

Brazil

An Assessment of the Current Macroeconomic Situation

(In Two Volumes) Volume I: Main Report
December 1988

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Country Operations Division
Latin America and the Caribbean Region
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AVERAGE EXCHANGE RATES (SALES)

1980	52.7	Cr\$/US\$	1988	Jan	77.65	Cz\$/US\$
1981	98.1	" "		Feb	90.84	" "
1982	179.5	" "		Mar	107.49	" "
1983	577.0	" "		Apr	125.69	" "
1984	1848.0	" "		May	150.64	" "
1985	6200.0	" "		Jun	178.30	" "
				Jul	215.83	" "
1986	18.66	Cz\$/US\$ a/		Aug	267.41	" "
1987	39.28	" "		Sep	326.24	" "
				Oct	411.70	" "
				Nov	526.15	" "

GLOSSARY OF ACRONYMS

BNDES	National Economic and Social Development Bank
CDB	Certificate of Deposit
FIESP	Sao Paulo State Federation of Industries
FGTS	Time-On-Job Guarantee Fund
FGV	Getulio Vargas Fund
FINAME	Special Agency for Industrial Financing
FINEP	Studies and Projects Financing Agency
GDP	Gross Domestic Product
IBGE	Brazilian Institute of Geography and Statistics Foundation
IBRE	Brazilian Economics Institute of the Getulio Vargas Foundation
ICV/SP	Sao Paulo Cost of Living Index
IDB	Inter-American Development Bank
IFS	International Financial Statistics
IGP/DI	General Price Index, Domestic Supply
INPC	National Consumer Price Index
IPA	Wholesale Price Index
IPC	Consumer Price Index
LBC	Central Bank Bill
LTN	National Treasury Bill
LTNF	Floating Rate National Treasury Bond
ORTN	Indexed National Treasury Bond
OTN	National Treasury Bond
PASEP	Public Employees' Financial Reserve Fund
PSBR	Public Sector Borrowing Requirement
SEPLAN	Planning Secretariat of the Presidency of the Republic (Planning Ministry)
SEST	Secretariat for the Control of Federal Public Enterprises
SINPAS	National Social Security System
WPI	Wholesale Price Index

a/ On February 28, 1986, Brazil announced an Economic Stabilization Plan. Among the principal measures adopted was the creation of a new currency, the cruzado (Cz\$), worth 1000 cruzeiros (Cr\$).

TITLE: BRAZIL - AN ASSESSMENT OF THE CURRENT MACROECONOMIC SITUATION

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ABSTRACT: This report assesses Brazil's current macroeconomic situation against the background of recent stabilization attempts and medium-term prospects. Volume I contains the summary and conclusions, and the main text of the report. Volume II contains seven annexes, including recent economic trends, recent developments and prospects on fiscal policy, performance of public enterprises, monetary policy and internal debt, and external debt. An analytical evaluation of the interrelationships among fiscal deficits, monetary policy and inflation is the subject of Annex VII. A Statistical Annex is also included.

BRAZIL

AN ASSESSMENT OF THE CURRENT ECONOMIC SITUATION

THE MAIN REPORT (Volume I)

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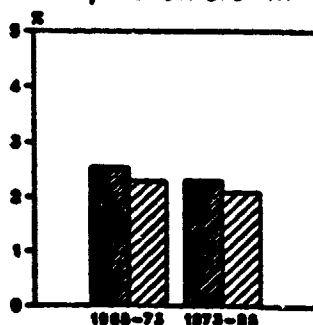
This report was prepared by a team led by Rui Coutinho. Other members of the team were Antonio Estache, Helena Cordeiro, Armando Pinelli-Siles, Silvina Vatnick and Jim Stephens. The team visited Brazil in June-July 1988. Mr. Ruben Lamdany contributed to Annex VI. A draft of the report was discussed with the Government in December 1988.

1987 SOCIAL INDICATOR DATA SHEET

BRAZIL

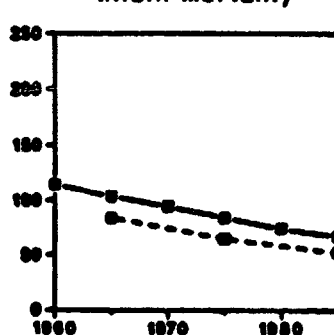
	1965	1973	Most Recent Estimate	Reference Groups (MRE)	
				Upper mid income	Industrial mkt econ.
AREA					
Total land area (thou sq km)	8,512.0	8,512.0	8,512.0		
Agricultural (% of total)	21.2	24.7	28.6		
GNP PER CAPITA (current US\$)	270	710	1,840	1,830	11,920
POPULATION AND VITAL STATISTICS					
Total population (thou)	84,292	102,982	138,370		
Urban pop. (% of total)	50	59	72	65	75
Population growth rate(%):					
Total		2.5	2.3	2.1	0.7
Urban		4.7	3.8	3.6	1.5
Life expect. at birth (yrs)	57	60	65	66	76
Population projections:					
Pop. in 2000 (thou)			178,369		
Stationary pop. (thou)			281,000		
Population density per sq km of agricultural land	47	49	52	238	534
Pop. age structure (%):					
0-14 yrs	44	43	38	36	21
15-64 yrs	53	54	58	59	67
65 and above	3	3	4	5	12
Crude birth rate (per thou)	39	33	29	28	13
Crude death rate (per thou)	11	10	8	8	9
Total fertility rate	5.6	4.6	3.6	3.7	1.8
Infant mort. rate (per thou)	104	89	67	52	9
Child death rate (per thou)	15	11	5	4	0
Family planning:					
Acceptors, annual (thou)	..	148	..	..	..
Users (% of married women)	..	..	65	..	..
FOOD, HEALTH AND NUTRITION					
Index of food production per capita (1979-81 = 100)	..	92	109	106	102
Per capita supply of:					
Calories (per day)	2,405	2,459	2,657	2,987	3,417
Proteins (grams per day)	60	60	60	75	92
Pop. per physician (thou)	..	1.6	..	2.4	1.5
Pop. per nurse (thou)	..	..	..	0.7	0.2
Pop. per hospital bed (thou)	..	0.2	..	0.4	0.1
Access to safe water (% of population):					
Total	..	77	71	..	..
Urban	..	87	80	..	..
Rural	..	57	51	..	..

Population Growth



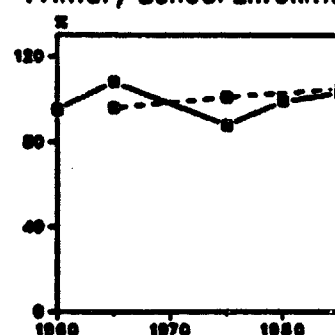
■ BRAZIL
▨ FIRST REF. GROUP

Infant Mortality



● BRAZIL
■ FIRST REF. GROUP

Primary School Enrollment



1987 SOCIAL INDICATOR DATA SHEET

BRAZIL

	Reference Groups (MRE)				
	1965	1973	Most Recent Estimate	Upper mid income	Industrial mkt econ.
LABOR FORCE					
Total Labor Force (thou)	27,039	35,113	50,719		
Female (%)	20	23	27	34	37
Agriculture (%)	49	44	31	29	7
Industry (%)	17	19	27	31	35
Participation rate (%):					
Total	32	35	37	38	47
Male	52	53	53	50	60
Female	13	17	20	26	35
Age dependency ratio	0.9	0.8	0.7	0.7	0.5
HOUSING					
Average size of household:					
Total	..	..	..	..	..
Urban	..	5	4	..	..
Rural	..	5	5	..	..
Percentage of dwellings with electricity:					
Total	..	56	67	..	..
Urban	..	79	89	..	..
Rural	..	13	21	..	..
EDUCATION					
Enrollment rates:					
Primary: Total					
Male	108	88	104	105	102
Female	109	89	108	108	102
Secondary: Total					
Male	108	87	99	101	101
Female	16	26	35	63	90
Pupil-Teacher ratio:					
Primary	16	24	31	64	89
Secondary	16	28	36	61	91
Pupils reaching grade 6 (%)					
Primary	..	..	..	28	20
Secondary	..	..	..	19	14
Pupils reaching grade 6 (%)	..	33	39	85	99
INCOME, CONSUMPTION, AND POVERTY					
Energy consumption per cap. (kg of oil equivalent)	286	589	781	1,960	4,883
Percentage of private income received by:					
Highest 10% of households	..	..	..	..	..
Highest 20%	60 a	62	..	..	..
Lowest 20%	4 a	3	..	..	..
Lowest 40%	11 a	9	..	..	..
Est. absolute poverty income level (US\$ per capita):					
Urban	..	..	..	..	..
Rural	..	..	..	..	..
Est. pop. below absolute poverty income level (%)					
Urban	..	..	..	..	..
Rural	..	..	..	..	..
Passenger cars/thou pop.	13.5	29.8	44.7	50.4	323.7
Newspaper circulation (per thousand population)	30.9	39.3	..	88.0	308.0

IECSE August 1987

.. Not available. Note: Most recent estimates of population and GNP per capita are for 1986 unless otherwise noted. Group averages are population weighted. Country coverage depends on data availability and is not uniform. Unless otherwise noted, 1965 refers to any year between 1962 and 1968, 1973 between 1970 and 1978, and most recent estimate between 1980 and 1986 a. 1980

COUNTRY DATA - BRAZIL

AREA (sq. km)	POPULATION (1987)	DENSITY
8,512,000	141 million	16.6 per sq. km

POPULATION CHARACTERISTICS (most recent estimate)

Crude Birth Rate (per 1,000)	29.6
Crude Death Rate (per 1,000)	8.0

INCOME DISTRIBUTION (1978)

% of private income, highest quintile	62.0
lowest quintile	8.0

ACCESS TO SAFE WATER (1985)

Percentage of population	87.0
--------------------------	------

NUTRITION (most recent estimate)

Calorie intake as % of requirements	108.0
Per capita protein intake (grams/day)	59.6

HEALTH (most recent estimate)

Population per physician	1,300
Population per hospital bed	300

DISTRIBUTION OF LAND OWNERSHIP

% owned by top 10% of owners	45.0
% owned by smallest 10% of owners	1.5

ACCESS TO ELECTRICITY (most recent estimate)

% of population - total	67.0
- rural	21.0

EDUCATION

Adult literacy rate % (1985)	79.0
Primary school enrollment % (1983) (Ages 7-14)	90.0

GDP PER CAPITA in 1987 US\$ 2,020

GROSS DOMESTIC PRODUCT IN 1987 (1980 prices) a/

ANNUAL RATE OF GROWTH (% constant prices)

	1987		ANNUAL RATE OF GROWTH (%)		
	US\$ Thous.	%	1985	1986	1987
GDP at Market Prices	18297750	100.0	8.4	8.0	2.9
Gross Domestic Investment	2614280	17.1	11.7	21.0	-3.1
Gross National Saving	2580908	18.7	12.8	19.8	..
Exports of GNS	1742573	11.4	6.9	-10.2	5.3
Imports of GNS	1157214	7.4	0.1	26.8	-2.6

OUTPUT, EMPLOYMENT AND PRODUCTIVITY IN 1985

	Domestic Product		Employment		GDP per Worker	
	US\$ Mill.	%	Mill.	%	US\$ Mill.	%
Agriculture	22,940	9.8	15.7	31.0	1,461	19.5
Non-Agriculture	210,970	90.2	35.0	69.0	6,028	80.5
Total/Average	233,910	100.0	50.7	100.0	7,489	100.0

GOVERNMENT FINANCE

	General Government b/		
	(US\$ Mill.)	% of GDP	
	1985	1980	1986
Total Receipts	1,120,304	28.7	29.3
Total Expenditures	1,488,607	30.0	38.9
Overall Balance	(368,303)	(1.3)	(9.6)
Of which: Government Fixed Investment	107,772	2.3	2.8

a/ From IBGE national accounts data, May 1988.

b/ National accounts definition.

COUNTRY DATA - BRAZIL

MONEY, CREDIT AND PRICES (Cr\$ Mill.)

	1984	1985	1986	1987
Money Supply (M1)	27898	111977	455478	1045963
Bank Credit to Public Sector	78890	249878	385018	2083184
Bank Credit to Private Sector	172827	573176	1257291	4771648
Money (M1) as % of GDP	7.1	7.9	11.9	8.2
General Price Index (3/86=100)	20.9	70.0	115.5	585.7

Annual percentage change in:

General Price Index	223.8	235.1	65.0	415.8
Bank Credit to Public Sector	186.8	208.3	59.8	433.3
Bank Credit to Private Sector	209.9	232.6	119.3	279.5

BALANCE OF PAYMENTS (US\$ Millions)

	1985	1986	1987 ^a
Exports of GMS	27383	23763	27751
Imports of GMS	15634	17127	18156
Resource Gap (deficit = -)	11499	6638	9593
Interest Payments (net)	-7950	-8792	-9400
Other Factor Payments (net) ^{a/}	-2940	-3235	-1892
Net Transfers	150	87	71
Current Account Balance	-241	-5304	-1428
Direct Foreign Investment (net) ^{a/}	1263	186	1148
Net M&T Borrowing			
Disbursements ^{b/}	2807	3170	1555
Amortization ^{b/ c/}	2478	3064	3583
Net Disbursements	329	106	-2128
Other Capital (net) and capital n.e.i.	-1638	1069	3423
Increase in Reserves (-)	285	3948	-1015
Gross Reserves (end year) ^{d/}	11608	6760	7458
Petroleum Imports ^{g/}	5694	3020	4123
Petroleum Exports ^{g/}	1470	675	844

RATE OF EXCHANGE

Average 1986	Average 1987
US \$1.00 = Cr\$ 813.66	US \$1.00 = Cr\$ 839.23
Cr\$ 81.00 = US \$ 0.07	Cr\$ 81.00 = US \$ 0.03

MERCHANDISE EXPORTS (AVERAGE 1962-87)

	US\$ Mill.	%
Coffee (beans and soluble)	2,413	10.1
Soybean products	2,277	9.5
Sugar	483	1.9
Cocoa	602	2.5
Iron	1,770	7.4
Manufactured Goods	12,383	51.8
Other commodities	4,001	16.7
Total	28,899	100.0

M&T EXTERNAL DEBT, DECEMBER 31, 1987

	US\$ Mill.
Public Debt incl. guaranteed	94,491
Non-guaranteed Private Debt	14,429
Total Outstanding and Disbursed	108,920

DEBT SERVICE RATIOS FOR 1987

	%
Net Debt Service Ratio ^{e/}	62.2
Public Debt Service Ratio (gross) ^{f/}	12.6

IBRD/IDA LENDING, (OCT. 31, 1988 IN US\$ MILL.)

	IBRD	IDA
Outstanding and Disbursed ^{h/}	6,449	...
Undisbursed	4,748	...
Outstanding incl. Undisb.	11,197	...

^{a/} Includes reinvested profits/earnings.

^{b/} Data from IBRD/DRS.

^{c/} Actual repayments.

^{d/} Change in level of reserves differs from reserve change in balance of payments by valuation adjustment.

^{e/} Debt service on both public and private external debt net of interest earned on foreign exchange reserves as a percentage of exports of goods and non-factor services.

^{f/} Includes World Bank, official export credits, concessional and non-concessional other.

^{g/} Crude and derivatives.

^{h/} Excludes exchange adjustment.

PREFACE

1. This preface analyzes some important policy initiatives that have been put forward by the Brazilian Government since the main text of this report was completed.¹ A list of the major proposed measures is presented in the Attachment to this Preface. These measures, which were prepared in the context of the discussions concerning the establishment of a Social Pact, include a significant revision of the 1989 budget, earlier presented to Congress. To become effective, the set of fiscal measures discussed below (see Attachment) will have to be approved by the legislature and accepted by the Executive in the very near future.

The Social Pact

2. The increase in the rate of inflation to 27.3% in October (IPC) raised inflationary expectations and had a destabilizing effect on financial markets. Faced with the initial stage of a shift from financial assets into real estate, dollars and gold, the Government joined ongoing talks between labor and business groups with the purpose of establishing an improved framework for wage and price increases. On November 3, representatives of the Government, business and labor groups signed a Social Pact "Compromisso Social - Pacto Contra a Inflacao".

3. The Social Pact stipulated that prices of private and public goods and services would not be increased by more than 26.5% in November and 25% in December. Industrial prices can only be adjusted once every thirty days. Wages would be raised according to the URP monthly adjustment. Therefore, in November nominal wages would increase by 21.4% and in December by the average of the monthly inflation rate for the September to November period, estimated at 26.5%. In addition, the Social Pact established a list of basic goods whose price adjustments could not exceed the above limits during the last two months of 1988. Control over these

1/ The main report uses data available as of end of October, 1988. Recently available information indicates that during the first three quarters of 1988 the operational deficit remained under the ceilings established in the government program. However, the higher than projected inflation rate raised monetary correction on the stock of debt, as a result of which the nominal deficit exceeded the target established for the third quarter. Given the performance in October-November, it is likely that the 1988 trade surplus will reach US\$19 billion, a 70% increase relative to last year's figure. Inflation, however, remains high. In October and November, inflation measured by the INPC (an index that measures price changes between the first and the last day of the calendar month rather than between the 15th of each month as the IPC, the index of official inflation) reached 26.7% and 28.2%, respectively.

prices could contribute to ensuring that monthly inflation would not exceed the ex-ante estimated rate. In turn, the Government would present within 30 days of the signature of the Social Pact, a set of proposals that would reduce the fiscal deficit in 1989. Looking beyond 1988, the Social Pact participants agreed to a reevaluation of the overall strategy by the end of the current year, and in particular, agreed to review the URP-based wage indexation formula.

4. In early December, the Government presented its fiscal adjustment program for 1989 - "Programa de Modernizacao e Ajustamento 1989". In its proposal, the Government recognizes that the threat of hyperinflation is the main short-term macroeconomic issue. To lend the necessary credibility to the anti-inflation strategy that underlies the Social Pact, a cut in the 1989 overall operational deficit is proposed to bring it from a projected deficit equivalent to 4.35% of GDP (deficit implicit in the August proposal to Congress) to a small surplus of 0.07% of GDP. In addition to a Central Government deficit of 2.8% of GDP (Chapter II), the 4.35% deficit figure includes preliminary projections for the remaining components of the public sector that were not available at the time the main text of this report was completed.

The 1989 Program

5. The Government is in the process of designing a macroeconomic program for 1989. The announcement of the Social Pact, with its price and wage ceilings through the end of December, stabilized financial markets and appeared to have averted, at least in the short term, the threat of hyperinflation. Fiscal proposals have been advanced which have been reviewed by the Pact and were to be discussed in Congress in December.² The outline of a monetary program has been delineated and a short term import liberalization scheme is being implemented. The overall objectives of the Government's program are highly commendable but, with the exception of fiscal policy, the program is not yet fully specified. A major shortcoming is the absence of an indexation policy. The Government's objectives are to move to forward-looking indexing, and to use a gradualistic approach to deal with inflation anchored in the new indexing rules. However, the details of such a strategy remain to be determined within the context of Social Pact negotiations.

2/ On December 9, Congress approved a modified version of the budget that included several proposals presented by its economic subcommittee. Among the most important changes are: the rejection of the indexation of expenditures, proposed by the Executive and the assumption of an implicit inflation rate of 10% monthly for 1989; a revision in the external debt rollover for the states that is compensated for by a reduction in the rural credit budget. Moreover, Congress approved a significant increase in the minimum wage starting January 1989, that will be followed by monthly real increases. The higher minimum wage will have serious implications for the budgets of the Social Security System and the state and local governments. The rejection of the indexation of expenditures would necessitate one or more Supplementary Budgets during the year if inflation exceeds 10% a month. It is possible that some of these measures will be vetoed by the Executive, requiring Congress to take another look at the 1989 fiscal program.

6. The fiscal proposals for 1989 represent an important step towards public sector adjustment. The new constitution changed the mechanisms regarding transfers to States and Local governments and its provisions also raised Social Security outlays. Coupled with the recovery of public sector real wages in January 1989, when the losses due to the wage freeze will be recouped, earlier projections for the 1989 deficit exceeded 7% of GDP. Operação Desmonte and other cuts brought the fiscal deficit to 4.35% of GDP, the figure implicit in the August proposal. The November package represents a further effort at fiscal adjustment, aimed at a 0.07% surplus.

7. The target of a small fiscal surplus deserves to be highlighted. The November package has some important measures such as a reduction in fiscal incentives, partial indexation of revenues and proposals for state enterprises, including their liquidation and privatization. The thrust of the package is on the revenue side, with some ancillary support from expenditure cuts. The revenue proposals themselves consist of a large component of once-and-for-all measures, and a smaller component of structural increases in revenues. Until Congress approves the 1989 budget, it will be difficult to fully assess the fiscal outlook. Even after taking into account the composition of the revenue proposals, the fiscal outcome will depend to a large extent on its implementation, particularly in the case of the main source of additional revenue - the added effort on tax collection which is expected to yield 1.9% of GDP. Because some of the revenue measures are highly dependent on smooth implementation, the credibility of the program is handicapped. In addition, not much room appears to have been left to allow for slippages and mid-course corrections. Nevertheless, barring unforeseen shocks, preliminary analysis suggests that the present package should not face major difficulties in bringing the operational deficit close to the Government's original 1989 target of 2% of GDP, as delineated in the August 31st version of the budget proposals sent to Congress. To enhance the credibility of its commitment to fiscal adjustment, the Government has proposed to achieve a balanced operational budget on a monthly basis. This is a rule of thumb that is aimed at enforcing discipline in expenditures. However, given the well documented seasonality in cash flows, enforcing this commitment may be destabilizing because it will require the postponement of some outlays to balance expenditures and revenues on a monthly basis.

8. The ability of the authorities to reduce inflation will depend not only on the conduct of aggregate demand policies but on future changes in indexation rules. The Social Pact's strategy is to stabilize and then gradually reduce inflation by setting decreasing monthly guidelines for price and wage increases. If continued into 1989, this anti-inflation strategy would mean the establishment of a declining path for price and wage increases that could bring the monthly rate into a single digit range by the end of the year. The credibility of this approach will depend on the extent that, ex-post, actual and projected inflation rates will coincide. To succeed, it must be complemented by a reformulation of existing indexation rules and supported by tight monetary and fiscal policies (see Chapter IV). To reduce inflation through demand policies only without changing the indexation rules will affect unreasonably the level of output and employment.

9. The success of the gradualistic approach to fighting inflation requires a reformulation of wage policy. At the core of this issue is the

relationship between real wages--particularly in the public sector--and macroeconomic stability. If wage adjustments in January and February of 1989 follow the URP formula and thus are based on the average inflation for the period of September to November 1988, it is unlikely that a reduction in inflation will be attained. The increase in real wages that would result from URP-based adjustment higher than the ex-ante inflation rate would quickly erode the viability of this gradualistic approach. The issue is how to change the present backward-looking indexing rules into forward-looking rules, while simultaneously creating mechanisms to compensate for losses that may arise from higher than expected inflation and that will not derail the anti-inflationary effort. In broader terms, the indexation issue needs to be addressed not only in the context of wage policy but also with respect to financial instruments.

10. The declared objectives of monetary policy include a more active interest rate policy and the support of the stabilization process. Implementing an active real interest rate policy would be essential, but would be difficult without complementary fiscal policies and a highly credible program. The pressures on the money supply should decline as a result of the reduction in public sector borrowing, the proposed temporary suspension or reduction in the scale of debt equity conversions and re-lending and by halting the accumulation of foreign reserves. However, the program lacks a critical analysis of the choice of instruments for reducing nonpublic sector sources of monetary pressure in the economy. Further, the program has yet to flesh out operational guidelines for monetary policy or the quantification of desired trends in monetary aggregates. Clearly, in the absence of a well specified strategy to reduce inflation and of an inflation target, such quantification cannot be undertaken. Nevertheless, their inclusion would enhance the program's credibility and help in its successful implementation. Until the new indexing rules are defined, it will be difficult to evaluate how much room there is in 1989 for a reduction in inflation and what the monetary program should look like.

11. A full analysis of the outlook for 1989 cannot be completed until the full program is specified, a consistent set of fiscal, monetary and balance-of-payments aggregates is delineated, the budget is approved and the price and wage guidelines are defined. In 1989, inflation will be determined as much by the fundamentals of monetary and fiscal policies, exchange and trade measures as by deindexation measures. The impact of the tax revenue measures on inflation and incentives cannot be evaluated until the full package is completed. Moreover, the economic impact of the package will remain unclear until a final agreement is reached on the share of the 1989 amortization payments on States' debt that will be rolled over. The fiscal outcome will also depend on how the proposed measures, after approval by Congress, will be implemented. The success of the program will thus require a full commitment of the Government, Congress and other Social Pact participants.

12. The critical importance of credibility and its impact on the success of stabilization programs in chronic-inflation countries such as Brazil is well-known. Failure to implement a successful package could put the economy on the threshold of hyperinflation. It will also be important to make an allowance for predictable (e.g. a consumption boom if the program succeeds) and unpredictable (e.g. certain lags in reaping the

benefits of a tight monetary policy) risks that the program's implementation is likely face, and for corresponding mid-course corrections. Finally, the program as yet is focused exclusively on 1989. This feature also affects credibility and predictability, and lack of credibility contributes through expectations to inflation. The program does not present a medium term outlook indicating major areas for economic reforms and the directions of these reforms. Although the first priority remains stabilization, it would be important to explore through the program the scope for medium-term policy reform, such as, for example in the area of trade and financial sector policies, thus clearly establishing the stabilization-growth linkage.

Attachment

PROPOSED MEASURES PRESENTED TO CONGRESS
(December 1988)

1. Fiscal savings are concentrated in the Central Government. For the overall public sector, the projected cut in the fiscal deficit is equivalent to 4.4% of GDP, to be achieved largely through savings of 2.2% of GDP in the Central Government's accounts and savings of 0.93% and 1.12% of GDP in the State Enterprises and Social Security budgets, respectively. The reduction in the Central Government deficit is expected to result, largely, from an additional revenue effort, in large part through improved collection and only marginally through new taxes. These revenues will be obtained from a reduction in collection lags (0.59% of GDP) for the income tax, industrial products tax and Finsocial; a reduction in fiscal incentives (0.42% of GDP); additional efforts to increase collection of past due taxes and to reduce fiscal evasion (1.87% of GDP); and a new social contribution on profits (0.98% of GDP). Most of the latter revenues will be then transferred to the Social Security Budget. The revenues from the newly created social contribution, combined with gains obtained from imposing monetary correction on balances due from Finsocial, are expected to finance the additional expenditures that Social Security will undertake as a result of the benefits brought about by the new Constitution. For the year, a balanced budget is projected for the Social Security. Taking into account losses in revenues that result from a decline in income tax rates on short term financial operations and a reduction in the PIS-PASEP, net revenues are projected to increase by 3.37% of GDP (including Central Bank profits).

