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**REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT OF THE  
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE  
EXECUTIVE DIRECTORS  
ON A  
PROPOSED FINANCIAL SECTOR ADJUSTMENT LOAN  
IN AN AMOUNT EQUIVALENT TO US\$500.0 MILLION  
TO  
BANCO NACIONAL DE COMERCIO EXTERIOR, S.N.C. (BNCE)  
WITH THE GUARANTEE OF  
THE UNITED MEXICAN STATES**

**MAY 22, 1989**

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## CURRENCY UNIT - PESO (MEX\$)

On April 10, 1989, the exchange rate in the controlled market was US\$1 = Mex\$2,355.00; the free market exchange rate stood at US\$1 = Mex\$2,370.00.

## FISCAL YEAR

January 1 - December 31

## WEIGHTS AND MEASURES

1 hectare (ha) = 10,000 square meters (m<sup>2</sup>) = 2.47 acres (a)  
1 kilometer (km) = 0.62 mile (mi)  
1 square kilometer (km<sup>2</sup>) = 0.39 square miles = 100 ha  
1 kilogram (kg) = 2,205 pounds (lbs)  
1,000 kilogram = 1 metric ton (t) = 0.98 long ton  
1 liter (l) = 0.26 gallons (gal)

## ABBREVIATIONS

ACF	-	Average Cost of Funds (see CPP for Spanish)
ANAGSA	-	National Agricultural Insurance Company
BANRURAL	-	Banco Rural
BNCE	-	Banco Nacional de Comercio Exterior, S.N.C.
BdM	-	Banco de Mexico (Central Bank)
CETES	-	Mexican Treasury Bills
CNBS	-	National Banking and Insurance Commission
CNV	-	National Stock Exchange Commission
CONASUPO	-	National Council for Popular Subsistence
COPLAMAR	-	Program to Provide Basic Needs in Marginal Areas
CPI	-	Consumer Price Index
CPP	-	Costo Promedio Porcentual (see ACF for English)
EFF	-	Extended Fund Facility
FFSP	-	Public Sector Financing Fund
FICORCA	-	Fideicomiso para la Cobertura de Riesgos Cambiarios (Private sector external debt restructuring facility operated by the BdM)
FONAPRE	-	Fund for Preventive Assistance to Commercial Banks
FSL	-	Financial Sector Adjustment Loan
GATT	-	General Agreement on Tariffs and Trade
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
IMF	-	International Monetary Fund
IMSS	-	Mexican Social Security Institute
ISPL	-	Industrial Sector Policy Loan
NAFIN	-	Nacional Financiera, S.N.C.
NTBs	-	Non-Tariff Barriers
ORP	-	Official Import Reference Price
"Pacto"	-	Economic Solidarity Pact
PDR	-	Regional/Rural Development Program
PECE	-	Stabilization and Growth Pact
PEMEX	-	Petroleos Mexicanos
FERL	-	Public Enterprise Reform Loan
QRs	-	Quantitative Restrictions
REER	-	Real Effective Exchange Rate
SEASAs	-	State Secretariats of Health
SECOFI	-	Ministry of Trade and Industrial Development
SHCP	-	Secretariat of Finance and Public Credit
SPP	-	Secretariat of Programming and Budgeting
SSA	-	Secretariat of Health
TPL I	-	First Trade Policy Loan (2745-ME)
TPL II	-	Second Trade Policy Loan (2882-ME)
UNAM	-	Universidad Nacional Autonoma de Mexico
VAT	-	Value Added Tax
WPI	-	Wholesale Price Index

MEXICOFINANCIAL SECTOR ADJUSTMENT LOANTABLE OF CONTENTS

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MEXICO

FINANCIAL SECTOR ADJUSTMENT LOAN

LOAN AND PROGRAM SUMMARY

Borrower: Banco Nacional de Comercio Exterior, S.N.C., (BNCE)

Guarantor: United Mexican States

Amount: US\$500 million equivalent

Terms: Repayment in 17 years, including five years of grace, at the standard variable rate.

Objectives: The proposed loan is part of a program of Bank's support to the Mexican Government's objectives of stabilizing the economy and resuming growth. It would assist in ensuring that financial sector and fiscal policies are conducive to achieving the afore-mentioned aims.

Description: The program includes measures required to:  
(a) reinforce the Government's fiscal efforts, including a series of taxation and related fiscal measures; (b) consolidate reforms in the financial sector, strengthening prudential regulations and supervision, and reducing interest subsidies and fiscal transfers for them. A technical assistance component of US\$15 million would provide assistance in priority areas of fiscal management, tax collection, public finance and investment evaluation and programming, including training and the provision of equipment.

Benefits and Risks: The above measures will improve the consistency of the macroeconomic framework, including a sustainable reduction in inflation, more efficient resource allocation, better fiscal management and improved performance in the financial sector. They are expected to spur private sector investments in Mexico. Additionally, the coverage of social sector programs is being extended to benefit a larger segment of the country's poor. Finally, the program outlined in the Government's Letter of Development Policy would create the preconditions for sustainable growth and, together with the Bank's support in monitoring policy performance, is expected to help secure the required financing package.

The major risk facing Mexico's adjustment program is that finance would not be available as and when needed to implement the growth strategy. In addition, there is a risk that the Government would fail to keep in place a macroeconomic framework consistent with the objectives of stabilization and growth, and a fiscal policy that is sustainable and consistent with the constraints of public finance. (The latter could be provoked, for example, either by deteriorating terms of trade or domestic pressures for excessive public spending). The proposed loan, however, together with the other two adjustment operations being processed simultaneously, (Industrial Sector Policy and Public Enterprise Reform Loans), should help attract external financing to cover Mexico's net capital needs. Furthermore, the new Administration has indicated its strong commitment to adjustment and structural reforms. Finally, the tranching of a substantial part of all three Bank operations would contain the risk that Bank funds would disburse in the absence of a sound macroeconomic framework.

Disbursements:

The proceeds of the loan would be disbursed against eligible general import expenditures in two tranches: US\$250 million upon effectiveness, and US\$235 million any time after November 30, 1989, upon meeting the conditions of second tranche release. US\$15 million would be disbursed under the technical assistance component, which would be available upon loan effectiveness. The loan is expected to be disbursed fully by June 30, 1991.

Retroactive Financing:

Retroactive financing will be permitted for eligible import expenditures up to US\$100 million incurred within four months prior to the signing of the loan.

Rate of Return:

Not applicable.

Appraisal Report:

Not applicable.

Schedule of Disbursements:

Bank Fiscal Years	<u>1990</u>	<u>1991</u>
	----US\$ Million----	
Annual	495	5
Cumulative	495	500

**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT**  
**REPORT AND RECOMMENDATION OF THE PRESIDENT**  
**TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN**  
**TO THE BANCO NACIONAL DE COMERCIO EXTERIOR, S.N.C.**  
**FOR A FINANCIAL SECTOR ADJUSTMENT LOAN (FSL)**

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1. I submit the following report and recommendation on a proposed loan to the Banco Nacional de Comercio Exterior, S.N.C., with the guarantee of the United Mexican States for the equivalent of US\$500 million to finance the Government's financial sector adjustment program. The loan would have a term of 17 years including 5 years of grace, with interest at the standard variable interest rate.

**PART I - THE ECONOMY**

**A. Background**

2. Between 1950 and 1974, Mexico enjoyed a remarkable period of high growth, low inflation and moderate external debt accumulation. Real growth averaged 6.4%, and inflation was in single digits throughout the period. This era of fiscal conservatism came to an abrupt end in the early seventies. Rapidly expanding government involvement in the economy pushed up the rate of economic growth. However, increasing government expenditure was not matched by rising public sector revenues. At the same time a decline in private savings incentives (real interest rates turned sharply downwards) prevented a matching increase in private savings. As a result, inflation tax and external debt became increasingly important sources of finance. The period of single digit inflation ended in 1973, the real exchange rate started to appreciate<sup>1</sup> and the accumulation of external debt accelerated above the GNP growth rate beyond 1973.

3. In 1976, Mexico experienced a serious, but comparatively brief financial and economic crisis, triggering a major devaluation of the Mexican peso and financial austerity measures. However, after major oil discoveries were announced the following year, the stabilization program was quickly terminated. In fact, the subsequent period was characterized by both rapidly expanding government revenues and vastly increased borrowing of the public sector. The Government's share in total value added increased by almost one third, and in total investment from 33.5% in 1970-75 to substantially over 40% in later years. Not surprisingly, the real exchange rate once again started to appreciate, eroding the gains of the 1976 devaluation. This expansion was largely fueled from abroad: Mexico's external debt increased from US\$16 billion to US\$86 billion between 1975 and 1982.

4. The situation changed dramatically in 1982 when rising world interest rates and falling oil prices put an end to Mexico's increasingly

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<sup>1</sup> The real exchange rate is defined as the price of foreign goods relative to domestic goods. Appreciation means a decline in this relative price.

expansionary policies. The refusal of external creditors to roll over Mexico's short term debt left no option but fiscal retrenchment. Mexico, which had run non-interest current account deficits in each of the preceding thirty years, suddenly needed to run surpluses on that account in every following year. The ratio of external debt to GDP increased substantially under the influence of rising interest rates and falling growth rates. The gap between the real interest rates on external debt and real GDP growth went from -5.3% in 1980-1981 to a full +10.5% in 1983. Such a high difference meant that, even without a non-interest current account deficit, the debt burden would increase rapidly, simply through the compounding effect of interest on debt inherited from the past. In addition, there were substantial capital losses on external debt due to the necessary real exchange rate depreciation. Given the major decline in oil revenues and rise in real interest obligations, the real depreciation of the exchange rate was unavoidable, but it led to an increase in external debt to GDP ratio of about 25 percentage points during the period 1982-1987.

5. The counterpart to the non-interest current account improvement was a sustained fiscal adjustment effort that is probably unmatched in any country. A primary fiscal deficit of 7.6% of GDP before the 1982 crisis was turned into a surplus of 4.9% in 1987 and an estimated 5.8% in 1988 (Annex I, Table 1). And this was achieved while revenues from oil exports declined by more than 7% of GDP between 1983 and 1988, and GDP growth declined dramatically. Non-interest Government expenditure was reduced from the equivalent of 35.4% of GDP in 1982 to about 22.6% in 1988. The public enterprise divestiture program was successful in closing or selling roughly 700 smaller entities, out of a total of about 1200 in 1982. In addition, in the same period, Mexico has undertaken far reaching structural reforms at an accelerating pace.

6. An IMF supported stabilization program was launched in 1983, during which the fiscal deficit was halved, international reserves recovered, and inflation began to decline. However, in 1984 and 1985 there was some fiscal expansion and monetary relaxation. Moreover, the earthquake in late 1985 and a major terms of trade deterioration in 1986 due to falling oil prices worsened Mexico's prospects. In response, the authorities adopted a deeper and growth-oriented stabilization program in July 1986. In return for renewed monetary and fiscal austerity, this program also called for a concerted financing effort on the part of Mexico's creditors.

7. The 1986 package included new elements of policy designed to eliminate structural rigidities in the economy. The most significant change was a major reorientation towards fuller integration with the world economy. Exports of manufactures, spurred by a 42% real exchange rate depreciation over the July 1985-December 1987 period, have overtaken oil exports and more than compensated for the US\$7 billion oil revenue loss experienced over the same time span. Since mid-1985, Mexico has undertaken a fast and far-reaching liberalization of the trade regime, aimed at expanding the tradeables sector, opening it to international competition and encouraging efficiency in both exporting, and import-substitution activities. In 1986 Mexico acceded to the GATT. The trade liberalization process was supported by Bank operations (Trade Policy I and II, and



Agricultural Sector I). While it will take some time before the full impact develops, the initial results are promising, incentives have been redirected and restructuring toward more efficient activity begun. For example, in agriculture, the policy reforms initiated since 1985, and especially since October 1987, have substantially reduced direct and indirect price discrimination against producers. Exchange rate policy has become more favorable to all tradeable sectors. Import barriers have been sharply reduced for major agricultural inputs such as machines, pesticides, and other high technology inputs. Export restrictions on fruits and vegetables, which represent 25% of crop output, have been substantially reduced, and most producer prices have been moved into a band of between 90% and 125% of international prices.

8. The key reforms in the trade regime included reductions in the coverage of NTBs and tariffs. The progress has been impressive. Import licensing coverage is now less than one-quarter of what it was in June 1985, official reference prices have been completely abolished, the maximum tariff is now one-fifth and the average tariff about one-half of what they were in June 1985. Progress has gone beyond the Government's original schedule, GATT commitments, and the targets in the Trade Policy Loans I and II and the Agricultural Sector Loan I.

9. The ensuing fiscal retrenchment was unavoidable given Mexico's sudden difficulty in accessing the international capital markets and the adverse terms of trade shocks it experienced. As a byproduct, the severe fiscal cutbacks have greatly increased the efficiency of many of the remaining government operations. There is, for example, little doubt that few, if any, of the many dubious large projects of the late seventies remain in the public sector investment program. But, cutting back public investments from almost 10% of GDP in 1982 to around 4.4% in 1988, clearly has had its costs. Government investment has a role to play in areas that heavily complement private investment and in the social sectors. Also private investment has not made up for the decrease.

10. With lower investment on the one hand, and restrictive demand management on the other, real growth again stopped. There has been no real growth between 1982 and 1987, and hence a severe decline in per capita income (Annex I, Table 1). Also, inflation, rather than slowing down, in fact accelerated towards the end of the period, partially in response to a sharp nominal devaluation. This devaluation, however, had become necessary because of the abrupt oil price decline in 1986. The subsequent de-facto targeting of the real exchange rate, together with an increase in the frequency of wage and cost adjustments, introduced an element of inherent instability into the system. This latter became fully apparent towards the end of 1987. The stock market plunge and less than perfect management of private debt buy backs evolving from the 1987 debt rescheduling triggered a run on the peso in October 1987. This resulted in reserve losses and eventually a 37% devaluation, fueling inflation and expectations of further exchange rate depreciations. The Government responded with the "Economic Solidarity Pact" (Pacto), a concerted effort to bring down inflation that was running well into triple digits by end-1987.

## **B. Macroeconomic Development in 1988**

11. The "Economic Solidarity Pact" (Pacto) was negotiated in December 1987 between Government, labor, farming, and business representatives. The program consisted of further tightening of fiscal and monetary policy, and renewed structural reform efforts. Trade liberalization was accelerated, credit subsidies substantially reduced, and the program of public enterprise divestiture reinforced. These measures were supplemented by a freeze of minimum wages, public sector prices and tariffs, and, what was a corner stone of the "Pacto", freezing the nominal exchange rate against the U.S. dollar. This partial freeze was originally intended for a couple of months only, but it was extended at three month intervals through the end of 1988.

12. On almost every target that is under direct or indirect control of the government, performance under the "Pacto" has been exemplary and often went beyond what was initially planned. Trade reform was accelerated, partly because of the potential efficiency gains, partly because of its restraining effect on price increases. The fiscal deficit was brought closely in line with the low inflation targets embedded in the "Pacto". This effort was all the more noteworthy, given the negative budgetary impact of further drops in oil prices and increasingly high real interest rates on foreign debt towards the end of the year.

13. Moreover, this has been achieved in spite of high domestic real interest rates. These have been at around 30% in real terms during most of 1988, and have crept up to a compounded real rate in excess of 40% towards the end of the year. And, it must be stressed that real interest rates on Government debt swung from a negative 3% in 1987. With the domestic debt in 1988 equivalent to around 20% of GDP, such a turn around caused a massive increase in real interest payments to service the domestic debt.

14. The fiscal measures, backed up by the exchange rate freeze and an array of formal and informal price controls, have had a dramatic success in reducing the rate of inflation. Inflation figures for October 1988 indicate a monthly rate of 0.8% for the CPI and 1.4% for the WPI. In November 1988, the WPI actually declined and the CPI inflation rate slowed down further to 1.3%. In December 1988, CPI inflation was 2.1%, substantial food price increases notwithstanding but the WPI went up by only 0.8%. This is a tenfold reduction compared with the beginning of the year; if the October-December 1988, rates could be sustained, Mexico's inflation rate would be at an annualized rate of approximately 15%. This would clearly be a dramatic change with respect to the 159% inflation rate in 1987.

15. The policy of a fixed Peso-Dollar rate came under increasing pressure in 1988 as the year went by. The real exchange rate against the US Dollar appreciated by 9.2% since January, and by 5.5% since March, the first month with low inflation. The appreciation of the dollar between March and September 1988 added to the pressure: on a trade weighted basis the real exchange rate appreciated by almost 7.4% between March and August. This should be set against a sharp real depreciation of 42% on trade-weighted basis between July 1985 and December 1987. July 1985 was the month preceding a nominal devaluation of 17% and the beginning of a much

more aggressive exchange rate policy. However, falling oil prices and rising international interest rates in the second half of 1988 added to pressure on the real exchange rate.

16. Doubts about the sustainability of the exchange rate may have been behind the second striking feature of 1988, an extraordinary surge in imports which increased by 48% in 1988. It seems that a substantial part of the import boom was related to speculation against the exchange rate, and, possibly, a gamble on future trade reform rollback.

