	0.42
Independent workers	1.1	2.2	3.0	4.1	5.0	6.8	8.4	11.0	16.5	41.8	0.54
Employers	1.8	3.0	4.3	5.5	6.2	8.7	9.9	12.1	16.9	31.7	0.40
Urban Areas	1.5	2.6	3.7	4.7	5.9	6.9	8.7	11.3	16.1	38.4	0.48
Rural Areas	1.9	3.3	3.9	4.8	5.9	6.7	8.2	10.6	14.2	40.7	0.48
Men	1.6	2.6	3.5	4.5	5.7	6.8	8.4	10.9	15.9	40.4	0.50
Women	1.5	2.5	3.2	3.9	5.2	6.7	9.1	11.9	17.9	38.1	0.50
TOTAL POPULATION	1.5	2.5	3.3	4.4	5.4	6.9	8.5	11.1	16.3	40.2	0.52

a/ Distribution of disposable personal money income (i.e., after taxes and social security contributions) among active members of the labor force (i.e., excludes pensioners and retirees). Also does not include incomes in kind.

Source: Isabel Heskia, "La Distribución del Ingreso en Chile," CEPLAN, Documento No. 31, Noviembre de 1973.

Table 10.2: CHILE - DISTRIBUTION OF INCOME RECIPIENTS ABOVE AND BELOW  
MEDIAN, BY SOCIOECONOMIC CHARACTERISTICS, 1967

(Percent)

Characteristics	Lower 50 Percent	Upper 50 Percent	Total Population
<u>Occupational Category:</u>			
Employers	2.7	97.3	100.0
Independent workers	52.4	47.6	100.0
White-collar employees	11.1	88.9	100.0
Blue-collar employees	72.7	27.3	100.0
<u>Sector of Economic Activity:</u>			
Agriculture	80.4	19.6	100.0
Industry	41.7	58.3	100.0
Services	40.9	59.1	100.0
<u>Rural/Urban:</u>			
Rural	75.3	24.7	100.0
Urban	39.7	60.3	100.0
<u>Sex:</u>			
Men	46.4	53.6	100.0
Women	64.0	36.0	100.0
<u>Education:</u>			
Primary or less	53.4	46.6	100.0
Secondary	51.3	48.7	100.0
Higher	5.6	94.4	100.0
<u>Age:</u>			
12-25 years	70.0	30.0	100.0
26-55 years	42.0	58.0	100.0
56 years and over	53.2	46.8	100.0

Source: Isabel Heskia, op. cit., Table 3

Table 10.3: CHILE - CHARACTERISTICS OF LOWER 50 PERCENT OF  
INCOME RECIPIENTS, 1967

(Percent)

<u>Characteristics</u>	<u>Proportion of Lower 50%</u>	<u>Proportion Total Population</u>
<u>Occupational Category:</u>	<u>100.0</u>	<u>100.0</u>
Employers	0.1	1.6
Independent workers	24.1	23.3
White-collar employees	5.7	26.3
Blue-collar employess	70.1	48.8
<u>Sector of Economic Activity:</u>	<u>100.0</u>	<u>100.0</u>
Agriculture	38.4	24.2
Industry	25.6	31.1
Services	36.0	44.7
<u>Rural/Urban:</u>	<u>100.0</u>	<u>100.0</u>
Rural	45.9	30.9
Urban	54.1	69.1
<u>Sex:</u>	<u>100.0</u>	<u>100.0</u>
Men	69.0	75.5
Women	31.0	24.5
<u>Education:</u>	<u>100.0</u>	<u>100.0</u>
Primary or less	68.0	64.7
Secondary	31.6	31.2
Higher	0.4	4.1
<u>Age:</u>	<u>100.0</u>	<u>100.0</u>
12-25 years	37.1	26.9
26-55 years	52.0	62.7
56 years and over	10.9	10.4

Source: Isabel Heskia, op. cit., Table 2

Table 10.4 : CHILE - DISTRIBUTION OF INCOME BY HOUSEHOLDS, 1968 <sup>a/</sup>

Deciles	Decile Boundaries		Mean Income (escudos)	Share of Total Income (percent)
	From (escudos)	To		
1	1	209	130.99	1.5
2	201	296	254.15	2.9
3	297	391	340.05	3.9
4	392	485	439.36	5.1
5	486	587	533.48	6.2
6	588	737	657.82	7.6
7	738	904	816.68	9.5
8	905	1,164	1,023.82	11.9
9	1,165	1,784	1,427.01	16.5
10	1,785		3,005.68	34.8
Total Population			862.90	100.0

<sup>a/</sup> Distribution of before-tax incomes, including social security contributions, all cash incomes, the estimated value of incomes in kind, consumption of own production (except food), and all transfer payments.

Source: UN-ECLA/IBRD, Proyecto Sobre Medición y Análisis de la Distribución del Ingreso en Países de América Latina: Chile (mimeo), Documento E/CEPAL/L.115/5, Noviembre 1974

Table 10.5: CHILE - HOUSEHOLD INCOME DISTRIBUTION BY ECONOMIC SECTOR OF PRINCIPAL INCOME EARNER, 1968

(Percent of households)

Monthly Income		Agriculture	Mining	Manufacturing	Construc- tion	Electricity etc. <sup>a/</sup>	Commerce	Transport, etc. <sup>b/</sup>	Services	Unspecified	Total
From	To										
(Distribution of sectors among income classes)											
0	372	51.2	10.1	18.3	24.4	10.9	16.8	11.3	14.8	38.9	27.7
373	746	31.8	42.9	39.6	42.0	25.7	26.6	32.7	27.2	22.4	31.6
747	1,119	9.9	20.7	20.7	20.0	18.8	21.8	26.3	22.0	11.6	17.6
1,120	1,492	3.5	7.7	8.4	5.8	10.9	11.4	10.4	10.6	4.6	7.4
1,493	1,865	1.4	6.3	4.6	2.6	6.9	6.9	6.5	8.0	3.0	4.5
1,866	2,238	0.7	4.6	2.6	1.6	5.0	5.2	5.1	5.1	2.0	2.9
2,239	2,984	0.6	3.4	2.7	1.3	6.9	3.7	4.4	5.3	1.7	2.7
2,985	3,730	0.4	1.7	1.0	0.8	4.0	3.7	1.2	3.3	0.7	1.5
3,731		0.4	2.2	2.0	1.4	10.9	3.9	2.0	3.6	1.2	2.0
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	2.0
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Distribution of income classes among sectors)											
0	372	41.4	0.8	12.4	6.4	0.2	7.2	2.9	8.0	20.7	100.0
373	746	22.5	3.1	23.7	9.6	0.4	10.0	7.3	12.9	10.5	100.0
747	1,119	12.6	2.7	22.2	8.3	0.6	14.7	10.6	18.6	9.7	100.0
1,120	1,492	10.7	2.4	21.6	5.7	0.8	18.3	10.0	21.4	9.2	100.0
1,493	1,865	6.8	3.2	19.4	4.3	0.9	18.3	10.4	26.8	9.9	100.0
1,866	2,238	5.5	3.5	17.0	3.9	0.9	20.8	12.4	25.6	10.1	100.0
2,239	2,984	5.3	2.8	19.3	3.7	1.4	16.5	11.8	29.7	9.3	100.0
2,985	3,730	5.7	2.5	12.2	3.9	1.4	29.0	5.7	33.0	6.8	100.0
3,731		4.4	2.5	19.3	5.2	3.0	23.2	7.1	27.0	8.7	100.0
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
Total		22.4	2.3	18.9	7.3	0.5	11.8	7.1	14.9	14.7	100.0

a/ Electricity, gas, water and sanitary services.

b/ Transport, storage and communications.

Source: UN-ECLA/IBRD, *op. cit.*



Table 10.6: CHILE - HOUSEHOLD INCOME DISTRIBUTION BY OCCUPATIONAL CLASSIFICATION, 1968

(Percent of households)

Monthly Income		Occupational Classification							Total
From	To	Employers	Self-Employed	White-Collar Employees	Manual Workers	Passives <sup>a/</sup>	Rentiers	Others	Population
(Escudos)									
(Distribution of occupations among income classes)									
0	372	2.8	43.0	3.4	30.4	46.2	44.5	23.7	28.3
373	746	4.2	26.2	25.3	45.9	25.1	25.2	47.4	32.3
747	1,119	12.8	14.1	26.7	16.7	15.0	12.0	9.2	18.0
1,120	1,492	7.5	7.0	13.8	4.4	5.4	5.8	0.0	7.5
1,493	1,865	13.8	3.9	9.0	1.7	2.7	4.7	7.9	4.6
1,866	2,238	16.8	1.8	6.8	0.5	2.5	2.4	0.0	3.0
2,239	2,984	13.8	1.7	6.7	0.3	1.3	3.1	0.0	2.7
2,985	3,730	8.5	1.3	3.6	0.1	0.5	1.0	6.6	1.6
3,731		20.0	0.9	4.7	0.0	1.4	1.3	5.3	2.0
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Distribution of income classes among occupations)									
0	372	0.2	38.8	2.9	37.3	12.6	7.9	0.4	100.0
373	746	0.3	20.7	19.2	49.3	6.0	3.9	0.6	100.0
747	1,119	1.6	20.0	36.3	32.2	6.4	3.3	0.2	100.0
1,120	1,492	2.2	23.7	44.6	20.1	5.5	3.8	0.0	100.0
1,493	1,865	6.7	21.9	48.4	12.7	4.5	5.1	0.7	100.0
1,866	2,238	12.4	15.3	55.7	6.1	6.5	4.1	0.0	100.0
2,239	2,984	11.1	16.2	60.1	3.2	3.6	5.7	0.0	100.0
2,985	3,730	12.1	21.4	56.8	2.1	2.5	3.2	1.8	100.0
3,731		21.7	11.7	56.5	0.5	5.2	3.3	1.1	100.0
Total		2.2	25.5	24.5	34.7	7.7	5.0	0.4	100.0

a/ Retired or disabled workers on pension.