2. The federal enterprises deficit is expected to be financed by a combination of sale of assets (0.13% of GDP), issuing equity (0.41% of GDP) and privatization of some public enterprises (0.24% of GDP). In comparison with the projected gains from the revenue side the contribution of expenditure cuts to deficit reduction are less significant. Savings on the expenditure side are expected to result from (i) a reduction in the wheat subsidy that will result from a cut of 15% in the domestic price paid to producers, a measure projected to yield 0.02% of GDP; (ii) a cut in the rural credit subsidy obtained by limiting agricultural credit except to small farmers (0.24% of GDP); and (iii) cuts in other current and capital expenditures that could yield up to 0.6% of GDP.

3. Although the Government's program is essentially focused on fiscal policies, the authorities announced their intention to pursue tighter monetary policies so as to maintain high real interest rates in the early phases of the program. In comparison with 1988, the pressures on the monetary base are expected to be lower as the fiscal deficit is reduced and net external inflows are diminished. The 1989 trade surplus is projected to decline to US\$14.5 billion on account of an increase in imports, particularly of intermediate and capital goods. Among the measures

proposed to increase imports are a reduction in the number of goods on the negative list and an easing of restrictions on import financing. Moreover, to reduce the pressures on the money supply, the Government is considering either to temporarily suspend or to reduce the scale of debt equity conversions and relending.

4. The table shown below summarizes the proposed measures:

LIST OF THE MAJOR PROPOSED MEASURES

I. FISCAL POLICY

Objective: To achieve in 1989 an operational surplus for the consolidated public sector of 0.07% of GDP (earlier projected to reach a deficit of 4.35% of GDP).

Proposed Measures

Revenue

- (i) To reduce collection lags and to impose monetary correction on balances due.
- (ii) To increase efforts in collecting taxes due and preventing tax evasion.
- (iii) To require a social contribution on profits.
- (iv) To reduce fiscal incentives.

Expenditure

- (i) To cut by 20%, with respect to the earlier budget proposal, "other capital and current" expenditures that are not linked to earmarked revenues, debt service and counterpart funds.
- (ii) To eliminate the reserve for seasonalities and to cut part of the reserve for contingencies.
- (iii) To reduce the wheat subsidy, rural credit subsidy and other outlays in the budget for official credit operations.

II. MONETARY POLICY

Objective: To use monetary policy as a stabilization tool by maintaining positive real interest rates and thus contributing to controlling aggregate demand.

Proposed Measures

- (i) To reduce pressures on financial markets by diminishing public sector borrowing needs, allowing no increase in reserves and regulating flows from relending and debt swaps.
- (ii) To control credit to the public sector by maintaining Resolution 1469 that imposes ceilings on the expansion of such credit.

III. TRADE AND EXCHANGE RATE POLICIES

Objective: To attain a trade surplus that is compatible with stabilization and no further accumulation of reserves. Use exchange rate policy to continue to maintain an adequate incentive to exporters.

Proposed Measures

- (i) To reduce the trade surplus to US\$14.5 billion by selectively liberalizing imports, enhancing the flexibility of import financing and reducing the list of products whose imports have been suspended.
 - (ii) To maintain the present exchange rate policy
 - (iii) To create a separate exchange rate for tourism
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SUMMARY AND CONCLUSIONS

OVERVIEW

1. The new economic team that took office in January 1988 faced three challenges: the need to control an escalating fiscal deficit; the need to stabilize the rate of inflation (and inflationary expectations); and the need to reestablish the credibility of economic policy. The main obstacle to stabilization was the fiscal deficit which was projected to rise to 7-8% of GDP, a significant increase compared with 1987's estimated 5.5%. The main cause behind the projected deterioration of the fiscal accounts was the substantial wage increases granted late 1987.
2. In contrast with the two previous stabilization attempts (the Cruzado and the Bresser Plans) the authorities preferred a gradualistic approach to stabilization. The first priority was to prepare a set of measures to cut the operational deficit to 4% of GDP. These measures, prepared in March-April 1988, consisted mainly of expenditure cuts and included a two month wage freeze and ceilings in the expansion of credit to the public sector. They became the centerpiece of the Government's program presented later to the IMF.
3. The Government's strategy was to cut the fiscal deficit, so as to stabilize the inflation rate, enhance the credibility of the Government's approach and prepare the ground for a further fiscal effort in 1989. In fact, the options were quite limited. Another heterodox shock would have likely failed. The failure of the Cruzado and Bresser Plans demonstrated that "heterodox" attempts at stabilization (that is, programs centered on income policies that include a wage and price freeze coupled with some form of deindexation) cannot succeed without the support of tight monetary and fiscal policies consistent with lower inflation. Although the design of the price and income policies played a major role in the breakdown of the Cruzado Plan, the main reason that the two stabilization attempts failed was the inadequate fiscal effort. Thus, the primacy of fiscal adjustment was the correct strategy.
4. The failure of the two heterodox plans have important implications for the conduct of economic policy. First, they reduced the credibility of government policy announcements, and second, they resulted in a learning process with respect to price behavior that, coupled with a reduction in the length of the interval between price and wage adjustments, increased inflation volatility and the acceptance (at least temporarily) by economic agents of a higher inflationary plateau. The failure of the two stabilization plans has, however, contributed to an emerging consensus that the roots of Brazil's current economic difficulties lie in excessive public sector growth and inefficiency. The widespread view that without a drastic reduction in the fiscal deficit the Brazilian economy will be unable to grow, creates a base of support for public sector reforms. Although the size of the deficit is widely viewed as a major obstacle to any attempt to

permanently reduce inflation, much less agreement exists on how to reduce the fiscal deficit.

Economic Performance During 1988

5. The evaluation of the 1988 economic performance should be viewed in the context of the constraints that policy makers faced in early 1988. Although the programmed 1988 fiscal deficit (4% of GDP) is inconsistent with medium term macroeconomic stability, the present fiscal stance can be justified: (i) as the initial step in deficit reduction, that will continue into 1989, assuming that the 1988 fiscal target will be met and the fiscal deficit will be cut further in 1989; and (ii) as the maximum fiscal effort that could be achieved in 1988 given (a) wage developments in late 1987 that raised the potential deficit to over 7% of GDP, and (b) the difficulties associated with an abrupt fiscal adjustment based on spending cuts.

6. The fiscal measures succeeded in controlling the deterioration in the operational deficit. Preliminary data suggests that up to the end of the third quarter of 1988 the operational deficit was under the projected ceilings. Nonetheless, in the fourth quarter several factors may raise the fiscal deficit above the programmed levels. On the external side, the 1988 performance of the Brazilian economy exceeded the most optimistic expectations as a result of favorable external conditions and low levels of domestic demand. The trade surplus for the year will be the largest in Brazil's history. Despite these favorable conditions, the 1988 export performance demonstrates once again the dynamism of Brazilian exporters when offered the right incentives. The negative aspect of the 1988 performance was the inability to stabilize inflation. After remaining relatively stable in the months following the announcement of the program, the monthly inflation rate experienced an upward surge. Over the last two months the threat of hyperinflation has become the dominant economic issue.

7. Partly as a consequence of the bright external performance, strong monetary pressures now pervade the economy. Large trade surpluses combined with deficit financing and the ongoing process of debt conversions had a monetary impact that was not offset by sterilization, and contributed to fueling inflation. The sterilization of the monetary impact of the external flows requires a more aggressive monetary policy and higher interest rates. Although higher real rates will deteriorate the fiscal deficit, they are necessary to prevent a flight from financial assets into goods, gold and dollars that could move the economy close to hyperinflation. In the short run, a less accommodating monetary policy is required. In the medium term it is necessary to recover monetary policy as an effective stabilization tool. In brief, this would entail lower fiscal deficits and a rethinking of existing indexation rules.

8. The overall economic outlook for the remainder of 1988 is far from positive. Stagflationary trends, rising inflation, continued domestic uncertainty, the authorities' lack of credibility on economic matters all impose constraints on the scope for short-term actions. The same constraints apply to the medium-term. The attention and energies of Brazilian policymakers have been channeled towards short-term management of the economy rather than finding ways to address medium-term issues. In essence the recent surge in inflation threatens the Government's gradual

approach to stabilization and requires a rethinking of the stabilization strategy. It is possible that if the monthly inflation rate continues to rise, the Government may be forced to abandon gradualism and undertake a new heterodox shock program. The lessons from the past attempts at stabilization indicate that whether such a program succeeds depends in large part on its credibility which in turn depends on the underlying fundamentals of fiscal, monetary and incomes policy. In addition, proper management of the exchange rate and pricing policies is crucial. In sum, the moment calls for a strong fiscal adjustment and a tighter monetary policy, and a revision of current indexation rules to increase their consistency with macroeconomic stability.

9. In 1988, Brazil is facing the prospects of a current account surplus, a large fiscal deficit, and rising inflation. This combination reinforces the view that domestic disequilibrium is the main issue facing the Brazilian economy. Cuts in fiscal spending could further increase the trade surplus. Maintaining the present real exchange rate, the relevant policy combination for Brazil should be a reduction in the fiscal deficit combined with an increase in imports with particular emphasis on capital goods imports, preferably in the context of a revision of trade policy. This combination would reduce the pressures that the large trade surpluses and deficit financing exert on the monetary base (with the ensuing need for sterilization policies), simultaneously allowing for the entry of capital goods required for investment. Although it is difficult to predict how an easing of import restrictions will affect the total import bill, improving the investment climate by permanently reducing the fiscal deficit should raise domestic investment and capital goods imports. On the external side, the relatively comfortable balance of payments position provides some room to reduce the fiscal deficit and inflation.

10. In 1988, in parallel with the short term measures to cut the fiscal deficit the Government continued to implement a set of reforms that aimed at redefining the fiscal roles of Congress, Treasury and the Central Bank. These measures represented another step in an ongoing process of reform that, in the last two years, changed Brazil's budgetary process, increased the transparency of federal expenditures and gave the Treasury and the Congress better tools to control fiscal spending. In January 1986 the reforms separated the Central Bank and Banco do Brasil, ending the latter's role as a monetary authority, and continued in March 1986 by creating the Secretariat of the Treasury, responsible for controlling disbursements and overseeing federal expenditures in general. In the 1988 budget, some expenditures previously executed by the monetary authorities were incorporated in federal government outlays through the credit operations budget and became subject to Congressional approval. These measures helped clarify the fiscal accounts and separate the roles of fiscal and monetary authorities. Although these reforms cannot solve the fiscal deficit problem by themselves, they improve the authorities' control over fiscal spending, which is essential to reduce the fiscal deficit.

11. Substantial progress was achieved on the external front. Brazil completed a multiyear agreement with the commercial banks and the Paris Club ending a turbulent period in Brazil's external economic relations that began with the 1987 moratoria. In addition, new regulations for debt equity swaps were established. The package offers a flexible menu of options to banks (including exit bonds) that expedited the agreement. For

Brazil, the package includes some debt restructuring (such as postponing principal payments) and yields current account savings by retimed interest payments and lower spreads. Some of the package's features (for example, those dealing with relending) will need monitoring by the authorities to prevent excessive pressures on the financial markets. In addition, completing the agreement allows policymakers to devote attention to domestic economic issues, such as high inflation and the fiscal deficit.

Key Issues for the 1989 Program

12. The fiscal outlook for 1989 depends on three ongoing processes. The first is the 1989 budget, which Congress must vote on by mid-December. The second is a set of fiscal measures in preparation (mostly on the revenue side) that Congress will have to approve before the end of 1988 to be effective for 1989. The third is the new Constitution, which was promulgated in early October. The new Constitution changes the distribution of revenue between federal and local governments, increasing the balance of resources in favor of state and local governments. These changes will have significant effects on the allocation of resources in the medium term. To compensate for the expected loss in revenue the Government undertook a far reaching evaluation of its expenditure program--Operação Desmonte. Preliminary estimates indicate that as a result of this evaluation federal expenditures will be cut by about 1-1.5% of GDP, broadly compensating for the loss of revenues.

13. The 1989 federal budget submitted in August to Congress embodies a deficit of 2.3% of GDP (excluding capital transfers to federal enterprises equivalent to 0.5% of GDP). Since the federal deficit exceeds the target established for the public sector as a whole (2% of GDP), the fiscal outlook for 1989 is far from being defined. The Government announced that the programmed deficit of 2% GDP will be distributed between the Federal Government and public enterprises. This strategy will require an additional fiscal effort that the authorities have announced will be presented to Congress in November. The fiscal outlook for 1989 will not be clarified until Congress approves the 1989 budget and the Government announces its new tax measures. Without a substantial fiscal effort it will be difficult to stabilize inflation in the coming year.

14. Brazil's economic policy framework has been reshaped by the new Constitution which was approved in October. The Constitution introduces important changes in the budgetary process and labor laws. It also includes a provision limiting the annual real interest rate to 12%. Although the precise meaning of the real interest rate needs to be defined and the price index to measure inflation has to be specified, this measure has potentially far reaching implications for the conduct of monetary policy and for the success of any stabilization attempt. If the ceiling implies that the authorities cannot finance the fiscal deficit by issuing additional government securities, the money supply would have to expand. Inflationary expectations could create a flight from money into goods, increase the demand for foreign currency and promote capital flight. Overall, if implemented, the interest rate ceiling will create serious obstacles to further stabilization efforts.

15. For the remainder of 1988 and into 1989, the conduct of economic policy will be dominated by three main factors:

- (i) Fiscal Policy. The difficulties associated with controlling fiscal expenditures so that the fiscal deficit for 1988 will not rise above 4% of GDP, and the design of a needed fiscal package for 1989.
- (ii) Monetary Policy. The problems associated with conducting monetary policy in a fully indexed economy. These difficulties are augmented by the pressures on the monetary base resulting from substantial trade surpluses, debt conversions, and the need to finance a still large fiscal deficit without resorting to excessive money creation (which would further increase inflation) or to excessive expansion of the internal debt.
- (iii) Inflation. The possibility that the monthly inflation rate, now close to 28%, may increase. Any further acceleration in inflation may cause a widespread flight from financial assets into goods, moving the economy closer to hyperinflation. The danger of hyperinflation adds urgency to a renewed effort on the fiscal front, as well as to modification of indexation rules in the economy to lengthen indexation periods and to make the resulting real prices more consistent with macroeconomic stability.

16. After 1989, the Brazilian economy is expected to face some additional difficult challenges. The country will have to:

- return to a growth path that will absorb the increasing labor force without pursuing demand policies that will create inflationary pressures or require unduly large external flows.
- encourage a recovery of private investment (without which sustained growth will be impossible) by stabilizing the macroeconomic environment and lowering inflation.
- maintain the path of fiscal adjustment given: (a) structural changes in revenue distribution among the different levels of government, resulting from the new constitution; (b) the need to increase public investment in the social and infrastructure sectors; and (c) the need to service external and domestic debt.

Some Medium Term Issues

17. The most relevant economic issues are how to cut the fiscal deficit, to reduce inflation and to engender the conditions for a recovery of private investment. These issues are closely interrelated. A recovery of private investment is unlikely to occur without reducing inflation and the fiscal deficit. Indexation constrains the design of anti-inflationary policies. Moreover, reducing inflation permanently requires cuts in the fiscal deficit to bring it to a sustainable level. Fiscal adjustment is constrained by interest payments (domestic and external) and requires the Government to deal with a dual transfer problem. Without fiscal

adjustment, real interest rates will stay high and investment will stagnate. High investment and higher growth (with its effects on the revenue side) will help reduce the fiscal deficit.

18. Medium-term macroeconomic adjustment requires not only satisfactory progress on short-run stabilization and the alignment of key relative prices, but also structural adjustment measures to solve the economy's fundamental problems underlying sustained macroeconomic imbalances. Structural measures help ensure sustained adjustment of aggregate demand, promote aggregate supply or assure external balance and above all enhance the credibility of the Government's approach. In short, medium-term macroeconomic adjustment requires that: (i) the real exchange rate be adjusted over time in line with the trade reform objectives, (ii) real interest rates be lower and more stable, and (iii) the real wage rate be prevented from attaining an unsustainable level.

19. Medium-term fiscal adjustment must be based on structural, not ad hoc measures. This requirement is complicated because, in a highly inflationary economy, implementing ad hoc measures is easier since nominal budgetary claims rapidly lose their real value, while price-related structural measures calling for recurring price changes are more difficult to implement. Despite this complication, avoiding a "stop-go" approach to stabilization will need structural, not ad hoc measures. In addition, some structural adjustment measures are critical for medium-term macroeconomic adjustment but have a negative short-run effect on stabilization, particularly on internal balance. Such tradeoffs should be taken into account when designing stabilization and adjustment programs.

20. Fiscal adjustment must be credible because credibility influences inflationary expectations and price-setting behavior. If the Government lacks credibility, indexation will propagate inflationary anticipatory price rises. Credibility can be better achieved if fiscal adjustment (a) represents a structural and sustainable adjustment, rather than a temporary relief measure, and (b) precedes the incomes policies normally associated with heterodox shocks by enough time to prove that the authorities are committed to the stabilization while simultaneously avoiding excessive recessionary trends.

21. Fiscal adjustment is constrained by the need to service a large domestic and external debt. The external and internal aspects of the transfer problem are interrelated. On the external side the issue is how to generate a noninterest surplus consistent with moderate growth, low inflation, and high investment. Without deficit adjustment public debt service (external and internal) will increase domestic borrowing or (inflationary) money creation. If adequate external capital flows are not forthcoming, foreign debt will be replaced by domestic debt and/or excessive money creation. When domestic debt bears higher real interest rates, the substitution process increases the interest bill and the fiscal deficit. Thus, the public sector faces two difficulties. One is the need to transfer abroad resources to service the external debt, now largely a liability of the public sector. Since interest payments took an increasing share of fiscal spending, flexibility is reduced. The other difficulty is a transformation problem that arises because while the public sector holds most of the external debt, the private sector generates the foreign exchange necessary for its service. How to implement a fiscal adjustment

despite these constraints remains a crucial aspect of a medium-term strategy. Without macroeconomic stabilization it is unlikely that Brazil's creditworthiness will improve so that a less constrained access to world markets will be possible.

22. To encourage a recovery of private investment is a challenge to policy makers. Stable growth and low inflation should improve the business environment and encourage firms to invest. Stabilization measures should be designed to convey to the private sector the Government's commitment to the program's success. Measures that economic agents view as leading to sustainable deficit reduction should have a larger impact on expectations than simple ad hoc measures. Fiscal deficits, financial instability, and lower investment are three interlinked problems. Fiscal adjustment is crucial to break the vicious circle, but increased fiscal effort must be accompanied by adequate external capital flows to smooth the adjustment process.

23. In the medium term, Brazil's growth will depend on accumulating capital and on developing, absorbing, and efficiently using modern technology. This dynamic process will be stimulated by the competitive pressures that emanate from a program of industrial and trade policy reforms. By removing market imperfections and administrative rigidities, these reforms would intensify market forces. However, the desired sector reforms should be implemented within an appropriate macroeconomic framework. In particular the control of inflation and reducing the fiscal deficit are preconditions for a recovery of private investment and sustained industrial growth.

24. High and volatile inflation rates pose an obstacle to the achievement of the medium-term growth objectives. In a fully indexed economy demand management policies lose much of their effectiveness as anti-inflation tools. The loss in output for a given reduction in inflation can become high and unsustainable. The present high monthly inflation rate makes the situation rather precarious as any adverse shock can rapidly move the economy into hyperinflation. As long as the present indexation rules are maintained, no substantial short-run reduction in the inflation rate should be expected. Thus, how to modify indexation rules so they will not obstruct the anti-inflationary efforts is a major issue.

25. In a fully indexed economy such as Brazil's, reducing inflation will require some form of price and income policies normally associated with heterodox shocks. A heterodox shock complements rather than substitutes for orthodox policies by enabling anti-inflation measures to overcome rigidities that result from indexation and from long-term inflationary expectations. The experience of Brazil and other countries with this type of anti-inflationary measure yields valuable lessons for the design and implementation of an eventual future shock. Three elements are important in designing a stabilization program that combines orthodox and heterodox elements. First, the program should be supported by a credible and consistent set of measures; second, the macroeconomic fundamentals should be in place; and third, the implementation of the program should be supported by a broad social pact. The timing of the package, the distribution of the fiscal adjustment over time, and the sharing of the burden between wage and nonwage earners are important issues that need to

be addressed when establishing the social pact. But because stabilization involves a long and uncertain process, the success or failure of a program established along the above lines will depend on how it is implemented. Moreover, because domestic adjustments will engender gainers and losers, prospects for successful price and incomes policies will be enhanced if they have the broad support of different social groups, and if any losses during the stabilization period are shared among them. Such understanding requires strong commitment from the Government and the main social groups in support of the stabilization efforts.

Summing Up

26. The difficulties faced by the 1988 gradualistic approach to dealing with inflation can be explained by:

- fiscal pressures and a relatively accommodating monetary policy;
- an increasingly pervasive indexation system; and
- diminishing credibility of the economic program as inflation slowly rose during the second half of the year.

Therefore, hyperinflation has become a distinct possibility and presently constitutes the main short term economic issue.

27. In 1988 substantial progress was made towards adjusting the fiscal deficit. Although the fiscal effort may be threatened if several downside risks materialize, it is possible that the government's target of 4% of GDP for the operational deficit will be met. That would represent a substantial cut in the deficit from its potential level of 7-8% of GDP, prior to the enactment of the first set of government measures. The unexpectedly high trade surplus has had a positive effect on both the level of economic activity as well as on the rebuilding of reserves. However, as a result of a continued sluggishness of imports (due to quantitative restrictions and low domestic demand) and a strong expansion of exports, the trade surplus has added to the inflationary pressures, in the absence of a strong sterilization policy.

28. On the inflation front the results of the Government's approach have been disappointing. In addition to the pressures emanating from the growth in reserves, the near full indexation of the economy, the resulting tendency for relative price changes to occur through an acceleration of inflation have been worsened by a growing lack of confidence in the current strategy of fighting inflation and a loss of credibility of the 1988 program.

29. A successful attack on inflation in 1989 will need to address all three issues that underlie the lack of success of the 1988 program. Briefly:

- the fundamentals of fiscal and monetary policies will need to be put in place with a primary focus on fiscal adjustment based largely on expenditure cuts rather than tax increases.

- a deindexation process that succeeds in increasing substantially the interval between adjustments for monetary correction should be established; and
- both of the above must be credibly done using a mechanism that will ensure the commitment of the major social groups.

30. The report recognizes that the experience of Brazil and other countries shows that a successful end to chronic inflation would necessitate a heterodox approach, requiring an incomes policy and a nominal anchor. A monetary nominal anchor based on a zero demand for domestic financing by the public sector is recommended. It is recommended that a heterodox approach be tried only if the fundamentals are firmly in place and an indexation approach that guarantees that the resulting real prices are consistent with macroeconomic stability is established. Another unsuccessful heterodox attempt would magnify the risk of hyperinflation.

31. Fiscal adjustment remains a crucial component of any strategy to deal with the inflation problem. Raising public sector savings will require a continuing effort to undertake public expenditure and tax reforms. The next challenge will be the resumption of growth that will require a recovery of investment. In the medium term, such recovery will need a major reform effort that should include trade policy reform, financial sector reform and, in general, measures that will increase economic deregulation and efficiency and improve resource allocation. A social policy reform aimed at targeting a higher fraction of social expenditures toward the poorest groups is also highly needed. Although the economic problems facing Brazil are substantial, Brazil still remains in a relatively better position than other highly indebted countries.³ In recent years an impressive external adjustment has been accomplished. Nevertheless, following a successful stabilization program, a resumption of growth would require a change in the pattern of net resource flows seen in recent years. In the 1982-87 period, net resource flows (the noninterest current account) from Brazil have been \$31.2 billion, or \$5.2 billion per year on average. A change in this pattern would contribute to easing the adjustment process, and would facilitate the recovery of investment.

3/ This conclusion is broadly supported by a comparison of various indicators of the external debt burden in various highly indebted countries. Over the 1985-87 period, external interest payments as a share of GDP averaged 6.1% for Argentina and 4.0% and 5.9% for Brazil and Mexico, respectively. During the same period external interest payments averaged 28% of tax revenues in Argentina and 18.5% and 55.2% in Brazil and Mexico, respectively. Between 1982 and 1987, investment as a share of GDP declined in Argentina from 15.5% to 12.1%, and in Mexico from 22.9% to 17.6%. In Brazil during the same period the investment ratio declined from 20% to about 19%. However, in 1987 inflation was much higher in Brazil (396%) than in Argentina (178%) and Mexico (159%).

BRAZIL - A MACROECONOMIC ASSESSMENT OF THE CURRENT ECONOMIC SITUATION

INTRODUCTION

1. The objective of this report is to: (i) summarize Brazilian economic developments in the first half of 1988; (ii) assess the effects of recent economic measures on short-term stabilization, focusing on inflation and the fiscal deficit (the main macroeconomic issues facing the Brazilian economy); and (iii) evaluate these issues for the medium term by examining the links between inflation, investment, the fiscal deficit, and domestic and external debt service.

2. The report contains four main chapters. The first provides some background on the economic developments during the last few years. A brief analysis of why two stabilization attempts, the Cruzado and the Bresser Plans failed, puts present economic problems into perspective and suggests what is needed for success in the future programs. The second chapter covers 1988 economic developments, particularly the Government's June economic program.¹ The third chapter assesses 1988 macroeconomic performance. The last chapter deals with some of the main issues facing the Brazilian economy today such as inflation, the fiscal deficit, the burden of the domestic and external debt (that limits the room for fiscal adjustment), and the need to increase investment, particularly private investment. Because these issues are interrelated, they will need to be addressed simultaneously and coherently for Brazil to return to a medium-term growth path which will permit new entrants to the labor force to find employment and to make some inroads into underemployment and unemployment.

I. BACKGROUND

3. Today's economic problems are the result of policies pursued over the last several years, compounded by the failure of the Cruzado and Bresser stabilization plans. These plans attempted to deal with the inertial component of inflation by relying more on price and income policies than on more traditional demand management. The authorities' inability to deal with the fiscal deficit, the major source of domestic imbalance, led to the failure of both plans. Analyzing the plans' pitfalls provides insights useful to the design of a future stabilization plan. The analysis also confirms that controlling inflation and the fiscal deficit are the central issues facing the Brazilian economy.

1/ "Program for Modernization and Adjustment: 1988-89", Ministry of Finance, June 1988.