17. At the same time, non-oil exports increased by 16% in dollar terms in 1988, (the 1987 over 1986 increase was 23.7%). But because of the falling revenues from oil, total exports grew by only 5% in nominal terms in 1988 over 1987. In addition there was a strong increase in exports from the "Maquiladoras," the import/export industries along the US border. While separate export and import data for the "maquila" sector are not yet available for 1988, preliminary data indicates that value added increased by 40% over 1987, adding a US\$2.3 billion to the trade surplus in 1987 (as opposed to US\$1.6 billion last year). The increase in exports was due to improved competitiveness since mid-85; as mentioned before, although the exchange rate depreciated in real terms by 42% between July 1985 and December 1987, some of the gains have been eroded since the beginning of 1988. Also, since 1985, Mexico's competitors have improved their competitiveness by almost 10%.

18. The net result was a deterioration in the current account of US\$6.8 billion dollars from 1987 to 1988 (a swing to a deficit of US\$2.9 billion in 1988 from a surplus of about US\$3.9 billion in 1987).

### C. Macroeconomic Policies in 1989

19. In December 1988 the Mexican Government and the various sectors of society agreed on a renewal of the "Pacto" as the initial phase of economic policies for 1989. This renewed Pacto now called Stabilization and Growth Pact (PECE) aims to consolidate price stability and contains specific guidelines through the end of July 1989. Within this framework, public sector prices and tariffs were adjusted, minimum wages were increased by 8%, and the peso is being depreciated daily according to a pre-announced schedule of one peso a day. Under the PECE it is expected that inflation will decline from 52% during 1988 to 20% during 1989. The fiscal measures approved by Congress in the 1989 budget will contribute to a reduction of the operational deficit. The fiscal stance, in conjunction with appropriate monetary and exchange rate policies, should help bring about the gradual recovery of investment and output, as well as lower inflation and the strengthening of international reserves.

20. The first quarter of 1989 indicates that the PECE is performing very much like the Pacto, with the same successes and weaknesses. Inflation, after accelerating to 2.1 and 2.4% respectively in December and January, came down to 1.4% in February and 1.1% in March. Current rates, if continued, are compatible with the Government's stated 20% year-end to year-end target (one percent a month until December implies 17% December to

December inflation), an impressive reduction from the 159% and 52% inflation rates in 1987 and 1988, respectively. Also, the nominal daily devaluation of the Peso has led to a small real depreciation of the exchange rate against Mexico's main trading partner, the USA. Current exchange rate policy and inflation targets are broadly consistent with a stable real exchange rate (a small real depreciation from December 1988 to December 1989). Exchange rate policy will be monitored in the context of the proposed IMF's EFF.

#### **D. Towards Renewed Growth**

21. The predominant long term problem in Mexico is the continued low growth rate of the economy. This is not only an issue of great social concern, but also presents a major inefficiency and a threat to the success of the short term stabilization program as well. An efficiency issue, because it suggests that the rationalized incentive structure that is beginning to emerge as a result of the ongoing reform program is not sufficiently exploited; and threat to the stabilization effort because any fiscal deficit is much harder to finance at low than at high growth rates. Thus low growth rates increase the probability that recourse to reliance on the inflation tax is imminent. For all these reasons restoration of growth to the levels prevailing before the expansionary mid seventies is imperative.

22. It is clear, however, that because of the short-term problems, fiscal efforts cannot be the main engine of growth. In the short run, balance of payments considerations leave no option but export led growth. Then however, supply bottlenecks will develop in time, with the consequent need for additional investment. At present, investment is equivalent to 20.3% of GDP, public investment being at its lowest historical level. With fiscal retrenchment necessary in the face of low inflation targets and the likely negative impact of external shocks on public finance, private investment will have to lead the way. This is also more in line with the structural reforms currently underway in Mexico; these reforms seek to reduce rather than increase the role of the public sector. This then sets the stage for the three proposed adjustment operations: Financial Sector Adjustment Loan (FSL); Industrial Sector Policy Loan (ISPL) and Public Enterprise Reform Loan (PERL); how to restore private sector based growth within the constraints set by external creditworthiness. A starting point would, therefore, have to be the design of a policy-financing package that will provide the framework for the increase in private investment necessary for resumed growth. The proposed operations are clearly an important component of such a package.

23. The need for a solution to Mexico's external debt problems is not only essential for the recovery of growth, but would also contribute significantly to the chances of success of the stabilization effort. Clearly, cutting back Mexico's access to foreign capital markets would in fact reduce Mexico's creditworthiness because it would slow down GDP growth. Sustained access to external capital markets is necessary to provide room for the additional investment needed for renewed growth. But fears of the consequences of a lack of access to capital markets, with its implications for fiscal and exchange rate policy, are clearly among the factors holding this investment back. In turn, the resulting sluggish

growth performance and public finance problems are among the factors causing the lack of access to external capital markets to begin with, thus closing the vicious circle.

24. It is exactly in such a vicious circle situation that the Bank has a major role to play. On the one hand, it can provide external funds as, for instance, through the three proposed adjustment operations and help secure other sources of financing, thus relaxing the external constraint that is stifling growth. But, at the same time the Bank would, through the policy package it supports, give a signal that the increased external funds will indeed, trigger the increased investment necessary for growth. Thus, Bank lending would play a major catalytic role in the process of breaking out of the macroeconomic bind in which Mexico finds itself. This is the main rationale for the three proposed adjustment operations: to act as a catalyzing agent for a process of renewed growth, where Mexico and all its external creditors play an active participatory role.

#### **E. External Debt and Creditworthiness**

25. Mexico's gross external public and private debt increased by nearly US\$11 billion during 1983-88, and net debt by about US\$9 billion. The debt service ratio increased from 47.1% of exports of goods and non-factor services in 1983 to 60.5% in 1988, mainly due to large repayments of around US\$3.5 billion of private sector debt and a decline in oil prices. At the end of 1988, the Bank's share of Mexico's long-term debt was 8.2%, and its share of Mexico's long-term debt service was 7.6%. Mexico's share in the Bank's total exposure was 8.7% in 1988. This latter ratio is expected to rise somewhat by the end of this decade because of Bank expanded assistance program, but will remain below 10% of the Bank's total portfolio. Provided that sound domestic economic policies continue to be pursued, and that the external environment remains favorable for the execution of these policies, Mexico is considered creditworthy for planned Bank lending.

### **PART II - ADJUSTMENT ISSUES AND THE FINANCIAL SECTOR REFORM PROGRAM**

#### **A. Overview**

26. A comprehensive adjustment program should concentrate on four major areas: public enterprise reform, industrial deregulation, macroeconomic stability and financial sector reform. The proposed Public Enterprise Reform and Industrial Sector Policy Loans would support the Government's program in the first two areas, while the proposed FSL would focus on the remaining areas. The main objective of the Government's financial sector reform program is to provide a policy framework, so that private investment can play the major role in the resumption of growth. This is fully in line with the structural reforms undertaken during the past few years; these reforms have been geared towards the opening up of the economy and a substantial reduction of the economic role of the public sector.

27. A stable macroeconomic environment is a necessary condition for renewed growth. High inflation, fears of future recessionary policies, and

balance of payment crises are all incompatible with the confidence necessary for renewed private investment. To avoid these, fiscal policies and external financing plans that are consistent with other macroeconomic targets are necessary. The achievement of such conditions of consistency is part of the basis of the proposed FSL. Consistency of fiscal policy not only requires consistency between fiscal deficits and available financing given macroeconomic targets, but also consistency between existing spending and revenue plans with those deficits targets.

28. Even within a stable macroeconomic environment, however, there may remain obstacles to private investment. Some have to do with the tax system, and constraints in the Mexican tax system are analyzed in paras. 44-55. Another problem for Mexico has been that, until recently, its banking system has not been able to play effectively an intermediary role in the financing of private investment. To overcome these obstacles, the proposed FSL would support the implementation of a comprehensive financial sector reform program (paras. 70-102).

## **B. Macroeconomic Consistency**

29. The consolidation of the stabilization process and the resumption of growth are the Government's highest economic priorities for 1989. The achievement of these objectives will require policy actions in two main areas: the formulation of an economic program to be implemented after the current phase of the "Pacto" expires on July 31, 1989; and restrictions on the overall fiscal deficit consistent with low inflation and renewed growth in 1989 and beyond.

### **"The Economic Solidarity Pact" ("The Pacto")**

30. The success of the Pacto itself is probably the most urgent precondition for renewed growth. There can be little doubt that a resurgence of inflation and possible backsliding on the many trade and industrial reforms implemented over the past few years would prevent output growth for many years to come. Experience elsewhere in Latin America provides ample proof. Any program for growth should, therefore, start with measures that allow the economy to emerge from the "Pacto" with the controls removed, but its anti-inflation gains intact.

31. The Pacto has been a success so far (paras. 12 and 20). However, signs of stress became obvious towards the end of 1988, particularly in the exchange rate, public sector prices and some relative prices. Since appraisal of the three adjustment operations in October 1988, the Government has taken policy actions towards a more flexible system. The current phase of the Pacto includes adjustments in public sector prices, a daily depreciation of the exchange rate, and selective adjustments in controlled prices in response to shortages of particular products (para. 19). This is a clear move in the right direction and further progress towards a more flexible system should be an important component of the economic policies to be implemented after the current phase of the Pacto expires on July 31, 1989.

32. Price controls affect mainly some agricultural commodities and have been in effect since well before the start of the Pacto. A medium-

term policy objective should be the gradual relaxation of these controls. In the interim period until the controls are fully removed, there should be periodic price adjustments so as to avoid shortages and prevent sectoral misalignments.

33. A gradual decontrol strategy could exploit individual windfalls, as they occur. An example would be to release prices of agricultural goods at harvest time, possibly backed up by stockpile releases where possible. In this method in particular there could be a coordinated approach with further trade liberalization. There are several agricultural commodities where import quotas put upward pressure on prices while controls are trying to keep them down. Simultaneous release of such quota together with price controls would clearly be advisable.

34. Price flexibility, like exchange rate policy, brings up an issue that is both the strength and the weakness of the Pacto: its concerted nature. Clearly, the fact that all the major actors in the Mexican economy were participants in it has been essential for its success. But the same concerted approach that made it work initially also makes it difficult to get out of it with anything less than a comprehensive package approach. The real wage is a particular stumbling block. The possibility to combine price decontrol or even exchange rate realignment with, for example, improved targeted food assistance programs or lower payroll taxes deserves attention.

35. The most difficult issue involves the exchange rate. There is concern that any significant exchange rate realignment would lead to matching wage claims and additional pressure on nominal price controls. Also, in a relatively open capital market like Mexico's, the money supply is not really under control of the Government under a fixed exchange rate regime, so the money supply could adjust quickly too. It is possible that in such circumstances a nominal devaluation would in fact bring about a real devaluation for only a very short time. As the existing agreement underlying the PECE very much relies on the nominal exchange rate policy as announced, this agreement would probably be in jeopardy when the government deviates from it on such an important policy instrument. This would result in increased wage-price pressure, which would diminish the impact of any nominal devaluation on the real exchange rate. A cautious policy would therefore be to continue the PECE as announced until its expiration date; but to reassess the exchange rate situation in a few months.

36. The Government intends to manage the exchange rate so as to be consistent with the attainment of the balance of payments and inflation objectives of the program, also taking into account, the behavior of international reserves, the trade balance, and the real effective exchange rate. Exchange rate policies will be monitored in the context of the proposed IMF's EFF (para. 143).

37. The particular policy actions to be implemented after July 31 to consolidate the stabilization effort cannot be fully defined at this time because they depend to a large extent on the uncertain external economic environment that the Mexican economy will face in the second half of this year. However, the Government has agreed to continue the on-going periodic consultations with the Bank on the broad outline of its intended economic

policy and a satisfactory assessment of the consistency of the macro-economic program and satisfactory progress towards more flexible price adjustments would be a condition for second tranche release.

### Consistency of Fiscal Policy

38. There are two major dimensions to the problems of fiscal consistency: first, whether the projected fiscal deficit is in line with other macro-economic targets, in particular for inflation, and availability of foreign financing. The second is whether the deficit projection is realistic given likely revenues and expenditures, if the Government is to play fully its supportive role in the process towards renewed growth. The deficit is discussed in paras. 39-43. The second dimension is covered in the subsequent paragraphs (tax revenues, paras. 44-55; public sector expenditures, paras. 56-58; government planning and budgeting, paras. 59-62; parastatal finances, paras. 63-65; and state and local finances, paras. 66-69).

### Ceiling for the Operational Deficit

39. The consistency between Government Budget and other macroeconomic targets, in particular output growth and the rate of inflation can be studied starting from the Government Budget constraint. There are three sources to finance public sector expenditure beyond what can be obtained from the regular tax system: external borrowing, monetization and issue of domestic interest-bearing debt. Macroeconomic targets and sustainability imply constraints on each of them. An econometric model has been developed to assess the macroeconomic framework of Mexico for 1989 and beyond under different assumptions about those macroeconomic variables. The model's structure and the results of the simulation are included in Annex IV. The model focuses on the concept of "financeable" deficit, which is defined as the deficit which does not require more financing than is compatible with sustainable external and internal borrowing, and existing targets for inflation and output growth. The most relevant results are summarized below.

40. If there is no foreign finance available, (zero net foreign debt increase), an inflation rate of about 15% and growth of 1.5% in 1989 would require a reduction in the projected operational budget deficit for 1989, compared with 1988, of about 4.4% of GDP, with a corresponding increase in the already high budget primary surplus of 5.8% of GDP achieved in 1988.

41. To put this in perspective, this would amount to a wholesale scrapping of the entire public sector investment program. In fact, the fiscal effort should be even larger than that; at unchanged policies the operational deficit is likely to worsen in 1989 unless the international price of oil remains at current relatively high levels. Measures to offset this expected deterioration in the operational deficit would be necessary in addition to the 4.4% of GDP increase in the budget primary surplus mentioned above.

42. If additional foreign financing were available to at least maintain the real value of the debt, a smaller cut in the operational deficit would be sufficient. An operational deficit for 1989 of about 2%



of GDP (down from about 4.4% of GDP in 1988), is compatible with an inflation target of 15%. This implies a 3% current account deficit, or refinancing of about half of interest payments.

43. The above results highlight the crucial role of transfers abroad for macroeconomic consistency. Without renewed access to foreign capital, Mexico faces a grim fiscal situation in 1989. The 1989 Budget approved by Congress in late December 1988, implies a primary surplus of 7.3% of GDP, including 0.4% of GDP revenue from asset sales, and an operational deficit of 2.1% of GDP. At current oil price projections (\$14 in 1989) the primary surplus might in fact reach 7.8% of GDP, including the 0.4% asset sales. This is in line with the macroeconomic targets for 1989 of about 20% inflation, a current account deficit of 2% of GDP, and 1.5% growth. The Government has undertaken to exchange views with the Bank periodically on budget implementation and to take the necessary corrective actions to ensure the achievement of the macroeconomic program.

### Taxation in Mexico

44. By international standards, Mexico has had and still has a low ratio of tax revenue to GNP (about 10% of GDP in 1988). In the fifties and sixties, this was supported by fiscal conservatism that kept the size of government small. During the strong expansion of the mid-seventies and early eighties, oil revenues and recourse to foreign borrowing made up for inadequate tax revenues. With both of these sources in steep decline, improving the tax system has taken on new urgency.

45. The Mexican tax system has been reformed extensively in the recent past. As a result, Mexico now has a well-designed value added tax system (VAT), and a much improved corporate tax structure. Since project appraisal in October 1988, additional measures have been incorporated in "Ley de Ingresos" 1989, to remove remaining inconsistencies in corporate taxes and to raise additional revenues. These measures will result in a net increase of 0.9 percentage points of GDP in tax revenues in 1989 as compared with 1988. Nevertheless, in the long term, the potential for increased revenue from taxation in Mexico is substantial. There seems to be ample room for improvement in tax administration, and if international comparisons are anything to go by, a comprehensive personal income tax reform could substantially increase revenues. For example, in Mexico personal income taxes constitute only 2% of the GDP whereas countries like Chile and Turkey obtain two or three times that with similar rates. Such a reform should focus on increasing coverage, simplification, greatly reduced deductions and administrative improvements. In the short term, revamping of the property tax offers possibility of significant revenue improvement.

### The Property Tax

46. There is an extensive system of property taxation in Mexico, covering both rural and urban areas. The tax is collected by states but transferred to municipalities. Revenues from it have declined precipitously over the last decade, however. This is one of the main reasons (the other being incomplete cost recovery on municipal services) why own sources of revenue of state and local governments have fallen by nearly 70% in real terms over the last six years. At issue is not so much

raising rates, but updating of cadastral register and values, reversal of the real erosion in assessment values and improvement in collection effort. As to the first, BANOBRAS has offered an update of the cadastral system. This has not been pursued by the municipalities that are by constitution responsible for this tax. The problem lies in the current relationship between the municipalities and the states. Municipalities need state approval for expenditures and rely on revenue sharing with the state to finance those expenditures. Therefore, municipal mayors have little incentive to raise an unpopular property tax. Moreover, non-compliance and inadequate coverage also result in poor revenue yields. This problem arises because, under the present arrangements, the state is the collecting agency for the property tax but does not retain it and, therefore, it has little incentive to increase collections. A reform that provides more incentives to the states to collect this tax, for example through a sharing arrangement, is advisable.