Source: UN-ECLA/IBRD, op. cit.



Table 9.3a: CHILE - IBRD ADJUSTED CONSUMER PRICE INDEX, 1970-1978

(December 1969 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	106.8	136.9			4,218	20,035	85,709	225,204	353,396
February	112.2	137.8			5,251	23,341	94,366	238,266	361,877
March	116.2	139.5	228.2	1,070	5,996	28,289	107,105	252,800	372,372
April	119.0	143.0			6,912	34,173	119,851	264,682	382,054
May	121.5	147.0			7,511	39,641	131,596	274,740	390,077
June	123.9	150.0	297.1	2,100	9,073	47,490	147,783	283,806	398,028
July	126.3				10,120	51,907	160,935	294,875	408,208
August	129.5				11,221	56,530	169,787	304,900	419,729
September	132.9	175.0	391.7	2,400	12,660	61,747	182,691	316,182	431,886
October	134.1			2,703	15,056	66,934	194,931	329,461	439,919
November	134.9			3,469	16,516	72,423	202,338	336,709	445,716
December	134.9	206.9	731.9	3,696	17,590	77,565	212,657	347,147	452,307
Annual Average	124.4	167.8	412.2	2,316	10,177	48,339	150,812	289,064	404,839
Percent Change		34.9	145.6	461.9	339.4	375.0	212.0	91.7	40.1
December - December Change (%)	34.9	53.4	253.7	405.0	375.9	341.0	174.2	63.2	30.3

Source: IBRD Report No. 966-CH, December 24, 1975; INE

Table 9.3b: CHILE - IMPLICIT UC ADJUSTED CONSUMER PRICE INDEX, 1970-1978

(December 1969 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	107.1	142.6	191.2	628	4,546	21,598	92,362	242,686	381,397
February	112.8	144.2	206.4	661	5,660	25,161	101,691	256,761	390,492
March	117.2	146.6	219.8	706	6,464	30,495	115,419	272,424	401,909
April	120.4	150.7	231.8	817	7,453	36,838	129,154	285,228	412,401
May	123.3	155.3	243.8	998	8,101	42,733	141,811	296,066	421,018
June	126.1	159.0	257.2	1,215	9,786	51,194	159,254	305,836	429,398
July	128.9	159.9	273.2	1,398	10,912	55,955	173,428	317,764	439,723
August	132.6	162.3	337.0	1,643	12,101	60,935	182,966	328,568	452,535
September	136.5	164.6	471.3	1,916	13,650	66,541	196,872	340,725	465,388
October	138.1	167.8	473.3	3,592	16,230	72,130	210,062	355,036	474,007
November	139.3	172.6	509.2	3,804	17,805	78,045	218,045	362,846	480,362
December	139.9	178.0	556.0	3,984	18,962	83,586	229,165	374,095	487,522
Annual Average	126.9	158.6	326.3	1,789	10,972	52,101	162,519	311,503	436,346
Percent Change	35.3	25.0	105.7	448.3	513.3	374.9	211.9	91.7	40.1
December - December Change (%)	39.9	27.2	212.4	616.5	375.9	340.8	174.2	63.2	30.3

Source: Mission estimates derived from real wage data presented in various issues of Comentarios Sobre la Situación Económica and other publications of the Department of Economics of the University of Chile.

Table 9.3c: CHILE - OFFICIAL CONSUMER PRICE INDEX, 1970-1978

(December 1969 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	106.8	136.9	171	479	3,012	14,308	61,189	160,859	252,757
February	112.2	137.8	182	499	3,750	16,669	67,369	170,230	258,814
March	116.2	139.5	187	530	4,282	20,203	76,464	180,620	266,320
April	119.0	143.0	198	584	4,937	24,405	85,563	189,109	273,245
May	121.5	147.0	206	697	5,367	28,310	93,948	196,340	278,983
June	123.9	150.0	210	806	6,483	33,915	105,504	202,879	284,670
July	126.3	150.4	220	929	7,229	37,069	114,893	210,800	291,950
August	129.5	152.0	269	1,088	8,017	40,368	121,213	217,966	300,190
September	132.9	153.6	329	1,271	9,043	44,082	130,425	226,096	308,885
October	134.1	156.2	379	2,384	10,752	47,785	139,163	235,592	314,630
November	134.9	160.4	401	2,520	11,795	51,704	144,451	240,772	318,720
December	134.9	164.8	434	2,640	12,562	55,374	151,866	248,288	323,501
Annual Average	124.4	149.3	265.5	1,202	7,269	34,510	107,645	206,630	289,389
Percent Change		20.1	77.8	352.8	504.7	374.8	211.9	92.0	40.1
December - December Change (%)	34.9	22.1	163.4	508.1	375.9	340.8	174.2	63.5	30.3

Source: INE

Table 9.4: CHILE - WHOLESALE PRICE INDEX, 1965-1978

(December 1969 = 100)

Years	Annual Average	Percent Change	Dec.-Dec. Change	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1965	35.18														
1966	43.23	22.9													
1967	51.58	19.3													
1968	67.32	30.5	33.1												
1969	91.89	36.5	39.4												
1970	125.0	36.0	33.7	108.8	115.0	117.2	120.8	123.3	125.3	127.5	130.7	132.3	132.7	133.2	133.7
1971	147.5	18.0	21.4	137.6	137.9	140.2	141.9	144.5	146.6	147.3	149.1	150.8	155.4	156.8	162.4
1972	250.8	70.0	143.3	170.8	180.1	186.1	196.8	201.9	207.6	212.1	253.7	305.2	340.6	360.3	395.1
1973	1,534	511.6	1,147.1	440	456	492	506	600	653	729	805	948	3,244	4,625	4,927
1974	17,313	1,028.6	570.6	6,723	7,917	8,833	10,673	11,324	14,242	17,776	19,462	22,314	25,267	30,186	33,044
1975	100,767	482.0	410.9	39,821	46,010	52,722	66,458	77,260	93,062	107,558	118,284	130,223	146,530	162,454	168,822
1976	323,621	221.2	151.5	191,117	212,843	234,252	260,357	297,079	329,079	353,743	373,397	397,870	403,365	405,780	424,572
1977	602,080	86.0	65.0	453,116	494,771	533,786	563,275	585,659	603,499	622,354	645,425	656,918	674,322	691,066	700,678
1978	860,731	42.9	38.9	715,905	743,959	776,600	805,494	829,209	852,661	871,615	903,321	933,095	953,623	970,265	973,027

Source: Instituto Nacional de Estadísticas

Table 9.5: CHILE - INDEX OF WHOLESALE PRICES BY SECTORS, ANNUAL AVERAGES, 1960-1978  
(1970 = 100)

Year	General Index	Domestic Products				Imported Products
		Agricultural	Mining	Industry	Total	
1960	9.0	8.5	10.7	8.1	8.4	10.3
1961	9.0	8.5	10.6	8.2	8.5	10.5
1962	9.8	9.6	11.0	8.9	9.3	10.9
1963	15.0	13.8	16.6	13.3	13.7	18.3
1964	22.6	21.0	23.3	20.4	20.8	27.2
1965	28.1	28.8	34.2	26.1	27.8	29.1
1966	34.6	36.2	42.6	33.4	35.2	32.9
1967	41.2	41.9	49.3	41.1	42.1	39.1
1968	53.8	52.2	60.0	53.7	53.7	54.2
1969	73.5	73.6	77.5	72.8	73.2	74.4
1970	100.0	100.0	100.0	100.0	100.0	100.0
1971	117.9	125.5	132.7	113.9	116.7	122.2
1972	200.5	261.9	228.1	189.4	203.4	190.8
1973	1,225.8	1,435.8	1,367.2	1,145.7	1,204.8	1,298.4
1974	13,838	10,627	21,924	12,250	12,372	18,824
1975	80,532	70,907	126,899	63,826	72,505	102,752
1976	258,618	245,286	370,218	201,398	236,459	309,859
1977	481,158	439,731	641,378	377,234	432,261	619,175
1978	687,813	592,272	969,260	576,090	626,896	835,116

Source: INE

Table 9.6: IMPLICIT GDP DEFLATORS BY SECTOR, 1966-1977  
(1965 = 100)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<u>GDP at Market Prices</u>	<u>130.4</u>	<u>167.2</u>	<u>218.9</u>	<u>307.9</u>	<u>427.3</u>	<u>528.0</u>	<u>978.7</u>	<u>5,155</u>	<u>38,849</u>	<u>190,802</u>	<u>638,600</u>	<u>1287,894</u>
Agriculture, Forestry and Fishing	116.5	144.4	156.3	236.1	345.6	452.4	807.8	4,497	25,821	111,157	531,722	1306,343
Mining	149.8	177.5	239.5	371.0	444.6	378.9	824.5	4,840	34,786	140,808	419,478	545,218
Manufacturing	124.3	165.5	238.1	331.6	478.8	525.8	920.6	5,309	38,020	201,503	690,937	1274,444
Construction	133.0	159.0	201.3	261.3	353.6	537.1	1,130.9	4,193	29,347	129,690	472,957	982,271
Electricity, Gas, Water and Sanitary Services	127.7	147.3	206.1	320.4	432.9	437.8	566.1	1,231	16,845	115,429	496,218	977,627
Transport, Storage and Communications	141.0	186.3	241.2	331.1	430.7	524.4	1,077.7	5,106	35,663	173,431	541,331	1118,858
Wholesale and Retail Commerce	130.9	170.9	209.5	285.9	397.8	510.6	1,070.2	6,227	55,222	311,637	966,511	1828,226
Banking, Insurance and Real Estate	128.9	167.0	227.3	306.6	425.3	524.8	682.1	5,287	42,362	190,933	658,792	1641,619
Housing	124.1	154.5	197.7	253.2	321.1	431.3	616.4	3,162	20,695	98,259	315,745	585,874
Public Administration and Defense	138.4	175.3	233.4	317.2	541.1	799.7	1,579.1	6,204	41,594	196,435	643,419	1540,410
Services	134.2	181.9	240.1	340.3	483.1	747.8	1,297.5	5,528	44,373	194,434	675,717	1540,488