I.1 The Pre-Cruzado Period

4. During the 1980s, macroeconomic policy concerns in Brazil were dominated by three related structural problems: (i) rising inflation; (ii) a reduction in public sector savings, which led to high fiscal deficits; and (iii) the need to maintain a minimum growth rate and simultaneously to transfer resources abroad to service a large external debt. For the last several years, Brazil has not successfully dealt with these issues. The reduction in external financing coupled with the Government's inability to reduce the fiscal deficit to levels compatible with the lower available savings burdened domestic financing sources. As domestic borrowing replaced external borrowing in financing the public sector deficit, the resulting high real interest rates increasingly crowded out the private sector. The combination of reduced external resources and high fiscal deficits hurt growth and spurred inflation.

5. Over 1980-83 several attempts were made to restore external equilibrium despite economic stagnation and rising inflation. A fiscal adjustment reduced the operational deficit from 8.3% of GDP in 1982 to 4.8% in 1983. The domestic costs were large, but the external adjustment was successfully completed. During 1980-83, GDP per capita declined 11.7% but a trade surplus adjustment equivalent to 5.4% of GDP was achieved. However, annual inflation increased from 100% in 1982 to over 210% in 1983 triggered by a 30% real exchange rate devaluation, an increase in agricultural prices due to a poor harvest, cuts in subsidies, and adjustments in public sector prices aimed at reducing the fiscal deficit. Widespread indexation and monetary accommodation set off wage and price increases, preventing the decline in demand from reducing inflation.

6. During 1984-85, excess capacity allowed Brazil to grow and maintain a strong external position. GDP increased 5.7% in 1984 and 8.4% in 1985 while the trade surplus averaged US\$12.8 billion (5.9% of GDP), a big improvement compared with US\$0.8 billion in 1982. Although growth resumed in 1984, Brazil was unable to shift the savings-investment balance enough to compensate for the contraction in available external financing (particularly in the public sector). Despite some reduction in the inflation-corrected deficit, the annual inflation rate topped 300% by the end of 1985.

I.2 The Cruzado and Bresser Plans

7. The 1986-87 period was dominated by two unsuccessful attempts to cut inflation drastically: the Cruzado Plan (February 1986) and the Bresser Plan (June 1987). The latter was embedded in a medium-term macroeconomic framework labelled the Macroeconomic Control Plan. Both included some form of price controls and deindexation (to reduce inflation inertia), and measures to address the fundamental inflationary force, the fiscal deficit. The plans differed on their strategies for dealing with inertial inflation. The Cruzado Plan fixed all prices including the exchange rate and abolished indexation for most financial instruments. Zero inflation became the official target. In contrast, the Bresser Plan did not abolish indexation but modified the indexing rules in an attempt to stabilize prices and wages. The price freeze was explicitly presented as a

temporary measure (maximum 90 days), and backward-looking indexation rules were established to regulate price and wage adjustments in the post-freeze period. However, in neither plan was the fiscal effort adequate to bring aggregate demand to a level consistent with permanently lower inflation.

8. The initial effects of the Cruzado Plan were highly positive. Inflation fell drastically and the balance of payments remained strong because of favorable external conditions, such as the decline in oil prices, interest rates, and the depreciating dollar. By July 1986, because of larger than estimated public sector deficits and higher real wages, aggregate demand expanded too fast. In November a fiscal adjustment (dubbed Cruzado II) increased public sector tariffs and indirect taxes. Simultaneously, regular minidevaluations of the cruzado were resumed. As the price freeze was relaxed and then abandoned, inflation accelerated sharply, reaching almost 17% in January and 23% in May 1987. The economy was virtually fully reindexed except for wages which, as a result of the month-long lag in wage increases and substantial inflation in excess of the 20% adjustments, declined sharply in real terms.

9. In the wake of the sudden acceleration of inflation the authorities adopted a new anti-inflation program--the Bresser Plan. Although this plan avoided some of the pitfalls encountered by the Cruzado Plan, the inflation targets, the size of the fiscal deficit, and the composition of its financing were not fully consistent. Moreover, implementation of measures to control the public deficit (targeted at 3.5% of GDP) proved too weak, and the Plan's monetary targets were exceeded from the beginning. Despite corrective fiscal measures in August 1987, the 1987 operational deficit rose from 3.7% in 1986 to 5.5% of GDP. As soon as price controls were relaxed in early September, the inconsistency between the desired inflation rate and fiscal policy showed up as price increases. Inflation increased from a 5% monthly average during the third quarter of 1987 to 12% during the last quarter. Meanwhile, increases in public sector wages granted in late 1987, (inconsistent with the Plan's income policies) fueled inflationary expectations and led to anticipatory price increases by firms. The monthly inflation rate reached 14.1% in December and 16.5% in January, remaining in the 16-19% range in February-April of 1988.²

^{2/} This outcome had been predicted in the *First Macroeconomic Assessment Report "Brazil: An Assessment of the Current Macroeconomic Situation"* (Report No. 7057-BR, December 1987). By the end of the third quarter of 1987 the short-run stabilization attempt was running into difficulties. The Report accurately forecast an operational deficit of 5.5% of GDP, and an increase in the monthly inflation rate. The larger than expected fiscal deficit and the constraints on domestic and external borrowing were expected to result in high monetary expansion by the end of the year, fueling inflation into 1988.

10. The two plans had important effects on the level of economic activity and external accounts. In 1986, as domestic demand accelerated, GDP increased by 8%. The combination of an overvalued exchange rate (due to the freeze) and strong domestic demand hurt Brazil's balance of payments. The 1986 trade balance of US\$8.3 billion was one-third below the US\$12.5 billion attained in 1985. In 1987, after two consecutive years of domestic growth exceeding 8% per year, and despite of a recovery of agricultural output, economic activity slowed considerably. Industrial output increased by only 0.9% in 1987 after a 10.9% expansion in 1986. However, real exchange rate adjustment combined with a slowdown in domestic demand (mainly the result of declining real wages) strongly improved the trade surplus in the second half of 1987. For the year, the trade surplus reached US\$11.2 billion, 34.4% more than the 1986 trade figure.

11. In sum, Brazil reduced its external borrowing requirements in the 1980s (particularly after the 1982 debt crisis) but was unable to tackle successfully its domestic imbalances, particularly the fiscal deficit. The private sector underwent its own internal adjustment, shedding external debt that the Central Bank took over and adapting to an environment of high and variable inflation and high real interest rates. The sharp decline in external flows after 1983 forced the authorities to use monetary expansion and domestic borrowing to finance the fiscal deficit, raising inflation and real interest rates. In retrospect, this stop-and-go approach of dealing with the fiscal imbalance prevented sustained economic growth. Deteriorating short-term macroeconomic prospects discouraged private investment, further limiting the potential for non-inflationary growth.

12. To foster a recovery of private investment and move the economy toward a non-inflationary growth path Brazil must cut the fiscal deficit substantially and reduce inflation. As discussed in detail in Chapter IV, these objectives are closely related. Investment is unlikely to recover amid the prevailing uncertainty about short and medium-term economic trends. High inflation and a large fiscal deficit are preventing a decline in real interest rates and the emergence of a stable economic environment.

I.3 Some Lessons From the Two Failed Heterodox Shocks

13. The failure of the Cruzado and Bresser Plans demonstrated that "heterodox" attempts at stabilization (that is, programs centered on income policies that include a wage and price freeze coupled with some form of deindexation) cannot succeed without the support of tight monetary and fiscal policies consistent with lower inflation. Although the design of the price and income policies played a major role in the breakdown of the Cruzado Plan, the main reason that both stabilization attempts failed was inadequate fiscal effort. Without substantial foreign savings, deficit financing by monetary expansion and domestic borrowing causes high inflation and domestic crowding out of the private sector with a negative effect on economic activity.

14. The failure of the two heterodox plans has significant implications for the future conduct of economic policy. These are:

- (i) Reduced Credibility. Public skepticism regarding policy announcements means that future stabilization plans will get more scrutiny. Deliberate or accidental deviations

from the announced path will imply to economic agents that the overall approach has failed and, stimulate defensive private sector behavior (such as anticipatory price and wage increases) that will undermine the stabilization effort. Overshooting of target variables during the initial phases of any new program becomes essential.

- (ii) Increased inflation volatility and acceptance (at least temporarily) of a higher inflationary plateau. The main cause is the change in the interval between price and wage adjustments. Before the Cruzado Plan, wages were adjusted every six months, although after inflation accelerated in late 1985, labor unions pushed to shorten the interval between wage adjustments to three months. The present system of monthly wage adjustment based on the average inflation for the previous quarter imposes a lesser drag on the monthly inflation rate and reduces the decline of real wages between consecutive adjustments. With the present indexation system, unless inflation accelerates real wages will remain stable. From the point of view of wage earners, higher but stable inflation becomes more tolerable than before 1986 (when wages were nominally adjusted every six months rather than monthly). Spiralling inflation, and the experience of the two previous Plans leads economic agents to resort to anticipatory price and wage increases whenever there is the possibility that a new price and wage freeze may occur. In sum, the two stabilization failures and changes in indexation rules increased the "upward mobility" of the inflation rate and its destabilizing effects. Because the present monthly inflation rates (about 25-28%) are highly unstable, any domestic or external shock could rapidly move the economy toward hyperinflation.

15. On a positive note, the failure of the two stabilization plans has contributed to an emerging consensus that the roots of Brazil's current economic difficulties lie in excessive public sector growth and inefficiency. The widespread view that without drastic decreases in the public sector deficit the Brazilian economy will be unable to grow, creates a base of support for public sector reforms. Although the size of the public sector deficit is a major obstacle to any attempt to permanently reduce inflation, much less agreement exists on how to reduce the fiscal deficit and who should bear the burden of such a reduction.

16. In sum, the Brazilian experience with "heterodox" shocks has lessons for the design of future stabilization packages:³

^{3/} The experience with heterodox shocks in Argentina and Israel also provides good insights for the design of a future stabilization program.

- (i) The levels of key macroeconomic variables must be set correctly prior to the beginning of the "heterodox" program. To lower inflation and to make the new inflation rate more stable, the fiscal deficit and the key relative prices (such as real interest rates, real wages, the real exchange rate, and key public sector prices) must not create inflationary pressures during the transition period to lower inflation. In addition, during the transition period, the conduct of monetary and fiscal policies should be consistent with the desired inflation rate, allowing for temporary or permanent shocks.
- (ii) External savings can help smooth out the adjustment process but cannot by themselves ensure a successful transition to a lower inflation path. In other words, although fiscal adjustment and correct relative prices remain the key prerequisites, external savings can reduce the domestic costs of the fiscal adjustment and make a successful stabilization more likely.
- (iii) Because domestic adjustments will engender gainers and losers, prospects for successful price and incomes policies will be enhanced if they have the broad support of different social groups, and if any losses during the stabilization period are shared among them. Such an understanding requires a strong commitment from the Government and the main social groups in favor of the stabilization effort. However, this approach may further complicate and slow down the economic policy-making process.

II. ECONOMIC DEVELOPMENTS IN 1988

17. The new economic team that took office in January 1988 faced three challenges: the need to control an escalating fiscal deficit, the need to stabilize the rate of inflation (and inflationary expectations) and the need to reestablish the credibility of economic policy. The main obstacle to stabilization was the fiscal deficit which was projected to rise to 7-8% of GDP, a significant increase compared with the 1987 level of 5.5%. This chapter analyzes economic developments in 1988 with respect to the real sector wages and unemployment, inflation, monetary and fiscal policies, and the external sector. For each of these variables an outlook for the remainder of 1988 is presented.

II.1 The Real Sector

18. Growth prospects for 1988 are poor. Following the 1986 drought, agricultural output expanded by 13.5% in 1987. Although a good crop is expected, because of the high 1987 base, agricultural output in 1988 will probably grow less than the average in recent years (about 2%). Industrial production continues to stagnate. Despite a small increase in July, the growth rate of industrial output for the twelve months ending in July was -4.88%. Good export performance has prevented an even larger decline in industrial output. On account of seasonality, industrial output in the second half of the year should increase relative to the first semester, but stagnant domestic demand should prevent any real recovery in industrial production. For the year, industrial production is expected to decline up to 1%. Because services industries are influenced by agricultural and industrial output, services will grow less than 1%. GDP growth in 1988 is expected to stay below 2% (less than envisioned by the Government program). A positive but less than 1% growth rate appears likely.⁴

II.2 Wages

19. The Bresser Plan rules still determine the adjustment of nominal wages. This legislation abolished the wage trigger created during the Cruzado Plan and established a temporary wage freeze, after which wages would be adjusted according to the Price Reference Unit (URP) based on the inflation average of the previous quarter. The two month wage freeze (to be discussed below in the context of fiscal policy) did not extend to the private sector. Any losses in real wages resulting from differences between the monthly inflation rate and the URP factor were to be recovered at the time of annual wage negotiations. No limits were established for real wage gains that could be obtained during the annual wage bargaining for each sector.

20. The URP adjustment offers significant but limited protection to real wages. Because nominal wages are adjusted on the basis of the

^{4/} This result follows from our analysis of leading indicators that attempts to predict major accelerations or decelerations of industrial production (see Annex I).

inflation rate of the previous quarter, whenever inflation accelerates real wages decline. Conversely, backward looking indexation rules will increase real wages if inflation declines between two consecutive quarters. Therefore, this set of rules introduces additional rigidity in the anti-inflation process, making a gradual approach to reducing inflation more difficult.

21. In 1987, real wages fell substantially relative to their 1986 peak, a value that was recognized as unsustainable in terms of macroeconomic stability. The rise in inflation between September and December 1987, well above the the URP adjustment, explains the drop in real wages that occurred in the last quarter of 1987 (Table II.1). In 1988, despite higher unemployment, real wages have remained stable largely because inflation has been relatively stable.

22. The evolution of real wages until 1989 will depend on the inflation rate and the outcome of forthcoming wage negotiations. If the monthly inflation rate stabilizes real wages should stabilize, contributing to a possible recovery of private consumption. Alternatively, accelerating monthly inflation would erode the real purchasing power of wage earnings. More important for the evolution of real wages are the annual wage negotiations that will take place until the end of 1988 for key economic sectors, such as public enterprises, banking, and metallurgy. The outcome of these negotiations should set the tone for the overall wage bargaining process. In retrospect, the increase in real wages that occurred during equivalent wage negotiations in 1987 aggravated the macroeconomic imbalances prevalent at that time and contributed to the breakdown of the Bresser Plan. Although choosing where to peg real wages is difficult, any increase in real wages over present levels (especially in the public sector) will increase the inflation rate (and inflationary expectations).

II.3 Inflation

23. During the first nine months of 1988, the rate of inflation increased slowly. Measured by the official consumer price index (IPC), the monthly inflation rate averaged 12% for the last quarter of 1987, 16.8%, for the first and 18.8% for the second quarter of 1988. In the third quarter of 1988 the consumer price index increased at the monthly rate of about 23%. No strong correlation appears to exist between quarterly changes in (URP) levels and acceleration of the inflation rate. Because firms anticipate wage increases (due to monthly URP adjustments) and raise their prices, new URP rates do not immediately push the inflation rate. Seasonal factors and public sector tariff readjustments (that enter directly in the computation of the price index), have more effect on changes in the monthly inflation rate. However, the constant incorporation of new URP adjustments into higher wages entrenches both inflation and inflationary expectations ever more firmly.

24. Following the disappointing inflation outcomes of the last few months, the 600% inflation target for the year will be exceeded. Between January and September 1987, the accumulated inflation rate was 397%.

TABLE II.1: REAL WAGES AND UNEMPLOYMENT

	Real Wage Index ^{/a} March 1986 = 100		Unemployment Rate	
	Average real wage	Real wage bill	Global ^{/b}	Sao Paulo
1984 Dec	93.5	83.2		12.4
1985 Dec	93.4	90.3	3.2	9.8
1986 Mar	100.0	100.0		11.5
Dec	103.3	108.5	2.2	7.3
1987 Sep	88.6	91.0	4.0	9.7
Dec	96.7	99.4	2.9	8.6
1988 Jan	90.6	93.1	3.8	9.4
Feb	89.7	92.4	6.3	10.3
Mar	89.5	92.1	4.3	10.3
Apr	97.4	92.1	4.1	10.4
May	100.0	102.7	4.0	10.4
Jun	95.2	97.7	3.9	10.1

^{/a} Source: Min. FAZENDA and FIESP

^{/b} Average unemployment rate for six metropolitan cities - Source: IBGE.

Table II.2: BRAZIL - INFLATION AND URPa/

(percent per month)

	<u>Month</u>	<u>Inflation (CPI)</u>	<u>URP^{b/}</u>
1987	September	5.68	4.19
	October	9.18	4.19
	November	12.84	4.19
	December	14.14	9.19
1988	January	16.51	9.19
	February	17.56	9.19
	March	16.01	16.19
	April	19.28	16.19
	May	17.78	16.19
	June	19.53	17.68
	July	24.04	17.68
	August	20.66	17.68
	September	24.01	21.39

- a/ The URP uses the average inflation rate for the preceding three months to adjust wages during each of the following three months.
- b/ In November and December the URP wage adjustment will be 21.39% per month.

Depending on the size and nature of shocks that may affect the economy, the monthly inflation rate could remain at 25-28% for the next few months. Although the backward-looking indexation rules provide an anchor for inflation rate, monetary and fiscal shocks and seasonal factors push the rate further upward. So, higher wages and fiscal deficits clearly may raise inflation to higher levels than experienced so far.⁵

II.4 Fiscal Policy

25. In 1988, two main elements influenced the conduct of fiscal policy. One was the continuing implementation of reforms that aimed at redefining the fiscal roles of Congress, the Treasury, and the Central Bank. The other was the need to bring the fiscal deficit under control, particularly following the large wage increases granted to public sector employees at the end of 1987.

5/ Some simulations will be presented below showing the impact of the fiscal deficit on inflationary outcomes.

Structural Reforms

26. Over the last two years, changes in Brazil's budgetary process have increased the transparency of federal expenditures and given the Treasury and the Congress better tools to control fiscal spending. In January 1986 the reforms separated the Central Bank and Banco do Brasil, ending the latter's role as a monetary authority, and continued in March 1986 by creating the Secretariat of the National Treasury, responsible for controlling disbursements and overseeing federal expenditures in general. Several parafiscal expenditures previously executed by the monetary authorities were transferred to the Treasury. In the 1988 budget, these expenditures were incorporated in Federal Government outlays through the credit operations budget and became subject to Congressional approval. Moreover, in 1988, federal securities could only be issued in amounts necessary to service the debt and to finance the federal budget as approved by Congress. These measures helped clarify the fiscal accounts and separate the roles of fiscal and monetary authorities. Although these reforms cannot solve the fiscal deficit problem by themselves, they improve the authorities' control over fiscal spending, which is essential to reduce the fiscal deficit.

27. In mid-1988 a set of new budgetary procedures produced a partially indexed budget. These procedures distinguish between indexed and non-indexed expenditures. Indexed outlays (essentially wage and interest payments) will have their monthly ceilings adjusted according to the changes in a pre-specified index. The monthly ceilings for the remaining expenditures will be adjusted on the basis of available revenues. These measures aim to restore the role of the budget as a tool to control Government spending. Because of the high and variable inflation that Brazil experienced in recent years, the budget had lost much of its ability to monitor projected and actual revenues and expenditures. Thus, the shift to partial indexation should improve the budget's usefulness as a monitoring device. Moreover, because the monthly adjustment of non-indexed items depends on revenue availability, an indexed budget may help reduce fiscal spending. However, this does not guarantee that the quality of the expenditure will count when non-indexed outlays are adjusted. On the other hand, indexing (even if partial) may reduce the fiscal drag on the expenditure side and accelerate inflation. Despite these shortcomings, the budget's indexation restores this instrument's potential role as a tool for monitoring fiscal spending.

The 1987 Outcome

28. The Bresser Plan succeeded in avoiding a combination of stagflation and hyperinflation in mid-1987. However, compared with the Bresser Plan's targets, the fiscal outcome in 1987 was disappointing. The operational deficit reached 5.5% of GDP, well above the programmed 3.5% of GDP. The 1987 fiscal outcome is explained by the large October 1987 wage increase, poor implementation of planned structural measures, and the real decline of tax revenues following the acceleration in the inflation rate (see Annex III). Fiscal accounts deteriorated mainly at the Central Government and SEST levels (Table II.3). Despite declines in real revenues, the state and local Government deficits met the targets.

Table II.3: BRAZIL - PUBLIC SECTOR BORROWING REQUIREMENTS /^a

(Operational Concept, 1986-1988)

(% of GDP)

	<u>1986</u>	<u>1987</u>	<u>1988</u>	
		Preliminary Estimate	Program's Targets	Downside Risks' Outturn
Central Government / ^b	1.5	2.8	3.3/ ^c	3.5-4.0
States and Municipalities	0.9	1.6	0.6	0.7
State Enterprises of which:	1.3	1.1	-0.4	0.0
SEST	0.5	-0.4	-0.7	-0.4
State & Local	0.8	1.5	0.3	0.4
Decentralized Agencies	0.0	-0.1	0.1	0.1
Social Security	-0.3	0.2	0.4	0.3
TOTAL	3.5	5.5	4.0	4.5-5.0

/^a Not strictly comparable to previous years, Central Government includes Funds and Programs. In 1988 Central Government includes also Central Bank results.

/^b Includes capital transfers to SEST enterprises which were, respectively, 1% of GDP for 1986, and 2.1% for 1987. For 1988 they are projected at 1.4% of GDP.

/^c Central Government deficit estimate is 3.4% of GDP (see Table 2), while the Central Bank results are expected to reduce it to 3.3% of GDP, according to Government projections.

Source: Central Bank and mission estimates.

Federally imposed controls over their levels of indebtedness coupled with their own adjustments explain the performance of this component of the public sector. As a whole, for 1987 the remaining components of the public sector (that is, Social Security, Decentralized Agencies and Funds and Programs) performed better than planned. They did not contribute to the worse than expected outcome of the fiscal deficit.

Recent Economic Measures

29. Earlier projections had indicated that without corrective measures, the operational fiscal deficit could increase from 5.5% of GDP in 1987 to over 7% in 1988. Three main factors explain such sharp deterioration in the fiscal accounts: (i) the increase in public sector wages granted in 1987; (ii) the decline in real tax revenues because of the sharp acceleration in inflation; and (iii) higher interest payments. In March 1988, the authorities tried to reduce the fiscal deficit by imposing ceilings on financial institution lending to the public sector. On April 7, a second set of measures was announced that: (i) eliminated monthly salary adjustments in April and May 1988 for all federal public sector workers by suspending the inflation adjustment; (ii) paid a small fixed bonus to all public sector employees earning less than five minimum reference wages (about US\$200.00) per month; and (iii) increased the corporate income tax for financial institutions (five percentage points (from 45 to 50%). The salary freeze would cut about 1.1% of GDP from the potential deficit and the controls on public sector borrowing from the financial system should cut the potential deficit an additional 1% of GDP. Finally, eliminating the wheat subsidy to consumers (announced on April 22), is expected to further reduce the fiscal deficit by about 0.2% of GDP. Consumer wheat prices will be corrected, monthly, for inflation. These measures should cut the projected 1988 deficit by approximately 2.6% of GDP, bringing it to about 4% of GDP, the official target for 1988.⁶

6/ Because of changes in the methodology used to estimate the Public Sector Borrowing Requirements, (PSBR), the projected 1988 deficit is not fully comparable with the deficits of previous years. These changes result from the redefinition of the roles of the Central Bank and the Treasury. In 1988, responsibility for issuing federal securities was assumed by the Treasury and several expenditures previously executed by the Central Bank on behalf of the Treasury were incorporated in the budget. In addition, in June 1988 a change occurred in the accounting procedures of the Central Bank. The Central Bank portfolio of federal securities that had been carried at historical values was revalued to reflect current values. As a result the Central Bank balance sheet was adjusted through a special bond issue of CZ\$2.8 trillion. Therefore, the 1988 nominal deficit includes interest payments on the portfolio of federal securities of the Central Bank, and the nominal profits of the Central Bank. Both items were previously excluded from the fiscal deficit. The new definition brings the Brazilian concept of operational deficit closer to the usual definition of fiscal deficit.

Federal Government

30. In 1988, the Federal Government will account for most of the public sector deficit. The 1988 target for the operational federal deficit is 3.4% of GDP, about the same as 1987 (Table II.4). In relation to the potential deficit, the thrust of the adjustment comes from the expenditure side. On the revenue side, no significant gains are expected for the Federal Government. Although measures were recently taken to reduce the collection lags for some taxes, high inflation rates are expected to continue to erode real revenues.

Public Enterprises

31. The 1988 program aimed at a big cut in the public enterprises deficit. After Treasury transfers are taken into account, the performance of public enterprises was programmed to improve from a 1.1% of GDP deficit in 1987 to a 0.4% of GDP surplus in 1988. Excluding capital transfers, the SEST deficit is programmed to fall from 1.7% of GDP in 1987 to 0.7% of GDP in 1988 (Table II.3). For SEST enterprises, deficit cuts should follow from a combination of lower investment outlays, lower interest payments (due to completion of the enterprise capitalization in the steel and electricity sectors), and higher real public sector tariffs (see Annex IV).

32. The Government also declared its intention to accelerate the privatization of public enterprises. The scale of the privatization drive has been rather modest. Total sales from divesting about 21 companies brought in about US\$200 million, a small fraction of the estimated US\$40 billion net worth of federal enterprises. Most of the sales of public enterprise stock consisted of private shares held by BNDES. The privatization program is expected to extend to the steel industry, contributing to the financial restructuring in the sector. Although the revenues from sales of public enterprises stock reduce the public deficit as measured by the PSBR, the loss of assets should be taken into account. Given its expected magnitude, privatization's main economic impact may lie in signalling the private sector that the Government is willing to restructure the public sector, rather than in any gains in the fiscal accounts.⁷

Rest of the Public Sector

33. Because of the wage freeze and the ceilings on borrowing from financial institutions, state and municipal government deficits are

7/ In a more comprehensive accounting framework that would consider the total assets and liabilities of the public sector the net worth of the public sector would remain unchanged, assuming the existence of competitive markets, appropriate discount rates, and identical tax rates on private and public enterprises. However, if the borrowing costs of the public sector are higher than those of private enterprises and that difference is reflected in the present value of the stock of public enterprises, privatization may result in a net gain for the public sector.