### The Value Added Tax

47. The VAT is collected by states and shared with the Federal Government. VAT collection has improved over the past two years, mostly because of administrative changes that gave the states, who administer this tax, stronger incentives to enforce compliance and improve collection. This was done by reducing unconditional revenue sharing in return for a share in the VAT collected by the states themselves. Introducing incentive compatibility in tax collection is good policy. However, there remain problems of poor collection of the VAT in metropolitan areas, especially the Federal District, because of administrative difficulties. Improvements in collection could yield substantial revenues and reduce dependence of metropolitan areas on federal transfers.

### The Corporate Income Tax

48. Several measures have been taken with respect to the corporate income tax since project appraisal in October 1988. Rates are being gradually reduced to accord with international levels relevant to Mexico. The rate has gone down from 39.2% in 1988 to 37% in 1989 and will equal the U.S rate of 35% in 1991. The five year transition period to fully adjust taxable bases for inflation has been eliminated, which substantially simplifies procedures reducing compliance costs. Dividends are no longer deductible at the corporate level. This reduces evasion at the individual level while maintaining the overall rate on dividends at around 40% (see discussion on personal income taxes below). Dividends paid out to residents and nonresidents are to be treated equally, which further strengthens the competitive environment in Mexico. A 2% minimum tax on assets, creditable to the income tax, has been introduced, which helps to fight evasion and broadens the base. To reduce metropolitan congestion, the immediate depreciation allowance on investment in the three main metropolitan areas has been reduced to 60% of the general rule. Consistent with the Bank's appraisal mission recommendations, these measures further streamline corporate taxes in Mexico, removing outstanding loopholes and inconsistencies.

## The Personal Income Tax

49. Following project appraisal, several changes have been introduced in the personal income tax. The maximum rate has been reduced from 50% to 40%. The personal exemption equivalent to one minimum wage have been replaced with a tax credit amounting to a 10% of three times the minimum wage. Furthermore, an additional 10% tax is to be levied on dividends received by individuals to raise the effective tax rate on dividends (after corporate tax) to 41%. While these steps are in the right direction, there remain problems with the personal income tax system, treatment of special tax bases (BETs), and exemptions.

50. The problem of special tax bases, BETs, seriously affects the personal income tax base. BETs for administrative ease, defined on an annual basis, can be easily included in the tax base. However, legally sanctioned BETS, which result in the exclusion of the transport and agriculture sector from the income tax base, are a major source of revenue loss and are much harder to deal with. It is clear that such BETs are huge loopholes in the tax system. A reform program could include three major steps: step I would involve identifying incomes and thereby bringing the sector into the tax base, step II would identify deductions, and finally, implementation would take place in step III.

51. There remain a large number of exemptions in the Mexican personal income tax code that contribute to a shrinking of the tax base. Among them is the exemption of fringe benefits in labor income. This is a serious loophole but its complete elimination would be politically difficult.

## Tax Administration

52. Fiscal austerity during the past several years has lead to an increasing deterioration of the capacity to administer taxes. Budget cuts, public employment freeze and deteriorating quality of technical and professional skills, have seriously affected tax managers' ability to carry out their institutional mandates. Despite these constraints, the authorities have been working hard to redesign administrative operations to improve efficiency through the continued implementation of three ongoing, interrelated, programs: (i) decentralization of computerized registration and collection of income taxes, (ii) automation of custom taxes operations and, (iii) strengthening of the campaign against evasion. The programs aim to update and modernize tax administration which has remained backward due to technological lags and increasing inability to deal with the growing evasion and collection problems. An Action Plan, consisting of measures directed towards improving internal evaluation and strengthening the decentralized systems already in operation has been prepared and will be supported under the proposed technical assistance component (Annex VI).

53. The program to decentralize income tax registration and its computerization was launched in 1988 and has been advancing at a fast pace. The program consists of transferring highly centralized data processing from the Subsecretaria de Ingresos in Mexico city to regional levels of tax administration. The resulting proximity to tax payers will enable authorities to immediately respond to noncompliance, leading to a tight compliance environment. Automated operations have already been

decentralized by installing 2232 computers in 273 locations throughout Mexico with software that enables registration and follow-up of individual transactions at the local level. The next stage is to create an interconnected automated supervisory and monitoring ring, with somewhat larger computers, that would enable the authorities to adequately follow-up decentralized operations. Given the nature of activities involved and the current possibilities of abuse, such improvements are essential. It is expected that the implementation of supervision and monitoring systems for the entire Mexican territory will be completed during 1989.

54. For improving the administration of customs taxes, the Directorate General of Customs has recently devised an action plan for the processing and control of substantially increased number of foreign trade transactions (which increased from 2 million to 5 million between 1982 and 1988). The Action Plan envisages two stages: (i) administrative adjustments, and (ii) automation. These stages will be implemented in 18 months starting March 1, 1989. The administrative adjustments are expected to be completed in six months, while automation will take about 15 months.

55. Finally, strict compliance will require more than the improvements in administrative and collection operations outlined above, laudable as they are. The de la Madrid administration launched a vigorous "crusade against evasion" in 1988. The measures included doubling of the audit task force as well as incentives to motivate taxpayers to meet obligations. The present Administration has reinforced this strategy with severe penalties for evasion. It is also studying, in more detail, the nature of tax evasion and the use of automated data processing to strengthen current capacity of the task force on evasion. Training programs are planned to improve working of the task force. The authorities plan to develop a specialized system of internal audit to maintain quality and minimize the high risk of corruption.

### Public Sector Expenditures

56. Since 1982, a major retrenchment of public expenditure has occurred of a dimension unprecedented in Mexican terms, if not for most developing countries. Non-interest spending declined by 36% in real terms (from 35.4% of GDP in 1982 to 22.6% of GDP by 1988, Annex I, Tables 2 and 3). However, the composition of cutbacks was, perhaps, not ideal from the standpoint of growth. Real investment expenditures, particularly in agriculture, oil, and basic infrastructure, were cut more deeply -- by roughly 43% in real terms -- (from 10.2% of GDP in 1982 to 4.4% of GDP in 1988) whereas other current spending declined by 28% (from 25.2% of GDP in 1982 to 18.2% of GDP in 1988). As a result, infrastructural bottlenecks in areas such as roads, communications, urban services, and skilled manpower availability could impose severe constraints on the sustainability of growth as the economy seeks to recover the 4-5% per annum growth rates considered necessary to create enough jobs while permitting depressed living standards to recover. Moreover, considering the sharp real cuts in public wages, and smaller, but still sizeable reductions in outlays on current goods and services, the adjustments in current spending have also had adverse effects on future growth potential, since capable civil servants are now beginning to abandon public service in growing numbers and the productivity of those who stay is being hampered by the scarcity of

even basic materials needed to carry out their duties -- paper, photocopiers, telephones, gasoline for rural extension vehicles, medical supplies, etc.

57. Clearly, there is a need to upgrade real public wages selectively to retain competitiveness with the private sector for vitally needed skills as well as to raise budgets for vitally needed equipment. But a real increase in non-interest current spending sufficient to fund significant near-term improvement in wages and working conditions seems unlikely. On the other hand, a significant improvement in labor productivity could be achieved through an orderly reduction in the size of the public work force accompanied by a reallocation of current spending toward complementary purchases of material and supporting services. Higher productivity would allow for improved wages and benefits consistent with fiscal discipline.

58. The restoration of growth will require a gradual increase in annual public sector investment by 1994. Major real investment increases are required in agriculture, ecology, transportation, energy and the social sectors. The Base Case macro-economic scenario (para. 103) assumes an average of 8.9% real increase per annum in Government investment during 1989-94. As a share of GDP, public investment would rise from 4.4% of GDP in 1988 to an average of around 6.0%, which in relative terms would bring non-oil public investment back up to the moderate levels of the late 1960s.

#### Government Planning and Budgeting

59. The deep and sustained cuts in public investment since 1983 meant that few new projects have been initiated over the past six years, with the result that a steady erosion of the institutional capacity to plan, prepare, monitor, and evaluate projects has taken place, both in the Secretariat for Programming and Budgeting (SPP) and in the line ministries managing sectoral investments. In addition, in the absence of a multi-year budgeting system, the Government was lacking an essential instrument in the past "sexenio" for introducing efficient and balanced cut backs in public investment levels. As a result, it was difficult to protect ongoing programs in such a manner as to minimize the economic cost of postponing the completion of new investments initiated earlier and deferring maintenance expenditures.

60. The proposed FSL would support a blend of short and medium-term plans, consistent with the Government's aims for strengthening investment planning in three key areas. To strengthen the screening of public sector projects and to introduce a multi-year investment programming, the Government would carry out an agreed Action Program designed to develop manuals, setting economic, financial and technical criteria for sector specific investment evaluation and establishing a central monitoring function. Terms of reference, satisfactory to the Bank, for the required study would be submitted to the Bank by September 1, 1989 and the study would commence not later than October 15 and be completed by March 15, 1990. The Government would, by April 15, 1990, provide a plan of action, satisfactory to the Bank, for adopting measures to improve public investment evaluation and programming procedures. The Government would make an effort so that initial measures to improve the existing system can already be undertaken in the budgeting year 1990.

61. It is expected that institutional measures, required to strengthen the monitoring for all public investments would complement the proposed actions. The new system of multi-year investment budgeting, would help separate projects into "core" priority investments which would be protected from fluctuations in budgetary availabilities, and secondary projects which would be subject to interruption.

62. Since loan appraisal, the Government has introduced, as part of the 1989 budget, substantive changes in budgeting and funding procedures for externally financed investments involving the Government's financial agents and central departments. The new budgeting and payment procedures for externally funded projects may bring about a reduction in the executing agency's approved investment budget ceiling, if disbursements from the external loan do not materialize to meet the agreed levels of project expenditures. Given the already depressed levels of budget allocations, this is an effective measure to promote investment project implementation. The Bank has reviewed these arrangements and found them to be fully consistent with earlier Bank recommendations for facilitating the implementation of externally funded projects. Agreement has been reached that the Government will monitor implementation of the new system, exchange views with the Bank before August 31, 1989, and discuss any further measures that would be introduced to achieve the objectives of improved project implementation and disbursement performance.

#### Strengthening Parastatal Finance

63. A review of public sector prices suggests the need to adopt different criteria to judge their appropriateness, depending on whether their outputs are internationally tradeable goods or not. Prices of public non-oil manufactured tradeables (coal, iron ore, sugar, fibers, petrochemicals, fertilizer, and steel) fell as much as 28% below prices of comparable international goods during the first quarter of 1987, when a rapid real depreciation of the exchange rate was taking place, but moved closer to international prices after introduction of the Pacto, reflecting domestic price adjustments of from 22-85% during December 1987 - February 1988. As of July 1988, the domestic prices of these tradeables were about 10% below international levels, a comparatively modest divergence, but, by March 1989 the average price lag on tradeables had increased slightly.

64. On the other hand, the key question for non-tradeable parastatal prices (power, water, telecommunications, etc.), is whether they are adequate to cover long run marginal costs. While detailed case-by-case studies would be needed to determine these costs for different parastatals, selected comparisons made during mid-1988 of some major utilities prices (using 1970 base real tariff levels) suggested potentially serious shortfalls, a situation unlikely to have changed materially since then.

65. In fiscal terms, the parastatals as a group still absorb a proportionately excessive share of federal resources to cover operating costs. The drain of transfers to cover parastatal losses has diminished from over 5% of GDP in 1981 to an estimated 2.1% in 1988. However, some recovery in real parastatal investment is likely to be needed in the future if they are to remain viable enterprises. Moreover, the bulk of the investment that does take place is currently financed through a combination

of borrowing and federal government capital grants. Considering all that, some further upward adjustment of relative parastatal prices beyond those introduced during late 1988 and early 1989, would appear to be required in the not-too-distant future. During the negotiation of the proposed Public Enterprise Reform Loan and in connection with agreements under other existing Bank operations, the Government has developed an Action Plan to bring about the gradual increases of real parastatal prices needed to reduce the need for budgetary transfers among the five major enterprises which currently absorb more than 90% of total transfers to parastatals.

### State and Local Government Finances

66. States and municipalities have benefitted enormously from a sweeping tax reform in 1980 which consolidated a number of tax bases shared by local, state, and federal governments into a single revenue sharing system. The efficiencies of consolidation have resulted in a significant increase in revenue sharing which now constitutes roughly 11% of federal revenues and over 60% of state and local income.

67. Unfortunately, as their revenues from tax sharing increased, state and local governments' own tax-raising efforts have seriously deteriorated. For example, in the four years preceding the 1980 tax reform, real estate tax collections by the states increased by roughly 29% in real terms, in line with a cumulative GDP increase of 27%, whereas during the four years following this reform, they declined by 61% even though GDP grew by a cumulative 5%. Although data on municipal and state finance beyond 1984 is not yet available, the prospects for future property tax collections may have worsened as a result of the decision to increase the share of real estate taxes transferred to local governments from 15% to 100%, while leaving the responsibility for collection in the hands of the states. This is because the states now have little incentive to put in the effort required to ensure compliance and adequate coverage. In the first year of this new experiment, property tax collections declined by 40%, as the states appear to have largely lost interest in enforcing its collection. At present, the ratio of property tax collections to GDP in Mexico is by far the lowest among the larger Latin American countries at a mere 0.1%, compared to 0.3% in Brazil, 0.4% in Colombia, 0.7% in Peru, and 1.5% in Argentina. To improve collection in Mexico, a new sharing formula needs to be developed that rewards the states for better collection performance in the same way as the VAT formula does. The Government shares these concerns, and as condition for second tranche release it will prepare an Action Program for the gradual reduction of non-matching grants to the states, so as to create incentives for them to increase their own tax-raising efforts.

68. User fee collections tells a similar story. In the four years prior to the revenue sharing reform (1980), collections remained approximately unchanged in real terms, whereas from 1980 to 1984, they declined by one quarter, with charges for water and sewerage declining by 40% in real terms. This was about one-third larger than the decline in real wages, and eight times larger than the fall in real per capita national consumption.

69. The deterioration in user charges and property taxes appears to have been most serious in the Federal District, where non-tax revenues declined by 7% annually, compared to 5.1% annually in the other municipalities. The District's overall deficit in 1988 is estimated at about 0.5% of GDP and it is likely to increase unless increases in real user charges and taxes take place. Additional revenues could be generated by revamping property taxes adopting a three year plan for increasing assessed values. The authorities are also considering unification of real property values used for claiming depreciation while calculating income taxes, with those used for the local real estate tax. The preparation of an Action Program for the increase in the District's self generated revenue by at least 10% in real terms in the 1990 Budget would be a condition for Second Tranche Release.

### C. Financial Sector Reform

70. An efficient financial system could help the Government's restructuring efforts by ensuring that credit, and hence investments and other resources, are put to their most productive use. Mexico had an extremely distorted financial system with a patchwork of regulations and controls imposed over the years to influence various economic activities. The government recognized that a comprehensive reform of the financial sector was needed and has started an extensive reform process. This process has been accelerated, in particular, concerning the commercial banks and brokerage houses since the discussions with the Bank on this sector commenced in October 1988.

71. The external debt crisis in 1982 required the large, but now shrinking, budget deficit to be funded domestically; but the problems in Mexico's financial system did not arise from the budget deficit alone. Over-regulation of commercial banks through interest rate controls, credit limits and forced lending schemes (described below) implicitly taxed commercial banks, causing the private sector to turn to less regulated intermediaries. Brokerage firms, acting through the mutual funds they managed, became important intermediaries. Commercial banks sought to retain their business by moving many transactions off their balance sheets with the authorities' tacit approval. Such attempts at circumventing misguided controls subverted prudential regulations. Past financial crises elsewhere have shown the economic damage that could result from the collapse of large imprudent financial intermediaries. In addition, the development banks and trust funds must have clearer roles and be made to operate more efficiently. Since project appraisal, the Government has implemented sweeping structural changes in the financial sector to address the problems discussed above. The following paragraphs discuss the institutional structure of the sector, the main issues at the time of project appraisal and the Government's response in the context of the financial sector reform supported by the proposed FSL.

### The Institutional Structure

72. Mexico's financial system now consists of a central bank (Banco de Mexico), 20 commercial banks ("bancos multiples"), 8 development banks ("bancos de desarrollo"), 21 government trust funds ("fideicomisos") and 25 privately owned brokerage firms ("casas de bolsas"). Other financial



institutions like insurance companies ("aseguradoras"), factoring companies ("afianzadoras"), leasing companies ("arrendadoras"), credit unions ("uniones de credito") and currency exchanges ("casas de cambio") are less important. Their development in recent years is briefly described below.