Source: Calculated from Tables 2.1 and 2.2



Table 9.6a: RATIO OF IMPLICIT SECTORAL DEFLATORS TO OVERALL GDP DEFLATOR, 1966-1977

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Agriculture, Forestry and Fishing	.89	.86	.71	.77	.81	.86	.83	.87	.66	.58	.83	1.01
Mining	1.15	1.06	1.09	1.20	1.04	.72	.84	.94	.90	.74	.66	.42
Manufacturing	.95	.99	1.09	1.08	1.12	1.00	.94	1.03	.98	1.06	1.08	.99
Construction	1.02	.95	.92	.85	.83	1.02	1.16	.81	.76	.68	.74	.76
Electricity, etc.	.98	.88	.94	1.04	1.01	.83	.58	.24	.43	.60	.78	.76
Transport, etc.	1.08	1.11	1.10	1.08	1.01	.99	1.10	.99	.92	.91	.85	.87
Wholesale and Retail Commerce	1.00	1.02	.96	.93	.93	.97	1.09	1.21	1.42	1.63	1.51	1.42
Banking, etc.	.99	1.00	1.04	1.00	1.00	.99	.70	1.03	1.09	1.00	1.03	1.27
Housing	.95	.92	.90	.82	.75	.82	.63	.61	.53	.51	.49	.45
Public Administration and Defense	1.06	1.05	1.07	1.03	1.27	1.51	1.61	1.20	1.07	1.03	1.01	1.20
Services	1.03	1.09	1.10	1.11	1.13	1.42	1.33	1.07	1.14	1.02	1.06	1.20
GDP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Table 9.6

Table 9.7: IMPLICIT GDP DEFLATORS BY EXPENDITURE CATEGORY, 1966-1977  
(1965 = 100)

Expenditure	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Consumption	126.1	164.9	214.7	295.2	417.4	523.9	958.4	4,877	38,083	206,294	678,574	1381,472 <sup>a/</sup>
Personal	(124.8)	(163.4)	(212.6)	(292.4)	(406.7)	(499.5)	(911.5)	(4,870)	(38,002)	(211,080)	(697,828)	(1410,539) <sup>a/</sup>
General Government	(135.0)	(174.9)	(228.7)	(313.9)	(486.8)	(684.2)	(1,268.9)	(4,916)	(38,534)	(180,168)	(582,045)	(1216,211)
Gross Domestic Investment	129.7	161.9	211.7	288.4	389.7	487.1	993.5	5,557	37,787	142,199	467,928	n.a.
Fixed Investment	(130.8)	(161.9)	(212.0)	(291.4)	(390.5)	(486.7)	(991.5)	(5,699)	(37,213)	(181,210)	(570,537)	(1085,878)
Change in Inventories	(124.0)	(162.8)	(207.4)	(264.3)	(383.3)	(491.7)	(1,037.7)	(3,604)	(46,142)	(328,546)	(897,091)	<sup>a/</sup>
Exports	146.3	173.0	231.3	374.1	478.3	467.0	886.5	5,765	43,835	208,970	640,009	1062,436
Imports	119.6	153.3	198.2	277.9	377.6	413.5	808.2	4,358	38,409	271,011	800,205	1354,300
GDP at Market Prices	130.3	167.2	218.9	307.9	427.3	528.0	978.7	5,155	38,849	190,802	638,600	1287,894

<sup>a/</sup> Inventory change is included in personal consumption in 1977.

Source: Tables 2.3 and 2.4

Table 9.8: IBRD INDEX OF CHILE IMPORT PRICES, 1955-1977 <sup>a/</sup>

(1969 = 100).

<u>Year</u>	<u>Index</u>
1955	98.6
1956	100.7
1957	101.6
1958	98.6
1959	97.4
1960	97.4
1961	95.8
1962	95.3
1963	97.4
1964	100.0
1965	100.9
1966	101.9
1967	101.6
1968	97.9
1969	100.0
1970	108.9
1971	114.0
1972	124.7
1973	163.8
1974	227.3
1975	233.6
1976	247.7
1977	286.4
1978	310.8

<sup>a/</sup> Calculated from IBRD price indices for manufactured exports (SITC 5-8) of developed countries, agricultural commodities, 34 commodities excluding petroleum, and petroleum with the weights 0.6, 0.2, 0.1, and 0.1, respectively.

Source: IBRD, Memo of October 21, 1977, entitled "Commodity Price Forecasts - Mid-Year Updating," Table 4; Monthly Commodity Price Data and Memo of April 12, 1979, entitled "Annual Review of Commodity Price Forecasts;" and mission estimates

Table 9.9: CHILE - MINIMUM WAGES AND SALARIES, 1953-1970 <sup>a/</sup>

(Current escudos)

Year	Vital Salary (SV) <sup>b/</sup>	Agricultural Minimum wage (SMA) <sup>c/</sup>	Minimum Wage (SMI) <sup>d/</sup>	SMA/SV (%)	SM/SV (%)
1952	72.84	-	-	-	-
1953	90.60	<u>-e/</u>	-	<u>-e/</u>	-
1954	139.20	36.53	-	26	-
1955	220.80	54.76	-	25	-
1956	323.47	81.38	146.00	25	45
1957	421.03	109.55	189.80	26	45
1958	505.24	135.53	233.60	27	46
1959	690.60	203.80	321.20	30	47
1960	690.60	247.47	321.20	36	47
1961	860.04	293.83	411.72	34	48
1962	970.92	339.45	464.28	34	48
1963	1,239.84	444.94	592.76	36	48
1964	1,802.76	662.48	861.40	37	48
1965	2,495.04	1,043.17	1,191.36	42	48
1966	3,141.24	1,421.31	1,497.96	45	48
1967	3,675.24	1,752.00	1,752.00	48	48
1968	4,480.08	2,135.62	2,135.62	48	48
1969	5,730.00	2,731.29	2,731.29	48	48
1970	7,404.00	4,380.00	4,380.00	59	59

a/ The SV is legally a monthly rate, while the SMA and SM are hourly rates. The numbers shown are annualized weighted averages of the respective minima prevailing during the year.

b/ Sueldo vital for industry and commerce, Department of Santiago.

c/ Salario mínimo agrícola for Province of Santiago. The SMA for 1959 is adjusted for introduction of the semana corrida (literally, the "continuous week") by which a person working six days is paid for seven. Workers in industry and commerce had enjoyed this benefit since 1948.

d/ Salario mínimo for industry and commerce nationwide.

e/ Did not exist for entire year.

Source: Ricardo Ffrench-Davis (op. cit.), Table 71

Table 9.9a: CHILE - REAL MINIMUM WAGES AND SALARIES, 1953-1970<sup>a/</sup>  
(Escudos of December 1969)

Year	SV	SMA	SM
1952	9,048	-	-
1953	8,979	-	-
1954	8,009	2,102	-
1955	7,251	1,798	-
1956	6,810	1,713	3,074
1957	6,656	1,732	3,000
1958	6,657	1,786	3,078
1959	6,563	1,937	3,052
1960	5,881	2,108	2,735
1961	6,802	2,324	3,256
1962	6,742	2,357	3,324
1963	5,968	2,142	2,853
1964	5,945	2,185	2,840
1965	6,386	2,670	3,049
1966	6,543	2,961	3,120
1967	6,480	3,089	3,089
1968	6,238	2,973	2,973
1969	6,106	2,911	2,911
1970	5,954	3,522	3,522

a/ Average nominal rates shown in Table 9.9 deflated by CPI.

Table 9.10: CHILE - FAMILY ALLOWANCES PER DEPENDENT BY MAJOR FUNDS, 1952-1970  
(Current escudos)

Year	Net Annual Equivalent <sup>a/</sup>			SSS/EMPART (%)	CEPP/EMPART (%)
	SSS	CEPP	EMPART		
1952	-	7.44	9.60	-	78
1953	-	7.94	10.80	-	74
1954	2.19	11.88	15.72	14	76
1955	8.11	18.84	24.60	33	77
1956	15.60	38.40	40.56	38	95
1957	21.87	53.88	60.00	36	90
1958	23.23	56.40	76.80	30	73
1959	33.63	67.20	95.82	35	70
1960	33.63	67.20	109.56	31	63
1961	38.84	77.28	126.72	31	63
1962	39.49	78.49	128.70	31	61
1963	45.08	88.92	157.20	29	57
1964	58.94	132.06	222.06	27	59
1965	114.43	180.00	310.80	37	58
1966	159.51	234.00	404.52	39	59
1967	208.05	288.00	512.52	41	56
1968	260.06	348.00	648.00	40	53
1969	346.75	444.00	925.02	37	48
1970	520.12	816.00	1,237.02	42	66

a/ In several years, retroactive adjustments or bonuses were declared late in the year, and in the case of EMPART an additional end-of-year distribution was made when the account out of which family allowances were paid was found to be in surplus. In these cases, the amounts received were divided among the year received and the year when the benefits were accrued.

Source: Ricardo French-Davis (op. cit.), Table 72

Table 9.10a: CHILE - REAL FAMILY ALLOWANCES PER DEPENDENT PER YEAR, 1952-1970  
(Escudos of December 1969)

Year	Net Annual Equivalent <sup>a/</sup>		
	SSS	CEPP	EMPART
1952	-	924	1,193
1953	-	787	1,070
1954	126	684	904
1955	266	619	808
1956	328	808	854
1957	346	852	948
1958	306	743	1,012
1959	320	639	911
1960	286	589	933
1961	307	627	1,002
1962	274	545	894
1963	217	428	757
1964	194	435	732
1965	293	461	795
1966	332	487	843
1967	367	508	904
1968	362	468	902
1969	370	473	986
1970	418	656	994

<sup>a/</sup> See note, Table 9.9

Source: Ricardo Ffrench-Davis, (op. cit.)