Table II.4: BRAZIL - CENTRAL GOVERNMENT ACCOUNTS

(% of GDP, 1987-89)

	1987	1988		1989
		Program's Estimates	Downside Risks' Outturn		Budgetary Proposal/^{a}
Revenues	9.6	8.6	8.5	9.8
Expenditures	13.1	12.3	12.6	13.6
Salaries	3.0	2.9	3.2/ ^b	3.7
Transfers to State & Municipalities	2.6	2.4	2.3	2.8
SEST Subsidy	0.6	0.6	0.7	1.0
Social Security System	0.06	0.02	0.01	0.4
Interest Payments	1.4	1.6	2.5	0.02
Wheat Subsidy	0.5	0.2	0.3	2.2
Rural Credit Subsidy	0.7	0.07	0.1	0.04
Other Net Agro Expenditures	0.7	0.3	0.3	0.05
Other Expenditures	3.5	4.2	3.2	0.1
Net Borrowing Requirements	3.4	3.7	4.1	3.4
Central Government Deficit (Operational Concept) ^{/c}	1.2	2.0	2.5	2.3
Transfers of Capital to SEST/ ^d	2.1	1.4	1.4	0.5
Central Government Deficit (Operational Concept)	3.3	3.4	3.9	2.8

^{/a} In accordance with the Budget proposal presented to Congress in August 1988.

^{/b} This takes into account the payment made in August in order to pay back the first month of the freeze which accounts for about 0.4% of GDP.

^{/c} Net borrowing requirements adjusted for operational concept and change in float (difference between authorized and effective payments and additional revenues not allocated) according to the authorities' estimates.

^{/d} Transfers of capital to SEST according to the authorities' program.

Source: Ministry of Finance and Mission estimates.

programmed to decline by 1% of GDP. The combined deficit for Social Security and decentralized agencies is expected to increase from 0.1% of GDP in 1987 to 0.5% in 1988 (Table II.3). The 1987 increase in the Social Security deficit relative to 1986 resulted from a decline in revenues, following cuts in real wages, stagnating economic activity, and higher expenditures from decentralizing medical care.

Recent Performance

34. During the first half of 1988, the fiscal deficit remained in line with programmed levels. According to preliminary estimates, from January to July the operational deficit was 0.8% of GDP, well below the 1.3% of GDP target (Table II.5). The federal, state, and municipal deficits were below target, while the public enterprises deficit exceeded the target.⁸ This fiscal outcome probably could not have been attained without reducing the growth of personnel expenditures made possible by the two month wage freeze. In the first eight months of 1988, personnel expenditures increased 20% in real terms in comparison with the same period of 1987. However, in the first quarter of 1988, before the wage freeze became effective, personnel expenditures increased 35% in real terms compared with the first quarter of 1987. The wage bill absorbs 65% of the Treasury's net disposable receipts (Treasury receipts minus statutory transfers and earmarked revenues), a big jump compared with its 25% share of net disposable receipts in the first half of 1987. On the expenditure side, the increase in the weight of the wage bill constrains the room for fiscal adjustment. Big reductions in the fiscal deficit probably cannot be achieved without reformulating public sector employment and wage policies.

35. Over January-July the public enterprises' operational deficit was about 0.3% of GDP. This surpassed the Government's target and represented a deterioration relative to the same period in 1987. Some laxity in enforcing credit ceilings contributed to this outcome. Moreover, delays in transferring resources from the Treasury to the public enterprises probably helped raise the SEST deficit and partially explain the better than expected outcome for the Treasury.

Tax Revenues

36. In 1987, tax revenues for all levels of Government declined by about 13% in real terms. ICM (the states' major source of revenues) and social contributions declined more (15.8% and 16.8%). Federal tax revenues declined from 9.6% of GDP in 1986 to 9.2% in 1987. The decline was largely due to the large share that exports and agriculture had in 1987 GDP growth, both exports and agriculture are taxed less than other sectors. In 1988 tax revenues could decline by about 1% of GDP. Hardest hit areas should be the IPI (about 0.5% of GDP--the result of reducing vehicle and beverage sales tax rates) and the IOF (about 0.4% of GDP--largely due to exempting foreign exchange operations as a part of the new tariff reform (see Annex

^{8/} The above estimates represent the estimated deficit in a given period divided by the estimated nominal GDP for the whole year.

Table II.5: BRAZIL - PUBLIC SECTOR BORROWING REQUIREMENTS - ACTUAL & PROGRAMMED

(Operational Concept, % of GDP)

	<u>1987</u>		<u>1988</u>							
	Jan- June	Jan- Dec	Jan- Mar	April- June	<u>Jan-June</u>		<u>Jan-July</u>		<u>Jan-Dec</u>	<u>Downside</u>
					Actual	Programmed	Actual	Programmed	Programmed	Risks' Outlook
Central Government/ <u>a</u> / <u>b</u>	1.5	2.8	0.22	0.0	0.28	0.7	0.28	0.9	3.3	3.5-4.0
State & Local Governments	0.7	1.55	0.16	0.13	0.28	0.2	0.28	0.2	0.6	0.7
State Enterprises	-0.6	1.05	0.06	0.14	0.20	0.0	0.28	0.03	-0.4	0.0
Decentralized Agencies	0.0	-0.14	0.0	-0.04	-0.03	0.0	-0.02	0.04	0.1	0.1
Social Security	-0.2	0.28	0.01	0.06	0.07	0.1	0.04	0.17	0.4	0.8
Total	1.3	5.46	0.45	0.8	0.75	1.0	0.76	1.3	4.0	4.6-5.0
Memo Item:										
Central Bank results	-	-	0.01	-0.03	-0.02	-0.1	-0.04	0.3	0.1	0.0

/a Not strictly comparable with previous years. Funds and Programs are included in Central Government accounts.

/b In 1988 it includes Central Bank results (according to the IMF projections).

Source: Central Bank, IMF Program and Mission estimates.

III).⁹ Accelerating inflation will hurt tax revenues. Income tax revenues in real terms should remain stable as quicker tax payments and shorter payment lags compensate for the decline in taxes on labor income. Recent measures to boost tax revenues include higher taxes on company profits and a recalculation of import tariff (to be based on the exchange rate of the day prior to the import declaration rather than on the average exchange rate of the previous month). Other measures being considered will involve the individual income tax and reducing tax collection lags (see Annex III).

37. The new Constitution will change how tax revenues are allocated. The Federal Government will lose some of its income tax and IPI revenue in favor of state and local Governments. Moreover, some specific taxes on transportation, mining, communications, electricity, and fuel will be included in calculating the ICM base and lost as a revenue source for the Federal Government. If the Constitution's new distribution of revenue had been fully implemented in 1988 the Federal Government would have lost 22.9% of its tax revenues (8% lost from the income tax, 9.1% from IPI, and 5.8% from other revenue taxes). In addition, transforming the ICM into a broader tax will likely create a chain of credits for input taxes that will reduce distortions from double taxation, but on the other hand diminish tax revenues. Using the 1975 input/output matrix and assuming that the present ICM rates apply across the board, the change to a broader ICM would result in a revenue loss from indirect taxes of as much as 23%.¹⁰ To compensate, the Federal Government reevaluated its expenditure program (Operação Desmonte) hoping to transfer to state and local Governments expenditure responsibility equivalent to the loss in revenues. The net effect appears to be neutral (see below).

Outlook for the Remainder of 1988

38. Although preliminary indications suggest that public sector performance was in line with Government projections in the first half of 1988, recent developments may threaten the 1988 fiscal target. The three main downside risks are the slippages on the wage front, lags in adjusting public sector tariffs, and higher interest rates.

- (i) Wages. In August, the authorities decided to grant a wage increase compensating public employees for the first month of the freeze. This wage increase (which originally was to occur in January 1989) will increase the 1988 fiscal deficit by about 0.5% of GDP. The Government has declared that unless there is room in the fiscal accounts, the wage increase corresponding to the second month of the freeze will not be granted before January 1989. However, given the pressures for a wage increase, the final outcome is unclear. What impact this has on the 1988 fiscal deficit will depend

^{9/} ICM - value added tax; IPI - tax on industrial products; IOF - tax on financial transactions.

^{10/} According to preliminary results included in the forthcoming Tax Reform report.

on its timing. The later in the year the wage increase occurs, the smaller its impact on the fiscal deficit. Nonetheless, as the peak in real public sector wages is restored in early 1989, the resulting pressure on public expenditures and the public sector deficit may force a close analysis by the authorities of public sector wage and employment policies.

- (ii) Public Sector Tariffs. During the first quarter of 1988, flexible price policies were in effect for the public sector. Since then, some price adjustments have fallen behind inflation. An average real price index for major enterprise output (weighted by 1987 sales share) shows a declining trend from March to August, recovering slightly in September (see Annex IV). The fall is largely due to the drop in the price for petroleum products, which will bring lower revenues to PETROBRAS that lower international oil prices will not compensate. Electricity (and to a certain extent steel and railways) have better price prospects, but not sufficient to offset declines in other sectors. Although in the short run a less than full adjustment of specific public sector prices may prevent inflation from accelerating further, it will lead to a deterioration of the financial situation of the public enterprises directly affected and increase the public sector deficit.
- (iii) Interest Payments. The increase in real interest rates since the middle of 1988 is expected to raise interest payments above the projected levels. The debt management policies pursued by the Central Bank in 1986-87 replaced much of outstanding fixed rate federal debt with floating rate bonds linked to the overnight rate. At the time, the change restored the flexibility of monetary policy and reduced the interest bill. Because a large part (about three-fourths) of the federal debt outstanding is held on an overnight basis, higher interest rates will have an immediate impact on the fiscal accounts. Each 1% increase in real interest rates will raise the fiscal deficit by about 0.15% of GDP.

39. Other factors may worsen the fiscal accounts, particularly the decline in real revenues due to accelerating inflation. Should all the downside risks discussed above materialize with no offsetting measures, the operational deficit could exceed the 4% target and fall into 4.5-5% range. In this case the deterioration would be reflected in the Federal Government and SEST accounts. Nonetheless, because measures can be taken (mostly on the expenditure side) until the end of the year to compensate for the additional outlays discussed above, the projected deficit target may well be attained. If not, a larger effort will be needed next year to reach the 1989 operational deficit target of 2% of GDP.

A Preliminary Fiscal Outlook for 1989

40. The fiscal outlook for 1989 depends on three ongoing processes. The first is the 1989 federal budget, which Congress is expected to vote on by mid-December. The second is a set of fiscal measures in preparation (mostly on the revenue side) that Congress will have to approve before the end of 1988 to be effective for 1989. The third is the new Constitution, which was promulgated in early October.

41. The new Constitution changes the distribution of revenue between federal and local Governments, increasing the balance of resources in favor of state and local Governments. It is estimated that the Federal Government will lose about 23% of its tax revenues to the state and local governments by 1992. In turn, state governments will transfer one-fourth of their most important revenue source, the ICM (a value added tax), to municipalities. These changes will have significant effects on the allocation of resources in the medium term (see Annex III).

42. The proposed 1989 federal budget estimates that the constitutional changes will cut federal revenues by 17%. These losses are caused by increases in statutory transfers (income tax and the IPI) to the state and local Governments and the elimination of specific taxes which will be included in the ICM. To compensate for the loss of revenues, the Federal Government undertook a far reaching evaluation of its expenditure programs (Operação Desmonte). This operation is expected to close down several Government agencies, privatize some small enterprises, suspend some transfers, and eliminate several regional incentives. Operação Desmonte was to achieve a reduction in expenditures that would compensate for the loss in federal revenues. Preliminary estimates indicate that federal expenditures will be cut by about 1-1.5% of GDP broadly compensating for the loss of revenues.

43. The 1989 federal budget submitted to Congress embodies a deficit of 2.3% of GDP (excluding capital transfers to federal enterprises equivalent to 0.5% of GDP) (Table II.4). Since the federal deficit exceeds the target established for the public sector as whole, the fiscal outlook for 1989 is far from being defined. The Government announced that the programmed deficit of 2% of GDP will be distributed between the federal government and public enterprises. This strategy will require an additional fiscal effort. Taking as a base either the 1988 program or the "downside risk" deficit, Table II.6 shows estimates of the fiscal effort necessary to achieve the 1989 deficit target. If the combined deficit of the Federal Government and public enterprises is set at 2% of GDP (a target that already requires some effort to be met) savings equivalent to 1% of GDP will be necessary to balance the fiscal accounts of state and municipalities, decentralized agencies, and social security. The fiscal outlook for 1989 will not be classified until Congress approves the 1989 budget and the Government announces its new tax measures. The 1989 deficit will exceed the authorities' target unless additional savings are obtained in the form of spending cuts or revenue increases. Moreover, if the fiscal outcome for 1988 turns out worse than projected in the Government program, the required additional effort in 1989 will be much higher.

Table II.6: BRAZIL - 1989 FISCAL ADJUSTMENT

(Public Sector Borrowing Requirements - Operational Concept^{/a}, 1987-89)

(% of GDP)

	1987	1988		1989				
	Preliminary Estimate	Program's Targets	Downside Outturn	Risk's	Budgetary Proposal	Authorities Target	Adjustment Required	
		A	B	C	D	D-A	D-B	
Central Government ^{/b}	0.7	2.0	2.5	2.3	1.5-1.0	0.5-1.0	1.0-1.5	
State Enterprises of which:	3.1	0.9	1.4	?	0.5-1.0	0.4	1.0-0.5	
SEST	1.6	0.6	1.0	?	0.5-1.0	0.1-0.0	1.0-0.5	
State and Local	1.5	0.3	0.4	?		0.3	0.0	
States and Municipalities	1.6	0.6	0.7	?		0.6	0.7	
Decentralized Agencies	-0.1	0.1	0.1	?		0.1	0.1	
Social Security	0.2	0.4	0.3	?		0.4	0.3	
TOTAL	5.5	4.0	5.0	?	2.0	2.0	3.0	

^{/a} Not strictly comparable to previous years. Funds and Programs are included in Central Government accounts and from 1988 on it includes Central Bank results.

^{/b} Not including capital transfers to SEST enterprises which in 1987 were 2.1% of GDP and for 1988 are projected at 1.4% of GDP. For 1989 they are budgeted at 0.5% of GDP.

Source: Central Bank and mission estimates.

II.5 Monetary Policy

Overview

44. In recent years, the conduct of monetary policy in Brazil has been hampered by large shifts in the composition of the private sector's portfolios. This is the result of sharp variations in the inflation rate, and of the need to finance large fiscal deficits. Portfolio shifts and financial innovations caused large variations in the velocity of money. Because the links between changes in the money supply, the real economy, and interest rates were not immune to these shocks it became more difficult to evaluate the economic impact of changes in policy instruments and the effectiveness of monetary policy as a stabilization tool decreased. In addition, until recently the conduct of monetary policy was complicated by the absence of a clear separation between the roles of the fiscal and monetary authorities. Brazil's monetary authorities (in addition to the functions normally associated with a Central Bank) have undertaken several fiscal expenditures on behalf of the Federal Government without having adequate resources in the fiscal budget. The Central Bank financed the remainder by issuing base money or securities on behalf of the Federal Government. The recent budgetary reforms that separated the roles of monetary and fiscal authorities and transferred to the Treasury the fiscal spending previously undertaken by the Central Bank are expected to restore some independence to the actions of the Central Bank.

45. Widespread indexation poses serious obstacles to the effective use of monetary policy to reduce inflation without causing large output losses. The Central Bank has sought to control short-term rates in the overnight market so that the accumulated monthly rate will reflect the inflation rate. Having an interest rate target normally implies losing control over the money supply, but the indexation of the Brazilian financial system made that loss inevitable.

Recent Developments

46. In 1988, monetary policy has been conducted in the context of an extensive process of demonetization and excess liquidity. As inflation accelerated in 1988, the private sector shifted its portfolios toward indexed assets, causing more demonetization. This period was the latest phase in a process of changes in private sector real holdings of financial assets, a process that accelerated with the Cruzado Plan. Between December 1987 and August 1988 as inflation averaged 19% per month, the money supply (M1) declined in real terms by about 50%. Because declines in demand for currency and sight deposits were matched by increases in demand for savings deposits and federal debt, total private financial assets remained about constant in real terms (see Annex V).

47. Although positive, compared with recent periods real interest rates remained low in the first half of 1988. Between the last quarter of 1987 and May 1988 the real return on CDBs (certificates of deposit) declined sharply. Comparing the three months accumulated real rate of return of the most common forms of financial savings shows that, until April, the CDB rates lagged behind saving deposits and overnight rates. By

the end of May, the three-month accumulated real return on overnight funds was 2.07% while the return for CDBs and passbook savings was 1.96% and 1.51%, respectively. The decline in credit demand (a result of low economic activity) reinforced the reluctance of banks to increase the rate offered on CDBs. The difference in yields among the different forms of financial savings explains the rapid growth in savings deposits (13% in real terms), and the decline in time deposits (-2% in real terms) that occurred during the first five months of 1988. Low real interest rates and demand from debt equity swaps fueled a stock market boom. Funds were attracted to the stock market by low interest rates that reduced firms' costs and diminished the attractiveness of alternative financial instruments.

48. The combination of low real interest rates, rising inflation and a decline in the demand for money balances posed a real threat to the economy. Low real interest rates during a period of rising inflation may lead to a speculative accumulation of stocks and a general flight from domestic financial assets into goods or dollars (raising the parallel market premium). Such trends have a negative effect on expectations and could raise the specter of hyperinflation. By raising the yield of financial assets relative to non-financial alternatives, higher real interest rates could help to reduce such danger. The authorities tried to create conditions to increase real rates, for example, by eliminating potential sources of monetary base expansion, such as voluntary deposits by exporters and savings institutions. At the same time, the authorities tried to minimize the impact of higher rates on the fiscal deficit by attempting to differentiate the "new" debt (issued with longer maturity) from the existing stock debt. The objective was to create an interest rate structure that differentiates between short- and medium-term rates. For this approach to be successful, the newly issued debt should not be rolled over in the overnight market.

49. The Central Bank's ability to change interest rates is limited. Because the rate on passbook savings accounts is fixed at about 6.2% per year (plus monetary correction), if differentials between risk adjusted rates on overnight and savings deposits are too high (after taxes), that may induce an outflow of funds from savings deposits to the overnight market or to CDBs (the latter are mainly offered in large denominations). The threat to the stability of the financial system may require Central Bank intervention in the form of additional credit to savings institutions to reverse the initial interest rate increase. In the current situation, the high liquidity of most financial assets (including bonds) poses important limitations to the effectiveness of monetary policy (see Annex V). Although the above limitations should not prevent the Central Bank from pursuing a more aggressive interest rate policy in the context of a credible program of fiscal adjustment, the recent decision of the Constituent Assembly to limit real interest rates to 12% will, if fully implemented, will restrict the Central Bank ability to set an independent course for monetary policy (see para. 79).

50. To minimize the effect of higher interest rates on the stock of debt, and to reduce liquidity, the Central Bank took several actions:

- (i) First, it changed tax rates that discriminated against short-term financial operations. The goal was to create an incipient term structure of interest rates. However, these measures probably will not succeed. In the past, investors did not consider tax incentives enough compensation for the added risk that highly variable inflation rates pose to assets with a longer maturity. Because inflation is not expected to abate in coming months, such a structure probably will not arise.
- (ii) Second, it set the conditions to eliminate sources of potential expansion of the monetary base, such as voluntary Central Bank deposits of the housing system and exporters. The impact on the base of withdrawing these deposits could counteract an attempt by the authorities to increase real rates. Moreover, if these resources were used to purchase newly-issued domestic debt the liquidity of financial markets would not fall. By May 1988 savings institution and exporter deposits were equivalent to 74% and 61% of the monetary base. In mid-1988 the Central Bank cancelled these deposit facilities.
- (iii) Third, to increase monetary policy flexibility the Central Bank reduced the maximum leverage allowed for brokers operating in the overnight market. The high leverage of these intermediaries makes the financial system vulnerable to sudden shifts in short-term interest rates and blocks a more aggressive interest rate policy. So, to remove the threat of significant losses to brokers and to restore some flexibility to interest rate policy, in early 1988 the Central Bank raised the required capital-to-debt ratio.

51. Following these measures the Central Bank raised short-term interest rates. The monthly overnight rate increased from 0.8% in April to 1.64% in August in real terms. Similarly, between April and August, interest rates on 60 days CDB's increased from 8.0% per annum to 10.0% (plus monetary correction).

Outlook for 1988

52. Higher real interest rates and higher inflation in the last months of 1988 should discourage private sector holdings of non-indexed assets. Our projections indicate that with an annual inflation of 800% (December to December values), the real monetary base and M1 will decline by about 38% and 44% (see Chapter III). A higher inflation rate would further reduce the demand for money (see next section). The combination of large fiscal deficits, debt conversions, and high trade surpluses exerts strong pressures on the monetary base. Sterilizing their impact (needed to prevent a further rise in inflation) will push real interest rates up, raise the fiscal deficit. Reducing the pressure on monetary policy will require reducing the trade surplus (by selectively increasing imports within the context of a medium-term reform program) and cutting the fiscal deficit.

53. The Constituent Assembly recently approved a 12% ceiling for the real interest rate. Although the precise definition of "real interest rate" and the price index to measure inflation have yet to be specified, this measure has potentially far reaching implications for the conduct of monetary policy and for the success of any stabilization attempt. Brazil's segmented credit markets make defining a real interest rate difficult, yet this ceiling doubtless will be binding on the freer credit market segments.

54. Enforcing the ceiling would imply a big drop in nominal interest rates and would likely result in credit rationing. Thus, a curb market for loans could develop and disintermediation of the economy could occur. The ensuing distortionary effects, albeit difficult to evaluate at this time, are likely to be large. Monetary policy would become less effective as a stabilization tool. For example, if the ceiling implies that the authorities cannot finance the fiscal deficit by issuing additional Government securities, the money supply would have to expand. Inflationary expectations could create a flight from money into goods, increase the demand for foreign currency and promote capital flight. Overall, if fully implemented, the interest rate ceiling will create serious obstacles to further stabilization efforts.

II.6 The Government's Macroeconomic Program and the IMF's Stand-By Program

55. The economic program that the Brazilian Government presented last June (which has the support of the IMF) is expected to provide the economic policy framework for the remainder of the year. A letter of intent was sent from the Brazilian Government to the IMF (on June 29) requesting a stand-by arrangement equivalent to SDR\$1,096 million for a period of 19 months. Conditional approval was given in July subject to the condition that a critical mass of commercial bank commitments be reached. When that condition was fulfilled in August, the IMF approved the program.

56. The program concentrates on five targets covering the period through December 1988. With the exception of a 2% of GDP target for the operational deficit, no other targets were established for 1989. These targets will be defined during future progress review discussions. The 1988 program presents targets for (a) public sector borrowing requirements (nominal deficit); (b) public sector operational deficit, (c) net domestic assets of the Central Bank; (d) the net international reserves of the Central Bank; and (e) net disbursements of external debt. The program sets quarterly targets (third and fourth quarter of 1988) for the nominal and operational deficits (see Table II.7).

57. Changes in Central Bank net international reserves are used to measure balance-of-payments performance. Net international Central Bank reserves are defined as the difference between Central Bank external assets and liabilities (liabilities include arrears, short-term liabilities, and medium and long-term liabilities to the IMF). With a projected trade surplus (US\$13 billion), debt service obligations, financing from official and commercial banks, and rescheduling of external debt, a balance of payments surplus of US\$5.4 billion is projected. Most of this surplus will be used to clear arrears to foreign commercial banks of US\$3.4 billion.

TABLE II.7: BRAZIL - QUANTITATIVE PERFORMANCE CRITERIA FOR THE THIRD AND FOURTH QUARTERS OF 1988

	Est. <u>June</u>	Targets & Limits for 1988	
		<u>Sept.</u>	<u>Dec.</u>
	<u>(Cz\$ billions)</u>		
Limit on borrowing requirement of the nonfinancial public sector	4,500.0	15,000.0	30,000.0
Limit on the operational deficit of the nonfinancial public sector	810.0	1,600.0	3,280.0
Limit on the net domestic assets of the Central Bank	1,102.9	313.0	-105.0
	<u>(US\$ millions)</u>		
Limit on net international reserves, adjusted	-3,110.2	850.0	2,430.0
Limit on net disbursements of external debt	...	4,700.0	5,700.0

Source: "Brazil Economic Program," June 1988, Central Bank of Brazil.

Net international reserves adjusted for the effects of net gold monetization, are expected to increase from (minus) US\$3.1 billion as of March 31, 1988 to not less than US\$2.4 billion by December 31, 1988. As of March 31, 1988, arrears were US\$ 4.8 billion (about half of total liabilities--US\$9.9 billion), while total assets were about US\$6.3 billion. The program allows upward or downward adjustment of the net international reserves target by the difference between projected amounts, and new money disbursements from commercial banks plus exchange savings from retiming of interest payments. A similar clause covers shortfalls in the projected rescheduling from official creditors.

58. The program also includes targets for the stock of net domestic Central Bank assets and for net external debt disbursements. The stock of net Central Bank domestic assets is defined as currency in the hands of the public minus the cruzado equivalent of the Central Bank's net international reserves (before adjustment for net gold monetization). One implication of this definition is that a higher than forecasted trade surplus (without a counterpart expansion in currency) will allow for an expansion of domestic credit under the ceilings.

59. The main objectives of the 1988 program are to reduce the fiscal deficit and to stabilize the inflation rate. The ceilings on the nominal and operational deficits ensure that fiscal accounts are monitored. The nominal deficit (which includes the monetary correction on the stock of debt) depends on the assumed inflation rate (600% for the year). Even if the operational targets are respected, a higher inflation rate will raise monetary correction and consequently the nominal deficit. Because inflation will exceed 600%, the nominal deficit target will have to be revised. Similarly, because the trade surplus will exceed the projected US\$13 billion, revisions may have to be made in the other targets. If the operational deficit cannot be held to 4% of GDP, attaining the 1989 target will be more difficult. If all targets are met (excluding those directly dependent on inflation) a good 1989 program will continue the gradual process of fiscal adjustment.

II.7 External Sector

60. In 1988 the performance of the trade accounts have exceeded the most optimistic expectations. As of August 1988, the accumulated trade surplus had reached US\$12.5 billion, higher than the full year in 1986 (US\$8.4 billion) or 1987 (US\$11.2 billion). The increase is largely due to higher export growth compared with the same period of 1987, during the first eight months of 1988 exports in current dollars increased 34.4% and imports declined 6.1%. Stagnating economic activity and excess capacity in the industrial sector have contributed to the strong trade performance. In the twelve month period ending in June 1988 manufactured exports were the main force behind the export drive (Table II.8). On the import side, intermediate goods (steel and metals), consumer goods, and grains experienced the largest decline.