73. Commercial banks have been universal ("Bancos Multiples") since 1976, and can both lend and invest in equities. Many banks operated as part of industrial groups lending to, and investing in the equity of, related firms. Banks with net foreign currency liabilities lost much of their capital when the peso was sharply devalued in 1982. Inflation exacerbated the situation because bank interest rates were controlled and slow to change thus reducing their financial margins while their loan portfolio worsened. Many banks were insolvent when they were nationalized in September 1982.

74. The Government then took several steps to improve the financial system. Several of the 60 financial institutions<sup>2</sup> were merged to form the present 18 (excluding the small foreign bank and the union-owned one) and bank holdings in related non-banking firms were sold. Many failing commercial banks were restored to solvency and their capital increased since 1984. A fund financed by a 2/1000 annual levy on bank assets, Fondo de Apoyo Preventivo or FONAPRE, was instituted to restructure banks and help the less efficient ones adopt better technology. In 1987, 34% of the commercial banks' (non-voting, class "B") equity was sold to the private sector and the government reiterated its intention that commercial banks be run independently, responding to market forces. Laws governing money markets were enacted to help delineate contracts, and distorted credits were reduced.

75. Other significant problems, however, remained. Commercial banks, the financial sector's most important intermediaries, had been forced to finance the Government and other favored sectors. Banks' administrative costs are higher than those abroad but even within Mexico, the administrative costs of the multi-regional banks are almost twice as high as the three large banks. Development banks and trusts rival commercial banks in size but mostly fund the government, rather than development.

76. The 6 national banks now account for 76.4% of total commercial banking assets (with 62.1% in the big three), the 7 multi-regional banks for 16.4% and the remaining 5 regional banks for 7.2%. Commercial bank capital is now 3.4% of total assets (the requirement is 3.5% of a defined group of assets), small by international standards but higher than the 1.6% in 1984.

77. The 8 development banks together rival commercial banks in total assets. They focus more on lending than on deposit gathering (less than 9% of their assets are funded by deposits) because over two thirds of their funds are from abroad. The 4 largest development banks account for 91.2% of total development banking assets, with NAFIN alone accounting for 43%.

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<sup>2</sup> Of the 60 institutions, 35 were universal banks, 10 were deposit banks ("bancos de deposito"), 9 were finance companies ("sociedades financieras"), 5 were venture capital firms ("sociedades de capitalizacion") and a mortgage bank ("banco hipotecario").

The 21 government financial trust funds lend through commercial or development banks ("2nd tier" operations) but the 7 largest trusts total barely 5% of the assets of the banking system.

78. Many of the 25 privately owned brokerage firms are run by former bankers who moved after bank nationalization. Brokers trade equities, bonds, and commercial paper. Brokers are allowed to underwrite securities but lack the capital of commercial banks who therefore dominate this business. Brokers have become extremely active, especially after 1976 when the government began borrowing through treasury bills (CETES) which accounts for 68.6% of government securities outstanding in August 1988. Brokers manage several of the 90 mutual funds ("sociedades de inversion"). There are now 300,000 investors in these funds, up from 19,000 in 1982, but below its peak of 390,603 in 1987. The stock market crash of 1987 caused investors to flee and made several brokers insolvent. The larger non-financial firms also lend surplus funds to each other, but little is known about this active intercompany market.

### Financial Sector Issues

79. When discussions on the proposed loan began in October 1988, the main issues in Mexico's financial system were: (1) extremely limited and misallocated commercial banking credit to the private sector; (2) inefficient financial intermediation and insufficient price competition because of deposit rate controls; (3) unclear roles for development banks and trust funds and an inadequate control of subsidies and transfers; and (4) supervision and prudential regulations of banks and brokers. The Mexican authorities have begun reforming the financial system, beginning with the commercial banks. These issues and the Government's financial sector reforms supported by this loan are discussed below.

### Commercial Banking Restrictions

80. Commercial bank lending to the private sector had been severely restricted until October 1988. In addition to the usual reserve requirement (10% of deposits or "captacion"), commercial banks were forced to lend a large part of their funds to the Government (31%), to development banks (10%), to housing and other favored segments of the economy (7.8%), and to development activities (16.2%) at different, but below market, interest rates. Lending at different interest rates could misallocate credit, and hence resources in the economy. In addition, under the "Pacto" lending to the private sector had been limited to 85% of its December 1987 nominal value, with any excess going to the Government at less than market interest rates. Consequently, direct commercial bank lending to the public sector, excluding reserve requirements, had grown from less than 3.6% of assets in 1980 to over 35.3% in July 1988. Commercial bank lending to the private sector, meanwhile, had fallen from 43.5% in 1980 to about 30% in July 1988.

81. There were also controls on commercial bank deposits. Interest on deposits were set nationally, preventing the more efficient banks from growing by competing for funds. No interest could be paid on checking accounts, whose aggregate balances fell from over 18.1% of total commercial banking assets in 1980 to 6.4% in mid 1988. The interest on savings

accounts were set at levels far below the market, reducing these balances from 14.9% of assets in 1980 to 4.5% in mid 1988. The low rates on savings deposits are regressive when savings depositors are poor and unsophisticated. The interest on time deposits, however, were set at close to market rates and such deposits, predominantly under 3 months maturity, rose from about 37.5% of assets in 1980 to over 50.5% in July 1988. Total deposits declined from 25.7% of GDP in 1982 to 20.5% in 1985 but later rose to 23.3% in 1987 while their total assets have fluctuated around 40%.

82. Brokers, unlike commercial banks, were free of such controls and could therefore offer a lower spread, channelling more of the funds remaining for the private sector. Brokers may not accept deposits but they manage trusts and mutual funds. Investors may also have discretionary brokerage accounts and although brokers are not supposed to guarantee investment returns, many are alleged to. These funds are lent to the private sector through commercial paper and to the government through treasury bills. Brokers thus became important intermediaries, giving rise to three concerns. First, credit could be misallocated if the paper of smaller firms, even if profitable, was harder to place. Even so, brokers alleviated the harmful effects on the economy of the controls on banks. The second concern was that implicit promises to investors could not be kept if returns were low and capital was impaired. This too was because controls on banks forced those who would normally deposit in banks invested through brokers. The third concern was that trading on margin (i.e. borrowing against securities) had become common and delayed settlements or postdated checks for payment allowed margin limits to be evaded. This flaw was exposed in the aftermath of the 1987 stock market crash and better supervision is therefore warranted. There have been some widely publicized arrests of some prominent financiers accused of having violated the securities market laws.

83. Commercial banks sought to retain private sector business by circumventing the forced lendings through off-balance sheet activities. They opened trusts or investment funds into which excess funds from many bank deposits (e.g. "cuenta maestra") were swept daily, reducing the amount subject to controls. Prudential regulations are undermined when commercial banks move their business off their books through such instruments as non-traditional bankers acceptances. Not all bank borrowers could obtain funds in this fashion, and those that could not were penalized.

### Commercial Banking Reforms Since October 1988

84. The Government began tackling these problems in October 1988. The timing was propitious. Before, the lending rates of many forced lending schemes were pegged to a commercial bank deposit rate index which lagged the rapid decline in market rates. This unusual, albeit temporary, interest rate structure converted the effective "tax" on commercial bank intermediation which the controls implied, into an unintended but substantial subsidy (about 4.9% of commercial banking assets, or 2% of GDP)<sup>3</sup> which the government could ill afford. By eliminating the controls on commercial banks, the government could reduce its borrowing costs

<sup>3</sup> These estimates are calculated by multiplying the difference between the market interest rate and that paid on forced lending by the peso amounts involved, translated on a per cent of assets and of GDP.

immediately while simultaneously ridding commercial banks of what would normally have been an onerous tax (of about 2.2% of commercial banking assets or 0.7% of GDP).

85. These changes were made in two steps. In the first step, commercial banks were essentially allowed to gather uncontrolled deposits which displaced the controlled system. The second step was in April 1989, when most forced lending and all interest rate controls on the older deposits were removed, thereby freeing the commercial banking system.

86. Until October 1988, the off-balance sheet commercial bank activities through unorthodox deposits ("acepciones bancarias"), though exempt from credit limits and forced lending, were not to exceed a bank's capital. Bankers acceptances in Mexico ("acepciones bancarias") are not the same as in other countries; and even in Mexico, the instrument has changed over the years. Normally, a bank "accepts" the credit risk of a commercial firm's obligation; but in Mexico a bank may accept its own obligation ("acepciones non-tradicional"). Although such acceptances are really bank deposits by another name, they are legally distinct and so free from the forced lending and interest regulations that apply to other deposits.

87. In October 1988, the limit on unorthodox deposits was lifted, but such deposits had to be included in banks' balance sheets, thus subjecting them to capital adequacy requirements. The newer deposits, however, remained free of the credit limits on lending to the private sector, reserve requirements and forced lending schemes. The allocation of credit have improved considerably. Although 30% of these funds have still to be lent to the government, doing so through tradeable instruments ensures that market rates are paid, making the government's costs more transparent.

88. These new deposits began to quickly displace the (mostly time) deposits in commercial banks still subject to the plethora of controls. By December 1988, the new deposits accounted for over two thirds of total deposits. The limit on commercial bank lending to the private sector, which the newer deposits were exempt from anyway, was eliminated in January 1989. From early April 1989, all interest rate controls and forced lending schemes on the older, much reduced, deposits were also eliminated. The commercial banking system has thus been freed, even of reserve requirements, and all that remains is the uniform 30% holdings of tradeable interest paying government paper.

89. This switch to unregulated deposits has encouraged greater price competition between commercial banks for funds. Each bank may now set the rates and other terms on their deposits and loans. The 30% holding of government paper could be construed as a liquidity ratio; but banks are better placed to decide liquidity levels and composition and any fears of insolvency are better assuaged through increased capital requirements. Considering commercial banks' meagre capital (about 3.4% of assets), deposits of very short maturity, loan portfolios of dubious quality, and the need for better banking supervision, the forced holdings of qualified tradeable instruments (only CETES, BONDES and Bank of Mexico deposits now qualify) is of less immediate concern.

90. The Mexican constitution only allows state owned banks to accept "deposits" from the public. Although brokers may not accept deposits, they may manage investment funds without promising a return. Client accounts with brokers and in commercial banks may now be electronically linked, however, allowing funds to be automatically transferred between them. This allows brokers and their funds to offer a comparable range of services, including check writing, and compete with banks. Such competition for funds would ensure that the more efficient institutions, whether banks or non-banks, would grow thereby reducing the costs of intermediation. So the substantial changes necessary to increase competition between commercial banks and with non-banks are well underway.

### Prudential Regulations and Supervision

91. Prudential regulations and supervision become especially important when there is greater competition in the financial markets. Although there are no tangible improvements in banking supervision yet, the authorities are aware of the dangers and are studying the issue. They have sought the Bank's technical assistance and the proposed loan will support these efforts.

92. Four agencies supervise the Mexican financial system: the Comision Nacional Bancaria y de Seguros (CNBS) oversees commercial and development banks and their trust funds; Comision Nacional de Valores (CNV) oversees the brokers and their investment funds; Banco de Mexico functions as the central bank; and the Secretaria de Hacienda y Credito Publico (SHCP) also supervises the development banks, makes any budget transfers necessary. As the government is the controlling shareholder of the commercial banks, the SHCP also oversees the commercial banks. FONAPRE, the fund which finances bank restructuring, is administered by a technical committee of representatives from the Banco de Mexico, SHCP and CNBS. The legal framework for supervision is set by the Ley de Sociedades Nacionales de Credito, the Ley del Mercado de Valores y de las Sociedades de Inversion, the Auxiliary Credit Organisations Law and the Banco de Mexico Law.

93. The CNBS classifies loans as either current or past due. When loan servicing is delayed beyond 15 days, they are classified as past due and if they are not serviced in an additional 15 days, the CNBS reviews the specific loan. If, despite the non-payment, the borrower is deemed a good prospect, the bank is asked to refinance the loan. Furthermore, even if the borrower is not refinanced, only that particular loan is considered past due and the other loans of the same borrower are considered current. Even when loans are classified as past due, the CNBS has the discretion to decide whether banks should provision for these possible losses (ostensibly to prevent banks from writing off these losses against their taxable income). The classification of bank loans is subjective and probably does not accurately reflect the quality of the portfolio. In 1987, for example, all banks' write-offs, depreciation and amortization were a mere 0.46% of assets (or 1.19% of income or 0.70% of loans outstanding). This appears unrealistically low considering that four multi-regional commercial banks in the system are being aided by FONAPRE.

94. Loans should be classified by default risk and interest accrual, or the roll over of bad loans, should not be permitted. The four

supervisory agencies should be better coordinated and share information. A full public disclosure of the financial state of each bank would help ensure prudence. The Government is reviewing the current system in light of the on-going financial sector reform program and a satisfactory action program to improve the regulation and supervision of banks and brokers would be a condition for second tranche release. This action program is expected to address, among others, the following areas: (a) a system to classify loan portfolios according to default risks; (b) stringent provisioning for loan losses; (c) detailed public disclosure of each bank's financial state; and (d) a better system to supervise both banks and brokers.

### Development Banks and Trusts

95. A separate problem in the financial sector relates to development banks and trust funds ("fideicomisos"), which rival commercial banks in size. There were three concerns at the time of project appraisal. First, the roles of each of the many development banks and trust funds were not clear and there was considerable overlap and duplication in their functions, contributing to administrative inefficiencies. Second, subsidies to final borrowers through cheap loans were not as tightly controlled or carefully targeted as they should be. Third, transfers to some of these entities, BANRURAL and ANAGSA in particular, were large and encourage wasteful practices. The proposed FSL will support the implementation of a comprehensive set of actions to address these issues.

96. The 8 development banks and 21 government trust funds have overlapping activities and operate inefficiently. Some are second tier institutions lending through commercial banks, but others like BANRURAL have a large branch network. It is unclear, given the extensive commercial banking system, if development banks need a branch network; and if they do, how it could be made to operate more efficiently. Some trust funds are managed by development banks and there are conflicting interests that may result in self-serving rather than efficient decisions. Furthermore, development banks have some commercial operations which are better clearly separated from development activities. Development banks have lent substantial amounts to the government and to public enterprises (84% of their loans are to the public sector with 58% to the Federal government alone), raising doubts about their development role.

97. The Government must carefully define the purpose of each institution. Defining the role of each development bank and trust fund would reduce their overlap and number, thereby improving their organization. Trust funds operating through commercial banks could efficiently channel external funds, provide long-term credit unavailable elsewhere in the market, or subsidize credit to carefully targeted groups, thus making retail operations by development banks unnecessary.

98. Subsidies and budget transfers are two distinct concepts. Subsidies refer to what the final borrower obtains through loans at less than market rates. Transfers, on the other hand, refer to funds going to the development banks and trusts, either to finance current or capital expenditures. In the long run, subsidies could only be provided from transfers; but over any short period, the two could (and do) differ considerably and it is important to control transfers as well.

99. Transfers to the development banks and trust funds may take several forms. Uncollected loans result in subsidies far greater than those implicit in low interest rates. Eventually, the losses have to be recognized reducing the bank's capital. Periodic infusions of capital by the Government are therefore non-transparent transfers. Equity in development banks and trust funds should be kept low, as it is all too easy to treat it as a zero interest rate loan. Such current and capital transfers are often substantially augmented by the government taking over the debts of the entities.

100. Total transfers to development banks and trusts in 1988 were Ps.2,293 billion or 0.54% of GDP. The agricultural development bank primarily serving small farmers, BANRURAL, accounted for the lion's share with Ps.1,908 b. (or US\$ 843 m.). The public agricultural insurance company, ANAGSA with whom BANRURAL borrowers are forced to insure their crops, accounted for Ps.317.5 b. (or US\$140 m.) of the transfers. Over half the transfers to BANRURAL in 1987 and 1988 were through the government assuming its obligations. Transfers to BANRURAL could be substantially reduced without jeopardizing credit to small farmers without access to commercial banks. BANRURAL should stop subsidized credits to commercial farmers and commercial "ejidatarios" whose incomes are well above the poverty definition. It should also substantially reduce its operating costs, and improve loan evaluation to curtail future loan losses.

101. The losses in ANAGSA could be similarly substantially reduced. The level of losses on insured crops suggests fraud. ANAGSA should avoid this and the moral hazard by only insuring against specific natural acts such as hail, flooding, frost or hurricanes with accurate actuarial estimates. Crop insurance for BANRURAL borrowers should not be compulsory, as now. In addition, ANAGSA could reinsure groups of producers, who insure their crops on a mutual basis, using area-wide regional yields to statistically estimate probable losses. As condition for Second Tranche release, the Government will prepare an Action Program, satisfactory to the Bank, for the redefinition of the role of each Trust Fund and Development Bank, including in particular a review of the operations and finances of NAFIN, BANCOMEXT and BANOBRAS, and restructuring of BANRURAL and ANAGSA, so that their efficiency of operations will improve, and fiscal transfers through BANRURAL and ANAGSA would be substantially reduced. In the meantime, the Government has agreed that the transfers to BANRURAL and ANAGSA will not exceed the budgeted level for 1989 (0.27% of GDP), except debt assumptions that are part of the agreed upon financial restructuring agreements.