Table 9.11: CHILE - MINIMUM WAGES AND SALARIES, BY MONTH OF ADJUSTMENT, 1969-78  
(Current escudos/pesos)<sup>a/</sup>

Year	Month	Vital Salary (per Month)	Minimum Wage (per Month) <sup>b/</sup>	Minimum Income (per Month)
1969	January	477.50	224.49	
1970	January	617.41	360.00	
1971	January	832.98	600.00	
1972	January	1,017.00	900.00	
	October	2,033.92	1,900.80	
1973	March	(3,270.54) <sup>c/</sup>	(3,056.49) <sup>c/</sup>	
	October			12,000
1974	January			18,000
	May			29,000
	July			39,000
	October			48,400
	December			64,900
1975	March			106,400 <sup>d/</sup>
	June			182,200
	September			225,680
	December			288.90
1976	March			381.35
	April			431.35
	June			599.58
	September			755.47
	December			891.45
1977	March			1,150.08
	May			1,196.08
	July			1,411.37
	December			1,665.42
1978	January			2,000.00
	March			2,160.00
	July			2,376.00
	December			2,661.12

<sup>a/</sup> Data through September 1975 are given in escudos; subsequent data are in pesos (1 peso = 1,000 escudos).

<sup>b/</sup> Daily rate multiplied by 30.

<sup>c/</sup> Includes 60.8 percent general wage and salary adjustment.

<sup>d/</sup> Includes E<sup>o</sup> 20,000.

Note: Data for 1976-78 are only for the month when an adjustment was made.

Source: INE



Table 9.12a: CHILE - REAL MINIMUM WAGE, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month,<sup>a/</sup> prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	337.08	438.28	420.56	224.95	426.74	323.93	337.07	395.65	565.94
February	320.86	435.41	407.24	198.62	342.79	278.05	306.15	373.96	552.64
March	309.81	430.11	394.39	285.65	300.20	376.12	356.05	454.94	580.07
April	302.52	419.58	358.57	216.31	260.42	311.36	359.91	434.51	565.37
May	296.30	408.16	328.47	173.96	386.10	268.41	327.78	435.35	553.74
June	290.56	400.00	302.93	145.55	319.63	383.66	405.72	421.44	542.68
July	285.04	379.75	274.39	138.93	385.38	351.01	372.56	478.63	582.06
August	277.99	361.45	250.00	132.89	347.56	322.31	353.14	462.90	566.08
September	270.88	342.86	229.77	127.35	308.06	365.49	413.52	446.38	550.15
October	268.46	324.32	376.40	443.95	321.47	337.17	387.56	428.39	540.10
November	266.86	306.12	307.57	345.92	293.05	311.61	373.37	419.17	533.08
December	266.86	290.00	259.74	324.68	368.96	372.46	419.20	479.74	588.34
Average	291.10	378.00	325.84	229.90	338.36	333.47	367.67	435.92	560.02

a/ Daily rate multiplied by 30.

Table 9.12b: CHILE - REAL MINIMUM WAGE, 1970- 78 (DEFLATED BY UC ADJUSTED CPI)  
(Escudos per month,<sup>a/</sup> prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	336.13	420.76	470.71	302.58	395.92	300.46	312.99	367.33	524.39
February	319.15	416.09	436.05	287.69	318.06	257.83	284.41	347.19	512.17
March	307.17	409.28	409.46	432.75	278.50	348.86	330.64	422.17	537.44
April	299.00	398.14	388.27	374.29	241.52	287.96	334.22	403.21	523.76
May	291.97	386.35	369.16	306.23	358.05	249.08	304.27	403.99	513.04
June	285.49	377.36	349.92	251.56	296.38	356.13	376.49	391.09	503.03
July	279.29	375.23	329.43	218.62	357.43	325.82	345.72	444.16	540.34
August	271.49	369.69	267.06	186.04	322.32	299.18	327.70	429.55	525.04
September	263.74	364.52	215.67	159.51	285.74	339.27	383.74	414.23	510.54
October	260.68	357.57	401.61	334.06	298.26	312.95	359.64	397.53	501.26
November	258.44	347.62	373.29	315.50	271.87	289.28	346.47	388.97	494.63
December	257.33	337.08	341.87	301.20	342.31	345.77	389.00	445.19	545.82
Average	285.82	379.97	362.71	289.17	313.86	309.38	341.27	404.55	519.28

a/ Daily rate multiplied by 30.

Table 9.12c: CHILE - REAL MINIMUM WAGE, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Escudos per month,<sup>a/</sup> prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	337.08	438.28	526.32	396.83	597.61	453.59	472.17	554.18	791.27
February	320.86	435.41	494.51	380.92	480.00	389.35	428.86	523.67	772.76
March	309.81	430.11	481.28	576.70	420.36	526.65	498.76	636.74	811.06
April	302.52	419.58	454.55	523.37	364.59	435.98	504.17	608.16	790.50
May	296.30	408.16	436.89	438.52	540.34	375.99	459.17	609.19	774.24
June	290.56	400.00	428.57	379.22	447.32	537.43	568.30	589.55	758.77
July	285.04	398.94	409.09	329.01	539.49	491.71	521.86	669.53	813.84
August	277.99	394.74	334.57	280.93	486.47	451.49	494.65	647.52	791.50
September	270.88	390.62	273.56	240.48	431.27	511.99	579.24	624.23	769.22
October	268.46	384.12	501.53	503.36	450.15	472.31	542.87	599.07	755.17
November	266.86	374.06	474.01	476.19	410.34	436.52	522.99	586.19	745.48
December	266.86	364.08	437.97	454.55	516.64	521.75	587.00	670.76	822.56
Average	291.10	403.18	437.74	415.01	473.71	467.06	515.00	609.90	783.03

<sup>a/</sup> Daily rate multiplied by 30.

Table 9.13a: CHILE - INDEX OF REAL MINIMUM WAGE, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	151	144	77	147	111	116	136	194
February	110	150	140	68	118	96	105	128	190
March	106	148	135	98	103	129	122	156	199
April	104	144	123	74	89	107	124	149	194
May	102	140	113	60	133	92	113	150	190
June	100	137	104	50	110	132	139	145	186
July	98	130	94	48	132	121	128	164	200
August	95	124	86	46	119	111	121	159	194
September	93	118	79	44	106	126	142	153	190
October	92	111	129	153	110	116	133	147	186
November	92	105	106	119	101	107	128	144	183
December	92	100	89	112	127	128	144	165	202
Average	100	130	112	79	116	115	126	150	192

Table 9.13b: CHILE - INDEX OF REAL MINIMUM WAGE, 1970-78 (DEFLATED BY UC ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	118	147	165	106	139	105	110	129	183
February	112	146	153	101	111	90	100	121	179
March	107	143	143	151	97	122	116	148	188
April	105	139	136	131	85	101	117	141	183
May	102	135	129	107	125	87	106	141	179
June	100	132	122	88	104	125	132	137	176
July	98	131	115	76	125	114	121	155	189
August	95	129	93	65	113	105	115	150	184
September	92	128	75	56	100	119	134	145	179
October	91	125	141	117	104	109	126	139	175
November	90	122	131	110	95	101	121	136	173
December	90	118	120	105	120	121	136	156	191
Average	100	133	127	101	110	108	119	142	182

Table 9.13c: CHILE - INDEX OF REAL MINIMUM WAGE, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	151	181	136	205	156	162	190	272
February	110	150	170	131	165	134	147	180	265
March	106	148	165	198	144	181	171	219	279
April	104	144	156	180	125	150	173	209	272
May	102	140	150	151	186	129	158	209	266
June	100	137	147	130	154	185	195	203	261
July	98	137	141	113	185	169	179	230	280
August	95	136	115	97	167	155	170	222	272
September	93	134	94	83	148	176	199	214	264
October	92	132	172	173	155	162	186	206	259
November	92	128	163	164	141	150	180	201	255
December	92	125	150	156	177	179	202	230	283
Average	100	139	150	143	163	160	177	210	269

Table 9.14a: CHILE - REAL MINIMUM SALARY, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	578.10	608.46	475.23	240.70	426.74	323.93	337.07	395.65	565.94
February	550.28	604.48	460.18	212.53	342.79	278.05	306.15	373.96	552.64
March	531.33	597.12	445.66	305.66	300.20	376.12	356.05	454.94	580.07
April	518.83	582.50	405.18	231.46	260.42	311.36	359.91	434.51	565.37
May	508.16	566.65	371.17	186.14	386.10	268.41	327.78	435.35	553.74
June	498.31	555.32	342.31	155.74	319.63	383.66	405.72	421.44	542.68
July	488.84	527.20	310.06	148.66	385.38	351.01	372.56	478.63	582.06
August	476.76	501.80	282.50	142.20	347.56	322.31	353.14	462.90	566.08
September	464.57	475.99	259.64	136.27	308.06	365.49	413.52	446.38	550.15
October	460.41	450.26	402.76	443.95	321.47	337.17	387.56	428.39	540.10
November	457.68	424.99	329.11	345.92	293.05	311.61	373.37	419.17	533.08
December	457.68	402.60	277.90	324.68	368.96	372.46	419.20	479.74	588.34
Average	499.25	524.78	363.47	239.49	338.36	333.47	367.67	435.92	560.02

Table 9.14 b: CHILE - REAL MINIMUM SALARY, 1970-78 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	576.48	584.14	531.90	323.77	395.92	300.46	312.99	367.33	524.39
February	547.35	577.66	492.73	307.84	318.06	257.83	284.41	347.19	512.17
March	526.80	568.20	462.69	463.05	278.50	348.86	330.64	422.17	537.44
April	512.80	552.74	438.74	400.51	241.52	287.96	334.22	403.21	523.76
May	500.74	536.37	417.15	327.68	358.05	249.08	304.27	403.99	513.04
June	489.62	523.89	395.41	269.18	296.38	356.13	376.49	391.09	503.03
July	478.98	520.94	372.25	233.93	357.43	325.82	345.72	444.16	540.34
August	465.62	513.23	301.78	199.07	322.32	299.18	327.70	429.55	525.04
September	452.32	506.06	243.71	170.68	285.74	339.27	383.74	414.23	510.54
October	447.07	496.41	429.73	334.06	298.26	312.95	359.64	397.53	501.26
November	443.22	482.61	399.43	315.50	271.87	289.28	346.47	388.97	494.63
December	441.32	467.97	365.81	301.20	342.31	345.77	389.00	445.19	545.82
Average	490.19	527.52	404.28	303.87	313.86	309.38	341.27	404.55	519.28