61. The evolution of the trade surplus in recent months ensures that the US\$13 billion target for 1988 will be exceeded. Because the economy is expected to continue to grow at a very modest rate no strong pressures are

Table II.8: Brazil - Composition of External Trade,
June 1987 vs. June 1988
(in US\$ Millions)

Exports	June 1987	June 1988	87/88 % change
Manufactured goods	5566	8784	57.8%
Semi-manufactured goods	969	2076	114.2%
Other agricultural goods	836	1154	38.0%
Coffee	1022	1102	7.8%
Soy	1145	1058	-7.6%
Iron ore, manganese ore and others	748	1004	35.1%
Cocoa	257	213	-17.1%
Sugar	118	124	6.1%
Total Exports	10656	15516	46.6%

Imports	June 1987	June 1988	87/88 % change
Petroleum and derivatives	1950	1897	-2.7%
Capital goods	1728	1934	11.9%
Chemical products	902	944	4.7%
Consumer goods	828	580	-30.0%
Steel and metals	405	253	-37.5%
Paper, rubber, plastics	377	383	1.6%
Coal	270	245	-9.3%
Grains	210	103	-51.0%
Fertilizers	114	107	-6.1%
Other	392	416	6.1%
Total Imports	7176	6852	-4.4%

Note: Within exports of manufactured goods, the leading gainers are;
(1) Manufactured steel products (+700 million), (2) Boilers
(+400 million), and (3) Transport materials (+400 million)

likely to come from domestic demand. However, in coming months the trade surplus could decline because of seasonal factors and an easing of imports. Starting in September, Cacex announced it will ease its import rules. For 1988, the trade surplus is expected to be about US\$18 billion.

Exchange Rate

62. Continuous exchange rate adjustment prevented the erosion of Brazil's external competitiveness in the face of high rates of domestic inflation. Nonetheless, in 1988 the real effective exchange rate appreciated slightly (how much depends on the index used to measure domestic inflation and the basket of currencies employed--see Table II.9). Using a basket of nine currencies and the wholesale price index to measure domestic inflation, in the first eight months of 1988 the real effective exchange rate appreciated 12%. The path of the trade surplus over the last several months suggests that the cooling of domestic demand, the availability of excess capacity, and the growth of the world economy have more than compensated for the appreciation of the real effective exchange rate. Because of the importance of exchange rate policy in determining resource allocation (through its effects on the relative price of traded and non-traded goods), future exchange rate path should be consistent with a sustainable external equilibrium, including a current account deficit that can be financed with moderate capital flows. Moreover, changes in commercial policy, terms of trade, or capital flows will require appropriate adjustments in the nominal exchange rate, to maintain a constant real exchange rate.

63. Exchange rate policy can be evaluated by studying the parallel market. The limitations imposed on the purchase of foreign currency for travel abroad and other transactions, and lately, the increased importance of informal debt conversions (see below) have made the parallel market very active. Nonetheless, the absence of reliable information on market size, the effects of seasonality, etc. limit this indicator's usefulness for short-term analysis. A comparison of the parallel market premium over an extended period may shed some light on the extent of exchange market pressure. In the past, a 20% parallel market premium has been considered "normal" by market participants. However, over the last several months the premium has fluctuated around the 50% range indicating a change in market conditions. Informal debt conversions coupled with continuing capital flight appear to explain the higher premium in the face of a large trade surplus.

The 1988 Balance of Payments Outlook

64. In 1988, Brazil is expected to experience a current account surplus of about US\$5.1 billion. Assuming debt conversions of US\$6.0 billion, other capital flows of US\$1.2 billion, the level of foreign financing embedded in the commercial bank package, plus bilateral and multilateral flows, gross reserves are expected to increase by about US\$5.4 billion (Table II.10). Such external sector performance will have a strong monetary impact and will create money supply problems. The important point is that in 1988, Brazil could transfer abroad resources equivalent to approximately 2.9% of GDP.

Table II.9: Brazil - Real Exchange Rates

Period	1/	2/
	U.S. WPI vs. IPA/PI (December 1980=100)	Purchasing Power Parity X-Rate
1980 - Dec.	100.0	100.0
1984 - Dec.	180.0	108.5
1985 - Dec.	188.6	120.1
1986 - Dec.	125.1	128.8
1987 - Dec.	114.4	125.1
	(Quarterly average)	
1987-I	127.7	129.6
-II	116.7	119.8
-III	127.4	129.4
-IV	118.7	126.4
1988-I	108.9	118.1
II	106.8	115.0
	(Monthly)	
1988 - Jan.	110.2	120.0
Feb.	108.2	116.8
Mar.	108.2	117.7
Apr.	106.9	116.4
May	107.1	115.7
Jun.	106.5	118.1
Jul.	106.5	111.8
Aug.	106.7	109.1
Sep.	108.7	...

1/ U.S. producer price index (IFS, line 63) versus Brazil wholesale price index for industrial products.

2/ Purchasing power parity exchange rate derived using wholesale prices and period average exchange rates for the United States, France, Italy, Netherlands, U.K., Japan, Belgium, Germany, Switzerland, Canada, Mexico and Chile.

Table II.10: BRAZIL - BALANCE-OF-PAYMENTS PROJECTIONS, 1988-92
(US\$ Billions)

	p	-----Projected-----				
	1987	1988	1989	1990	1991	1992
IBRD Balance of Payments Summary						
Trade Balance	11.2	18.0	14.5	18.3	12.3	12.0
Services (Net) a/	-12.7	-13.0	-13.5	-13.4	-14.1	-14.6
of which:						
Net Factor Services	-11.9	-12.5	-12.5	-11.9	-12.1	-12.2
Gross Interest	-9.8	-10.4	-10.8	-10.5	-10.4	-10.2
Current Account Balance	-1.5	5.1	1.0	0.0	-1.7	-2.5
Net Direct Foreign Investment a/ b/	1.1	0.3	1.0	1.1	1.1	1.3
Other Capital c/	-2.1	0.5	-1.6	-2.3	-2.0	-2.0
Net MLT	3.2	-0.6	0.8	2.3	3.8	4.5
Change in Gross Reserves (increase -) d/	-0.7	-5.4	-1.2	-1.2	-1.3	-1.4
Liber		8.0	8.5	8.4	8.3	8.1
Spread		0.813	0.813	0.813	0.813	0.813
Gross Reserves to Imports ratio (months of MGNFS)	5.0	10.3	9.7	9.3	8.7	8.4

a/ Includes reinvested profits.

b/ Excludes debt-equity conversions.

c/ Includes other capital, errors and omissions, short term capital, Brazilian lending abroad and net IMF.

d/ Change in reserves equivalent to roughly one third of the increase in imports of goods and non-factor services.

p = preliminary data

Table II.11: BRAZIL - NATIONAL ACCOUNTS

	a/							b/					
	Actual							Preliminary	Projected				
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
National Accounts Data (% of GDP)													
Consumption	79.3	79.2	80.7	82.9	79.0	78.3	78.9	77.3	77.4	78.9	78.5	76.0	76.3
Gross Fixed Capital Formation	22.9	21.1	20.0	14.7	15.5	16.7	18.5	19.7	17.0	19.0	20.0	21.0	21.0
Exports of GNS c/	8.9	9.3	8.0	11.3	13.5	12.0	8.8	8.5	10.9	10.0	10.0	10.1	10.2
Imports of GNS c/	11.1	9.7	8.7	8.9	7.9	7.0	6.2	5.5	5.3	5.9	6.4	7.0	7.4
Net Factor Service Income	-3.2	-4.1	-5.3	-5.7	-5.6	-5.2	-4.1	-3.5	-3.7	-3.3	-3.0	-2.8	-2.6
Gross National Product	96.8	95.9	94.7	94.3	94.4	94.8	95.9	96.5	96.3	96.7	97.0	97.2	97.4
Memorandum Items:													
GDP Growth Rate (%)	9.1	-3.1	1.1	-2.8	5.7	8.4	8.0	2.9	1.0	3.9	4.8	5.2	5.5
Consumption/capita Growth Rate (%)	3.3	-6.7	1.2	-4.0	-1.4	4.5	5.5	0.3	0.3	1.1	2.1	2.4	3.8
Domestic Savings/GDP d/	0.207	0.206	0.193	0.171	0.210	0.217	0.211	0.227	0.228	0.231	0.235	0.240	0.237
National Savings/GDP d/	0.179	0.168	0.140	0.115	0.155	0.166	0.170	0.192	0.189	0.197	0.205	0.212	0.212
Marginal National Savings Rate	0.159	0.233	0.620	-3.593	0.647	0.917	0.231	0.472	-0.589	0.392	0.355	0.344	0.196
ICOR	2.424	-6.561	21.354	-7.314	2.765	1.679	2.157	7.056	18.672	4.347	3.925	3.831	3.751
Import Elasticity e/	0.07	3.73	-6.67	6.96	-0.53	0.37	1.61	-1.32	-5.43	3.88	2.91	2.83	2.12
Current Account/GDP c/ f/	-0.053	-0.044	-0.061	-0.033	0.000	-0.001	-0.017	-0.005	0.015	0.003	0.000	-0.004	-0.005
Terms of Trade Index (1986=100)	94.7	83.8	81.0	74.8	80.6	79.1	100.0	91.7	101.7	99.2	97.7	96.0	95.1

a/ Historical figures based on IBGE national accounts data, June 1988.

b/ Projected growth rates and ratios calculated using constant (1986) price data.

c/ Current account to GDP ratio calculated using current US\$ values.

d/ Historical ratios calculated using current C2\$ values.

e/ Imports of goods and non-factor services

f/ Projected values assume maintenance of the 1986 real exchange rate

Medium-Term Outlook

65. The Balance-of-Payments projections for 1988-92 and the magnitude of the external financing requirements are presented in Table II.10. Overall, the assumptions underlying these projections represent an active policy scenario. The success of a sustained medium-term growth strategy (such as the one underlying this scenario) presumes that some important pre-conditions are satisfied. These conditions include (i) satisfactory progress in stabilization during 1988 and beyond, including reducing the fiscal deficit and inflation to encourage a recovery of private investment; (ii) implementing sectoral reforms in the agricultural, trade, financial, and public sectors; and (iii) implementing policies to permit Brazil's future return to the world capital markets to finance its development. To achieve the required economic stabilization and growth, any increases in domestic savings (obtained by reducing public sector deficits) would need supplementing by moderate foreign capital inflows.

66. The central points of these projections are:

- (i) the trade surplus will decline from a projected US\$18 billion in 1988 to an average of US\$13.0 billion during 1989-92 (about 3.1% of GDP);
- (ii) the current account deficit should average below 1% of GDP during 1989-92;
- (iii) total external financing requirements for 1989-92 are estimated at US\$11.5 billion. Of these about US\$4.2 billion will finance the current account deficits and the remainder will offset expected net capital outflows and changes in reserves. These projections embodied the elements of the recently signed financial package with the commercial banks and the Paris Club agreement (see below); and
- (iv) debt service as a ratio of exports of goods and services should decline from 43% in 1988 to 36% in 1992, and the interest service ratio should decline from 30% to 24%. As a ratio of GDP, debt service should decline from 4.5% in 1988 to 3.3% in 1992 and the interest to GDP ratio should decline from 3.0% to 2.1% (Table II.12).

Downside Risks

67. There are several important downside risks in the above scenario because of external and domestic factors. External shocks (such as higher interest rates, a lower world demand for Brazilian products, or higher oil prices) would damage the current account, and would require additional external flows, preventing the projected improvement in creditworthiness indicators. However, the domestic side contains most of the major downside risks. The above scenario assumes that the fiscal deficit and inflation will be brought to a much lower level. The subsequent increase in savings (mainly public savings) and investment (mainly private investment) would underwrite the success of the strategy underlying the scenario.

Table II.12: BRAZIL - DEBT INDICATORS

	a/												
	Actual					Preliminary			Projected				
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
External Debt Indicators													
Total DOD (in US\$ millions) b/ c/	64,244	73,963	85,364	93,556	102,039	105,126	111,045	121,264	113,986	110,690	109,831	111,028	112,954
(of which IMF)	---	---	550	2,644	4,185	4,619	4,490	3,344	2,644	2,244	1,344	744	144
s b/	2.76	2.75	3.64	3.84	3.35	3.59	4.46	4.22	3.25	3.20	2.99	2.80	2.60
DOD/GDP b/	0.268	0.279	0.318	0.457	0.485	0.464	0.408	0.379	0.388	0.298	0.277	0.257	0.238
Debt Service (in US\$ millions) b/ d/	14,146	17,601	20,766	18,409	19,995	22,319	24,248	23,813	15,747	15,809	16,617	15,723	15,507
Debt Service/XGS	0.51	0.66	0.89	0.76	0.65	0.78	0.98	0.83	0.43	0.46	0.45	0.40	0.36
Debt Service/GDP	0.059	0.067	0.077	0.090	0.095	0.098	0.089	0.074	0.045	0.042	0.042	0.036	0.033
Interest/XGS b/	0.320	0.383	0.533	0.422	0.379	0.384	0.414	0.335	0.296	0.312	0.284	0.261	0.235
Interest/GDP b/	0.031	0.039	0.047	0.050	0.055	0.050	0.038	0.029	0.030	0.028	0.026	0.024	0.021

a/ Historical figures based on IBGE national accounts data, June 1988.

b/ Includes the IMF.

c/ Assumes debt-equity conversions equal to \$5.0 billion in 1988, \$3.5 billion in 1989, \$2.5 billion in 1990, \$2.0 billion in 1991 and \$2.0 billion in 1992.

d/ Projected debt service reflects terms of 1988 commercial bank and Paris Club rescheduling agreements.

68. The 1988 performance of the external accounts suggests once more that the major problem facing the Brazilian economy is the domestic imbalance in the fiscal accounts and the high inflation rate. Presently, a major downside risk is an acceleration in the inflation rate that could move the economy into hyperinflation. The ensuing economic cost associated with the disruptions in economic activities are difficult to estimate but will be significant. However, among the downside risks, hyperinflation, although a possibility, is not the most likely scenario. Existing indexation mechanisms represent a drag in the inflation rate that can, at least temporarily, prevent a rapid acceleration of inflation, thus giving the authorities some breathing room to set into place short-term anti-inflationary measures.

69. Thus a more likely downside risk scenario is one featuring large fluctuations in the rate of inflation. Periods of high inflation would be followed by anti-inflationary measures (such as some form of wage and price controls) that bring a short term reduction in inflation. The depth and the scope of the anti-inflationary measures constitute a main difference between such a scenario and the baseline case. The downside risk scenario is characterized by the inability of the authorities to address the structural macro imbalances such as the fiscal deficit. Because the macro economic fundamentals are not in place, the stabilization measures taken in this scenario will have only a temporary rather than a permanent effect on inflation. This "muddle through" approach would result in highly variable inflation and real interest rates. Economic agents, realizing that the macroeconomic fundamentals are not in place, would require higher risk premia to hold government debt, raising the fiscal deficit. Private sector crowding out would continue.

70. In such an environment, the macroeconomic reforms that are necessary to improve resource allocation and increase overall efficiency are unlikely to succeed. Economic growth could be characterized by fluctuations in growth rates and an average growth rate below the baseline case. In sum, if the Government is unable to make big cuts in the fiscal deficit and reduce inflation, private investment probably will not grow enough to support the desired growth path. An alternative to this scenario is a combination of stop and go policies on the fiscal adjustment, coupled with heterodox shocks. The expected outcome would be high and variable inflation and real interest rates, in short, an environment far from conducive to a recovery of private investment.

71. The unclear framework for future economic decision-making heightens the uncertainty about possible fiscal adjustment. The new Brazilian Constitution was approved in early October. Under the new Constitution, Congress will play a major role in the formulating the annual budget. The fiscal implications of this change remain to be seen. The conduct of macroeconomic policy could be threatened by new usury laws that impose ceilings on real interest rates. Some provisions covering wage policy and workers' rights may undermine Brazil's competitiveness, as do restrictions on foreign investment. Although constitutional tax reforms change the resource balance in favor of state and local Governments, a corresponding decentralization of spending (as currently planned) will keep

the fiscal deficit about constant. However, the new distribution of resources will favor the richer states, perhaps leading to new demands for federal spending in the poorer states, especially in the Northeast.

II.8 External Debt

72. In 1988 the main developments on the external debt were completing a multiyear agreement with commercial banks and the Paris Club (ending the difficult period in Brazil's external economic relations that began with the 1987 moratorium) and establishing new regulations for debt-to-equity conversions (a full discussion is presented in Annex VI).

Overview

73. Debt rescheduling has helped Brazil since 1983. Agreements with commercial banks rolled over maturities and lowered interest rates and spreads. The debt situation changed on February 20, 1987. Faced with balance of payments problems including large reserve losses, the Government temporarily suspended interest payments on its external commercial bank debt, but reaffirmed its intention to negotiate a multi-year debt rescheduling. At the end of 1987, Brazil suspended principal payments on Paris Club debt contracted before March 1983, remaining current on interest payments.

74. During the last months of 1987, Brazil and its commercial bank creditors made progress toward normalizing their relations. A November 1987 interim agreement regularized interest payments while a more complete medium-term package was being negotiated. Under the interim agreement, Brazil would pay about one-third of the interest due between February 20 to December 31, 1987, about US\$4.5 billion, and the commercial banks would refinance the remaining two-thirds. The first stage of the agreement was implemented in December 1987 and January 1988 covering about US\$ 1.5 billion in interest due for the last quarter of 1987. The remaining interest payments would be settled at the date of effectiveness of a medium-term package. On June 22, 1988, the Government of Brazil reached an agreement with the Advisory Committee of creditor banks on a financing package that will give Brazil new money and refinance existing external debt. The new money package covers the period 1987-88 and the first half of 1989. The agreement was signed on September 22, 1988.

75. On July 29, 1988 the Paris Club agreed to reschedule 100% of principal and 70% of interest falling due from August 1, 1988 to March 31 1990, for 10 years (including 5 years grace). The remaining 30% interest will be paid in two installments on April 1, 1990 and 1991, respectively. The agreement also rescheduled principal due between January 1 and July 31, 1988. Bilateral discussions between Brazil and creditor institutions (to be completed no later than March 31 1989) will set the details for rescheduling or refinancing, including interest rates to be charged.

The 1988 Commercial Agreement

76. The commercial bank's financing package has three main components: (i) four new money facilities amounting to US\$5.2 billion gave the banks some choice in how to allocate their commitments; (ii) a multi-year rescheduling of principal falling due between 1987 and 1993 covering medium and long term external debt; and (iii) a renewal of trade and interbank credit lines. The new money facilities comprise:

- A parallel new money facility for US\$2.85 billion (plus any amount lenders decide to commit to it rather than to the other facilities). Subject to existing regulations, these loans are eligible for debt-equity conversions and relending.
- Two parallel cofinancing facilities totaling US\$750 million, linked to IBRD loans.
- New money bonds up to US\$1 billion, which are not eligible for debt equity swaps or relending.
- New money trade deposit facility or US\$600 million to provide Brazil with medium-term credit for imports and exports.

77. The disbursements of the new money facilities will take place in three tranches. The first tranche of US\$4.0 billion was disbursed after October 1, 1988 after all conditions were met. A second tranche of US\$0.6 billion is scheduled to be disbursed not before December 1, 1988, and a third tranche of US\$0.6 billion is scheduled to be disbursed not before April 1, 1989.

78. The agreement plans a multi-year rescheduling of all principal maturities of Brazilian public and private sector medium- and long-term external debt falling due during 1987-93 (including those falling due under the 1983 and 1984 New Money Agreements and the 1983 and 1984-86 Deposit Facility Agreements). The agreement covers about 95% of commercial bank debt. The debt is consolidated into a multiyear deposit facility at the Central Bank with 20 years maturity and 7 years grace. Repayments include a 1991-93 down payment (according to the original schedule) of about US\$1.7 billion and a amortization schedule that increases gradually from 2% in 1995 to 10% in 2007. The margin over six-month LIBOR is set at 13/16 and interest payments are shifted from a quarterly to a semi-annual basis. The resources in the deposit facility will be available for relending (subject to ceilings) and for debt-equity conversions. Finally, commercial banks agreed to restore trade and interbank credit lines to agreed levels in the 1986 restructuring package, about US\$15 billion. These credit lines declined below that level following the declaration of the moratoria.

79. By signing the external financing package, Brazil closed a difficult period in its relations with its commercial bank creditors. Although framed in a traditional mold, the package offers a flexible menu of options to banks (including exit bonds) that expedited the agreement. For Brazil, the package includes some debt restructuring (such as postponing principal payments) and yields current account savings by

retimed interest payments and from lower spreads. Some of the package's features (for example, those dealing with relending) will need monitoring by the authorities to prevent excessive pressures on the financial markets (see Annex VI). In addition, completing the agreement allows policymakers to devote attention to domestic economic issues, such as high inflation and the fiscal deficit.

Debt Equity Program

80. Debt-to-equity conversions have a long tradition in Brazil. Since their beginning in the mid-1960s, the flows of debt conversions have been influenced by changes in Central Bank regulations and the world economy. In February and March 1988, the Central Bank announced a new set of regulations that established the present framework for the debt conversions (Resolution 1460 and other accompanying regulations). These rules defined the debt eligible for conversion (about US\$62 billion of Brazil's medium- and long-term debt) and the procedures that the conversions should follow. The choice of procedures will depend on whether the debt is public or private and whether it was compulsorily or voluntarily deposited at the Central Bank. A system of auctions has been established for converting private debt that had been compulsorily deposited at the Central Bank into private equity. Ceilings are set determining the amounts to be converted, one-half of which will be invested in underdeveloped areas of the country. Subject to the approval of the authorities, public debt can only be converted to investment in public sector enterprises.

81. In parallel with the official conversions regulated by Resolution 1460, a second type of conversion has flourished. These operations, known as informal conversions, began in 1985. Their volume has increased recently for private and public enterprises. In brief, these conversions allow a firm to buy dollars in the parallel market and (through an intermediary) and repurchase its matured debt in the secondary market. The incentive for the conversion depends on the debt discount in the secondary market and the black market premium. As long as the discount in the secondary market is larger than the spread in the parallel market (defined as a proportion of the parallel rate) firms have an incentive to undertake the transaction. (For example, if the discount on Brazilian debt remains at about 46% of the face value of the debt, and the parallel market premium is below 80% there is an incentive to undertake this type of debt conversion.) The pressures that informal conversions exert in the parallel market help explain the coexistence of a high dollar premium that does not fuel expectations of a real devaluation and a healthy trade surplus. The value of conversions has been high. Between January and August 1988, about US\$4.5 billion of debt conversions took place (of which US\$1.1 billion through the auction process and US\$1.9 billion through informal conversions).¹¹ The remainder of the conversions resulted from directly

^{11/} The US\$1.9 billion figure underestimates the total amount of informal conversions because it does not take into account conversions not yet reflected in Central Bank accounts. These conversions are estimated to amount to an additional US\$2.2 billion. The central Bank expects swaps to reach between US\$7.5 and US\$8.5 billion in 1988.

negotiated agreements between debtors and creditors in which the debt is negotiated either at face value or at a discount.

82. The analysis of the macroeconomic impact of debt conversions can be separated into balance of payments and monetary and fiscal effects. In accounting terms, a debt equity swap has little or no effect on a country's net liabilities because net capital inflow is zero. As external debt is exchanged for foreign direct investment, the debt-equity swap reclassifies a country's external liabilities. If the reserves are used to repurchase the debt, a decline in external liabilities is compensated by a decline in external assets, and the country's net external position remains unchanged. However, if the debt is exchanged at less than par value the country experiences a capital gain equal to the difference between redemption and face value that, however, does not have a counterpart flow. Debt conversions reduce the gross stock of a country's external liabilities and improve traditional creditworthiness indicators such as the debt-to-GDP ratio and the debt-to-exports ratio. These conversions can facilitate the future access to additional external credits. However, for Brazil, less restricted access to international financial markets depends in large measure on prospects for domestic stabilization and its effects on external performance (in addition to swap-induced declines in credit worthiness indicators).

83. Debt conversions affect current account net factor payments. The conversions replace fixed-service schedule debt with an obligation whose stream of payments, profits and dividends is more directly related to the level of domestic activity. In other words, these payments should have a more pro-cyclical trend. The current account impact of the debt conversions will depend on whether profit remittances are larger or smaller than the stream of interest payments. Present Brazilian rules do not impose restrictions on remittances of profits and dividends. In addition, remittances can be affected by considerations other than the level of economic activity (such as expectations on future economic policy and the balance-of-payments outlook. The share of repatriated profits and dividends versus the share that is reinvested will depend on how foreign investors view domestic economic prospects, in terms of inflation, the fiscal deficit, and growth.

84. A final issue is additionality: whether the direct foreign investment resulting from the swaps is "new" investment or simply investment flows that would have taken place without the swaps. An analysis of past trends will not shed much light on this. Progress in privatization, continuing fund conversions and a consistent macroeconomic program all should enhance the degree of additionality of any debt conversion program.

85. Because of their fiscal and monetary implications, debt conversions may complicate macroeconomic management of the economy. If swaps involve converting private debt into private equity, they will have no monetary impact, since the conversion simply transfers liquidity within the private sector. However, when debt equity swaps involve Central Bank or Government debt, their impact on financial markets will depend on how the domestic side of the transaction is financed. Bond financing could

increase interest rates and have significant crowding out effects (see below). In addition, because Brazil's domestic interest rates have been consistently higher than external rates, substituting domestic for external debt would increase total interest payments and the fiscal deficit. Alternatively, financing through monetary expansion would have an inflationary impact. The total debt eligible for conversions is about US\$66 billion, of which about US\$28 billion might have a monetary impact. Converting 5% of this amount in one year could increase the monetary base by about 29%. Therefore, to absorb the monetary impact of the conversions, the Government would need to reduce the fiscal deficit or sterilize the impact of the conversions through open market operations. In sum, the monetary and fiscal effects of the debt equity program need to be carefully monitored so that they do not have negative effects on financial markets. Lower fiscal deficits, by reducing the pressure on financial markets, would increase the authorities' flexibility to accommodate the debt conversions.

III. MACROECONOMIC POLICIES AND PERFORMANCE IN 1988

86. The previous section analyzed recent economic developments and presented for each of the main macroeconomic variables an outlook for the remainder of the year. Based on that outlook, an integrated macroeconomic view for 1988 is presented in this chapter. Given the considerable uncertainty that surrounds the short-term trends of key variables (such as inflation), the analysis of macroeconomic performance for 1988 will use two scenarios (Cases B and C), representing upper and lower possible outcomes for inflation, GDP growth, and the fiscal deficit. In addition, a baseline case (Case A) is shown representing the main assumptions underlying the Government program which uses actual data up to June 1988 (Table III.1).

Table III.1: BRAZIL - ASSUMPTIONS UNDERLYING THE THREE MAIN SCENARIOS

	<u>Case A</u>	<u>Case B</u>	<u>Case C</u>
Inflation (Annual Rate %)	600.0	800.0	1000.0
Operation Deficit (% of GDP)	4.0	4.0	5.0
GDP Growth (%)	2.0	2.0	0.0
Real Interest Rates (Annual Rate)	12.0	12.0	15.0

III.1 Overview

87. The objective of the 1988 Government program was to reverse the deterioration of the fiscal accounts, stabilize the inflation rate, and prepare the ground for a further fiscal effort in 1989. A further objective was to normalize relations with the international financial community and to seek benefits on the external side through a new commercial bank package. A main objective for 1988 was to stabilize the inflation rate at 16-18% per month. The authorities expected that reducing the fiscal deficit would improve credibility and contribute to the anti-inflationary effort. The program's credibility would be enhanced by using an orthodox approach to prepare for other anti-inflationary measures.