### Interest Rate Subsidies

102. Until recently, the subsidies to final borrowers varied uncontrollably with domestic interest rates, inflation and external market conditions because development banks and trust funds lent at fixed nominal interest rates. Furthermore, these fixed rates were often lower than the deposit rates of commercial banks, allowing arbitrage. Since project appraisal, the Government has taken actions to eliminate most interest rate subsidies. The new policy is that new loans through Development Banks and Trust Funds will not carry any interest subsidies, except for those to low-income producers in agriculture (PBIs). Therefore, average subsidy level

will decline as existing sub-loans mature. Subsidies will be measured in comparison to the average cost of funds (CPP). Subsidies to PBIs will not exceed, as a percentage of GDP, the level of 1988.

#### **D. Prospects for the Medium-Term and Financing Requirements**

103. The fundamental assumption for a most likely macroeconomic scenario is that the process of fiscal adjustment is adhered to, and that the policy actions discussed before in the areas of macroeconomic management and financial sector are implemented, as well as the actions in industrial deregulation and parastatal reform supported by the proposed Industrial Sector Policy and Public Enterprise Reform Loans. This scenario assumes moderate (around 2% of GDP) current account deficits over the 1989-94 period. Oil prices are assumed to remain at the estimated 1989 level in real terms over the whole period (US\$14/bbl). Total investment is expected to increase gradually, reaching about 25% of GDP by 1994. This investment behavior will lead to a gradual resumption of GDP growth, which would climb slowly from about 2% in 1989 to about 5% by 1994 (Annex V, Pages 1-4).

104. This Base scenario assumes that the necessary external financing will, indeed, be forthcoming. If this external financing were not available, a substantial further adjustment in the public sector would become necessary or current net transfers to external creditors would have to be reduced. If public investment were to take the burden of the additional fiscal adjustment, it would have to be reduced from the already very low level of 1988. Other macroeconomic benefits of a satisfactory financing package, such as lower domestic real interest rates, would not materialize, with accompanying negative impact on private investment. Output growth under this scenario would slow down, remaining below 2% through 1994. The slowdown in growth has a perverse multiplier effect on the need for public sector adjustment. Slower growth leads to a fall in private sector savings, which requires a larger fiscal adjustment than would otherwise have been necessary. Not surprisingly, employment growth would slow down too, and remain within 1% in any year of the "sexenio" under this scenario. The simulation clearly demonstrates the importance of a satisfactory solution to Mexico's debt problem.

105. Mexico's total financial requirements in the base case scenario amount to about US\$58.7 billion in the 1989-94 period (Annex V, Page 4). Identified capital inflows (direct foreign investment, international organizations and bilaterals) are expected to amount to about US\$20.6 billion, and therefore there would be a need for additional financial inflows of about US\$38 billion (the "financing gap") in the 1989-94 period (Annex V, Page 4). This assumes considerable fiscal effort in Mexico to contain the current account deficit (at current debt obligations) at about 2% of GDP throughout the Sexenio, and a strong IBRD and IMF lending program. In addition, reserve accumulation is assumed in line with the targets embedded in the IMF letter of intent for the EFF. Assuming that commercial banks amortizations due were to be rolled over, the "financing gap" would decline to US\$24.8 billion in the 1989-94 period.

106. Mexico's net capital needs are substantial and sensitive to declining oil prices. If oil prices would drop by 15% with respect to the



base case, Mexico's trade surplus would shrink rapidly because of stagnating oil revenues, and reverse itself into a deficit of nearly US\$1 billion by 1991. As a consequence, Mexico's financing gap would increase from US\$38 billion to US\$45.8 billion over 1989-94. Thus, any financing plan should include contingent provisions covering major unanticipated changes in external factors, such as oil prices and international interest rates. Contingency facilities, even if actually not used, would contribute to expectations of a more stable environment, thus encouraging investments.

107. At this stage, the key is to reduce financial uncertainty by putting external debt management on a long-term footing. Continued uncertainty about future financing availability means continued uncertainty about the public sector's tax and exchange rate policies and thus continued high internal real interest rates. But this in turn would put severe strain on fiscal policy. Also, continued uncertainty and the risk of new balance of payments crises in the absence of a satisfactory multi-year debt relief package would shake investors' confidence and discourage the return of flight capital. Therefore the Mexican Government has established its own objectives in terms of a combination of new money, refinancing and debt relief that results in providing a predictable and stable financing for a multi-year period. Anything short of such a multi-year approach is likely to compound the macroeconomic problems that currently exist because of the very uncertainty such an approach would also lead to.

108. Given past experience, it may be difficult to obtain commitments for new financing for a multi-year period, which would be needed to restore confidence and revive investments, thus helping recover economic growth. Thus any new money package will almost certainly require complementing debt reduction measures. However, the expected presence of the IMF with a three-year program and the policy content of the proposed FSL and the other two adjustment operations should offer a measure of comfort to Mexico's creditors as they consider providing a new financial package in 1989, including some form of debt relief that can reduce net transfers to external creditors, thus meeting the financing gap correspondingly.

109. To resolve the internal macroeconomic problems that would be aggravated by continued external uncertainty, debt reduction to be effective will need to be on a significant scale. Anything less will have the same vulnerability as short-term new money packages. Moreover, the mechanisms through which debt reduction is pursued will need to be designed so as not to jeopardize the fiscal and monetary restraint the domestic stabilization effort requires. In particular, caution is necessary when assessing the contribution reserve based debt buy backs and public debt for private equity swaps can make to debt relief. Reserve based debt buy backs maximize the potential for capturing secondary market debt discounts because creditors receive fully liquid instruments in exchange; but they imply a negative cash flow effect early on. Debt equity swaps involve fiscal problems, because, obviously, public debt can only be swapped for private equity if the public sector acquires the equity first. But acquisition of the private equity that is to be used for the swap needs to be financed. Under present financial conditions in Mexico, debt equity swaps on a significant scale would lead to serious fiscal problems. For these reasons, the Mexican authorities have focussed on debt reduction measures that avoid such fiscal problems like interest rate reduction,

reductions in the stock of debt and so on. To make its debt reduction program a success, on the scale required, the Government might consider some commercial techniques, such as interest rate recapture or commodity linked pricing. Such contingency arrangements for an optimistic outcome of Mexico's macroeconomic developments are expected to persuade creditors who otherwise may not participate in debt reduction.

110. Given the sensitivity of Mexico's macroeconomic growth prospects to the availability of external finance, adequate resource mobilization for Mexico in 1989-94 will be of crucial economic and political importance. The success of the adjustment program to be supported under the proposed FSL then hinges on Mexico's access to external finance. The Government has already initiated discussions with principal external creditors, including creditor nation governments, key bilateral donors and commercial banks to design a financing package consisting of a blend of debt reduction, restructuring, and new money in adequate amounts to alleviate net transfers abroad and meet the projected financing gap over the medium term. A condition for loan effectiveness would be substantial progress in obtaining adequate financing for Mexico's requirements for 1989-90. Continued substantial progress in obtaining financing for 1989-90 and for the medium term would be a condition for second tranche release.

### PART III: THE PROPOSED LOAN

#### A. Origin and Objectives

111. The Government has, as described in the previous sections, undertaken renewed efforts since end-1987 to stabilize the economy and create the preconditions for sustainable growth. After a "sexenio" without economic growth, deteriorating consumption and real wages, the Government has assigned top priority to growth oriented adjustment measures and requested the Bank's financial assistance during the 1988 Annual Meetings at Berlin. The Bank -- benefiting from extensive economic and sector work program and substantial involvement in Mexico's adjustment process over the last "sexenio", especially since 1985 when the country's economy began to be integrated more fully with the world economy -- responded to this request without delay.

112. The three adjustment operations were appraised in October 1988. Negotiations took place in March/May 1989. The Mexican delegation was led by Lic. Enrique Vilatela, Director General of SHCP. The measures to be supported by the proposed FSL would provide a framework for macro economic consistency, assuring a permanent reduction in inflation and a sustainable fiscal stance over the medium term, thus providing the precondition for recovery of growth. Two other adjustment loans -- processed in parallel with the proposed one -- are designed to strengthen Mexico's adjustment policies and to promote growth by enhancing the supply response to new policy initiatives. An Industrial Sector Policy Loan would promote efficient resource allocation and competitiveness through industrial deregulation and further trade measures and rational pricing policies, and a Public Enterprise Reform Loan would address policy and institutional reforms which will assure that the enterprises remaining in Government ownership after a major divestiture program can operate in a competitive

environment, enjoying financial and managerial autonomy and accountability. The latter of the two adjustment loans would help strengthen the Government's fiscal efforts, minimizing the burden of aggregate transfers and making them more transparent.

113. The rationale for Bank support lies in the unprecedented adjustment effort made in the past "sexenio" and further measures already taken by the new Administration since December 1988. The three proposed Bank loans are particularly timely, as they would lend critical support to renewed adjustment efforts at the beginning of the new "sexenio".

#### **B. Loan Amount and Tranching**

114. A US\$500 million FSL is proposed to support the policy objectives outlined in the previous sections and provide finance (\$15 million) for a technical assistance component. The Borrower would be the Banco Nacional de Comercio Exterior (BNCE). This development bank has extensive administrative experience in managing Bank supported operations and would be in a position to intermediate efficiently the proceeds of the loan. The Government, as Guarantor, would, in addition to substantive reform measures already taken, carry out the agreed programs under the proposed operation.

115. The proposed loan would consist of two tranches. A US\$250 million first tranche would be released upon loan effectiveness. The following would be conditions for effectiveness of the proposed loan:

- (a) BNCE would submit subsidiary agreements to the Bank for passing on the proceeds of the proposed loan to the Government on terms and conditions satisfactory to the Bank; and
- (b) Substantial progress in obtaining adequate financing for Mexico's requirements for 1989-90 (para. 110).

116. A series of specific conditions in areas of fiscal management, taxation, poverty alleviation, and financial sector have already been met since appraisal, as follows:

- (i) The Bank has found the 1989 budget consistent with the macroeconomic framework for 1989 (para. 43);
- (ii) The Government has, since appraisal, introduced a series of tax measures, mainly in the areas of corporate and income tax and taken actions to strengthen tax administration (paras. 44-55);
- (iii) The Government has, since appraisal, taken a series of measures in the financial sector: eliminating forced lending to the public sector and favored subsectors, and allowing commercial banks and brokerage houses to compete for deposits by setting their own interest rates. Additionally, the Government has indicated that new loans through Development Banks and Trust Funds will not carry any interest rate subsidies, except for low-income producers in agriculture (subsidies to them will not exceed, as percentage of GDP, the level of 1988) (paras. 84-90 and 102); and

- (iv) The Government has, since appraisal, launched the "Programa Nacional de Solidaridad", which adequately addresses the issues of the worst forms of poverty and helps alleviate the short-term impact of adjustment under an action plan affecting over 1200 "municipios". The 1989 budget allocation is US\$450 million equivalent, which would be increased in 1990 (paras. 121-122);

117. To provide support to Mexico's phased adjustment program under the proposed loan, a second tranche of US\$235 million would be released any time after November 30, 1989, upon furnishing satisfactory evidence to the Bank that:

- (i) The Government's macroeconomic program is consistent with the objectives of stabilization and recovery of economic growth, as set forth in the Letter of Development Policy, including progress toward more flexible price adjustments (para. 37 and Annexes VII and VIII);
- (ii) An Action Program for the increase in the Federal District's self-generated revenues of at least 10% in real terms over the 1988 level in the 1990 Budget has been adopted (para. 69);
- (iii) An Action Program for the gradual reduction of non-matching federal grants to the states have been adopted in the 1990 Budget (para. 67);
- (iv) An Action Program has been adopted which redefines the role of each development bank and trust fund, including a detailed review of the finances and operation of NAFIN, BANCOMEXT, BANOBRAS, BANRURAL and ANAGSA; in the meantime, fiscal transfers to BANRURAL and ANAGSA would, as a percentage of GDP, remain within the amounts budgeted for 1989 (para. 101);
- (v) An Action Program has been adopted for the further strengthening of bank supervision and prudential regulations (para. 94); and
- (vi) Continued substantial satisfactory progress has been made for financing Mexico's requirements for 1989 and 1990, and for financing over the medium term in the context of the agreed upon adjustment program and growth targets (para. 110).

118. Agreed Action Programs as second tranche release conditions would include a specific timetable for implementation and all legal and administrative arrangements required to put the measures in effect.

### **C. Debt Reduction Support**

119. As explained previously (paras. 107-109), any financing short of a multi-year commitment would compound macro-economic problems and would lead to continued uncertainty about Mexico's public finances and tax and exchange rate policies. It is unlikely that new money in the amounts required could be secured for a multi-year package. Therefore, the

Government intends to include some form of debt reduction in its next financing package, which would be expected to restore confidence and thus spur investment and help recover growth.

120. Since without specific Bank assistance it may be difficult for the Government to put in place effective debt reduction schemes, subject to Bank agreement, up to US\$125 million equivalent under the second tranche of the proposed loan could be used for the implementation of debt reduction plans which, in the Bank's judgment, shall meet the requirements of the Bank's support of debt reduction programs.

#### D. Poverty Impact

121. Throughout the 1970's and up to the early 1980's, absolute poverty in Mexico was on the decline as a result of income growth and welfare programs. Between 1960 and 1985, life expectancy at birth increased from 58 to 64 years, and infant mortality declined from 74 to around 50 deaths per 1000 live births. With improvements in primary education, illiteracy fell from 44% in 1950 to 17% in 1980. Some of these gains, however, are threatened by the recent public expenditure cutbacks resulting from the Government's fiscal efforts to combat the root causes of the 1982 crisis. The social sector's share in public expenditures -- declining in real terms -- dropped from 20% before 1982 to 13% currently. This trend is unsustainable, given Mexico's already waning job opportunities, reduction in real wages and worsening inter-personal and inter-regional income disparities. While the response by non-government organizations to help the poor to overcome these difficulties is impressive, they cannot entirely replace the Government's essential role in providing basic needs.

122. Upon assuming office in December 1988, the new Administration unveiled its "Programa Nacional de Solidaridad" to address the worst manifestations of poverty. In the first stage, the Program covers 1276 rural municipios in the ten poorest states of Mexico. These are Chiapas, Guerrero, Hidalgo, Oaxaca, Guanajuato, Puebla, Tlaxcala, Queretaro, San Luis Potosi and Zacatecas. The urban poor are addressed through a series of special measures in the metropolitan areas of Mexico city, Monterrey, Guadalajara, Zacatecas as well as other state capitals. Total resources set aside for the program in 1989 are about US\$400 million. Of the total, 20% will be spent on directly productive activities in agriculture, 30% on infrastructure related activities and the remaining 50% on social services.

123. The continued expansion of the program is expected to cost three times as much next year. The plan eventually is to set aside substantially larger resources to cover all poor groups by 1996. The Program coordinates and focuses the existing ongoing activities of entities such as CONASUPO, IMSS/COPLAMAR, PDR and other government bodies. The amounts set aside for the Program are in addition to those budgeted for the normal development activities of these organizations. Salient features of the program are:

#### Nutrition Support

124. One of the worst manifestations of poverty is malnutrition, which contributes to high infant mortality and the relatively high incidence of low weight at birth (at 15% in Mexico, it is twice as high as in other

countries with similar income levels), and causes physical and mental damage for life. The short term impact of adjustment on employment, income and consumption (especially due to the elimination of food subsidies), may have compounded an already serious problem. To remedy this, the Government has expanded its food subsidy program targeted to the poor. 500 lecherias (of which 100 are already in operation) are to be set up where subsidized milk (at about a third of the market price) will be sold. CONASUPO also plans to start popular kitchens in the urban areas to provide subsidized, nourishing meals to the urban poor (20 kitchens are already in operation). Similar food supplement programs are planned for the rural poor by rehabilitating nearly 13000 rural stores and providing them with additional working capital, to enable the poor to obtain basic necessities at subsidized prices.

### Primary Health Care

125. Despite significant achievements at the aggregate level, the geographic distribution of health services is not satisfactory. In rural areas, especially in the poorest states such as Oaxaca, Chiapas, Guerrero and Hidalgo, and at the periphery of the largest cities, general health care is poor and child mortality rates are high. The uninsured face special difficulties in obtaining first and second level health care. To provide additional primary health care to the poor, IMSS/COPLAMAR programs are to be revitalized at the cost of about MEX\$40 billion. The program will be spread over April through July 1989 and will provide additional health centres in 12 states (Vera Cruz and Nayarit, in addition to the 10 listed above) for treatment and preventive measures. For the poor, nutrition support and primary health care are closely related. The program aims to provide nutrition support to about 1.5 million pregnant and lactating mothers (this represents an addition of nearly 30% over the previous year's target). Free school lunches provided to malnourished children of school-age will be increased from the present level of 0.5 million to 1.5 million. All of these are sound short-term remedial measures. However, given the magnitude of the health problem, long term solution lies in the full implementation of the National Health System ("Sistema Nacional de Salud") through the Federal Secretariat of Health (SSA) and the State Secretariats of Health (SEASAs). The program offers relatively inexpensive solutions in those states where infrastructure is already well developed. In other states integrated rural development projects can help focus on the health care problems of the rural poor. A project is being prepared by SSA to provide basic health care services to the uninsured, covering about 30 million people by 1994. The program is expected to raise the productivity, quality and coverage of services by improving maintenance and providing adequate equipment and trained personnel. It would, by 1994, help save the lives of some 40,000 mothers and children, and avoid physical and mental damage to an estimated 60,000 children.