Table 9.14c: CHILE - REAL MINIMUM SALARY, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	578.10	608.46	594.74	424.62	597.61	453.59	472.17	554.18	791.27
February	550.28	604.48	558.79	407.60	480.00	389.35	428.86	523.67	772.76
March	531.33	597.12	543.85	617.08	420.36	526.65	498.76	636.74	811.06
April	518.83	582.50	513.64	560.02	364.59	435.98	504.17	608.16	790.50
May	508.16	566.65	493.69	469.23	540.34	375.99	459.17	609.19	774.24
June	498.31	555.32	484.29	405.77	447.32	537.43	568.30	589.55	758.77
July	488.84	553.84	462.27	352.05	539.49	491.71	521.86	669.53	813.84
August	476.76	548.01	378.07	300.60	486.47	451.49	494.65	647.52	791.50
September	464.57	542.30	309.12	257.32	431.27	511.99	579.24	624.23	769.22
October	460.41	533.28	536.65	503.36	450.15	472.31	542.87	599.07	755.17
November	457.68	519.31	507.21	476.19	410.34	436.52	522.99	586.19	745.48
December	457.68	505.45	468.65	454.55	516.64	521.75	587.00	670.76	822.56
Average	499.25	559.73	487.58	435.70	473.71	467.06	515.00	609.90	783.03

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Table 9.15a: CHILE - INDEX OF REAL MINIMUM SALARY, 1970-78 (DEFLATED BY IBRD ADJUSTED CPI)  
(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	122	95	48	85	65	68	79	113
February	110	121	92	43	69	56	61	75	107
March	106	120	89	61	60	75	71	91	116
April	104	117	81	46	52	62	72	87	113
May	102	114	74	37	77	54	66	87	111
June	100	111	69	31	64	77	81	84	109
July	98	106	62	30	77	70	75	96	117
August	95	101	57	28	70	65	71	93	113
September	93	95	52	27	62	73	83	89	110
October	92	90	81	89	64	68	78	86	108
November	92	85	66	69	59	62	75	84	107
December	92	81	56	65	74	75	84	96	118
Average	100	105	73	48	68	67	74	87	112

Table 9.15b: CHILE - INDEX OF REAL MINIMUM SALARY, 1970-78 (DEFLATED BY UC ADJUSTED CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	118	119	109	66	81	61	64	75	107
February	112	118	101	63	65	53	58	71	104
March	107	116	94	94	57	71	67	86	110
April	105	113	90	82	49	59	68	82	107
May	102	109	85	67	73	51	62	82	105
June	100	107	81	55	60	73	77	80	103
July	98	106	76	48	73	66	71	91	110
August	95	105	62	41	66	61	67	88	107
September	92	103	50	35	58	69	78	85	104
October	91	101	88	68	61	64	73	81	102
November	90	98	81	64	55	59	71	79	101
December	90	95	75	61	70	71	79	91	111
Average	100	108	82	62	64	63	70	83	106

Table 9.15c: CHILE - INDEX OF REAL MINIMUM SALARY, 1970-78 (DEFLATED BY OFFICIAL CPI)

(Average 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978
January	116	122	119	85	120	91	95	111	158
February	110	121	112	82	96	78	86	105	155
March	106	120	109	124	84	105	100	128	162
April	104	117	103	112	73	87	101	122	158
May	102	114	99	94	108	75	92	122	155
June	100	111	97	81	90	108	114	118	152
July	98	111	93	71	108	98	105	134	163
August	95	110	76	60	97	90	99	130	159
September	93	109	62	52	86	103	116	125	154
October	92	107	107	101	90	95	109	120	151
November	92	104	102	95	82	87	105	117	149
December	92	101	94	91	103	105	118	134	165
Average	100	112	98	87	95	94	103	122	157

Table 9.16: CHILE - RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR WORKER,<sup>a/</sup> 1968-1977

(Escudos per month)

Year	Month of Adjustment or Bonus	Minimum Wage <u>b/</u> or Income	Family Allowance	Trans- portation <u>c/</u> Allow- ance	Other Bonuses, etc.	Total <u>w/</u>
1968	January	175.50	74.83	-	-	250.33
1969	January	224.50	99.75	-	-	324.25
1970	January	360.00	149.62	-	-	509.62
1971	January	600.00	299.25	-	-	899.25
1972	January	900.00	413.98	-	-	1,313.98
	October	1,900.80	829.92	-	-	2,730.72
1973	March	3,056.49 <u>d/</u>	829.92	-	-	3,886.41
	October	12,000 <u>e/</u>	3,150	720	-	15,870.00
	November	12,000	3,150	720	3,056.49 <u>f/</u>	18,926.49
	December	12,000	3,150	720	13,056.49 <u>g/</u>	28,926.49
1974	January	18,000	6,300	720	-	25,020
	February	18,000	6,300	1,700	7,700 <u>h/</u>	33,700
	May	29,000	14,000	5,000	-	48,000
	June	29,000	14,000	5,000	10,000 <u>i/</u>	58,000
	July	39,000	17,500	5,000	-	61,500
	September	39,000	17,500	5,000	22,500 <u>j/</u>	84,000
	October	48,400	21,700	6,200	15,000 <u>k/</u>	91,300
	November	48,400	21,700	6,200	-240 <u>l/</u>	76,060
	December	64,900	32,900	8,400	18,270 <u>m/</u>	124,470
1975	January	64,900	32,900	8,400	-3,630 <u>n/</u>	102,570
	February	64,900	32,900	8,400	-	106,200
	March	86,400	44,100	11,200	20,000 <u>o/</u>	161,700
	April	86,400	44,100	11,200	20,000 <u>p/</u>	161,700
	May	86,400	44,100	11,200	20,000 <u>q/</u>	161,700
	June	182,000	75,600	19,200	-10,000 <u>r/</u>	266,800
	July	182,000	75,600	19,200	-10,000 <u>r/</u>	266,800
	August	182,000	75,600	19,200	-	276,800
	September	225,680	93,800	23,200	-	342,680
	December	288,900	120,050	30,590	- <u>s/</u>	439,540 <u>s/</u>
1976	March	381,350	158,480	40,380	-	580,210
	April	431,350 <u>t/</u>	158,480	40,380	-	630,210
	June	599,580	220,290	56,130	-	876,000
	September	755,470	277,550	70,720	-	1,103,740
	December	891,450	327,495	83,450	450,000 <u>u/</u>	1,752,395
1977	March	1,150,080	389,725	99,310	-	1,639,115
	May	1,196,080	389,725	99,310	-	1,685,115
	July	1,411,370	459,865	117,190	-	1,988,425
	November	1,411,370	459,865	117,190	450,000 <u>v/</u>	2,438,425
	December	1,665,420	542,640	138,200	450,000 <u>v/</u>	2,796,260

<sup>a/</sup> The average worker is assumed to have 3.5 dependents.<sup>b/</sup> Minimum daily wage multiplied by 30 (for period before October 1973 when replaced by minimum monthly income).<sup>c/</sup> Allowance per dependent multiplied by 3.5.<sup>d/</sup> Includes 60.8 percent general wage increase.

Table 9.16

- e/ In October 1973, a minimum income for all workers replaced the sueldo vital and salario mínimo.
- f/ Bonus equivalent to wage of April 1973.
- g/ Repeats November bonus plus Christmas bonus of E<sup>o</sup>10,000.
- h/ Bonus of E<sup>o</sup>2,200 per dependent paid in February, March and April
- i/ One-time only bonus of E<sup>o</sup>10,000 per worker.
- j/ One-time only bonus of E<sup>o</sup>5,000 per worker and per dependent.
- k/ A E<sup>o</sup>15,000 advance paid in October to be deducted in equal installments from November and December earnings.
- l/ Includes an advance paid in November equivalent to 15 percent of the October 1974 wage, less the first installment due on the October advance. The November advance was to be deducted in equal installments from earnings in December and January.
- m/ Includes Christmas bonus of E<sup>o</sup>8,400 per dependent, less the second installment repayment of the October advance and the first installment repayment of the November advance.
- n/ Second installment repayment of November 1974 advance.
- o/ Bonus of E<sup>o</sup>20,000 paid to lower-wage workers (workers whose earnings totaled less than E<sup>o</sup>150,000 after regular March adjustment).
- p/ E<sup>o</sup>20,000 bonus paid all workers.
- q/ Advance of E<sup>o</sup>20,000 paid in May, repayable from June and July earnings.
- r/ Repayment of May advance.
- s/ Does not include Christmas bonus (for lack of information).
- t/ Special 13.1 percent adjustment declared for low-wage workers.
- u/ Christmas bonus of 100 pesos per worker and per dependent.
- v/ Bonus of 100 pesos per worker and per dependent.
- w/ Does not include meal allowance which is compulsory only for public sector employees.