88. In fact the options were limited. The existing indexation rules ruled out the use of traditional contractionary demand policies to reduce the inflation rate. But prevailing domestic imbalances (symbolized by the large fiscal deficit) discouraged the undertaking of another "heterodox" shock. In essence, the Government's approach was to control public spending (to reduce the operational deficit), stabilize the inflation rate, and create the conditions for a strong fiscal adjustment in 1989 attain an operational deficit no larger than 2% of GDP.

89. The 1988 outlook leaves little doubt that inflation and the trade surplus will be higher than originally projected. GDP growth should be slightly lower than expected but the operational deficit could exceed the original target. Given the considerable uncertainty surrounding the short-term trends of some key variables such as inflation, two scenarios are used for 1988. These scenarios, hereafter Cases B and C, define an upper and lower bound of a range of possible outcomes for inflation, GDP growth, and the fiscal deficit. Moreover, a baseline scenario is presented (Case A) that contains the main assumptions underlying the Government's June program. The main assumptions underlying the three scenarios are summarized below.

90. Case C represents a scenario in which inflation in the latter part of the year rises to about 25% per month and the fiscal deficit exceeds the targets reaching about 5% of GDP. Scenario B duplicates the assumptions of the base case scenario (Case A) but allows for a higher rate of inflation about 20% per month in the second half of the year. These scenarios should not be viewed as predictions of actual outcomes but rather as defining a range of possible outcomes within which actual economic performance should fall. Thus, scenarios B and C represent two among many possible outcome combinations. Taking these scenarios as reference points, several questions are asked in this section. These questions can be divided into two groups; the first set addresses the effects on credit availability and domestic financing. Specifically:

- (i) How much will credit availability to the private sector be affected if the operational deficit exceeds the Government target, if inflation and trade surplus are higher and GDP growth is lower than their respective targets?
- (ii) Is the projected fiscal deficit consistent with inflation and output growth forecasts or does it require additional domestic borrowing or monetary base expansion that will be inconsistent with the Government's targets?

91. The second group of questions analyze the effects on inflation and real interest rates of a fiscal deficit that exceeds the financeable limits. Considering the large external inflows, the need to sterilize their monetary impact, and the domestic financing of the deficit, two questions are asked:

- (i) What will be the impact on inflation if the authorities peg the real interest rate and finance the remaining fiscal deficit through monetary expansion?
- (ii) What will the impact on the real interest rate if the expansion of the base is maintained at a level consistent with a given inflation target and the remaining domestic financing is obtained by issuing interest bearing debt?

III.2 Methodology

92. Following the methodology used in the first Macroeconomic Assessment (Report No. 7057-BR, December 1987), two approaches are used to analyze the above questions. For a given inflation rate, balance-of-payments outlook, and output growth, the first approach looks at private credit expansion consistent with the projected increase in the money demand and public sector borrowing needs. The relationship implied by the consolidated balance sheet of the banking system is that for a given change in net foreign assets, a decline in money demand or an increase in public sector borrowing will result in a decline in the credit available to the private sector.¹² The demand for money is a key element of this approach. Given the volatility of money demand in Brazil in the 1980s, the projections below are indicative of broad trends.

93. The second approach analyzes the deficit that is consistent with forecasts of external financing, inflation, and GDP growth. The deficit can be financed from domestic sources by monetary expansion or bond sales, and by borrowing abroad. If the fiscal deficit exceeds the level of domestic financing consistent with Government inflation and growth targets and further external financing is unlikely, the additional money creation and domestic borrowing necessary to finance the deficit may render the Government's targets inconsistent. This approach addresses the following question: other things being equal, what is the maximum deficit consistent with the initial assumptions regarding growth, interest rates, and inflation? An extension of the approach will be used to discuss the second set of questions set forth previously, namely, the effects of alternative financing strategies. Both methodologies are partial equilibrium

^{12/} The macroeconomic impact of fiscal deficits depends on how the deficits are financed. If the deficit is financed through monetary expansion the impact on inflation will be larger than if the deficit is financed by issuing domestic debt. The effects of deficit financing on inflation and interest rates and consequently on the demand for money have implications for the availability of credit to the private sector. If a limit exists on the amount the private sector will absorb of Government debt, either because the Government is unwilling to raise real interest rates or the private sector is unwilling for risk reasons to purchase additional debt, monetary expansion will become the only source of financing whenever that limit is reached.

approaches that do not evaluate the effects that increases in inflation and interest rates due to financing a fiscal deficit exceeding the financeable limits will have on GDP growth.¹³

III.3 Impact on Credit Availability

94. In broad terms, the availability of banking system credit to the private sector depends on: (i) the change in the banking system's net foreign liabilities (a function of balance-of-payments trends); (ii) the change in money demand (broadly defined to include time and savings deposits) that depends on inflation, the level of economic activity and interest rates; and (iii) the borrowing needs of the public sector. Although the operational deficit is a better measure to evaluate the fiscal effort between periods, the nominal deficit measures public sector borrowing needs and so is the relevant concept to estimate the change in the stock of banking system credit.¹⁴ In the following analysis the change in net foreign assets (that is in reserves and short-, medium- and long-term liabilities), is obtained as the cruzado counterpart of the flows shown in the previous section under the balance of payments projections. The second and third factors are discussed below.

95. Demand for Money. The inflation increase of early 1988 demonetized the Brazilian economy. The higher opportunity cost of holding money balances led private investors to shift from demand deposits and currency into indexed assets such as time and savings deposits and Government debt. For the remainder of 1988, because the inflation is not expected to decline and real interest rates are expected to increase relative to early 1988, the disincentive to hold real money balances should continue. Table III.2 shows projected growth rates for different monetary aggregates under different inflation and growth scenarios. These projections are obtained using econometrically estimated demand functions for financial assets (including bonds), taking into account seasonal factors (see Annex VII). The overall outlook is for a continuing shift of private sector portfolios toward indexed assets because of higher inflation

13/ Both approaches give partial equilibrium analyses of the effects of a change in a given variable. A more complete assessment would require a large econometric model. Two conditions discourage the construction of such model. One is the lack of quarterly data for the real side, severely limiting the scope of any econometric analysis. The other is the instability of most of the econometrically estimated relationships, the outcome of the shocks that have affected the Brazilian economy. Therefore, the following results should be viewed as broad consistency tests.

14/ The nominal deficit is a function of two main factors: the inflation rate or, alternatively, the monetary correction which accrues monthly, and the operational deficit. An increase in the rate of inflation will raise monetary correction and the nominal deficit. The seasonality pattern of the operational deficit also affects the nominal deficit. For a given operational deficit and inflation rate, the nominal deficit will be lower the more concentrated is the operational deficit towards the end of the year.

**Table III.2: BRAZIL - PROJECTED REAL GROWTH RATES
OF MAIN FINANCIAL ASSETS, 1988**

(%)

	<u>Case A</u>	<u>Case B</u>	<u>Case C</u>
Currency	-35.9	-44.3	-52.2
Demand Deposits	-32.8	-43.7	-54.0
M1	-33.5	-43.8	-53.6
Time and Savings Deposits	3.6	3.5	5.5
M3	-5.5	-8.2	-9.1
Federal Securities	15.8	15.4	16.0
M4	2.1	.5	0.0
Monetary Base	-31.8	-38.2	-44.3
 <u>Assumptions</u>			
Inflation (annual rate) (%)	600.0	800.0	1000.0
Real Interest Rate (annual rate) (%)	12.0	12.0	15.0
GDP Growth (%)	2.0	2.0	0.0

Source: Mission estimates

Deflator 6P/DI

and real interest rates. Declines in the demand for currency and bank reserves (because of lower demand for sight deposits) should cause a large real decline in the monetary base. In both simulations, the broader financial aggregate, M4, is projected to remain constant in real terms.

96. Public Sector Borrowing. The public sector will continue to absorb much of the available credit. As the projections in Table III.3 show, the inflation rate mostly determines the nominal deficit (and thus nominal borrowing). Given its borrowing needs, banking system credit to the public sector should grow substantially in real terms.¹⁵

97. Credit to the Private Sector. Private credit should fall because of (i) increased public borrowing; (ii) a small decrease in the real money demand; and (iii) negative net external financing, the result of the trade surplus and limited external borrowing (Table III.4). On the supply side, this will continue a discouraging trend. On the demand side, the uncertain economic outlook and high public sector borrowing have raised real interest rates and crowded out private borrowing. The present trends are clearly inconsistent with a recovery of private investment and renewed growth (see Chapter IV). A basic condition of investment recovery (which will increase private credit demand) is an improved economic outlook, which will come only with fiscal adjustment and reduced inflation. These are the prerequisites for an increased supply of private credit that will not hurt the balance of payments.

98. In the three scenarios the trends of credit to the public and private sectors would move in opposite directions. As shown in Table III.4 credit to the private sector would decline substantially in real terms, a trend which is more accentuated in scenarios B and C. In these scenarios higher interest and inflation rates reduce the demand for money and limit the expansion of credit that is consistent with the monetary expansion. In addition, the higher trade surpluses that are incorporated in scenarios B and C result in larger accumulation of reserves than in scenario A, further constraining credit expansion. Because private credit is obtained residually after public sector borrowing needs are met, it bears the brunt

^{15/} A decline in the real rate of credit growth to the public sector when the operational deficit increases to 5.0% of GDP may appear counter-intuitive. Two factors explain this decline. The first is that the higher interest rate assumed in case C, which is consistent with an increase in the debt to GDP ratio, raises the demand for bonds and allows a larger share of the deficit to be financed outside the banking system. The second factor has to do with the relationship between period average and end of period inflation. The above simulations were obtained as follows: for the January to June period, actual values were used for the nominal and operational deficit. For the remainder of 1988 different assumptions were made for monthly inflation and the operational deficit. Because the deficit is defined as a share of GDP, a flow calculated at average prices, an acceleration in the rate of inflation during the second half of the year results in a lower real growth rate of the stock of debt, measured at end of year prices.

**Table III.3: BRAZIL - PUBLIC SECTOR, DOMESTIC DEBT (NET)
1988 PROJECTION**

	<u>Case A</u>	<u>Case B</u>	<u>Case C</u>
<u>Operational Deficit</u> <u>(% of GDP)</u>	4.0	4.0	5.0
<u>Nominal Deficit</u> <u>(% of GDP)</u>	36.0	40.9	49.2
<u>Growth Rate of</u> <u>Net Domestic Debt (%)</u>			
Nominal growth	743.0	980.0	1220.0
Real growth	20.4	20.0	20.0
<u>Nominal Domestic Debt</u> <u>to GDP Ratio</u>			
End of Period	.765	.866	.994
Period Average	.357	.356	.369
<u>Assumptions:</u>			
GDP Growth (%)	2.0	2.0	0.0
<u>Annual Real Interest</u> <u>Rate (%)</u>	12.0	12.0	15.0
<u>Annual Inflation Rate</u> <u>(IGP/DI) %</u>	600.0	800.0	1000.0

Source: Mission estimates

of the adjustment. It is unlikely that a decline in real credit of the magnitude shown in Table III.4 will be consistent with a recovery of private investment or sustained growth.

TABLE III.4: BRAZIL - PROJECTED GROWTH OF DOMESTIC CREDIT
(Consolidated Banking System)

	<u>Case A</u>	<u>Case B</u>	<u>Case C</u>
<u>Real Growth Rates</u>			
Credit to Private Sector	-16.7	-22.9	-22.4
Credit to Public Sector (net)	9.2	8.9	8.3
<u>Assumptions</u>			
Inflation	600%	800%	1000%
Operational Deficit (% of GDP)	4.0%	4.0%	5.0%
GDP Growth	200	200	0.0
Real Interest Rate (Annual rate)	12.0	12.0	15.0%

Source: Mission estimates

III.4 The Financeable Deficit

99. The second approach used to evaluate the macroeconomic implications of deficit financing is based on the concept of financeable deficit. When the Government establishes a set of domestic targets, such as inflation and GDP growth, it constrains domestic financing. Because of

projected external flows, the financeable deficit is defined as the maximum amount of borrowing consistent with the upper limit of the fiscal stance.¹⁶ Table III.5 shows the maximum financeable deficit consistent with different inflation targets. These results strongly suggest that a 4% of GDP operational deficit (the Government's target) exceeds the financeable limits, therefore, deficit financing would require an expansion of domestic debt that would raise the debt GDP ratio and real interest rates. The Government's program implicitly assumed that domestic borrowing would finance the deficit and accepted the resulting increase in real interest rates. The real increase of net domestic credit to the public sector (discussed before) is consistent with this result. In fact, the options at this time are limited. If the deficit financing is obtained by monetary expansion it could cause hyperinflation.

**TABLE III.5: CONSISTENCY CHECKS BETWEEN INFLATION
TARGETS AND MAXIMUM FINANCEABLE
FISCAL DEFICIT (1988)**

Inflation Targets (Annual Rates Dec to Dec)	Increases in Money Base As Percentage of GDP	Maximum Financeable Deficit (Operational) (% of GDP)
Case A 600%	2.3	1.9/ <u>a</u>
Case B 800%	2.3	1.1/ <u>b</u>
Case C 1000%	2.1	0.5/ <u>c</u>

9/21/88

/a Net external financing of -.8% of GDP (trade surplus US\$13 billion, no increase in gross reserves and US\$2.9 billion in debt conversions); GDP growth at 2%.

/b Net external financing of -1.6% of GDP (trade surplus US\$16 billion, increase in gross reserves of US\$3 billion and US\$2.9 billion in debt conversions); GDP growth at 2%.

/c Same as /a but GDP growth at 0%.

16/ As a reference point it is useful to define the financeable deficit as the deficit that if maintained would result in constant debt-to-output ratios. In the medium term, if such fiscal stance is sustained, an increase in Government liabilities at a rate identical to that of domestic output growth would imply no additional crowding out pressure and a constant real interest rate and inflation. However, in the short term, policies may be required that will result in an increase in the debt to GDP ratio. The main point brought forward by the financeable deficit analysis is that if the fiscal deficit exceeds the financeable limits that are determined by the targets set by the authorities, then one of the targets will have to be abandoned.

Evaluation and Policy Implications

100. Although the 1988 fiscal deficit is clearly inconsistent with medium-term macroeconomic stability, the present fiscal stance can be justified: (i) as an initial step in deficit reduction, that will continue into 1989, assuming that the 1988 fiscal target will be met and the fiscal deficit will be cut further in 1989; (ii) as the maximum fiscal effort that could be achieved in 1988 given (a) the late 1987 wage policies, that raised the potential deficit to over 7% of GDP, and (b) the difficulties associated with an abrupt fiscal adjustment based on spending cuts.¹⁷

101. In 1988, the burden imposed on the financial markets by financing the fiscal deficit is compounded by the need to absorb large external flows. These flows can be divided into balance of payments flows and debt conversions. Given the projected level of commitments and other capital flows, a trade surplus of the order of US\$13-14 billion should allow Brazil to begin to increase its gross reserves. Therefore, a trade surplus of the order of US\$18 billion (the trade surplus projected for 1988) should produce a current account surplus, a negative net external financing, and a decline in net external debt. Sterilizing the monetary impact of these flows by open market operations would raise domestic debt and interest rates without contributing to deficit financing and simultaneously raise interest payments and deteriorate the fiscal deficit.

102. The financial impact of the balance of payments flows is augmented by the effects of debt conversions. When public debt is swapped for private equity, debt conversions imply substituting domestic for external debt. Given the amount of real balances economic agents are willing to hold for an expected inflation and interest rate, the larger the monetary impact of the debt conversions, the less room for non-inflationary monetary financing of the deficit. Consequently, further pressure will be put on domestic borrowing to finance the deficit. In sum, the domestic counterpart of the balance of payments flows, debt conversions and the fiscal deficit are expected to have a significant impact on the financial markets, an impact that will depend on how much sterilization (with the ensuing increase in real interest rates), that the authorities are willing to accept. Some simulations are presented below to illustrate these effects.

^{17/} Fiscal adjustment should start on the expenditure side. Cutting outlays (such as personnel expenditures and fiscal incentives estimated at about 1.6% of GDP) has so far proven difficult. If spending on personnel and fiscal incentives are not cut, then cuts in capital outlays and other current expenditures would be needed, possibly without regard to the "quality" of the cuts. This is extremely costly from the point of view of medium-term growth. Only after the expenditure reductions are achieved should tax revenues be increased to reduce the fiscal deficit.

103. In 1988, Brazil is facing the prospects of a current account surplus, a large fiscal deficit, and rising inflation. This combination reinforces the view that domestic disequilibrium is the main issue facing the Brazilian economy. In the process of fiscal adjustment, spending cuts could further increase the trade surplus. Maintaining the present real exchange rate, the relevant policy combination for Brazil should be a cut in the fiscal deficit combined with an increase in imports with particular emphasis on capital goods imports. This combination would reduce the pressures that the large trade surpluses and deficit financing exert on the monetary base (with the ensuing need for sterilization policies) while simultaneously allowing for the entry of capital goods required for investment. Although it is difficult to predict how an easing of import restrictions will affect the total import bill, improving the investment climate by permanently reducing the fiscal deficit should raise domestic investment and capital goods imports. On the external side, the relatively comfortable balance of payments position provides some room to reduce the fiscal deficit and inflation.

III.5 Impact on Inflation and Interest Rates

104. If further external financing for the public sector is not available and the fiscal deficit exceeds its financeable limit, additional domestic financing will be necessary. The effects of fiscal deficits on inflation and interest rates will depend on how much burden will be put on domestic borrowing versus monetary financing. To evaluate this impact two simulations were performed. Assuming monetary expansion is consistent with the desired inflation rate, the first simulation studied the impact on the domestic real interest rate if the remainder of the fiscal deficit is financed through domestic borrowing. The second simulation assumes a constant interest rate and estimates the amount of domestic borrowing consistent with that level. It studies what will be the impact on inflation if the remainder of the deficit financing (after taking into account external flows), is obtained by expanding the monetary base.

105. These two simulations illustrate in an extreme manner two financing alternatives, or alternatively, two different rules of monetary policy. One is to maintain the expansion of the base consistent with an inflation target and to allow the real interest rate to increase as result of additional Government borrowing. The other is to maintain a constant real interest rate and to allow the monetary base to reach the level necessary to finance the fiscal deficit. Although initially the two targets (inflation and the real interest rate) may be consistent with each other, whenever the fiscal deficit exceeds the financeable limits imposed by these targets the additional domestic borrowing and monetary expansion necessary to finance the deficit will force the authorities to abandon at least one target. The implications for inflation and real interest rates of excessive fiscal deficits are shown in Tables III.6 and III.7. The main conclusions that can be drawn from these simulations are:

- (i) When deficit financing is conducted by monetary expansion, the impact on inflation will be substantial. In the baseline case, a 2.3% of GDP expansion of the monetary base will be consistent with a 20% monthly inflation rate in the

last quarter of 1988. Expanding the base to 4% of GDP would raise inflation to about 25%. This rate does not represent a complete adjustment to a higher money supply. In 1989, the inflation rate would continue to increase until actual and desired money holdings converge. Therefore, the full inflationary impact of this financing alternative will not be felt until 1989. Inflationary

TABLE III.6: MONETARY FINANCING - INFLATION IMPACT

(monthly averages - last quarter of 1988)

	Operational Deficit			
	4%		5.0%	
	Increase in the Monetary Base (% of GDP)	Inflation/ <u>e</u>	Increase in the Monetary Base (% of GDP)	Inflation
Baseline Case	2.3/ <u>a</u>	20%	2.1/ <u>b</u>	25%
Excluding Debt Conversions/ <u>d</u>	3.1/ <u>c</u>	23%	4.2/ <u>c</u>	29%
Including Debt Conversions	4.0/ <u>c</u>	25%	5.1/ <u>c</u>	31%

9/20/88

/a Increase in the monetary base consistent with an inflation rate of 20% per month, a growth rate of GDP of 2% and a real interest rate of 12% per year.

/b Increase in the monetary base consistent with an inflation rate of 25% per month, a growth rate of GDP of 0% and real interest rate of 15% per year.

/c Increase in the monetary base necessary to complete the deficit financing.

/d Excludes debt conversions of US\$ 2.9 billion for 1988.

/e Monthly average for the last quarter of 1988.

TABLE III.7: BOND FINANCING - INTEREST RATE IMPACT

(monthly averages - last quarter of 1988)

	<u>Operational Deficit</u>	
	<u>4%^{/a}</u>	<u>5.0%^{/b}</u>
Baseline Case	.95	1.2
Excluding Debt Conversions	1.33	6.72
Including Debt Conversions	4.00	9.50

9/20/88

/a Assumes a GDP growth rate of 2% for 1988 and an average inflation rate of 20% per month for the last quarter of 1988.

/b Assumes a GDP growth rate of 0.0% for 1988 and an average inflation rate of 25% per month for the last quarter of 1988.

pressures in 1989 would depend on whether or not the Central Bank absorbs the excess liquidity. In any event the hyperinflationary risks of this alternative are very high.

- (ii) If the expansion in the monetary base is consistent with the inflation target, the impact on real interest rates of the additional domestic borrowing will depend on how large the operational deficit gets (Table III.7). The impact of these real interest rates on the level of economy activity, the public sector deficit, and the financial markets will be large.
- (iii) Negative net external financing, large fiscal deficits, a high volume of debt conversions would exert pressure on the financial markets. Given the amount of real balances the private sector desires to maintain for a given combination of interest rates and inflation, if part of the monetary expansion is simply the counterpart of the debt conversions, it does not constitute deficit financing. Consequently, additional monetary expansion or domestic borrowing will be needed to finance the deficit, raising interest rates or inflation.

106. The above results represent two opposite approaches to deficit financing. Given the potential impact on financial markets of relying exclusively on one source of financing, the deficit probably would be financed by a mix of domestic borrowing and monetary expansion. For example, the authorities may be forced to expand the monetary base to reduce the impact of high real interest rates on (i) the fiscal deficit (ii) the stability of financial markets (by directing funds from time and savings deposits into the overnight market) and (iii) the level of economic activity. On the other hand, exclusive reliance on monetary finance could cause hyperinflation.¹⁸

107. The main point of these simulations is that large cuts in the fiscal deficit are needed to stabilize the inflation rate and to reduce real interest rates to encourage a recovery of private investment. In addition, the impact on the financial market of large accumulations of unsterilized reserves and of large amounts of debt conversions should be carefully evaluated. Because any reasonable medium-term growth path presupposes a recovery of private investment, high and variable interest rates will not be consistent with a medium-term strategy directed to attain a satisfactory growth rate of domestic output supported by a recovery of private investment. High real interest rates may, however, play an important role in discouraging capital flight and supporting domestic stabilization. Although investment decisions depend on many factors, particularly the investment climate and expectations regarding the future path of domestic demand, only cutting fiscal deficits and inflation can create stable interest rates and promote investment.

^{18/} The above results represent only a partial equilibrium perspective. For example, they do not take into account the negative effect of higher interest rates on income and consequently on the demand for money and bonds. Although it is difficult to estimate empirically the extent of this effect, it seems reasonable to assume that it will reinforce the above conclusions.

IV. KEY MEDIUM-TERM ISSUES: TOWARDS A RESUMPTION OF STABLE GROWTH

108. This chapter analyses some medium-term macroeconomic issues facing the Brazilian economy. The goal is not an exhaustive discussion but a narrow focus on issues vital to returning the Brazilian economy to a sustainable growth path. Particular attention will be given to fiscal adjustment, the internal transfer problem, the obstacles indexation poses for reducing inflation, and the conditions for a recovery private investment. These issues are closely interrelated. A recovery of private investment is unlikely to occur without reducing inflation and the fiscal deficit. Indexation constrains the design of anti-inflationary policies. Moreover, reducing inflation permanently requires cuts in the fiscal deficit to bring it to a sustainable level. Fiscal adjustment is constrained by interest payments and requires the Government to deal with the transfer problem. Without fiscal adjustment real interest rates will stay high and investment will stagnate in the medium term. High investment and higher growth (with its effects on the revenue side) will help reduce the fiscal deficit.

IV.1 Overview

109. The success of a medium-term macroeconomic adjustment program such as the one underlying the pro-active policy scenario presented in Chapter II, will depend on four main elements: (i) satisfactory progress in short-term stabilization; (ii) continued alignment of key relative prices (such as the real exchange rate, real wages, real interest rates, and real public sector tariffs); (iii) implementing structural measures to deal with medium-term fiscal adjustment issues; and (iv) addressing medium-term policy issues in agriculture, finance, trade, and social sectors. These reforms will increase the efficiency of resource allocation in Brazil and support a sustainable economic growth rate.

110. Brazil faces four main economic policy issues. First, it needs to reduce the fiscal deficit to create a stable and low-inflation environment. This environment would support an increase in investment and help in the implementation of reforms in agriculture, trade, finance, and the public sector. The reforms themselves constitute the second set of policy issues. The third set concerns the need to maintain an adequate resource balance to service the external debt and to improve the country's creditworthiness over the medium term. Finally, Brazil needs to redress the domestic "social debt" owed to the country's poor by a systematic attack on poverty. In essence, the authorities have faced these same issues over the last several years, although their relative importance has shifted over time. The design of economic policies to deal with these issues requires in the medium term some important trade-offs, a choice which represents the essence of the design of a medium-term program.

111. For the remainder of 1988 and into 1989, the conduct of economic policy will be dominated by three main factors:

- (i) Fiscal Policy. The political and economic difficulties associated with controlling fiscal expenditures so that the 1988 fiscal deficit will not rise above 4% of GDP and the design of a needed fiscal package for 1989.

- (ii) Monetary Policy. The problems associated with conducting monetary policy in a fully indexed economy. These difficulties are augmented by the pressures on the monetary base resulting from substantial trade surpluses, debt conversions, and the need to finance a still large fiscal deficit without resorting to excessive money creation (which could further increase inflation) or to excessive expansion of the internal debt.
- (iii) Inflation. The possibility that the monthly inflation rate, now close to 28%, may increase. Any further acceleration in inflation may cause a widespread flight from financial assets into goods moving the economy closer to hyperinflation. The danger of hyperinflation adds urgency to a renewed effort on the fiscal front and to a rethinking of indexation rules.