### Elementary Education

126. Although education standards in Mexico have shown impressive improvements in the past, the majority of the poor have access only to primary education. The poorest states rank lowest in terms of the indicators of primary education, mainly because of the shortage of school

facilities, inadequate maintenance and poorly trained and badly paid teachers, as well as poor transport facilities and the prevalence of child labor which hampers school attendance. Unless the coverage in primary education is extended in these areas, the rural poor will have only limited employment opportunities and will remain locked into poverty. In the poorest states remittances account for nearly 30% of family income. This could be improved through education which can help secure more off-farm jobs.

127. Estimates show that reassignment of approximately 9% of the existing education budget would be sufficient to remove the above bottlenecks. If targeted only at the poorest four states, Oaxaca, Chiapas, Guerrero and Hidalgo, the annual cost of an adequate program would be only 2%. As for sources of financing, it has been estimated that if the cost recovery of higher education were to be improved by restoring UNAM fees back to their 1950 level in real terms, the additional revenues would fully cover the costs of the program in the above four states. If coupled with nutrition support programs, which would be delivered through the primary school system, school attendance would become much more attractive to poor families and the incidence of child labor could be curbed.

128. The recent measures address the problems outlined above. A program of rehabilitation of primary and secondary schools is planned, starting in June, 1989. The target between June- September this year is to rehabilitate 25000 schools costing approximately Mex\$ 45 billion.

129. The new program focuses on some additional measures; responding to a persistent demand of the urban poor during the election campaign, 300,000 residential urban plots are to be regularized to establish ownership rights of the occupants. Among the longer term objectives of the program is to focus the development activities of the PDR on the structurally poor in rural areas. This will include the rehabilitation of 150,000 hectares of agricultural land in semi-arid poor states such as Zacatecas, Durango, Coahuila and Nuevo Leon. Investments are to be undertaken in tubewells, other irrigation works and rural infrastructure development.

130. It is clear from the measures taken since project appraisal that the new Mexican Administration is committed to expand social programs, in order to satisfy basic needs of the poor in nutrition, primary health care and education. In providing these services, the focus of Government action is to improve the targeting and delivery mechanisms through close monitoring at the coordinated federal level, of programs implemented at the state and municipality level.

#### **E. Benefits and Risks**

131. The proposed operation would provide critical support to the adjustment efforts of the Mexican Administration that took office on December 1, 1988 for a six-year term. Building on the macroeconomic framework that was put in place toward the end of 1987 and implemented since then, the measures taken during loan preparation and those to be supported under the proposed loan would provide a broad framework for macroeconomic consistency, efficient resource allocation in the public sector, sound fiscal management and improved financial sector performance.

Achievement of these objectives would spur investment and create the preconditions for recovery of sustainable economic growth in Mexico. Growth would generate jobs and help alleviate the worst aspects of poverty. Permanent reductions in inflation resulting from a consistent macroeconomic framework would benefit the economy by rationalizing the expectations of investors and eliminating the regressive inflationary tax affecting mostly the wage earners and the poor.

132. Highly visible Bank support to Mexico's adjustment efforts through the three proposed policy-based loans would help restore domestic, as well as international confidence, as the new Government stays the course and achieves the objectives of economic recovery. The Bank would, with the three operations, help encourage investments, especially in the private sector, and -- perhaps most importantly -- help mobilize external resources and achieve some degree of debt relief required to meet Mexico's financing needs for the medium term growth strategy.

133. Mexico's growth oriented adjustment program faces several important risks. Above all else, the program's success will hinge on the availability of external finance, as and when required, to cover the current account deficit in the balance of payments. Clearly, Mexico's ability to grow and service its debt would be at stake, if the projected financing gap were to remain unfinanced. The Bank's three proposed adjustment operations -- each with quick disbursing components -- would provide the downpayment of the net external capital needs of the adjustment program. With significant up-front policy content attached to each operation, and in particular to the proposed FSL, the seed money of the first tranche disbursements and the Bank's monitoring of further adjustment measures is expected to help win the confidence of the international financing community and key bilateral donors. The Bank has assessed Mexico's financial needs and has been encouraging its external creditors to mobilize the resources required over time through a menu of restructuring, relief and new money under a market-based phased multi-year program.

134. The recovery of growth will also depend on whether the Government maintains a macroeconomic framework that is consistent with the objectives of the program, as stated in the Letter of Development Policy (Annex VIII). Investment, in particular private investment, will largely depend on the extent to which the new Government can rebuild public confidence by keeping steady policy signals, a realistic exchange rate policy, fiscal prudence and an overall policy framework that is conducive to keeping inflationary expectations low, thus guaranteeing a reasonable return on investments. Assessment by the Bank that an adequate macroeconomic framework is in place is a condition of second tranche release, which would not only protect the Bank's interest, but also act as a deterrent against deviations from a consistent policy framework, because any Bank sanction under the proposed loan might have serious implications for the Government's ability to attract external resources.

135. A third risk facing the objectives of the proposed operation is a potential failure by the Government to achieve the fiscal targets of the program. Such a risk may materialize, if revenues were to be adversely affected by an unforeseen decline in Mexico's terms of trade (oil) or a rise in international interest rates or protectionism in industrialized



countries during the implementation of the adjustment program, or, if for any domestic reason, the targeted primary budget surplus were to be eroded, because of excessively high public spending, or poor tax revenue performance. While no one can control adverse external developments, the risk of below target domestic performance is mitigated by the strong commitment of the new Administration to eradicate the root causes of Mexico's economic malaise, i.e. the inadequate fiscal policies and inward-looking orientation of the past.

#### **F. Technical Assistance Component**

136. The proposed Loan would provide finance for a technical assistance program of US\$15 million equivalent, which would be available upon loan effectiveness (Annex VI). This component would provide assistance to the Government in priority areas of fiscal management, public finance and public investment evaluation and programming. More specifically, the following would be provided: (a) technical assistance and training, for modernizing the tax administration and collection systems, including improvements in customs administration (Annex VI); (b) acquisition and utilization of computer equipment and software; (c) studies in the public and finance sectors; and (d) studies of public investment evaluation and multi-year investment procedures, including the preparation of manuals, setting economic, financial and technical criteria for sector specific investment evaluation and establishing a centralized unit for monitoring investments. Consultants to be financed from the loan would have terms of reference, conditions of employment and hiring procedures that are in accordance with the Bank's guidelines.

#### **G. Disbursements, Auditing and Procurement**

137. The proposed loan would be disbursed in two tranches. The first US\$250 million would be disbursed upon effectiveness (para. 115), and the second tranche of US\$235 million would be disbursed after November 30, 1989 provided that the second tranche release conditions have been met (para. 117). The closing date of the proposed loan would be June 30, 1991.

138. Disbursements under both the first and second tranches would be against 100% of the foreign exchange costs of eligible imports of the private and public sectors. For the purposes of the loan, eligible imports would include goods in general except, however, that goods still subject to quantitative import restrictions, goods financed from other official multilateral or bilateral sources, intended for luxury consumption or goods imported for military or paramilitary purposes, would be ineligible for Bank financing. Taking into account the unprecedented growth in imports (para. 16) in 1988, retroactive financing is recommended up to an amount of US\$100 million for eligible import expenditures incurred from February 15, 1989. Disbursements under the technical assistance component would finance 100% of the expenditures of consultants, and 100% of the cost of equipment and goods required for implementation of the agreed technical assistance programs.

139. Imports to be financed by the Bank up to US\$5 million equivalent would be purchased under contracts awarded on the basis of the commercial procurement practices of the importer in the private sector, and standard

Government procedures in the public sector. The Bank has reviewed the Government's standard procurement procedures and found them satisfactory. Single purchases of goods costing in excess of US\$5 million would be procured through international competitive bidding, in accordance with Bank Guidelines. Goods under the technical assistance program would be procured through local shopping for items costing up to US\$50,000 equivalent, and local competitive bidding above that threshold for contracts up to a value of US\$300,000. Higher contract values are not expected.

140. BNCE, the Borrower, would be responsible for managing the loan account and documenting and processing withdrawal applications. Disbursements would be made on the basis of statements of expenditures to be prepared by the Banco de Mexico, certifying the individual import expenditures, the goods imported, the payments made and the amounts involved and demonstrating their eligibility under the loan. Application for withdrawals will be made in consolidated statements amounting to no less than US\$5 million.

141. Supporting documentation for the statements of expenditures would be kept by the Borrower for review by Bank staff and would be audited annually by independent auditors acceptable to the Bank. Audit reports would be submitted to the Bank within six months after the end of each fiscal year of the Guarantor.

#### **H. Bank/IMF Collaboration**

142. Bank/IMF collaboration has been close over the years, especially since 1982, when the Fund began to assist the Government to help address the underlying causes of the economic crisis. Since that time the Government benefited from an EFF of SDRs 3.6 billion, a special emergency drawing of SDRs 291 million after the 1985 earthquake, and a stand-by of SDRs 1.4 billion. Currently, the Government is committed to its commercial creditors under the terms of the 1986 multi-facility financing package to engage the Fund in an enhanced surveillance of the macroeconomic program. Since the ending of stand-by in 1988, the first such review has taken place in the beginning of 1989.

143. Extensive consultations have taken place between Fund and Bank staff concerning Mexico's current economic situation and prospects, covering fiscal, monetary, financial and exchange and interest rate policies, and there is an understanding about the policy actions to consolidate the stabilization program, strengthen the balance of payments and recover growth in 1989. Since the time of appraisal, discussions between the Government and the Fund have advanced considerably about a possible EFF. Currently, it is expected that a three-year facility would be in place before the scheduled Board date of the proposed FSL. Further consultations would take place between the two institutions to monitor macroeconomic performance during the implementation period of the proposed FSL.

**PART IV - COUNTRY ASSISTANCE STRATEGY AND BANK OPERATIONS**

**The Context of Bank's Assistance: The Government's Own Development Objectives**

144. The Government's overriding objective for the current Sexenio is the restoration of growth after six years of falling per capita income. But the experience of the past six years has made it clear that without macroeconomic stability and access to external financing, sustainable growth will remain out of reach; thus the Government considers the success of the stabilization effort and a resolution of the debt overhang problem as prerequisites for any success towards renewed growth. The stabilization program has been a success so far resulting in a dramatic reduction in inflation from 159% in 1987 to 52% in 1988 and to an estimated rate of only 20% in 1989 (paras. 11-12 and 19-20). Increased growth will have to go together with increasing living standards for the poorer segments in society, both in its own right and to maintain the consensus underlying the Government's program. To this end the Government has embarked on a significant expansion in policies oriented towards poverty alleviation (paras. 121-130).

145. In addition, the Government strongly feels that growth should be private sector based, with the Government providing a supporting role. Thus the Government intends to continue its reform program towards a modern, rationalized incentive structure for the private sector. This will reduce the need for government intervention, improve private sector resource allocation and provide full support for efficient private sector investment by foreigners and domestic entrepreneurs alike. To allow the public sector to play a supportive role towards private sector based growth, the Government intends to modernize the machinery of the state and focus its role on legitimate public sector functions. This involves continued privatization/modernization where called for, and improvement of the efficiency of the remaining parts of the public sector.

146. With these in mind, the Government has adopted a policy agenda, which involves the structural reforms being supported by this Financial Sector Adjustment Loan as well as the two other accompanying loans on Industrial Sector Policy and Public Enterprise Reform (paras. 22, 26-27 and 112). The Government is committed to the implementation of macroeconomic policies that are consistent with the objectives of the recovery of growth, increased fiscal efforts, improved efficiency of the financial system, reduction of interest subsidies and strengthened prudential regulation. To improve the efficiency of public enterprises (PEs), and to reduce the heavy burden they impose on the economy, the Government is focusing on: (i) "disengagement" of enterprises, including privatization, liquidation, mergers, and transfer of PEs to local governments; and (ii) a program of reforms in the policy and institutional environment to improve the efficiency of PEs which would be retained by the Government. These measures will improve the competitive environment and provide greater managerial and financial autonomy and accountability to PEs, increase market forces, decentralize decision making, strengthen managerial capabilities and incentives and improve the allocation of resources. To

help complete the transformation of Mexico's industrial sector from its inward-oriented and highly protected structure to an open system where the factors of production and services compete freely, the Government is undertaking a broad deregulation effort. This is designed to provide, at the same time, for technological change and modernization, so as to ensure an adequate supply response to new policies.

147. Provided the Government is able to resolve these intertwined stabilization, debt, growth, and efficiency issues, maintains satisfactory progress in advancing the major structural adjustment policies already described, and benefits from a reasonably favorable international environment, the fundamentals for sustained rapid growth look promising. First, Mexico has a rich natural and human resource base and close proximity to the world's largest market. Secondly, the rationalization of the trade regime has created incentives strongly favoring international competitiveness and improved investment efficiency. Lastly, low Mexican unit labor costs make the country attractive as an industrial base. The Bank's base case macroeconomic scenario shows that with moderately favorable external conditions and consistent macro policies and deeper adjustment efforts, GDP growth would climb slowly from about 2% per annum in 1989 to about 5% per annum by 1994 (paras. 103-110). The realization of this scenario is contingent on foreign financing. If this financing were not available, or if Mexico's external conditions were to deteriorate, output growth would slow down and employment opportunities would not keep pace with population growth. Mounting social pressures, in that case, would make it very difficult for the Government to stay the course and the efficiency gains of structural reforms may be lost. An under-financed adjustment program would simply compromise Mexico's ability to service even its current debt.

148. Given the fiscal crunch under which Mexico's policy makers must operate, more effective programs are necessary in the social sectors, including health, education, and nutrition, which are designed to target resources and cushion the needy against the impact of adjustment, while permitting the benefits of structural reform to be reaped. Therefore, the new Administration has, in December 1988, unveiled the "National Solidarity Program" to address the worst manifestations of poverty in the ten poorest states of the Union and the urban poor in Mexico City and all state capitals. Of the total of approximately US\$400 million allocated to the program for 1989, 20% will be allocated to agriculture, 30% to infrastructure, and 50% on social services.

149. Historically, ecological and natural resource management issues have ranked low on the list of Mexican policy priorities. However, over recent years extremely serious environmental problems have been affecting the health of most Mexicans and the country's economic growth potential. The worst problems have been encountered in air and water pollution, soil erosion and deforestation. These and other issues in Mexico's management of its ecology and natural resources have received increasing Governmental attention and the Government is now committed to put in place a strategy that can deal with these issues effectively over the medium and long term.

## Bank Strategy

150. The Bank's assistance strategy is designed to support Mexico's major reform initiatives through an expanded policy dialogue and substantial volumes of lending, thus contributing to the consolidation of an outward-oriented development model and serving as a catalyst for mobilizing external finance in the required amounts for the restoration of the growth of the economy.

151. The Bank has transferred increasing amounts of resources to Mexico through policy-based and sector adjustment loans in the context of an adjustment-oriented framework that was supported by the 1986-87 commercial financing package; it has become Mexico's largest single source of new money. Six Bank loans in trade, exports, agriculture, and industry were linked to the multi-facility financing scheme, providing drawdown conditions for the parallel money and growth facilities which were mobilized fully in March 1988. The Bank also put up guarantees of US\$750 million. In addition, the Bank facilitated Mexico's efforts to issue securitized bonds for retiring old debt in January 1988. The Bank's strategy supported primarily policies designed to open the economy.

152. Given the challenges the Mexican Government is facing over the medium term and its stated development strategy, the Bank's country assistance objectives are to: consolidate the excellent policy dialogue with the Government, and focus on remaining priority issues, support the Government's development program through sustained high levels of lending, help maintain an adjustment oriented framework that can help secure multi-year external financing packages, and support innovative market based debt reductions schemes, including the use of Bank resources in forms acceptable to the Bank. To lend effective support to the initiatives of the current Administration, the Bank's overall assistance strategy would focus on: (a) promotion of adjustment with recovery of growth; (b) strengthening of incentives for efficiency; (c) alleviating poverty; and (d) improving the environment. The Bank has taken a staged approach to implementing its strategy. As a first step, the Bank has reviewed Mexico's adjustment and structural reform priorities and, jointly with the Government, defined a broad program of Bank support through three major adjustment operations, including a Financial Sector Adjustment Loan, a Public Enterprise Reform Loan and an Industrial Sector Adjustment Loan. The policy conditionality of these three operations provides the central element of the Bank's support for Mexico's program in 1989.