Table 9.17a: CHILE - REAL RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR WORKER, 1970-1977 (DEFLATED BY IBRD ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	477.17	656.87	614.01	323.16	593.17	511.95	512.83	646.58
February	454.21	652.58	594.56	285.34	641.78	454.99	465.78	611.13
March	438.57	644.62	575.80	363.22	562.04	571.60	541.72	648.38
April	428.25	628.85	523.50	275.05	487.56	473.18	525.83	619.28
May	419.44	611.73	479.55	221.20	639.06	407.91	478.90	613.35
June	411.32	599.50	442.27	185.07	639.26	561.80	592.76	593.76
July	403.50	569.15	400.60	176.66	607.71	514.00	544.32	674.33
August	393.53	541.72	364.99	168.97	548.08	489.65	515.94	652.16
September	383.46	513.86	335.46	161.93	663.51	554.97	604.16	628.89
October	380.03	486.08	540.74	587.13	606.40	511.97	566.22	603.54
November	377.78	458.80	441.86	545.59	460.52	473.16	545.50	724.19
December	377.78	434.63	373.10	782.64	707.62	566.67 <sup>a/</sup>	824.05	805.50
Average	412.09	566.53	473.87	339.66	596.39	507.65 <sup>a/</sup>	554.29	651.76

<sup>a/</sup> Does not include Christmas bonus.

Source: Table 9.14

Table 9.17b: CHILE - REAL RECEIPTS OF MINIMUM-INCOME BLUE-COLLAR WORKER, 1970-1977 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	475.84	630.61	687.23	434.69	550.33	474.86	476.20	600.00
February	451.79	623.61	636.62	413.31	595.48	421.90	432.71	567.11
March	434.83	613.40	597.81	550.25	521.41	530.17	503.05	601.68
April	423.27	596.72	566.86	475.93	452.17	437.63	488.30	574.67
May	413.32	579.04	538.96	389.38	592.64	378.54	444.55	569.17
June	404.14	565.57	510.88	319.87	592.78	521.49	550.06	550.99
July	395.36	562.38	480.96	277.98	563.65	477.11	505.11	625.76
August	384.33	554.07	389.91	236.56	508.27	454.51	478.78	605.18
September	373.35	546.32	314.88	202.82	615.43	515.15	560.64	583.59
October	369.02	535.91	576.95	441.79	562.63	475.19	525.44	560.06
November	365.84	521.00	536.28	497.61	427.23	439.25	506.20	672.03
December	364.27	505.20	491.14	726.07	656.51	526.06 <sup>a/</sup>	764.69	747.47
Average	404.61	569.49	527.37	413.86	553.21	470.99 <sup>a/</sup>	519.64	604.81

<sup>a/</sup> Does not include Christmas bonus.

Source: Table 9.14



Table 9.18 CHILE - RECEIPTS OF MINIMUM-INCOME WHITE-COLLAR WORKER,<sup>a/</sup> 1969-1977  
(Escudos per month)

Year	Month of Adjustment or Bonus	Minimum Salary	Family Allowance <sup>b/</sup>	Transportation Allowance	Other Bonuses, etc.	Total <sup>c/</sup>
1969	January	477.50	270.10	-	-	747.60
1970	January	617.41	388.50	-	-	1,005.91
1971	January	832.89	560.00	-	-	1,392.89
1972	January	1,016.96	805.00	-	-	1,821.96
	October	2,033.92	1,610.00	-	-	3,643.92
1973	March	3,270.54 <sup>d/</sup>	1,610.00	-	-	4,880.54
	October	12,000 <sup>e/</sup>	3,150	720	-	15,870.00
	November	12,000	3,150	720	3,056.49 <sup>f/</sup>	18,926.49
	December	12,000	3,150	720	13,056.49 <sup>g/</sup>	28,926.49
1974	January	18,000	6,300	720	-	25,020
	February	18,000	6,300	1,700	7,700 <sup>h/</sup>	33,700
	May	29,000	14,000	5,000	-	48,000
	June	29,000	14,000	5,000	10,000 <sup>i/</sup>	58,000
	July	39,000	17,500	5,000	-	61,500
	September	39,000	17,500	5,000	22,500 <sup>j/</sup>	84,000
	October	48,400	21,700	6,200	15,000 <sup>k/</sup>	91,300
	November	48,400	21,700	6,200	-240 <sup>l/</sup>	76,060
	December	64,900	32,900	8,400	18,270 <sup>m/</sup>	124,470
1975	January	64,900	32,900	8,400	-3,630 <sup>n/</sup>	102,570
	February	64,900	32,900	8,400	-	106,200
	March	86,400	44,100	11,200	20,000 <sup>o/</sup>	161,700
	April	86,400	44,100	11,200	20,000 <sup>p/</sup>	161,700
	May	86,400	44,100	11,200	20,000 <sup>q/</sup>	161,700
	June	182,000	75,600	19,200	-10,000 <sup>r/</sup>	266,800
	July	182,000	75,600	19,200	-10,000 <sup>r/</sup>	266,800
	August	182,000	75,600	19,200	-	276,800
	September	225,680	93,800	23,200	-	342,680
	December	288,900	120,050	30,590	- <sup>s/</sup>	439,540 <sup>s/</sup>
1976	March	381,350	158,480	40,380	-	580,210
	April	431,350 <sup>t/</sup>	158,480	40,380	-	630,210
	June	599,580	220,290	56,130	-	-
	September	755,470	277,550	70,720	-	1,103,740
	December	891,450	327,495	83,450	450,000 <sup>u/</sup>	1,752,395
1977	March	1,150,080	389,725	99,310	-	1,639,115
	May	1,196,080	389,725	99,310	-	1,685,115
	July	1,411,370	459,865	117,190	-	1,988,425
	November	1,411,370	459,865	117,190	450,000 <sup>v/</sup>	2,438,425
	December	1,665,420	542,640	138,200	450,000 <sup>v/</sup>	2,796,260

a/ The average worker is assumed to have 3.5 dependents.

b/ Allowance per dependent multiplied by 3.5

c/ Does not include meal allowance which is only compulsory for public sector.

d/ Includes 60.8 percent general wage increase.

- e/ In October 1973, a minimum income for all workers replaced the sueldo vital and salario mínimo.
- f/ Bonus equivalent to wage of April 1973.
- g/ Repeats November bonus plus Christmas bonus of E<sup>o</sup>10,000.
- h/ Bonus of E<sup>o</sup>2,200 per dependent paid in February, March and April.
- i/ One-time only bonus of E<sup>o</sup>10,000 per worker.
- j/ One-time only bonus of E<sup>o</sup>5,000 per worker and per dependent.
- k/ A E<sup>o</sup>15,000 advance paid in October to be deducted in equal installments from November and December earnings.
- l/ Includes an advance paid in November equivalent to 15 percent of the October 1974 wage, less the first installment due on the October advance. The November advance was to be deducted in equal installments from earnings in December and January.
- m/ Includes Christmas bonus of E<sup>o</sup>8,400 per dependent, less the second installment repayment of the October advance and the first installment repayment of the November advance.
- n/ Second installment repayment of November 1974 advance.
- o/ Bonus E<sup>o</sup>20,000 paid to lower-wage workers (workers whose earnings totaled less than E<sup>o</sup>150,000 after regular March adjustment).
- p/ E<sup>o</sup>20,000 bonus paid all workers.
- q/ Advance of E<sup>o</sup>20,000 paid in May, repayable from June and July earnings.
- r/ Repayment of May advance
- s/ Does not include Christmas bonus (for lack of information).
- t/ Special 13.1 percent adjustment declared for low-wage workers.
- u/ Christmas bonus of 100 pesos per worker and per dependent.
- v/ Bonus of 100 pesos per worker and per dependent.

Table 9.19a: CHILE - REAL RECEIPTS OF MINIMUM-INCOME WHITE-COLLAR WORKER, 1970-1977 (DEFLATED BY IBRD ADJUSTED CPI)  
(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	941.86	1,017.45	851.38	431.23	593.17	511.95	512.83	646.58
February	896.53	1,010.81	824.42	380.76	641.78	454.99	465.78	611.13
March	865.67	998.49	798.40	456.13	562.04	571.60	541.72	648.38
April	845.30	974.05	725.88	345.40	487.56	473.18	525.83	619.28
May	827.91	947.54	664.95	277.78	639.06	407.91	478.90	613.35
June	811.87	928.59	613.25	232.41	639.26	561.80	592.76	593.76
July	796.44	881.58	555.48	221.84	607.71	514.00	544.31	674.33
August	776.76	839.09	506.10	212.20	548.08	489.65	515.88	652.16
September	756.89	795.94	465.14	203.36	663.51	554.97	604.16	628.89
October	750.12	752.91	721.57	587.13	606.40	511.97	566.22	603.54
November	745.67	710.66	589.63	545.59	460.52	473.16	545.50	724.19
December	745.67	673.22	497.87	782.64	707.62	566.67 <sup>a/</sup>	824.05	805.50
Average	813.39	877.53	651.17	389.71	596.39	507.65 <sup>a/</sup>	554.29	651.76

<sup>a/</sup> Does not include Christmas bonus in 1975.

Source: Table 9.16

Table 9.19b: CHILE - REAL RECEIPTS OF MINIMUM-INCOME WHITE-COLLAR WORKER, 1970-1977 (DEFLATED BY UC ADJUSTED CPI)

(Escudos per month, prices of December 1969)

	1970	1971	1972	1973	1974	1975	1976	1977
January	939.23	976.78	952.91	580.06	550.33	474.86	476.20	600.00
February	891.76	965.94	882.73	551.52	595.48	421.90	432.71	567.11
March	858.28	950.13	828.92	691.00	521.41	530.17	503.05	601.68
April	835.47	924.28	786.01	597.67	452.17	437.63	488.30	574.67
May	815.82	896.90	747.32	488.98	592.64	378.54	444.55	569.17
June	797.71	876.03	708.38	401.69	592.78	521.49	550.06	550.99
July	780.38	871.10	666.90	349.08	563.65	477.11	505.11	625.76
August	758.60	858.22	540.64	297.07	508.27	454.51	478.78	605.18
September	736.93	846.23	436.61	254.70	615.43	515.15	560.64	583.59
October	728.39	830.09	769.90	441.79	562.63	475.19	525.44	560.06
November	722.12	807.00	715.62	497.61	427.23	439.25	506.20	672.03
December	719.02	782.52	655.38	726.07	656.51	526.06 <sup>a/</sup>	764.69	747.47
Average	798.64	882.10	724.28	489.77	553.21	470.99 <sup>a/</sup>	519.64	604.81

<sup>a/</sup> Does not include Christmas bonus in 1975.