112. After 1989, the Brazilian economy is expected to face some difficult challenges. The country will have to: (a) return to a growth path that will absorb the increasing labor force without pursuing demand policies that will create inflationary pressures or require unduly large external flows; (b) encourage a recovery of private investment by stabilizing the macroeconomic environment and lowering inflation, with which sustained growth will be impossible; and (c) maintain the path of the fiscal adjustment, task given: (a) structural changes in revenue distribution among the different Government spheres, resulting from the tax component of the new constitution; (b) the need to increase public investment in the social and infrastructure sectors; and (c) the need to continue to service external and domestic debt.

113. The overall economic outlook for the remainder of 1988 is far from positive. Stagflationary trends, rising inflation, continued domestic uncertainty, the authorities' lack of credibility on economic matters all limit the scope for short-term actions. The same constraints apply to the medium term. Unfortunately, the attention and energies of Brazilian policymakers have been channeled towards short-term management.

The Role of Structural Adjustment Measures

114. Medium-term macroeconomic adjustment requires not only satisfactory progress on short-run stabilization clear alignment of key relative prices, but also structural adjustment measures to solve the economy's fundamental problems underlying sustained macroeconomic imbalances. Structural measures help ensure sustained aggregate demand adjustment promote aggregate supply or assure external balance and above all enhance the credibility of the Government's approach.

115. In short, medium-term macroeconomic adjustment requires that (i) the real exchange rate policy be conducted over time in line with the trade reform objectives, (ii) lower and more stable real interest rates, and (iii) the real wage rate be prevented from attaining an unsustainable level. The macroeconomic and price/wage policy implications of attempting to align these key real prices mean:

- (i) reducing the structural fiscal deficit in a credible way, permitting a less constrained monetary policy;
- (ii) using monetary policy to influence the volume and price of credit, thus permitting a gradual lowering and stabilizing of real interest rates;
- (iii) undertake "midi" devaluations as necessary to conform with trade policy reform, while retaining the daily mini-devaluations; and
- (iv) finding institutional mechanisms to maintain real wages at a level consistent with macroeconomic stability and productivity growth.

116. Medium-term macroeconomic adjustment must to be based on structural, not ad hoc measures. This requirement is complicated because, in a highly inflationary economy, implementing ad hoc measures is easier since nominal budgetary claims rapidly lose their real value, while price-related structural measures calling for recurring price changes are more difficult to implement. Despite this complication, avoiding a "stop-go" approach to stabilization will need structural, not ad hoc measures. In addition, some structural adjustment measures are critical for medium-term macroeconomic adjustment but have a negative short-run effect on stabilization, particularly on internal balance. The consideration of such trade-offs is clearly an important aspect of designing stabilization and adjustment programs.

IV.2 Fiscal Adjustment

117. The preceding Macro Assessment Report (Brazil: An Assessment of the Current Macroeconomic Situation, Report No. 7057-BR, December 1987) concluded that the size of the fiscal deficit was the main reason for the failed stabilization attempts of 1986 and 1987. Although in recent years some adjustments have been made the operational deficit remains large (Table IV.1). The centerpiece of the policy scenario presented above is the fiscal adjustment package. Its impact needs to be analyzed from two different levels, the direct macroeconomic impact and the indirect impact through its effects on the credibility of the overall stabilization package. A reduction in the fiscal deficit will have a direct impact on:

- (i) inflation, to the extent that a lower deficit will require less

a/

Table IV.1: BRAZIL - PUBLIC SECTOR OPERATIONAL DEFICIT (% OF GDP), 1980-87

	b/						d/	
	PRIMARY DEFICIT (-)			INTEREST PAYMENTS			CURRENT ACCOUNT	OPERATIONAL
	-----			-----			DEFICIT	DEFICIT
	Total	Investment	c/ Other	Total	Domestic	External		(-)
1980	0.7	8.0	-7.3	2.9	1.0	2.0	-4.4	3.6
1981	-0.6	9.0	-9.6	6.2	3.9	2.3	-3.4	5.6
1982	-0.3	8.7	-9.0	6.6	5.8	2.8	-0.4	8.3
1983	-1.7	6.4	-8.1	6.5	3.2	3.3	-1.6	4.8
1984	-5.2	6.0	-11.2	7.9	4.2	3.7	-3.3	2.7
1985	-3.3	6.2	-9.5	7.6	4.2	3.5	-1.9	4.3
1986	-0.6	6.2	-6.8	4.2	1.6	2.6	-2.6	3.6
1987p	0.3	6.9	-6.6	5.2	2.2	3.0	-1.4	5.5

a/ Shares at current prices

b/ Primary deficit is equal to the public sector operational deficit less interest payments.

c/ Includes public enterprises investment (federal and state-owned), classified as private sector in national accounts data, plus public administration investment, which corresponds to the public sector in national accounts data.

d/ Current account surplus is equal to the operational deficit less public sector investment.

p = preliminary data.

Note: Negative values indicate a surplus.

Source: Central Bank and mission estimates.

monetary financing; (ii) real interest rates by reducing domestic borrowing; and (iii) external financing requirements, thus allowing a larger part of the external resources to finance the private sector.

118. The "quality" of the fiscal adjustment should receive particular attention, since the composition of expenditure cuts or tax increases make a difference from the macroeconomic point of view. In the medium term, cuts in the investment program will hurt the social sectors and because of their complementarity with private investment, may have a negative impact on growth. Moreover, if the public sector is engaged in producing inputs for private industry (such as energy and infrastructure) in the long run spending cuts in these expenditures could create bottlenecks in some industries. How to cut public outlays is the essence of the issue. But, cuts in subsidies and transfers may increase inflation particularly in the short run. Another trade-off exists on the revenue side, since revenue needs may have to be weighted against efficiency and equity considerations. However, as hyperinflation becomes a distinct possibility, short-term stabilization gets higher emphasis over medium-term macroeconomic stability, but only until monthly inflation declines to a non-threatening level.

119. The fiscal adjustment should concentrate on:

- (i) Expenditures vs. Revenues. Fiscal adjustment must first cut spending and rationalize taxes before planning to raise new revenue;
- (ii) Structural vs. ad-hoc Measures. Expenditure measures should concentrate on structure, and the scope for ad hoc ceilings and/or freezes should be limited to the very short run; the most important structural measures for further review are:
 - (a) elimination of existing subsidies such as the producer wheat subsidy; subsidies on alcohol, sugar and other subsidies implicit in the minimum price program;
 - (b) eliminating fiscal incentives;¹⁹
 - (c) phased elimination of subsidies to commercially-oriented productive public firms. These firms should be given significant tariff-setting autonomy subject

19/ Fiscal incentives remain a significant drain on public resources. Although some reduction in their budgetary impact has been achieved in 1988 the room for increasing resources through their elimination is still considerable, 1.5-2% of GDP. In addition to the revenue impact their elimination would correct distortions created by the present system.

to broad public regulation (as with the private sector); regulations barring the entry of competitors into their respective industries should be dropped;

- (d) rationalizing wage and employment policies in the public sector to reduce excess employment, and to rationalize wage differentials;
 - (e) restructuring in the light of Operação Desmonte the fiscal relationships of the federal, state, and municipal governments to ensure a greater degree of local resource mobilization, and less dependence on the Federal Government to finance deficits; and
 - (f) rationalizing the public investment program to ensure its consistency with macroeconomic resource constraints, and with Brazil's sectoral development strategies and objectives.
- (iii) Other Revenue Measures. One promising tax measure to assist short-run stabilization while helping medium-term performance is substituting tariffs for quotas consistent with the plan's longer term trade policy objectives. In addition, eliminating most tariff exemptions would ensure that old and new tariffs generate more revenue.²⁰ Over the medium term, increasing revenues by improving tax administration, simplifying tax rates and structures, and improving revenue indexation should be vigorously pursued.

Fiscal Adjustment, Credibility and the Heterodox Shock

120. In 1988, the Government used a gradualist approach to deal with the fiscal deficit. The Government may abandon gradualism and undertake a new heterodox shock program if the monthly inflation rate continues to rise. The lessons from the past attempts at stabilization indicate that whether such a program succeeds depends on its credibility and on the underlying fundamentals of fiscal, monetary and incomes policy. In addition, proper management of the exchange rate and pricing policies is crucial.

121. Chapter I discussed how economic policy credibility was adversely affected by the failed Cruzado and Bresser Plans. There is wide agreement that a major reason for the failure of the two stabilization plans lay in the inadequacy of the fiscal adjustment. The cross country evidence on the results of stabilization packages with heterodox components in high inflation countries demonstrates that a credible fiscal adjustment needs to come before a heterodox shock. Moreover, fiscal adjustment needs support from structural rather than ad-hoc measures. Structural measures will

^{20/} Preliminary calculations suggest that an across-the-board tariff of 15% would yield 0.5 to 0.8% of GDP, and correspondingly, a similar tariff of 30% would yield about 1.0 to 1.6% of GDP.

enhance credibility better than temporary ones. Although the latter may yield short-term fiscal savings, because they do not address fundamental fiscal issues they have a limited effect on credibility. For example, a temporary wage freeze will provide some breathing room in the fiscal accounts, but unless wage and employment policies are fully revised the fiscal imbalance will reemerge.

122. Fiscal adjustment must be credible because credibility influences inflationary expectations and price-setting behavior. If the Government lacks credibility, inflationary anticipatory price setting behavior will be propagated by indexation throughout the economy. Credibility can be better restored if fiscal adjustment precedes the incomes policies normally associated with heterodox shocks by enough time to prove that the authorities are committed to the stabilization while simultaneously avoiding excessive recessionary trends.

IV.3 Domestic Debt, External Debt, and the Transfer Problem

123. The external and internal aspects of the transfer problem are interrelated. The external transfer problem arises in transferring resources from debtor to creditor countries, particularly when these resources represent a significant share of GDP.²¹ On the external side the issue is how to generate a non-interest surplus consistent with moderate growth, low inflation, and high investment. The resource surplus can be obtained by reducing consumption or investment. Reducing investment will reduce future growth, de facto transferring the problem to future years. An alternative is a real currency depreciation to improve competitiveness and raise the trade surplus. By itself, this is inflationary, particularly if the economy is indexed and/or real wages are sticky downwards. A real depreciation also raises the real cost of debt service in terms of domestic goods and so it will affect the budget.

124. Without deficit adjustment, public debt service (external and internal) will increase domestic borrowing or (inflationary) money creation. If adequate external capital flows are not forthcoming, foreign debt will be replaced by domestic debt and/or excessive money creation. When domestic debt bears higher real interest rates, the substitution process can further increase the interest bill and the fiscal deficit.

125. To prevent widespread bankruptcies following the real devaluation of 1983, the Government became responsible for large amounts of private external liabilities aggravating the budget deficit. The Government issued domestic debt to obtain the resources necessary to service its enlarged external liabilities. Thus, the public sector faces two difficulties. One is the transfer problem discussed above (that is, the need to transfer abroad resources to service the external debt, now largely a liability of the public sector). Since interest payments take an increasing share of

^{21/} The concept of net transfer, that is, net disbursements minus interest payments, combines capital flows and service payments. If the borrowed funds were invested efficiently they would yield a rate of return in excess of the financial cost. That flow is not being considered here.

total spending, fiscal adjustment flexibility was reduced. The other difficulty is a transformation problem that arises because while the public sector holds most of the external debt, the private sector generates the foreign exchange necessary for its service. How to implement a fiscal adjustment despite these constraints, and the need to service domestic debt, remains a crucial aspect of a medium-term strategy.

126. When domestic debt is issued to obtain resources for servicing the external debt, the accumulation of internal liabilities only postpones the deficit problems. The private sector cannot absorb interest-bearing debt without limit. Eventually, real interest rates climb and financial instability follows. Recourse to the inflation tax thus becomes an attractive and cheaper alternative to finance the deficit. However, high inflation creates financial instability. Because domestic debt is index linked, if monetary correction follows inflation, the real value of debt stock remains unchanged. For Brazil, inflation cannot be used as a device to amortize in real terms domestic debt unless monetary correction is allowed to lag behind inflation (or some form of capital levy is applied). Both alternatives pose grave dangers to the financial system and could result in rapid financial disintermediation, a flight to real assets, and/or hyperinflation.

External Debt

127. Between 1980 and 1987 Brazil's gross external debt increased from US\$64.2 billion (equivalent to 27% of GDP) to US\$121.2 billion (37% of GDP). In 1987 about 88.7% of total external debt was registered debt (US\$107.5 billion) and 11.3% was non-registered debt (US\$13.7 billion). Moreover in 1987 73.3% of the registered debt had a variable interest rate, mostly Libor (64%). In 1987 about 86% of the registered debt was public debt a significant increase relative to 1980 when the share of public debt was 69.3%. The US dollar is the main currency denomination of the external debt. In 1987, the share of registered debt denominated in US dollars was 67.3% a decline from a 77.8 % share in 1980. During the same period the share of Yen denominated debt increased from 6.8% to 11.3%. Most of the total debt is to foreign commercial banks. In 1987 Brazil owed US\$76.5 billion to commercial banks, US\$7.9 billion to Brazilian banks abroad and US\$36.7 billion to non-commercial banking institutions. The service of the foreign debt required the transfer to creditors of a significant amount of net resources (measured as the surplus in the non-interest current account). Between 1983 and 1987 the resource transfer amounted to US\$31.2 billion.

128. Given the significant share of non-dollar denominated debt, the fluctuations in cross currency exchange rates over the last few years have resulted in capital gains on losses in Brazil's external debt. The devaluation of the U.S. dollar that began in 1985 resulted in capital losses that exceeded the gains obtained in 1981-84. It is estimated that because of cross currency fluctuations in the 1986-87 period the annual increase of the external debt stock was equivalent to 2% of GDP. When measured at 1980 exchange rates the stock of Brazil's external debt is about 6.5% below the value of the stock at market exchange rates.

Differences in the currency composition of the foreign debt and the trade flows may require a more active role of liability management to reduce capital losses (see Annex VI).

129. Capital flight appears to have played a role in the debt accumulation process. Given the deficiencies of the available data, the measurement of capital flight is a rather difficult task. In this Report capital flight was measured subtracting the increase in official foreign reserves and the current account deficit from the increase in external debt and the direct foreign investment inflows. In essence this methodology measures capital flight as the discrepancy between the increase in external debt and the amount that can be explained by balance-of-payments flows such as the current account deficit, direct foreign investment and increase in reserves. This procedure does not distinguish between "normal" capital flows and capital flight. Thus, it is the broadest definition of capital flight.²² The estimates of capital flight obtained with this procedure suggest that the cumulative capital flight for the period 1980-87 was US\$24 billion in current dollars, equivalent to 20% of the 1987 stock of external debt. Adjusting for cross currency change the estimate declines to US\$16 billion, about 14% of the exchange adjusted stock of debt. Adjusting for accumulation of assets by the banking system, the cumulative capital flight estimate is \$14.6 billion and the ratio declines to 12.8%. Although as discussed above these estimates measure the upper range of actual flows, they suggest that capital flight has played a role in the accumulation of foreign debt, particularly in recent years (see Annex VI). In general, given the difficulties associated with estimating capital flight, the magnitude and direction of year-to-year changes should be emphasized more than the estimated levels as such.

130. Since 1983-84, Brazil's agreements with its commercial bank creditors stipulated that new money disbursements (Project 1) and amortization falling due (Project 2) would be deposited in a Central Bank account of the foreign commercial bank creditor. Under these agreements, the foreign bank could relend the resources deposited in its account to domestic borrowers. At the creditor's option, the resources could remain in the Central Bank, where the monetary authority would have responsibility for the debt service. Over the last few years, external funds available to Brazil have been limited to refinancing old debt and flows from multilateral sources. When state enterprises and state and local governments could not service their external debts, internal transfer mechanisms were created (such as MF-30) to prevent default that could disrupt the domestic economy and compromise creditworthiness. The main instrument was a Central Bank bridge loan to the public sector to finance the deposits due at the Central Bank. Afterwards, the bridge loans could be cancelled by a relending operation with no net monetary impact. If the bridge loan covered interest and amortization (thus exceeding potential relending) it would expand the base. To control the expansion of the monetary base, the Government regulated the maximum-refinancing that the public sector could obtain.

^{22/} This methodology was employed by the World Bank in the 1985 World Development Report.

131. Without external or domestic resources to finance interest payments on the foreign debt the Central Bank became lender of last resort. As the demand for Central Bank resources exceeded the supply, the authorities were forced to expand the monetary base or sell bonds. In the absence of foreign savings, transferring resources from the private to the public sector to finance the fiscal deficit (particularly external interest payments) is the main feature of the substitution of internal for external debt.²³

132. The 1988 agreement with the commercial banks coupled with the debt-equity swap program provides some possibilities for cutting the external debt (see Annex VI). Debt swaps yield an immediate reduction in external debt. In the medium term, converting debt into equity will reduce the interest bill but the net effect on the balance of payments and external borrowing will depend on future remittances of profits and dividends. The impact on domestic financial markets depends on whether external liabilities are financed by issuing domestic debt. As illustrated in the simulations presented in Chapter 3, the impact on interest rates and monetary expansion of relatively small amounts of conversions can be significant. Since Brazil's real domestic interest rate is higher than the foreign rate, replacing external liabilities with domestic debt will increase the interest bill in the medium term.

133. The trends of internal and external debt are closely linked. The recent balance of payments performance suggest that the main disequilibrium facing the Brazilian economy is internal. The active policy scenario presented in Chapter 2 suggests that in the medium term Brazil can achieve a growth rate of about 5-6% per year, that needs to be supported by moderate capital inflows consistent with a decline in the debt to GDP ratio and a general improvement in creditworthiness indicators. This scenario implies reducing the fiscal deficit to increase domestic savings to finance the added investment. For a given fiscal deficit, additional external

23/ Financial transfers represent a shift in purchasing power away from the debtor country to the rest of the world. Restoration of international creditworthiness is related to the amounts of the transfer that are expected to occur and to the country's perceived ability to undertake it. The problem is exacerbated because transfers are concentrated in government finances. A tax increase or a spending cut will be required to obtain the necessary savings in the primary deficit and to reduce domestic borrowing. Asset transactions between debtor and creditor countries, such as debt-equity swaps, are important to the extent that they diminish the amount of the transfer and improve the country's creditworthiness.

capital flows will reduce the pressures on domestic financial markets and interest rates that stem from deficit financing and smooth out the macroeconomic effects of reducing the fiscal deficit.

Domestic Debt

134. Between 1980 and 1987 the composition of the federal debt stock changed significantly. In 1980, OTNs and LTNs represented 72% and 28% of the federal debt stock excluding the portfolio of the monetary authorities. Because the LTNs ex-post real rate of return depends on the accuracy of inflation forecasts, this instrument was not suited to an environment of high and variable inflation. As their placement required very high discount rates (thus implying high interest rates) the authorities gradually substituted OTNs for LTNs as debt instruments. By 1985, OTNs represented about 98% of the stock of federal debt outside the Central Bank. (A more complete analysis is presented in Annex V.)

135. In 1986 the LBC replaced the OTN and, starting in January 1988, new Treasury Bills replaced them as the major deficit financing instrument. During 1986 and 1987 Central Bank bills were the main financial instrument negotiated in both primary and secondary markets. As of May 1988, OTNs represented about 35% of the federal debt stock while LBCs and LFTs accounted for 30% and 35%. Paralleling the composition shift of the federal debt stock the average maturity of the debt has fallen, a trend that was intensified after floating rate replaced fixed rate debt. About 75% of the federal debt is held on an overnight basis so any increase in short-term rates will have a strong impact on the fiscal deficit.

Trends in Debt

136. As measured by several indicators, Brazil's internal debt has grown rapidly over the last few years (Table IV.2). Between 1980 and 1987, the stock of Treasury securities outstanding (excluding Central Bank portfolio, debt holdings by the Social Security system and public enterprises, and state and municipal debt) increased at the annual rate of 17% in real terms. This growth would have been larger but for sharp declines in 1983 and 1986 of the real debt stock. In 1983, setting the monetary correction below inflation decreased the debt stock 17.7% in real terms. The 1986 remonetization of the Brazilian economy during the Cruzado Plan substituted monetary debt for interest bearing debt. These two episodes reduced the real value of the outstanding Treasury debt stock.

137. The concept of net public debt broadens the public sector to include the Central Bank, and includes public sector borrowing from the private sector and the banking system (net of deposits and other domestic assets of the public sector). Between 1981 and 1985, net domestic public debt at constant prices grew an average 15.3% per year (23.3% per year if the monetary base is excluded). Due to the substitution of monetary for interest bearing debt in private portfolios, the 1986 net debt growth rate is positive or negative depending on whether the money base is included in the concept of net debt.

**Table IV.2: BRAZIL - EVOLUTION OF PUBLIC SECTOR INDEBTEDNESS:
ALTERNATIVE CONCEPTS, 1980-87**

	TREASURY SECURITIES OUTSTANDING			Treasury securities outstanding excl. C.B., social sec. & State plus State & Municipal Debt (4)	NET PUBLIC SECTOR DOMESTIC DEBT	
	Total (1)	excl. C.B. portfolio (2)	excl. C.B., social sec. & State (3)		Total (5)	excl. Monetary Base (6)
	----- % growth rates -----				----- % growth rates -----	
1981	86.1	79.5	79.6	71.4	n.a.	n.a.
1982	27.8	10.8	9.3	12.0	27.9	37.3
1983	3.9	-37.9	-38.7	-34.6	13.1	27.0
1984	9.6	80.3	85.4	64.4	18.7	19.4
1985	33.1	44.3	42.4	38.8	16.8	17.9
1986	66.6	-15.8	-22.2	-18.2	2.7	-10.6
1987	-1.5	22.4	28.1	27.7	14.6	29.6
	----- % of GDP -----				----- % of GDP -----	
1980	6.7	4.8	4.6	5.8	n.a.	n.a.
1981	12.6	8.7	8.3	10.0	15.5	11.5
1982	16.1	9.7	9.1	11.2	19.8	15.8
1983	21.4	7.7	7.1	9.3	28.6	25.7
1984	23.1	13.7	13.0	15.2	33.5	30.3
1985	28.4	18.2	17.1	19.5	36.1	32.9
1986	28.9	9.4	8.1	9.7	22.7	18.0
1987	44.0	17.7	16.1	19.2	40.0	36.0
	----- % of GDP ^{1/} -----				----- % of GDP ^{1/} -----	
1980	4.83	3.48	3.30	4.16	n.a.	n.a.
1981	9.28	6.45	6.12	7.36	11.4	8.49
1982	11.73	7.07	6.61	8.16	14.4	11.53
1983	12.54	4.52	4.17	5.49	16.8	15.07
1984	13.01	7.70	7.32	8.55	18.9	17.03
1985	15.98	10.26	9.62	10.95	20.3	18.53
1986	24.64	7.99	6.92	8.29	19.3	15.34
1987	23.58	9.50	8.62	10.29	21.4	19.32

1/ End-of-period stocks converted at period average prices.

Notes:

- (1) = Total Treasury securities outstanding.
- (2) = Treasury securities outstanding excluding the Central Bank portfolio.
- (3) = (2) minus securities held by state enterprises and the social security system.
- (4) = 3 + State and municipal securities.
- (5) = Central Bank included in the public sector. Net domestic debt includes the monetary base plus net credit from the banking system.

138. Although the 1983 and 1986 policies slowed down its growth, domestic debt as a percentage of GDP increased during the last eight years. As a share of GDP the net debt stock (including state and municipal debt) increased from 5.8% in 1980 to 19.2% in 1987. This upward trend is shared by other measures of indebtedness that show the effects of the 1983 and 1986 policies.²⁴

139. When the interest rate on domestic debt is larger than the growth rate of domestic output, increasing the debt-to-GDP ratio would be, in the long run, unsustainable. Only adjusting the primary deficit would move the economy to a stable path. Otherwise, increasing the amount of government debt in private wealth would require higher real interest rates to divert a larger amount of private savings to finance the public deficit. Thus the cost of capital will increase, adversely affecting investment, and reducing

^{24/} The current price debt-to-GDP ratio is not independent of the inflation rate. In a period of high and variable inflation, this ratio is usually biased, decreasing or increasing depending on whether the monthly inflation rate shows a downward or upward trend. Because the debt stock is evaluated at year end prices and GDP is measured at average period prices, an acceleration in the inflation rate will increase the debt to GDP ratio. For a more accurate estimate of this ratio the debt stocks were evaluated at average period prices. The inflation adjusted ratio of net domestic debt to GDP doubles between 1981 and 1987 with similar increases being observed for the other debt aggregates. Because a large part of Treasury securities that were issued during this period remained in the portfolio of the Central Bank the total stock increased at a much faster pace than the other debt aggregates. However, when the Central Bank is included in the public sector the increase in the Central Bank portfolio of public securities is not reflected in the net domestic debt aggregate.

the capital stock and output per capita in the long run. The high interest rates and low investment that have characterized the Brazilian economy in recent years reflect the effects of the rapid growth of public debt.²⁵

140. The future trend of the debt-to-GDP ratio will depend on three elements: (i) the fiscal deficit; (ii) the amount of financing that can be obtained by money creation, that depends on the level of inflation; and (iii) the level of external financing. (A more complete analysis is presented in Annex VII.) For a given fiscal deficit an increase in monetary expansion or larger external inflows will reduce domestic borrowing. The framework used in Chapter 3 to evaluate the consistency of macroeconomic targets had as a reference point the deficit that can be financed by levels of borrowing that would result in a constant debt-to-GDP ratio. In 1987 the net public debt to GDP ratio was .193; a medium-term GDP growth rate of 5% per year would imply that about 1% of GDP in additional domestic borrowing would result in a stable debt to GDP ratio. This level of borrowing is well below the levels that took place in the last several years. Lower GDP growth would allow for less domestic borrowing that would maintain a stable debt ratio and stable interest rates. The inescapable conclusion is that without fiscal adjustment it is unlikely that interest rates will decline in the medium-term and private investment recover.

IV.5 Inflation and Indexation

141. High and volatile inflation rates pose an obstacle to the achievement of the medium-term growth objectives. In a fully indexed economy demand management policies lose much of their effectiveness as anti-inflation tools. The "sacrifice ratio" (that is, the loss in output for a given reduction in inflation) can become high and politically

25/ It is difficult to determine a critical value for the debt to GDP ratio beyond which there would be a breakdown of the financial system. The ability or the willingness of the authorities to collect a rising amount of taxes to service the debt may nevertheless set a limit to a what could be considered a sustainable debt growth. An increase in taxes faces some limitations. Higher taxes may reduce individuals incentive to work and the tax base and diminish government revenues. Furthermore, if the tax increase has a strong impact on wealth distribution its implementation may face important obstacles. It is important to evaluate if the conditions which resulted in the present a debt overhang, that is, past deficits, are still prevalent today or the adjustment in the primary deficit has been undertaken. A wider definition of sustainability would more likely refer to the long-run growth rate of the debt ratio than to its level. The simple arithmetics of debt accumulation show that if the growth rate of domestic output is larger than the domestic interest rate, debt would grow at a declining rate approaching a stationary value even when the Government runs a deficit that is financed through further borrowing.

unsustainable. The basis for the heterodox shocks of February 1986 and June 1987 was the desire to prevent high output losses associated with fighting inflation by using exclusively demand-based policies, on the assumption (proven to be erroneous) that inflation was largely inertial.