153. To provide continued support for Mexico's development program and the intellectual underpinnings of a broad policy dialogue, the Bank is carrying out jointly with the Government an expanded program of economic and sector work, including (a) a review of the current regulatory and financial framework in industry and agriculture; (b) a study of future tax reform options; (c) an intensive analysis of urban air pollution in collaboration with the World Health Organization; (d) an assessment of infrastructure and energy sector issues; (e) the development of strategies for integrated health and nutrition initiatives; (f) an assessment of improved programs to ameliorate rural poverty; and (g) an analysis of environmental issues to come up with a set of recommendations. This collaborative effort will help monitor the evolving requirements of

Mexico's development priorities and adjust the policy content of Bank lending from time to time. For the design of new lending operations as well as the monitoring of the Bank's existing project portfolio, the semi-annual country strategic and implementation review between the Bank and the Government -- introduced in 1985 -- affords the Bank a timely opportunity to adapt to new conditions.

154. The above outlined strategy will be implemented with the help of sustained high levels of Bank lending to Mexico over the medium term, which would be maintained at US\$2 billion per year. Such high levels of new commitments would, of course, hinge on the maintenance of a consistent macroeconomic environment and the depth and quality of Mexico's further structural reforms. As 17% of the Bank's past lending to Mexico has been in support of adjustment since 1986, it is the Bank's intention to cut back on quick-disbursing policy based operations and, in a manner consistent with the requirements of the recovery of economic growth, focus on sector investment operations which are designed to support agreed investment programs in high priority sectors. To keep resource transfers at adequate levels, the Bank and the Government are currently reviewing the requirements of time-slice financing, which would be an essential feature of the sector investment operations. To help achieve the stated objectives of the Bank's country assistance strategy, the policy content of the proposed lending program, in more specific terms, would be directed at: fiscal issues, financial sector efficiency, domestic deregulation, trade and export development, subsidy control and pricing issues, improved public sector and parastatal enterprise management, decentralization and deconcentration of the public sector, social welfare and poverty programs, and environmental measures. Proposed lending levels at US\$2 billion per year would increase the Bank's exposure by US\$4.8 billion by 1994 and, for the expected blend of quick disbursing and investment operations, increase Mexico's share in the total of the Bank's loans disbursed and outstanding to 9.7% in FY90, which is expected to remain below 10% in the FY90-93 period.

#### Burden Sharing in the Financing Plan

155. As outlined in paras. 103-106, the total required capital inflows amount to US\$ 58.7 billion in 1989-94 (Annex V, page 4). Financing would come from direct foreign investment (DFI), international financial institutions (IFI), bilaterals and commercial creditors. Assuming that all amortization on commercial debt is rescheduled, the required flows are reduced to US\$45.4 billion over the 1989-94 period (Annex V, page 4). Assuming as a benchmark case that commercial creditors provide sufficient amounts of new money (disbursements in excess of scheduled amortization) to meet Mexico's needs after official sectors have made their contribution, the burden sharing among Mexico's various creditors is shown below:

Sharing the Burden of Mexico's Financing Needs

	Percentage of Mexico's Financing Needs met by Various Creditors			Increase in Net Exposure (US\$ billion)
	89-91	92-94	89-94	89-94
DFI	27.2	40.5	33.4	15.1
IFIs	17.6	-4.6	7.3	3.3
of which: IBRD	14.8	5.6	10.5	4.8
IMF	2.8	-9.4	-2.9	-1.3
IDB	0.0	-0.8	-0.4	-0.2
Bilaterals	8.6	0.4	4.8	2.2
Commercial				
Banks Creditors	46.7	63.7	54.6	24.8
TOTAL	100.0	100.0	100.0	

Source: Annex V, Page 3 and 4.

156. In this scenario, net exposure by the Bank would go up by US\$4.8 billion over the 1989-94 period, provided that, in addition to continued policy reform, individual project conditionality is satisfactory and adequate disbursement mechanisms are in place. The Bank's total share in the financing would be substantial in the early phase of Mexico's adjustment program: 14.8% over the period 1989-91. However, as time progresses, the Bank's share would diminish to a still positive 5.6% in 1992-94. Over the next six years taken together, the Bank would assume 10.5% of Mexico's financing requirements. The Bank's share in Mexico's total debt would increase from 7.1% at the end of 1988 to 9.5% at the end of 1994.

157. On the basis of current commitments, the IMF would increase its net exposure over the first three years by US\$0.7 billion, but reduce it by US\$2 billion over the next three years, for a total decline in net exposure of US\$1.3 billion over the period 1989-94. Similarly, the IDB, under current commitments, would reduce its net exposure by US\$0.2 billion over the whole period. Finally, Mexico's bilateral partners would have to make available a net amount of US\$2.2 billion over the 1989-94 period, for a share in the financing burden of 4.8%. In total, official creditors disburse in excess of amortization an amount of US\$5.5 billion to Mexico over the period 1989-94, which constitutes 12.1% of Mexico's needs over the corresponding period.

158. The remainder would have to come from DFI and commercial creditors. Current projections imply that one third of that total would come through DFI; the assumed amounts are not implausible given historical experience plus the reforms concerning foreign investment implemented under the auspices of the Industrial Sector Policy Loan. The remainder would have to be met by new money contributions by Mexico's commercial creditors.

This would imply that commercial creditors would need to contribute 55% of the required financing over the 1989-94 period. Their total exposure in Mexico would rise by US\$24.8 billion.

159. Of course new money is only one of several ways in which commercial creditors could assume their share of the financing burden. Various forms of debt relief or debt service relief could alternatively, or in combination with reduced new money commitments, be used instead. The set asides in the Bank's and the IMF's lending program could be used in support of a debt reduction plan agreed upon as part of such a financing plan. The World Bank participation in support of a debt reduction plan would be in coordination with the IMF and subject to a review of the quality of the debt reduction package. Reduction of commercially held debt would arithmetically increase the Bank's share in Mexico's total debt; for example if debt reduction operations result in a 20% reduction in commercially held debt at the end of 1994, the Bank's share in Mexico's total debt would increase from 9.5% to 11%. Since such debt reduction operations would also increase Mexico's creditworthiness, such a small increase should not be a cause for concern, particularly if the adjustment program, as expected, is accompanied by a significant increase in exports.

#### Sectoral Composition of Bank Lending

160. As of March 31, 1989, Mexico had received 111 loans from the Bank, amounting to US\$11.5 billion, net of cancellations and terminations; of these, 75 loans, totalling US\$5.5 billion, were fully disbursed and US\$2.4 billion remained undisbursed. The Bank's exposure was US\$5.89 billion (on book value basis) (Annex II), while on a cash basis this is equivalent to US\$7.4 billion. The sectoral composition and some of the specifics of past lending, as well as the design of major new lending operations are discussed below for key areas of the Mexican economy in which the Bank has been active over the years.

#### Agriculture

161. Because of the crucial importance of agriculture for the one-third of the country's population living in rural areas, some 32% of the Bank's past lending has supported agricultural development, and nine operations are currently under supervision. The Bank's lending program in agriculture is aimed at: (a) helping correct the incentive regime in agriculture through gradually reductions in input subsidies and export controls; (b) promoting more efficient and rationale use of natural resources supported by improved technologies and services; (c) generating employment-intensive investments in rural areas and effective assistance to small farmers; and (d) creating an integral framework for sound rural development. To support these goals, the Bank made a US\$300 million Agriculture Sector Loan during FY88, and, starting in FY90, expects to support policy adjustment in agriculture, rehabilitation of the irrigation infrastructure, including improved cost recovery and maintenance operations, investments for agricultural marketing and storage facilities, food security, poverty alleviation, and forestry development.



## Trade

162. About 14% of past Bank lending has been for trade, and three loans remain under supervision. Two trade policy loans of US\$500 million each were made in FY87 and FY88 in support of the Government's sweeping trade reforms. The two operations supported the speedy reduction of non-tariff barriers (quotas and official reference prices) and rationalization of the tariff system (reduced levels and dispersion). The Bank supported the development of non-oil exports through two export development operations in FY83 and FY87. These export development loans were intended to strengthen the supply response by Mexican industry to the new trade policy signals. A third export loan is under preparation, which would strengthen the temporary import regime, provide further support to indirect exporters, assure automatic access to finance by exporters under the various credit programs, streamline financial and administrative procedures, and seek further reductions in export controls.

## Industry

163. Some 18% of the Bank's lending has supported industry, and currently seven projects are under supervision. The Bank's lending strategy for industry, covering small and medium-scale industry, mining, the capital goods industry, industrial restructuring and technology development, is designed to support: (a) trade policy reform; (b) financial sector policies to reverse the prolonged contraction of savings mobilization through interest rate decontrol and the development of a wider menu of savings instruments, and the rationalization of credit allocation in support of viable, competitive private companies; (c) industrial restructuring, regulatory reform, clarification of foreign investment rules, and export promotion to assure a vigorous supply response to trade liberalization and increased international competitiveness. Recent Bank operations provided support for restructuring of the fertilizer, steel, automotive parts, textile, and flower sectors, and other key private industrial subsectors demonstrating a capacity for undertaking integrated restructuring operations.

## Infrastructure

164. Lending for transportation, power and water accounts for 23% of the Bank's total in Mexico, with 12 projects currently under supervision. Lending for infrastructure is focussing on regional development, decentralization, more efficient public investment allocation, and improved cost recovery. Recent Bank loans supported the highway, railways and port sub-sectors. Emphasis was placed on obtaining more realistic user fees and deferring all but the highest-yielding investment projects so as to permit a minimum of budgetary outlays for maintenance expenditures and protect the existing capital stock. Proposed loans would support the Government's decentralization initiatives, cost-based pricing, and managerial improvements. Loans are being prepared to finance the upgrading, rehabilitation, and maintenance of roads at the state level, the construction of toll roads cofinanced with the Mexican private sector, the restructuring of several ports, water supply and sewerage, urban transport, and power.

### Housing and Others

165. The Bank has lent some 13% of its total for tourism, urban development, housing and vocational training. Currently two housing loans are under supervision. Government housing programs designed to improve cost recovery, while providing transparent and controlled credit subsidies only to the truly needy, have been supported by Bank financing. A Second Housing Finance loan would support graduated loan cost recovery linked to the income of final borrowers, thus ensuring a reduced drain on the fisc and affordability for low-income beneficiaries.

### Social Sectors and Environment

166. The Bank is assisting the Government in redesigning public health, education, and human resource programs to make them more cost effective and targeted to meet the needs of the poor. A proposed health project would support decentralization measures, finance new primary health facilities, and strengthen professional services. Similar initiatives are being pursued in education and nutrition. A pilot project under preparation would improve the well-being of women in low-income areas. It includes the provision of piped water, health and educational services, training for productive activities, and credit for launching new microenterprises. These focussed operations would be followed by broader programs, once the institutional conditions and capacity for project implementation can support a larger Bank presence.

167. The Bank is also undertaking jointly with the Government and the World Health Organization a major review of air pollution issues to determine how the Bank could best contribute to new Government programs for cleaning up polluted urban environments. With strong Government commitment, the Bank would focus on technical assistance operations, include strengthened environmental components in investment loans, and -- as soon as the policy framework and suitable institutional arrangements are there -- make loans for sector-wide environmental programs and in support of remaining environmental policy issues.

### IFC Operations

168. The IFC has worked with the Bank to: (i) identify private sector investment opportunities likely to thrive in the current climate of growth-oriented adjustment and greater integration with the world economy; and (ii) assist in strengthening the country's capital markets through economic sector work and venture capital operations. As of March 31, 1989, the IFC had invested US\$990.7 million in 37 companies in Mexico, of which US\$690.2 million had been sold, repaid, or cancelled.

**PART V: RECOMMENDATION**

169. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank, and recommend that the Executive Directors approve the proposed loan.

Barber B. Conable  
President

Attachments  
May 22, 1989  
Washington, D.C.

**MEXICO**  
**FINANCIAL SECTOR ADJUSTMENT LOAN**  
Basic Macroeconomic Indicators

**ANNEX I**  
Page 1 of 3

	1960-69	1960-70	1971-76	1977-82	1980	1985	1970	1976	1980	1981	1982	1983	1984	1985	1986	1987 a/	1988 a/
<b>Growth Rates:</b>																	
GDP .....	5.98	7.06	7.45	6.65	8.15	6.66	6.98	4.25	8.26	7.95	-0.65	-5.55	3.65	2.75	-4.05	1.45	1.15
GDP deflator .....	8.05	3.65	15.25	29.95	4.95	2.35	10.95	10.65	28.75	27.25	61.25	62.25	61.75	53.95	74.55	139.45	103.65
Inflation Rate (December/December) .....	..	..	..	..	..	..	4.85	27.25	29.65	28.75	66.65	60.65	59.25	63.75	105.75	159.25	51.65
GDP per capita .....	2.53	3.53	3.15	3.75	3.15	3.05	3.15	1.25	5.45	5.15	-9.15	-7.65	0.65	-0.15	-1.45	0.45	-0.95
Consumption per capita .....	3.35	6.25	2.95	3.65	-1.05	1.25	1.45	1.75	4.95	4.65	-1.45	9.15	0.25	-0.65	-7.75	-0.95	2.25
Real Industrial Wages .....	1.35	5.15	4.05	-1.15	1.75	6.95	0.65	10.65	-4.45	1.25	1.95	-26.05	2.95	1.85	-19.25	-4.55	-10.05
<b>Investment-Savings (as % of GDP):</b>																	
Total Investment .....	16.2	19.6	21.9	25.2	18.0	20.5	22.6	22.3	26.1	29.0	21.3	20.9	19.9	21.9	18.5	18.6	20.5
National Savings .....	14.1	17.5	18.6	21.3	13.4	18.5	19.6	19.5	23.7	23.2	17.5	24.6	22.4	22.6	17.2	21.3	18.6
BoP Current Account .....	-2.1	-2.1	-3.1	-3.9	-2.6	-2.0	-3.0	-3.6	-4.4	-5.8	-3.6	3.8	2.5	0.7	-1.3	2.7	-1.7
<b>BoP (million US\$):</b>																	
Current Account .....	(181)	(479)	(2,304)	(6,456)	(204)	(418)	(1,219)	(3,756)	(9,717)	(13,646)	(6,220)	5,416	4,239	1,226	(1,675)	3,881	(2,927)
Exports of Goods & Non Fact. Services ..	988	1,984	5,030	16,692	1,572	1,948	2,687	7,020	22,902	29,047	26,167	27,179	30,133	27,606	21,675	27,519	29,905
Net International Reserves (end period)	379	591	1,221	2,169	459	575	620	741	4,004	5,055	365	3,678	5,767	2,863	2,757	6,576	1,555
<b>External Sector Indicators (percent):</b>																	
Exports GNFS real growth rate .....	5.7	5.2	7.9	9.9	1.2	3.8	-5.8	16.6	6.2	11.5	21.7	13.7	5.7	-4.1	1.5	12.2	7.3
Oil Exports real growth rate .....	..	..	23.3	49.9	..	..	..	..	31.0	31.4	33.6	1.7	-1.6	-5.9	-9.4	-0.3	0.0
Non-Oil Exports real growth rate (Goods) ..	..	..	0.8	2.5	..	..	..	..	-1.7	9.2	-15.2	37.9	23.5	-4.8	38.5	14.1	7.1
Exports GNFS nominal growth rate .....	9.7	9.2	16.0	27.4	3.9	16.7	0.0	12.7	35.0	26.8	-9.9	3.9	10.9	-6.4	-20.8	25.8	5.0
Exports of GNFS/Current GDP .....	15.4	9.3	8.0	12.3	11.4	7.3	6.5	7.1	10.7	10.4	15.3	19.0	17.4	15.4	16.9	19.2	15.3
Imports GNFS real growth rate .....	4.4	5.7	9.4	9.6	2.9	3.6	10.1	1.0	31.9	17.8	-38.0	-33.7	17.8	13.3	-14.4	3.7	33.9
Imports GNFS nominal growth rate .....	11.6	8.5	19.5	21.0	15.3	4.7	21.1	-0.8	35.2	30.2	-40.6	-36.1	26.0	13.8	-11.7	4.9	48.5
Imports of GNFS/Current GDP .....	16.6	11.4	9.5	12.0	13.9	9.6	9.0	9.3	13.0	12.9	10.3	9.4	9.6	10.5	12.6	12.0	14.0
Resource Balance/Current GDP .....	-1.2	-2.1	-1.5	0.3	-2.5	-1.9	-2.5	-2.2	-2.3	-2.5	5.0	9.6	7.8	4.9	4.3	7.2	2.2
Terms of Trade Index (1980 = 100) .....	95.7	89.6	83.5	104.9	89.7	66.1	69.4	75.3	100.0	102.9	96.9	78.7	77.1	75.2	58.2	62.7	56.0
Real Exchange Rate Index (1980=100) b/c/	115.3	106.3	105.2	111.3	115.9	106.5	104.6	109.3	100.0	90.7	134.3	137.5	114.0	111.7	145.9	151.4	124.6
<b>Foreign Debt Indicators : a/</b>																	
Total DOD (Million US\$) .....	..	3,514	11,240	55,129	..	2,212	4,056	22,177	57,450	78,298	86,111	93,057	94,908	96,675	101,054	107,682	104,106
Public DOD .....	..	2,299	7,546	31,561	..	1,457	2,195	17,634	50,150	68,098	78,011	78,257	78,612	81,130	85,951	93,734	94,630
Private DOD d/ .....	..	1,215	3,694	23,567	..	754	2,770	4,843	7,300	10,200	8,100	14,800	16,296	15,745	15,103	14,146	9,576
Total DOD/Exports GNFS (\$)	..	146.5	211.1	311.3	..	115.5	134.4	315.9	230.9	269.6	329.1	342.4	315.0	350.9	462.0	392.0	260.0
Total DOD/Current GDP (\$)	..	13.0	16.4	37.0	..	10.2	12.9	23.3	29.5	31.3	30.5	63.0	54.0	53.1	77.9	75.4	58.8
Debt service MLT (Million US\$) e/ .....	..	563	1,275	6,128	..	488	691	2,230	7,901	8551	9425	11468	11,404	10,635	9,222	9,613	12,217
Debt service MLT/Current GDP (%) e/ .....	..	2.1	1.9	5.2	..	2.1	1.8	2.3	4.1	3.4	5.5	7.9	6.5	5.9	7.1	6.7	6.9
Debt service MLT/Exports GNFS (\$) e/ .....	..	24.0	24.9	45.0	..	25.1	25.7	31.3	34.5	29.4	36.0	42.2	37.6	39.2	42.2	34.9	42.3
Interest MLT (Million US\$) e/ .....	..	133	352	3,669	..	87	216	1,063	3,694	4,639	6,183	6,631	7,507	7,729	6,503	6,002	6,562
Interest MLT/Exports GNFS (\$) e/ .....	..	5.5	10.2	19.5	..	4.5	6.0	15.4	17.0	16.6	22.6	24.4	24.9	26.0	29.7	21.6	22.7
Interest MLT/Current GDP (%) e/ .....	..	0.5	0.6	2.4	..	0.4	0.6	1.1	2.0	1.9	3.7	4.5	4.3	4.2	5.0	4.2	3.7
<b>Memorandum Item:</b>																	
FSBR (as % of GDP) .....	-0.7	-3.0	-8.9	-10.0	-2.7	-0.9	-3.5	-9.2	-7.0	-13.7	-15.9	-6.2	-6.0	-6.9	-14.6	-15.6	-12.9
Primary Balance (as % of GDP) .....	..	..	..	..	..	0.0	-1.4	-4.6	-2.5	-7.8	-2.6	5.4	6.0	5.0	3.4	4.9	5.6
Inflation Adjusted Balance (as % of GDP)	..	..	..	..	..	-1.1	-3.6	-8.5	-4.0	-10.1	-10.3	-4.6	-0.1	-3.9	-4.9	2.5	-4.4
M4/GDP (as % of GDP) .....	15.0	22.7	29.1	27.9	16.8	21.8	30.7	26.5	21.3	27.6	28.7	26.1	27.0	26.6	27.5	28.3	28.4
Monetary Base (growth rate) .....	10.7	14.8	31.9	55.1	1.0	12.2	10.7	29.6	41.2	45.1	90.4	58.1	54.1	17.5	47.7	70.3	42.3