Source: Table 9.16

Table 9.20: CHILE - NOMINAL AVERAGE WAGE AND SALARY INDICES, 1959-1978

(April 1969 = 100)

Year/Month	Aggregate Indices			Sectoral Indices				
	Wages	Salaries	Wages	Mining	Manufacturing	Public Utilities	Government	
			and Salaries				Central Government	Autonomous Agencies
1959 April	6.6	6.9	6.8	5.2	6.6	4.6	6.8	8.4
1960 April	n.a.	n.a.	7.8	n.a.	n.a.	n.a.	n.a.	n.a.
1961 April	n.a.	n.a.	9.0	n.a.	n.a.	n.a.	n.a.	n.a.
1962 April	n.a.	n.a.	10.2	n.a.	n.a.	n.a.	n.a.	n.a.
1963 April	13.3	14.5	13.9	11.9	13.9	11.1	14.2	15.6
1964 April	18.7	18.4	18.6	16.4	20.7	16.0	16.3	18.9
1965 April	28.6	28.5	28.6	24.9	29.6	22.1	26.1	32.7
1966 April	39.3	38.5	38.9	32.5	42.6	34.9	34.7	40.7
1967 April	54.1	56.4	55.3	52.9	54.7	50.9	57.3	57.3
1968 April	71.3	62.0	66.6	71.0	72.0	61.2	59.4	64.9
1969 April	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1970 January	125.4	131.4	128.4	134.4	125.4	118.5	133.5	129.4
April	138.7	148.8	143.8	138.1	140.4	122.3	157.8	148.5
July	151.6	156.7	154.1	141.6	152.3	155.2	161.4	157.5
October	168.3	163.3	165.8	194.9	159.2	155.7	165.1	165.1
1971 January	182.9	185.0	183.9	218.4	176.4	166.6	170.7	194.1
April	210.9	229.0	220.1	229.0	207.3	201.1	234.6	230.6
July	233.9	243.4	238.7	243.6	227.6	219.2	241.5	257.1
October	250.0	253.5	251.8	256.0	256.3	236.3	245.0	252.2
1972 January	284.4	276.7	280.5	289.9	286.6	239.0	242.6	306.1
April	317.4	300.1	308.7	278.7	327.7	318.5	262.5	324.0
July	349.3	342.7	346.0	290.4	362.3	324.4	371.3	336.8
October	562.8	551.4	557.1	431.8	618.9	425.8	514.0	593.0
1973 January	801.4	729.9	765.2	788.8	803.9	791.0	670.9	715.0
April	919.1	787.4	852.4	796.7	987.8	786.6	760.8	760.8
July	1,328	1,130	1,228	979.2	1,439	912.1	1,240	1,111
October	1,699	1,307	1,501	1,471	1,821	1,108	1,235	1,497
1974 January	4,336	4,009	4,170	2,876	5,070	3,656	4,987	2,978
April	5,590	5,429	5,508	4,499	6,359	4,302	6,167	4,590
July	9,657	9,610	9,633	9,362	10,316	7,337	11,919	7,776
October	12,775	13,550	13,167	11,197	14,029	9,659	16,758	11,260
1975 January	17,597	19,602	18,612	16,464	19,611	14,345	23,733	15,727
April	27,347	28,963	28,165	27,631	29,098	19,290	36,643	23,579
July	43,191	48,435	45,846	43,875	45,713	34,978	61,995	38,645
October	56,814	60,393	58,626	57,315	61,191	44,410	73,787	48,640
1976 January	74,875	79,097	77,012	73,040	82,764	60,253	93,547	63,124
April	105,130	109,406	107,294	103,161	116,085	81,541	129,094	87,728
July	150,803	153,255	152,042	147,643	167,025	112,059	184,637	119,530
October	198,848	198,661	198,750	203,100	218,419	142,211	239,193	153,958
1977 January	248,885	255,817	252,391	261,911	275,015	172,144	305,611	198,339
April	301,298	311,623	306,522	314,507	332,987	203,671	374,766	243,216
July	363,065	385,263	374,299	361,696	404,003	243,957	468,531	305,425
October	379,735	394,602	387,243	380,260	429,740	249,792	471,840	304,923
1978 January	446,377	470,502	450,647	416,201	513,916	301,125	..	..
April	500,552	519,579	510,171	479,779	573,001	326,670	..	..
July	569,566	581,276	575,449	511,191	657,045	417,848	..	..
October	597,682	595,945	596,456	555,894	687,571	435,307	..	..

Source: INE

Table 9.21: CHILE - INDICES OF REAL WAGES AND SALARIES, 1959-1978

(April 1969 = 100)

Year/Month	a/			b/			c/		
	Wages	Salaries	Wages and Salaries	Wages	Salaries	Wages and Salaries	Wages	Salaries	Wages and Salaries
1959 April							60.0	62.7	61.8
1960 "							n.a.	n.a.	63.6
1961 "							n.a.	n.a.	68.4
1962 "							n.a.	n.a.	68.1
1963 "							60.6	66.1	63.3
1964 "							57.9	56.9	57.5
1965 "							68.7	68.4	68.7
1966 "							76.8	77.8	76.0
1967 "							89.5	93.3	91.5
1968 "							93.1	81.0	87.0
1969 "							100.0	100.0	100.0
1970 Jan.				109.9	115.1	112.5	110.2	115.5	112.8
April				108.1	116.0	112.1	109.4	117.3	113.4
July				110.4	114.0	112.3	112.6	116.4	114.6
Oct.				114.4	111.0	112.7	117.8	114.3	116.0
1971 Jan.	125.4	126.8	126.1	120.4	121.7	121.0	125.4	126.8	126.1
April	138.4	150.3	144.4	131.3	142.6	137.1	138.4	150.3	144.4
July	138.9	144.6	141.8	137.3	142.8	140.1	145.9	151.9	148.9
Oct.	126.8	128.6	127.7	139.8	141.8	140.8	150.2	152.3	151.3
1972 Jan.	124.7	121.3	123.0	139.6	135.8	137.7	156.1	151.8	153.9
April	118.7	112.2	115.4	128.5	121.5	125.0	150.4	142.2	146.3
July	99.9	98.0	99.0	120.0	117.7	118.8	149.0	146.2	147.6
Oct.	104.6	102.5	103.5	111.6	109.3	110.5	139.3	136.5	137.9
1973 Jan.	89.0	81.1	85.0	119.7	109.0	114.3	157.0	143.0	149.9
April	61.0	52.3	56.6	105.6	90.5	98.0	147.7	126.5	137.0
July	56.6	48.2	52.4	89.1	75.8	82.4	134.1	114.1	124.0
Oct.	59.0	45.4	52.1	44.4	34.1	39.2	66.9	51.4	59.1
1974 Jan.	96.5	89.2	92.8	89.5	82.7	86.1	135.1	124.9	129.9
April	75.9	73.7	74.8	70.4	68.4	69.4	106.3	103.2	104.7
July	89.5	89.1	89.3	83.1	82.6	82.8	125.4	124.7	125.0
Oct.	79.6	84.5	82.1	73.9	78.4	76.1	111.5	118.3	114.9
1975 Jan.	82.4	91.8	87.2	76.4	85.2	80.9	115.4	128.6	122.1
April	75.1	79.5	77.3	69.5	73.6	71.5	105.2	111.4	108.3
July	78.1	87.6	82.9	72.5	81.3	76.9	109.4	122.7	116.1
Oct.	79.7	84.7	82.3	73.9	78.6	76.4	111.6	118.6	115.2
1976 Jan.	82.0	86.6	84.3	76.1	80.4	78.3	114.8	121.3	118.1
April	82.3	85.7	84.0	76.4	79.5	78.0	115.3	120.0	117.7
July	87.9	89.4	88.7	81.6	82.9	82.3	123.2	125.2	124.2
Oct.	95.7	95.6	95.7	88.9	88.8	88.8	134.1	134.0	134.0
1977 Jan.	103.7	106.5	105.1	96.2	98.9	97.6	145.2	149.2	147.3
April	106.8	110.4	108.6	99.1	102.5	100.8	149.6	154.7	152.2
July	115.5	122.5	119.1	107.1	113.6	110.4	161.8	171.7	166.8
Oct.	108.1	112.3	110.3	100.3	104.1	102.2	151.5	157.4	154.5
1978 Jan.	119.3	124.0	121.8	110.7	114.9	112.8	167.3	173.8	170.6
April	122.8	127.6	125.3	114.0	118.3	116.1	172.1	178.8	175.5
July	130.9	135.6	132.3	121.5	124.0	122.8	183.1	186.8	185.0
Oct.	127.5	127.1	127.2	118.3	118.0	118.1	178.3	177.7	177.9

a/ Adjusted CPI, Appendix Table 9.3a.

b/ Implicit University of Chile price index, Appendix Table 9.3b.

c/ Official CPI, Appendix Table 9.3c.