142. In the short run, the rise in the monthly inflation rate is a central economic issue. For 1988 the authorities forecasted a 600% inflation rate (a monthly average of 17.5%). As discussed previously, the target will be exceeded as inflation has reached about 28% per month. Such a high monthly inflation rate makes the situation rather precarious as any adverse external shock can rapidly move the economy into hyperinflation. As long as the present indexation rules are maintained, no substantial short-run reduction in the inflation rate should be expected. A major issue in any new stabilization package is how to modify indexation rules so they will not obstruct the anti-inflationary efforts.

Policy Alternatives Without a Wage/Price Freeze

143. The orthodox approach to inflation calls for contractionary monetary and fiscal policies, that the public must perceive as sustainable and credible. However, the downward wage rigidity prevalent in an indexed economy greatly reduces the effectiveness of such policies. Tight fiscal and monetary policies combined with downward wage rigidity could cause unemployment without inflation gains. The costs of high unemployment could force the authorities to abandon this approach. Moreover, adjusting the exchange rate or any other nominal variables could cause higher wages and prices, more inflationary expectations, and more inflation. Initially, contractionary fiscal and monetary policies may cause more inflation than they cure.

144. To reduce inflation within an indexed economy, one alternative is a shift toward forward-looking rules with a retroactive compensation of any difference between projected and actual inflation rates. For Brazil, this alternative may face some implementation problems due to the lingering memories of the ill-fated 1980 experiment with pre-indexation, that however did not include provisions for ex post correction. In 1980, as the difference between actual and expected inflation increased, the economy became unstable and the experiment was quickly abandoned. Success with ex post indexation requires that the fundamentals are correctly set, tight monetary and fiscal policies are pursued, and that price and income policies are consistent with an ex post reduction in the inflation rate.

145. Another alternative is to abolish indexation without a wage and price freeze. Such a program would need the support of a very tight monetary policy. If the Government tightens money supply growth the tightening of liquidity would not allow residual inflation from the demand side or inertial inflationary expectations to increase the price level. This approach has two main problems. One is that in past years, monetary policy was accommodating because it was not independent of fiscal policy. Therefore, a tighter monetary policy is nearly impossible without substantial adjustments on the fiscal side. Otherwise the impact on interest rates of a combination of tight monetary policies and lax fiscal policies could cause output losses and undermine the stabilization program.

146. The other problem refers to the inertia of inflationary expectations. The long history of inflation in Brazil and the failure of past stabilization attempts have increased the skepticism of economic agents regarding the Government's ability to cut inflation. This pessimism is translated in a downward rigidity of long-term inflationary expectations. Implementing orthodox fiscal and monetary policies in the face of rigid inflationary expectations may cause output and employment losses and undermine the approach. Therefore, even though the macroeconomic fundamentals are consistent with a sustainable low inflation rate, it may take a long time to prove the program's credibility. In sum, the basic premise of this approach is that inflation can be stopped abruptly and with a little cost if the Government introduces radically new monetary and fiscal policies that are consistent with price stability. The key ingredient for the success of these policies is credibility. Economic agents must be convinced that tighter monetary and fiscal policies will be pursued as long as necessary to reduce inflation. If the Government cannot establish its credibility, the stabilization approach will fail. Moreover, unless provisions are made for adjusting contracts established during the high inflation period, large income transfers can occur that will undermine the stabilization effort.

The Case for Heterodoxy

147. A heterodox shock combines an orthodox component (such as measures to cut the fiscal deficit) with income policies (usually consisting of some combination of a wage and price freeze). The objective is to create major discontinuities in key economic variables. When the program is implemented, in addition to a fiscal adjustment some discrete adjustment in the exchange rate, wages, prices of specific commodities, and public sector tariffs may be necessary to bring relative prices closer to a sustainable equilibrium. Although the fiscal deficit may not be the only source of inflationary pressures, programs that have been implemented without imposing fiscal discipline (such as the Cruzado and the Bresser Plans) did not succeed. If cutting the budget drastically is not immediately possible, economic agents must believe that a sustainable budget path will be reached soon enough that the Government will not use the inflation tax to finance the deficit. A wage/price freeze, or any other form of incomes policies that characterize the heterodox approach, can only bring inflation to a halt if accompanied by policies that make the income policies sustainable and bring stability to real wages and other key relative prices.

148. In addition to backward-looking wage indexation rules, two other considerations favor a heterodox approach to stabilize high-inflation indexed economies: non-synchronization of price adjustments by firms and the rigidity of inflationary expectations. Because firms do not adjust prices simultaneously, the coexistence of price staggering with wage indexation implies that reducing the money supply causes slower disinflation than in an economy where prices are adjusted simultaneously. The price controls component of the heterodox approach is a tool to speed up the disinflation process.

149. Inflationary expectations are difficult to reverse in an economy with a long history of inflation. Indexation schemes tend to be self-fulfilling and economic agents behave in a manner consistent with inflation predictions. In essence, if the private sector does not believe that the Government has chosen the low inflation route and behaves accordingly, the effect could be recession. Price and wage controls provide the means to force the private sector to move to the low inflation path. The heterodox elements of the shock program attempt to break the link between yesterday's inflation and today's and thus to cut the inertial inflation process. Price controls, however, have costs that should be considered when preparing the stabilization program. In addition, the method to remove controls must be specified.

150. In sum, formal and informal indexation arrangements, staggered price setting, inflationary expectations, and monetary accommodation cause strong inertial inflation. To successfully reduce inflation the deindexation policy has to change inflationary expectations so that economic agents will modify their behavior accordingly and cut the link between present and past price increases. At a given moment, if inflation is largely inertial and the macroeconomic fundamentals are in place, a heterodox shock may succeed in bringing down inflation without causing undue recessionary effects. The main message of the heterodox approach is that the anti-inflationary measures have to take into account the need to break the inertial inflationary link.

151. Measures must address the most relevant macroeconomic variables, such as the fiscal deficit and key relative prices. The credibility and the expectational issue can be addressed by designing a comprehensive and

consistent program that should be compatible with both low inflation and growth.²⁶ Implementation requires careful synchronization of price/incomes policies to prevent serious distortions in relative prices in the program's early stages. For financial assets, stabilization programs in Argentina and Brazil used conversion tables to break the link between past inflation and present asset returns. The use of conversion tables prevented large income transfers from debtors to creditors. The conversion table is an example of a measure with a strong transitory impact that aids the transition from a high to a low inflation regime.

152. The program's success can be helped by implementing reforms that bring the goods, factors, and asset markets as close to equilibrium as possible. Nonetheless, even if relative prices are close to equilibrium, however defined, they will not necessarily be correct following the change from high to low inflation. Since during the transition period that follows the shock additional adjustments in relative prices may be necessary, these adjustments should be made in the context of a social pact that shares the gains and the losses among the relevant social groups.

26/ The credibility of the Government's commitment to stabilization can be reinforced by using a nominal anchor such as the exchange rate or a monetary aggregate. At the beginning of the stabilization period there is uncertainty about the demand for money and how the demand for real balances will respond to the decline in the inflation rate. Consequently, it may be very difficult a priori to fix targets for money growth. If the money targets are set too tight the subsequent increase in real interest rates may derail the stabilization effort through its impact on the level of economic activity and unemployment. Some countries have used a fixed exchange rate as an alternative and visible indicator of the commitment of the authorities to the success of the program and as guide for the conduct of monetary policy. The choice of the exchange rate as a nominal anchor constitutes a high risk strategy. If the macroeconomic fundamentals necessary to support the policy are not in place, the ensuing overvaluation of the domestic currency would result in a deterioration of the trade balance, capital flight and loss in reserves that would rapidly lead to a costly breakdown of the stabilization plan. A nominal anchor, either a monetary aggregate, the exchange rate or any other nominal alternative is an important element for the success of a stabilization plan, but needs to be supported by adequate macroeconomic policies and correctly set fundamentals.

Summing Up

153. The above discussion suggests that in a fully indexed economy such as Brazil's, reducing inflation will require some form of price and income policies normally associated with heterodox shocks. The experience of Brazil and other countries with this type of anti-inflationary measure yields valuable lessons for the design and implementation of an eventual future shock. As discussed in Chapter 1, one reason for the failure of the Cruzado and Bresser plans was insufficient fiscal effort. A heterodox shock complements rather than substitutes for orthodox policies by enabling anti-inflation measures to overcome rigidities that result from indexation and from long-term inflationary expectations.

154. Three elements are important in designing a shock that combines orthodox and heterodox elements. First, the program should be supported by a credible and consistent set of measures; second, the macroeconomic fundamentals should be in place; and third, the implementation of the program should be supported by a broad social pact. The distribution of the fiscal adjustment over time and the sharing of the burden between wage and non-wage earners are important issues that can be addressed when establishing the social pact. But because stabilization involves a long and uncertain process, the success or failure of a program established along the above lines will depend on its implementation.

155. A decision to implement another heterodox shock in the near future must address two key issues. First, Brazil appears to be suffering from "heterodox fatigue". After two failed attempts, the authorities may lack the credibility to convince the private sector of their ability to make the necessary cuts in the fiscal deficit and, consequently, may be unable to influence private sector expectations and behavior. Second, unless the key economic "fundamentals" are correctly set, a shock would have little chance of success. At this time the fiscal deficit and some key relative prices are out of line. The uncertainty regarding the fiscal outlook for 1989 is a major factor against a shock. Although the balance of payments situation is favorable an adjustment may be needed to the real exchange rate prior to introducing a heterodox shock. As a strategy it seems preferable first to bring the fiscal deficit and key relative prices to sustainable levels; only then should the possibility of either a shock, possibly including some far-reaching modifications in the indexation rules, be considered. This strategy, i.e., giving priority to fiscal adjustment, could improve the credibility of a second round of anti-inflation measures. However, threat of hyperinflation may require the speeding up of the above strategy.

IV.4 Investment

156. A medium-term sustainable growth path requires an increase in investment (public and private), more efficient resource utilization, and macroeconomic stability. The three factors are closely related. This section analyzes the investment dimension of the stabilization and growth process.

Overview

157. A recovery of private investment requires a supportive macroeconomic environment with low inflation and low fiscal deficits. Declines in public sector borrowing will reduce interest rates and make more resources available for private investment. Moreover, resource availability can increase if the intermediation process between lenders and borrowers become more efficient. Reduced segmentation, and freer credit allocation among potential borrowers are important to sustain high investment levels and to improve the quality of investment projects. A main feature of the financial sector that discourages investment is the short-term nature of contracts. Because of high and variable inflation and uncertainty about future government policies, economic agents have reduced the length of financial contracts, severely restricting the availability of medium-term credit (except for credit from official sources). Sustainable lower inflation rates should increase the length of financial contracts and renew the chance for a resurgence of medium-term credit at reasonable interest rates.

158. Reforms in trade and industrial policies and in the regulatory framework may also affect the level and the quality of new investment. In addition to raising industrial capacity and potential output, capital accumulation represents the process that incorporates technological advances into the production process. Incentives to buy modern technologies that will raise productivity are augmented whenever firms are exposed to domestic and external competition, as long as the regulatory framework is benign. In sum, policies that support competition and deregulation generally favor a more rapid technological absorption. In this context reforms in trade and industrial policies and in the regulatory framework can contribute to improve the allocation of resources and to foster a recovery of private investment.

Recent Performance

159. Compared with the 1970s Brazil's gross fixed investment as a share of GDP declined sharply during 1980-87. Total gross investment in 1975 was 24.4% of GDP but declined to 16% in 1983-85 before recovering slightly in 1986-87 (Table III.3). Both public and private investment shares declined, but the ratio of private investment to GDP fluctuated more than the share of public investment. In the public sector, SEST enterprises experienced the largest decline in investment reflecting attempts to cut the fiscal deficit through lower investment outlays. The parallel trend of private and public investment suggests their complementarity. Over 1980-87, the increase in private savings was not sufficient to compensate for the decline in public savings or in external savings, which declined from 6.0% of GDP in 1982 to about 0.5% in 1987. The reduction in external savings and the absence of an adjustment in public savings produced a decline in investment.

160. Stabilization policy involves an intertemporal trade-off between lower current consumption and higher future consumption. The issue facing the authorities is not only burden sharing, but a willingness to accept the short-term costs. Fiscal deficits, financial instability, and lower

investment are three interlinked problems. Budget problems are responsible for financial instability that discourages investment and impedes future growth by limiting domestic financing possibilities. Fiscal adjustment is the key ingredient to break the vicious circle, but increased fiscal effort must be accompanied by adequate external capital flows to smooth the adjustment process.

Table IV.3: BRAZIL - INVESTMENT AND SAVING, 1980-87

(% of GDP)

	a/ d/ Investment						a/ Saving			
	Public b/						b/			
	Total	Private	Total	Public Administ.	Government (SEST)	c/ Other	Total	Private	Public	External
1980	22.5	14.5	8.0	2.8	4.5	1.2	22.5	12.8	4.4	5.3
1981	21.0	12.0	9.0	2.8	5.3	1.1	21.0	13.2	3.4	4.4
1982	20.4	11.7	8.7	2.4	5.0	1.3	20.4	14.0	0.4	6.0
1983	16.1	9.7	6.4	1.8	3.7	0.9	16.1	11.2	1.6	3.3
1984	15.5	9.5	6.0	1.9	3.3	0.8	15.5	12.2	3.3	0.0
1985	16.7	10.5	6.2	2.3	3.1	0.8	16.7	14.7	1.9	0.1
1986	18.5	12.3	6.2	2.8	2.7	0.7	18.5	14.3	2.6	1.6
1987 ^p	19.7	12.8	6.9	3.2	3.1	0.6	19.7	17.8	1.4	0.5

a/ Shares at current prices.

b/ Public sector also includes public enterprises which are included in the private sector in the national accounts data.

c/ Mainly state-owned enterprises.

d/ Gross fixed investment.

p = preliminary data.

Source: IBGE and mission estimates.

161. In an economy with Brazil's domestic imbalances, the key elements influencing investor decision-making are difficult to determine. Surveys of Sao Paulo industrial firms and informal discussions suggest that investment planning in Brazil depends on domestic demand, cost reductions, technology and capacity considerations. In the short run, lower expected real interest rates are not an important consideration, since most investment outlays are financed by firms' own resources. The relatively low importance of interest rates is not surprising, in view of the high and variable real rates of the past five years that discouraged market borrowing for other than short-term credit and private sector's skepticism regarding the possibility that a permanent reduction in real rates can be achieved given the present setting of monetary and fiscal policies. Therefore, firms have relied on internal liquidity to finance replacement and modernization investments. But such limited sources of savings cannot finance the investment levels the Brazilian economy needs to attain in the medium term. The solution is to reduce the fiscal deficit to increase resource availability for private investment.

Inflation and Investment

162. During the 1980s inflation in Brazil slowed only during the Cruzado and Bresser Plans. During the last two years, the monthly inflation rate has shown great variability. High and variable inflation causes uncertainty that shortens horizons for investment and production decisions and blur the distinction between changes in relative prices and changes in the general price level. High inflation forces individuals and firms to concentrate their savings in liquid assets. Firms tend to emphasize finance over production decisions. Managerial efforts are concentrated on very short-term decisions rather than on medium-term planning. The ensuing waste of resources is one of inflation's biggest costs.

163. Structural macroeconomic adjustment policies change relative prices (in trade or nontraded goods or in public or private goods). Although policy changes may correct relative prices, the private sector may not perceive these as permanent. Inability to communicate policy changes in relative prices to the relevant economic agents reduces policy effectiveness. High inflation reduces the private sector's ability to distinguish between changes in relative prices and changes in the general price level. Signal extraction and signaling are much more difficult in a high inflation environment. Rate variability increases with the inflation rate compounding the problems confronting investment decision-makers. A low, stable, and predictable inflation helps ensure that a change in relative prices will have the desired effects on resource allocation.

Credit and Investment

164. During 1980-87, while private sector credit underwent real fluctuations, public sector borrowing expanded steadily. As a result the ratio of private to public sector credit declined from 3.9 in 1980 to 1.1 in 1987 (Table III.4). Because the price and availability of credit go

Table IV.4: BRAZIL - INVESTMENT, OUTPUT, INFLATION, INTEREST RATES AND CREDIT

Year	INVESTMENT			OUTPUT		INFLATION	INTEREST RATE	DOMESTIC CREDIT/ ⁵		
	Private (% growth) (1)	Public (2)	I_p/I_g ¹ (3)=(1)/(2)	Gross Domestic Product (% change) (4)	Capacity/ ² Utilization (%) (5)	Annual Rate/ ³ (IGP/DI) (6)	Real/ ⁴ Interest Rate (7)	To Private Sector (Growth Rate) (8)	To Public/ ⁶ Sector (Growth Rate) (9)	Ratio of Private to Public Sector Credit (10)
1980	-	-	1.81	9.1	84	110.2	-18.4	-	-	3.9
1981	-19.8	9.0	1.33	-3.1	76	95.1	25.7	8.2	13.8	3.7
1982	-1.4	-2.3	1.34	1.1	76	99.7	24.8	0.7	45.9	2.6
1983	-19.5	-26.5	1.52	-2.8	72	210.9	18.4	-19.8	5.9	1.9
1984	3.5	-0.9	1.58	5.7	76	223.8	36.4	-5.2	-12.7	2.1
1985	18.6	12.0	1.68	8.4	79	235.1	32.1	3.3	17.3	1.8
1986	27.8	8.0	1.98	8.0	84	65.0	6.4	54.7	31.7	2.2
1987	7.1	14.5	1.86	2.9	80	418.0	30.8	-26.7	41.8	1.1

/1 Ratio of private to public fixed capital formation at constant (1980) prices.

/2 Source: Conjuntura Economica, several issues.

/3 Annual percentage change in end-of-year general price index (IGP/DI).

/4 Working capital loans; gross rate includes taxes and other charges. Deflated by the periods' official inflation. Source: Analise.

/5 Growth rate of the stock of credit of the private sector. End of period values deflated by IDP/DI.

/6 Includes Central Bank credit and financial system holdings of federal and state securities.

into the investment decision-making process, less availability of medium-term funds will hurt investment. However, the full impact on investment will depend on whether other sources of savings (such as external borrowing, funds from the equity markets) can replace domestic credit as a source of financing.

165. In addition, credit availability affects current production. To support production firms need cash to purchase inputs and maintain inventories. Lack of credit to finance working capital may cause bottlenecks in production that will limit firms' ability to respond to short-term changes in demand. Credit shortages (typically short-term credit) can disrupt the production schedule.

Segmentation of Credit Markets

166. The segmentation of credit markets is an important feature of the Brazilian financial system. (A more complete discussion is presented in Annex V.) Segmentation arises from government policies that favor specific economic activities or regions. Minimum portfolio requirements, direct credit policies, and credit at negative real interest have raised interest rates in the relatively free segments of the credit markets thus discriminating against borrowers who do not have access to preferred credit. By using interest ceilings and setting monetary correction below the rate of inflation (particularly in 1983), the authorities induced large internal income transfers. Because the Government bore some of the costs, the final effects were higher fiscal deficits and inflation. Moreover, increased government borrowing raised interest rates and crowded out the private sector. In Brazil, a large share of private sector credit moves through government established mechanisms. The Government's role in channeling resources to specific economic sectors or regions of the country increased during the 1980s. The share of the outstanding financial system liabilities under direct or indirect government control increased from 50-60% in 1980 to 80% in 1987.

167. Lending financed by forced savings programs such as FGTS, PIS-PASEP, FINSOCIAL and the FND represents one type of directed credit. Other sources of directed credit are the several funds and programs, previously administered by the Central Bank and the Banco do Brasil, and now under the Treasury control. Earmarking a share of bank deposits to finance specific economic sectors constitutes another source of directed credit. Finally, requiring insurance companies and private pension funds to purchase government securities finances public sector deficits and is one more form of directed credit. These regulations result in segmented credit markets and dispersed lending rates. The dispersion is equivalent to imposing a tax on those sectors without access to government directed credit and simultaneously, granting a subsidy to those sectors with access. In this context the directed credit programs have reduced the efficiency of resource allocation. Moreover, the rationale for their existence is far from clear. Besides, the implementation of the credit programs, with their set of complex and constantly changing regulations increase the operational costs of financial institutions and lead to higher spreads between lending and borrowing rates in the freer segments of the credit markets.

168. In Brazil (with the exception of official sources), long-term investment financing through private capital markets is scarce or non-existent. The short maturity of financial contracts is mostly the result of high and variable inflation rates. The absence of a long-term structure of interest rates makes changes in short-term interest rates more important. In fact, they are the only important consideration. However, monetary policy can affect investment decisions by influencing the uncertainty of future trends in short-term interest rates (and working capital costs) and the attractiveness of short-term financial assets relative to physical capital as a vehicle for firms retained earnings.

169. By improving the financial system's stability and efficiency, a financial sector reform could help create a more receptive investment environment. Among other things, financial sector reform would include measures to: (i) reduce credit segmentation, (such as gradually phasing out Government directed credit and earmarking of funds, which should reduce disparities in lending rates across sectors); (ii) increase the stability of the financial system (such as changing the structure of reserve requirements, improved banking supervision practices, and creating a deposit insurance system); and (iii) increase competition and reduce operating costs of financial institutions (such as gradually deregulating interest rates, reducing taxes on the financial sector, reducing taxes on the financial instruments, deregulation to allow financial institutions to freely set banking tariffs and fees, and revising the existing procedure regulating entry in the banking system--Carta Patente).

170. Financial reform along these lines will be an important step toward improving the efficiency of the financial system, increasing the role played by market forces in determining the allocation of credit flows and enhancing the stability of the financial system. However, its successful implementation will require a supportive macroeconomic environment, particularly a reduction in inflation and in the fiscal deficit so that financing the deficit does not require a large inflation tax and the use of earmarked resources.²⁷

Trade Policy and Industrial Reforms and Investment

171. Less restrictive trade and industrial policies can be important incentives to raise investment. Moreover these policies help maintain Brazil's competitiveness in world markets. Brazil's industrialization process was supported by restrictive import controls, public investment, and large financial and fiscal incentives. The goal was to achieve self-sufficiency by encouraging import substitution. A large domestic market and a reasonably competitive exchange rate supported the import substitution drive. By easing entry and expansion in the capital and intermediate industrial subsectors, the incentive and regulatory framework

^{27/} The inflation tax increases the distortions in the financial markets. Because high powered money constitutes the base of incidence of the inflation tax, an increase in reserve requirements to raise inflation tax revenues will drive a wedge between borrowing and lending rates.

may have encouraged industrialization in its early stages. However, in a world that has become much more interdependent economically, a cumbersome regulatory framework is an obstacle to progress.

172. Competition can be thwarted by administrative barriers that require government investment licenses and credit and fiscal restrictions that impede competitors from entering a market were existing firms already benefit from fiscal incentives. Petrochemicals, informatics, steel, telecommunications equipment, and shipbuilding receive more than moderate benefits from the regulatory framework. In addition, these subsectors benefit from considerable credit and fiscal incentives.

173. These regulations have important costs in the form of foregone tax revenues. Fiscal incentives as a group represent about 1.6% of GDP. Between 1982-85 the cost of industrial incentives granted by four agencies (CONSIDER, CDI, BEFIEEX and CPA) averaged about 0.5% of GDP. This figure is the lower bound of overall incentive costs because it does not include the cost of regional incentives, nor that of accelerated depreciation rules. A detailed review of the fiscal incentives program could begin the elimination of the program's distortionary effects and obtain much needed fiscal savings.

174. Geared toward import substitution, Brazil's external trade policies contain a wide range of trade barriers and foreign exchange rationing. A more outward looking strategy could increase the overall efficiency of resource allocation. By maintaining a moderately competitive exchange rate the Brazilian authorities have avoided the almost inevitable distortionary effects on demand and resource allocation. Brazil's import policies have rationed foreign exchange and imposed trade barriers. CACEX, the operating agency, played an important role in foreign exchange allocation by distributing specific imports among selected firms. Trade reform should shift the regime from quantitative control of foreign exchange and imports to a price mechanism where tariffs and the exchange rate determine the value of imports. Since 1987 the authorities have taken some cautious steps in this area. They include shortening the list of products whose imports are banned (negative list), easing the conditions for foreign term financing required for certain categories of imports, simplifying the tariff structure, and allowing a less restrictive 1988 import program. Moving the trade regime along these lines would enhance the economy's competitiveness and efficiency and improve the resource allocation.

175. By restricting domestic and external competition, the present regulatory framework probably reduces the absorption rate of new technology and, in the medium term, diminishes the competitiveness of Brazilian products in world markets. Competition is essential to maintain an efficient industrial sector. A medium-term strategy should include a trade regime that fosters Brazil's integration in the world economy and an industrial policy that promotes competition and reduces to a minimum regulatory controls and incentives.

176. In the medium term, Brazil's productivity growth will depend on accumulating capital and on developing, absorbing, and efficiently using modern technology. This dynamic process will be stimulated by the competitive pressures that emanate from a program of industrial and trade policy reforms. By removing market imperfections and administrative rigidities, these reforms would intensify market forces. However, the desired private sector reforms should be implemented within an appropriate macroeconomic framework. In particular the control of inflation and reducing the fiscal deficit are preconditions for a recovery of private investment and sustained industrial growth.

Summing Up

177. In sum, to attain the medium-term growth rates that the Brazilian economy can reach, higher investment levels are necessary. The scenario presented in Chapter II suggested that to reach an average annual growth rate of 6.0%, investment as a share of GDP would have to increase to about 21%. This level of investment implies an ICOR of about 3.5-3.8%, slightly higher than the average ICOR observed in 1970s. The savings needed to finance investment can be obtained by reducing the fiscal deficit and by moderate capital inflows. A lower fiscal deficit will diminish the need for the inflation tax and consequently will help reassure the private sector that the importance of this source of deficit financing will decline in the future.

178. Stable growth and low inflation should improve the business environment and encourage firms to invest. Stabilization measures should be designed to improve the credibility of the approach and convey to the private sector the sincerity of the Government's commitment to the program's success. Measures that economic agents view as leading to sustainable deficit reduction may have a larger impact on expectations than simple ad hoc measures. Lower and more stable interest rates should reduce private sector crowding out and foster a recovery of private investment. Because the availability of external savings is limited, the strategy should be to increase public savings by reducing the primary deficit.