Source: Table 9.20

X. OTHER STATISTICS

Table 10.1 : CHILE - DISTRIBUTION OF INCOME AMONG RECIPIENTS, BY SOCIOECONOMIC CHARACTERISTICS, 1967<sup>a/</sup>

(Percent)

Characteristics	D E C I L E S										Gini Coefficient
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
Blue-collar employees	2.6	4.2	5.1	6.2	7.2	8.9	10.3	12.7	15.5	27.4	0.36
Agricultural	3.3	5.4	6.5	7.1	8.1	9.6	10.2	12.4	14.6	22.8	0.28
Industrial	3.3	5.0	6.2	7.1	8.2	9.2	10.4	11.9	14.5	24.3	0.36
Service	2.6	3.8	4.6	5.4	6.6	7.9	9.8	12.3	16.2	30.9	0.44
White-collar employees	2.5	4.1	4.6	5.5	6.5	7.8	9.1	11.2	15.3	33.6	0.42
Independent workers	1.1	2.2	3.0	4.1	5.0	6.8	8.4	11.0	16.5	41.8	0.54
Employers	1.8	3.0	4.3	5.5	6.2	8.7	9.9	12.1	16.9	31.7	0.40
Urban Areas	1.5	2.6	3.7	4.7	5.9	6.9	8.7	11.3	16.1	38.4	0.48
Rural Areas	1.9	3.3	3.9	4.8	5.9	6.7	8.2	10.6	14.2	40.7	0.48
Men	1.6	2.6	3.5	4.5	5.7	6.8	8.4	10.9	15.9	40.4	0.50
Women	1.5	2.5	3.2	3.9	5.2	6.7	9.1	11.9	17.9	38.1	0.50
TOTAL POPULATION	1.5	2.5	3.3	4.4	5.4	6.9	8.5	11.1	16.3	40.2	0.52

a/ Distribution of disposable personal money income (i.e., after taxes and social security contributions) among active members of the labor force (i.e., excludes pensioners and retirees). Also does not include incomes in kind.

Source: Isabel Heskia, "La Distribución del Ingreso en Chile," CEPLAN, Documento No. 31, Noviembre de 1973.



Table 10.2: CHILE - DISTRIBUTION OF INCOME RECIPIENTS ABOVE AND BELOW  
MEDIAN, BY SOCIOECONOMIC CHARACTERISTICS, 1967

(Percent)

Characteristics	Lower 50 Percent	Upper 50 Percent	Total Population
<u>Occupational Category:</u>			
Employers	2.7	97.3	100.0
Independent workers	52.4	47.6	100.0
White-collar employees	11.1	88.9	100.0
Blue-collar employees	72.7	27.3	100.0
<u>Sector of Economic Activity:</u>			
Agriculture	80.4	19.6	100.0
Industry	41.7	58.3	100.0
Services	40.9	59.1	100.0
<u>Rural/Urban:</u>			
Rural	75.3	24.7	100.0
Urban	39.7	60.3	100.0
<u>Sex:</u>			
Men	46.4	53.6	100.0
Women	64.0	36.0	100.0
<u>Education:</u>			
Primary or less	53.4	46.6	100.0
Secondary	51.3	48.7	100.0
Higher	5.6	94.4	100.0
<u>Age:</u>			
12-25 years	70.0	30.0	100.0
26-55 years	42.0	58.0	100.0
56 years and over	53.2	46.8	100.0

Source: Isabel Heskia, op. cit., Table 3

Table 10.3: CHILE - CHARACTERISTICS OF LOWER 50 PERCENT OF  
INCOME RECIPIENTS, 1967

(Percent)

Characteristics	Proportion of Lower 50%	Proportion Total Population
<u>Occupational Category:</u>	<u>100.0</u>	<u>100.0</u>
Employers	0.1	1.6
Independent workers	24.1	23.3
White-collar employees	5.7	26.3
Blue-collar employess	70.1	48.8
<u>Sector of Economic Activity:</u>	<u>100.0</u>	<u>100.0</u>
Agriculture	38.4	24.2
Industry	25.6	31.1
Services	36.0	44.7
<u>Rural/Urban:</u>	<u>100.0</u>	<u>100.0</u>
Rural	45.9	30.9
Urban	54.1	69.1
<u>Sex:</u>	<u>100.0</u>	<u>100.0</u>
Men	69.0	75.5
Women	31.0	24.5
<u>Education:</u>	<u>100.0</u>	<u>100.0</u>
Primary or less	68.0	64.7
Secondary	31.6	31.2
Higher	0.4	4.1
<u>Age:</u>	<u>100.0</u>	<u>100.0</u>
12-25 years	37.1	26.9
26-55 years	52.0	62.7
56 years and over	10.9	10.4

Source: Isabel Heskia, op. cit., Table 2

Table 10.4 : CHILE - DISTRIBUTION OF INCOME BY HOUSEHOLDS, 1968 <sup>a/</sup>

Deciles	Decile Boundaries		Mean Income (escudos)	Share of Total Income (percent)
	From	To		
1	1	209	130.99	1.5
2	201	296	254.15	2.9
3	297	391	340.05	3.9
4	392	485	439.36	5.1
5	486	587	533.48	6.2
6	588	737	657.82	7.6
7	738	904	816.68	9.5
8	905	1,164	1,023.82	11.9
9	1,165	1,784	1,427.01	16.5
10	1,785		3,005.68	34.8
Total Population			862.90	100.0

<sup>a/</sup> Distribution of before-tax incomes, including social security contributions, all cash incomes, the estimated value of incomes in kind, consumption of own production (except food), and all transfer payments.

Source: UN-ECLA/IBRD, Proyecto Sobre Medición y Analisis de la Distribución del Ingreso en Países de América Latina: Chile (mimeo), Documento E/CEPAL/L.115/5, Noviembre 1974

Table 10.5: CHILE - HOUSEHOLD INCOME DISTRIBUTION BY ECONOMIC SECTOR OF PRINCIPAL INCOME EARNER, 1968

(Percent of households)

Monthly Income		Agriculture	Mining	Manufacturing	Construc- tion	Electricity etc. <sup>a/</sup>	Commerce	Transport, etc. <sup>b/</sup>	Services	Unspecified	Total
From	To										
(Distribution of sectors among income classes)											
0	372	51.2	10.1	18.3	24.4	10.9	16.8	11.3	14.8	38.9	27.7
373	746	31.8	42.9	39.6	42.0	25.7	26.6	32.7	27.2	22.4	31.6
747	1,119	9.9	20.7	20.7	20.0	18.8	21.8	26.3	22.0	11.6	17.6
1,120	1,492	3.5	7.7	8.4	5.8	10.9	11.4	10.4	10.6	4.6	7.4
1,493	1,865	1.4	6.3	4.6	2.6	6.9	6.9	6.5	8.0	3.0	4.5
1,866	2,238	0.7	4.6	2.6	1.6	5.0	5.2	5.1	5.1	2.0	2.9
2,239	2,984	0.6	3.4	2.7	1.3	6.9	3.7	4.4	5.3	1.7	2.7
2,985	3,730	0.4	1.7	1.0	0.8	4.0	3.7	1.2	3.3	0.7	1.5
3,731		0.4	2.2	2.0	1.4	10.9	3.9	2.0	3.6	1.2	2.0
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	2.0
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Distribution of income classes among sectors)											
0	372	41.4	0.8	12.4	6.4	0.2	7.2	2.9	8.0	20.7	100.0
373	746	22.5	3.1	23.7	9.6	0.4	10.0	7.3	12.9	10.5	100.0
747	1,119	12.6	2.7	22.2	8.3	0.6	14.7	10.6	18.6	9.7	100.0
1,120	1,492	10.7	2.4	21.6	5.7	0.8	18.3	10.0	21.4	9.2	100.0
1,493	1,865	6.8	3.2	19.4	4.3	0.9	18.3	10.4	26.8	9.9	100.0
1,866	2,238	5.5	3.5	17.0	3.9	0.9	20.8	12.4	25.6	10.1	100.0
2,239	2,984	5.3	2.8	19.3	3.7	1.4	16.5	11.8	29.7	9.3	100.0
2,985	3,730	5.7	2.5	12.2	3.9	1.4	29.0	5.7	33.0	6.8	100.0
3,731		4.4	2.5	19.3	5.2	3.0	23.2	7.1	27.0	8.7	100.0
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0
Total		22.4	2.3	18.9	7.3	0.5	11.8	7.1	14.9	14.7	100.0

a/ Electricity, gas, water and sanitary services.

b/ Transport, storage and communications.

Source: UN-ECLA/IBRD, *op. cit.*

Table 10.6: CHILE - HOUSEHOLD INCOME DISTRIBUTION BY OCCUPATIONAL CLASSIFICATION, 1968

(Percent of households)

Monthly Income		Occupational Classification							Total Population
From (Escudos)	To	Employers	Self-Employed	White-Collar Employees	Manual Workers	Passives <sup>a/</sup>	Rentiers	Others	
(Distribution of occupations among income classes)									
0	372	2.8	43.0	3.4	30.4	46.2	44.5	23.7	28.3
373	746	4.2	26.2	25.3	45.9	25.1	25.2	47.4	32.3
747	1,119	12.8	14.1	26.7	16.7	15.0	12.0	9.2	18.0
1,120	1,492	7.5	7.0	13.8	4.4	5.4	5.8	0.0	7.5
1,493	1,865	13.8	3.9	9.0	1.7	2.7	4.7	7.9	4.6
1,866	2,238	16.8	1.8	6.8	0.5	2.5	2.4	0.0	3.0
2,239	2,984	13.8	1.7	6.7	0.3	1.3	3.1	0.0	2.7
2,985	3,730	8.5	1.3	3.6	0.1	0.5	1.0	6.6	1.6
3,731		20.0	0.9	4.7	0.0	1.4	1.3	5.3	2.0
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Distribution of income classes among occupations)									
0	372	0.2	38.8	2.9	37.3	12.6	7.9	0.4	100.0
373	746	0.3	20.7	19.2	49.3	6.0	3.9	0.6	100.0
747	1,119	1.6	20.0	36.3	32.2	6.4	3.3	0.2	100.0
1,120	1,492	2.2	23.7	44.6	20.1	5.5	3.8	0.0	100.0
1,493	1,865	6.7	21.9	48.4	12.7	4.5	5.1	0.7	100.0
1,866	2,238	12.4	15.3	55.7	6.1	6.5	4.1	0.0	100.0
2,239	2,984	11.1	16.2	60.1	3.2	3.6	5.7	0.0	100.0
2,985	3,730	12.1	21.4	56.8	2.1	2.5	3.2	1.8	100.0
3,731		21.7	11.7	56.5	0.5	5.2	3.3	1.1	100.0
Total		2.2	25.5	24.5	34.7	7.7	5.0	0.4	100.0

<sup>a/</sup> Retired or disabled workers on pension.

Source: UN-ECLA/IBRD, *op. cit.*





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