a/. It refers to 1965-70.

b/. As measured by relative wholesale price indexes.

c/. An increase in the index means real depreciation.

d/. Private Non-Guaranteed.

e/. It includes only External Public Debt.

Sources: SHCP and IBRD staff estimates.

MEXICO  
FINANCIAL SECTOR ADJUSTMENT LOAN  
Real Non-interest Public Spending, 1978-88  
(billions of 1988 pesos)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	Av. Annual Change		1982-88
											1988 <sub>2</sub>	1978-82	
Total Non-interest Expenditure	942	1088	1258	1599	1710	1294	1285	1301	1260	1218	1115	16.1	-6.9
Current	652	728	843	990	1218	958	964	1013	1011	925	899	18.9	-5.0
Wages	266	288	295	340	387	310	312	330	302	302	306	9.8	-4.9
Federal	131	145	150	172	198	149	163	162	148	153	139	10.9	-5.9
Public enterprises <u>1/</u>	113	121	128	149	164	139	134	148	137	129	123	9.7	-4.7
PEMEX	21	23	21	28	24	28	24	30	28	34	30	3.3	3.8
Other	92	98	107	121	140	111	110	118	109	95	94	11.1	-6.4
Other entities	21	20	17	19	24	23	14	20	19	19	26	3.3	1.3
Other current <sub>2/</sub>	386	434	547	657	631	648	652	684	709	623	601	21.1	-5.3
Purchases goods & serv.	241	266	299	485	420	389	422	467	463	379	365	14.9	-2.3
Federal	11	27	51	145	100	65	67	64	71	34	n.a.	77.9	-20.6
Public enterprises <u>1/</u>	209	215	227	317	300	315	345	394	383	336	n.a.	9.4	2.3
PEMEX	39	55	64	75	72	65	72	69	95	77	n.a.	18.8	1.1
Other Public Enterprises	170	160	163	242	227	250	273	305	288	259	n.a.	7.5	2.7
Other entities	21	23	21	23	14	9	10	10	9	10	n.a.	-9.1	-7.9
Transfers and other	145	168	248	172	411	259	230	216	246	244	237	29.7	-8.8
Capital	290	360	411	601	493	336	321	288	249	293	836	14.1	-8.8
Federal	99	121	133	238	179	127	113	105	91	110	59	15.9	-10.9
Public enterprises <u>1/</u>	156	198	227	294	251	159	158	139	116	141	134	12.7	-10.0
PEMEX	89	110	120	177	140	86	78	62	50	63	54	12.2	-14.7
Other Public Enterprises	67	88	107	117	111	73	80	77	66	78	80	13.4	-5.3
Other entities	35	43	51	70	63	50	52	43	42	42	43	15.4	-6.2
Memorandum item:													
GDP (billion Pesos)	2337	3088	4277	5874	9798	17879	29472	47483	79354	195615	398500		
GDP Deflator (1988 = 100)	0.800	0.789	1.000	1.200	2.028	3.982	6.145	9.635	16.794	40.813	80.000		
Fixed Investment Deflator	0.800	0.789	1.000	1.200	2.028	3.938	6.235	9.891	19.103	37.408	74.300		

Sources: SHCP and IBRD staff estimates.

1/ Public enterprises under budgetary control.  
2/ Estimated.

3/ Total of purchases of goods and services & current transfers.

MEXICO  
FINANCIAL SECTOR ADJUSTMENT LOANNon-interest Public Spending, 1978-88  
(Shares in GDP, percentages)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Non-interest Expenditure</b>	<b>26.6%</b>	<b>27.6%</b>	<b>29.3%</b>	<b>34.3%</b>	<b>35.4%</b>	<b>28.1%</b>	<b>26.9%</b>	<b>26.6%</b>	<b>27.4%</b>	<b>24.9%</b>	<b>22.6%</b>
<b>Current</b>	<b>18.4%</b>	<b>18.4%</b>	<b>19.7%</b>	<b>21.4%</b>	<b>25.2%</b>	<b>20.7%</b>	<b>20.1%</b>	<b>20.6%</b>	<b>21.4%</b>	<b>19.3%</b>	<b>16.2%</b>
<b>Wages</b>	<b>7.5%</b>	<b>7.8%</b>	<b>6.9%</b>	<b>7.3%</b>	<b>8.0%</b>	<b>6.7%</b>	<b>6.5%</b>	<b>6.7%</b>	<b>6.4%</b>	<b>6.3%</b>	<b>6.0%</b>
<b>Federal</b>	<b>3.7%</b>	<b>3.7%</b>	<b>3.5%</b>	<b>3.7%</b>	<b>4.1%</b>	<b>3.2%</b>	<b>3.4%</b>	<b>3.3%</b>	<b>3.1%</b>	<b>3.2%</b>	<b>2.6%</b>
<b>Public enterprises 1/</b>	<b>3.2%</b>	<b>3.1%</b>	<b>3.0%</b>	<b>3.2%</b>	<b>3.4%</b>	<b>3.0%</b>	<b>2.6%</b>	<b>3.0%</b>	<b>2.9%</b>	<b>2.7%</b>	<b>2.5%</b>
<b>PEMEX</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.6%</b>
<b>Other</b>	<b>2.6%</b>	<b>2.5%</b>	<b>2.5%</b>	<b>2.6%</b>	<b>2.9%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>2.0%</b>	<b>1.9%</b>
<b>Other entities</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.6%</b>
<b>Other current</b>	<b>10.9%</b>	<b>11.1%</b>	<b>12.8%</b>	<b>14.1%</b>	<b>17.2%</b>	<b>14.0%</b>	<b>13.6%</b>	<b>13.9%</b>	<b>15.0%</b>	<b>13.0%</b>	<b>12.2%</b>
<b>Purchases of goods &amp; serv</b>	<b>6.8%</b>	<b>6.8%</b>	<b>7.0%</b>	<b>10.4%</b>	<b>6.7%</b>	<b>6.4%</b>	<b>6.6%</b>	<b>9.5%</b>	<b>9.6%</b>	<b>7.9%</b>	<b>7.4%</b>
<b>Federal</b>	<b>0.3%</b>	<b>0.7%</b>	<b>1.2%</b>	<b>3.1%</b>	<b>2.2%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>1.5%</b>	<b>0.7%</b>	<b>n.a.</b>
<b>Public enterprises 1/</b>	<b>5.9%</b>	<b>5.5%</b>	<b>5.3%</b>	<b>6.8%</b>	<b>6.2%</b>	<b>6.6%</b>	<b>7.2%</b>	<b>8.0%</b>	<b>8.1%</b>	<b>7.0%</b>	<b>n.a.</b>
<b>PEMEX</b>	<b>1.1%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.8%</b>	<b>2.0%</b>	<b>1.6%</b>	<b>n.a.</b>
<b>Other Public Enterprises</b>	<b>4.6%</b>	<b>4.1%</b>	<b>3.8%</b>	<b>5.2%</b>	<b>4.7%</b>	<b>5.4%</b>	<b>5.7%</b>	<b>6.2%</b>	<b>6.1%</b>	<b>5.4%</b>	<b>n.a.</b>
<b>Other entities</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>n.a.</b>
<b>Current transfers and other</b>	<b>4.1%</b>	<b>4.3%</b>	<b>5.8%</b>	<b>3.7%</b>	<b>8.5%</b>	<b>5.6%</b>	<b>4.8%</b>	<b>4.4%</b>	<b>5.2%</b>	<b>5.1%</b>	<b>4.8%</b>
<b>Capital</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.6%</b>	<b>12.9%</b>	<b>10.2%</b>	<b>7.4%</b>	<b>6.8%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>5.6%</b>	<b>4.4%</b>
<b>Federal</b>	<b>2.8%</b>	<b>3.1%</b>	<b>3.1%</b>	<b>5.1%</b>	<b>3.7%</b>	<b>2.8%</b>	<b>2.4%</b>	<b>2.2%</b>	<b>2.2%</b>	<b>2.1%</b>	<b>1.1%</b>
<b>Public enterprises 1/</b>	<b>4.4%</b>	<b>5.0%</b>	<b>5.3%</b>	<b>6.3%</b>	<b>5.2%</b>	<b>3.5%</b>	<b>3.3%</b>	<b>2.9%</b>	<b>2.6%</b>	<b>2.7%</b>	<b>2.5%</b>
<b>PEMEX</b>	<b>2.5%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>3.8%</b>	<b>2.9%</b>	<b>1.9%</b>	<b>1.6%</b>	<b>1.3%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>1.0%</b>
<b>Other Public Enterprises</b>	<b>1.9%</b>	<b>2.2%</b>	<b>2.5%</b>	<b>2.5%</b>	<b>2.3%</b>	<b>1.6%</b>	<b>1.7%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.5%</b>
<b>Other entities</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>1.5%</b>	<b>1.3%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>0.8%</b>	<b>0.8%</b>
<b>Memorandum item:</b>											
<b>GDP (billion Pesos)</b>	<b>2337</b>	<b>3000</b>	<b>4277</b>	<b>5674</b>	<b>9790</b>	<b>17879</b>	<b>29472</b>	<b>47403</b>	<b>70354</b>	<b>106616</b>	<b>166600</b>

Sources: SHCP and IBRD staff Sources: SHCP and IBRD staff estimates.

1/ Public enterprises under budgetary control.

FINANCIAL SECTOR ADJUSTMENT LOAN  
STATUS OF BANK GROUP OPERATIONS IN MEXICO 1/

A. Statement of Bank Loans  
(As of March 31, 1989)  
(US\$ million)

Loan No.	Fiscal Year	Borrower	Purpose	Amount less Cancellations	Undisbursed
75 loans fully disbursed				5,482.00	
1708-5	1979	NAFIN	Irrigation	81.80	15.14
1858-5	1980	NAFIN	Irrigation	84.40	15.15
1990	1981	BANOBRAS	Urban Development II	144.18	10.01
2048	1982	NAFIN	Integrated Rural Dev.	175.00	8.07
2142	1982	NAFIN	Capital Goods Industry	152.30	0.40
2154	1982	NAFIN	Pollution Control	13.09	4.40
2282	1983	NAFIN	Agricultural Marketing	115.00	12.21
2281	1983	BANOBRAS	Third Water Supply	100.30	30.34
2325	1983	NAFIN	Third Sm/Med Industry	175.00	1.34
2331	1983	BANCOMEXT	Export Development	350.00	4.22
2428	1984	BANOBRAS	Highways	200.00	85.00
2450	1984	BANPESCA	Ports	58.30	39.22
2528	1985	NAFIN	Chiapas Agric. Dev.	58.00	42.63
2548	1985	NAFIN	Sm/Med Scale Mining II	105.00	39.12
2559	1985	NAFIN	Vocational Education	81.00	23.90
2575	1985	BANOBRAS	Railways V	300.00	167.34
2612	1986	BANOBRAS	Low Income Housing I	150.00	28.07
2658	1986	NAFIN	Proderith II	88.30	71.20
2685	1986	BANOBRAS	Earthquake Rehab	400.00	38.55
2688	1986	BANOBRAS	Municipal Strengthening	40.00	36.62
2689	1986	BANOBRAS	Solid Waste Pilot	25.00	19.58
2745	1987	BANCOMEXT	Trade Policy Loan I	500.00	10.59
2748	1987	NAFIN	Industrial Recovery	150.00	55.33
2747	1987	NAFIN	Technology Development	48.00	34.67
2777	1987	BANCOMEXT	Export Development II	250.00	38.16
2824	1987	BANOBRAS	Urban Transport	125.00	101.12
2837	1987	NAFIN	Agricultural Credit	400.00	51.55
2858 3/	1987	NAFIN	Sm/Med Industries IV	100.00	100.00
2859	1987	NAFIN	Agricultural Extension	20.00	16.95
2875	1987	BANOBRAS	Highway Maintenance	135.00	125.00
2876	1988	NAFIN	Manpower Training	80.00	63.68
2918	1988	NAFIN	Steel Sector Restruct.	400.00	342.63
2918	1988	NAFIN	Agricultural Sector Loan	300.00	201.99
2919 3/	1988	NAFIN	Fertilizer Sector Loan	265.00	265.00
2948 3/	1988	BANOBRAS	Ports Rehabilitation	50.00	50.00
2947 3/	1988	BANOBRAS	Housing Finance	300.00	300.00
Total				11,459.65	
Of which has been repaid				3,112.85	
Total now outstanding				8,346.80	
Amount sold : 92.34					
Of which has been repaid: 92.34				0.00	
Total now held by Bank 2/				8,346.80	
Total undisbursed					2,449.18

1/ The status of the projects listed in Part A is in a separate report on all Bank/IDA financed projects in execution, which is updated twice yearly and circulated to the Executive Directors on April 30 and October 31.  
2/ Prior to exchange adjustment.  
3/ Not yet effective.

MEXICO  
FINANCIAL SECTOR ADJUSTMENT LOAN

B. Statement of IFC Investments  
As March 31, 1989  
(US\$ Million)

Fiscal Year	Obligor	Type of Business	-----Original Approvals-----		
			Loan	Equity	Total
1968/69	Industrial Perfect Circle, S.A. a/	Industrial Equipment	0.80	0.00	0.80
1968	Bristol de Mexico, S.A. a/	A.C. Engine Overhaul	0.50	0.00	0.50
1961	Aceros Solar, S.A. a/	Twist Drills	0.30	0.00	0.30
1962/5/6/8	Fundidora Monterray, S.A. a/	Steel	2.30	21.40	23.70
1963	Tubos de Acero de Mexico	Stainless Steel Pipes	0.90	0.10	1.00
1963	Quimica del Rey, S.A. a/	Sodium Sulphate	0.70	0.00	0.70
1964/8	Industria del Hierro, S.A.	Construction Equipment	0.00	2.00	2.00
1970	Minera del Norte a/	Iron Ore Mining	1.50	0.00	1.50
1971	Celanes Mexicana, S.A. a/	Textiles	12.00	0.00	12.00
1972	Promotora Papel Periodicos, S.A. de C.V. a/	Pulp and Paper	0.00	b/	b/
1973/9	Cementos Veracruz, S.A.	Cement	15.90	0.00	15.90
1974/81	Cancun Aristos Hotel	Tourism	1.00	0.30	1.30
1976/78	Mexinox, S. A.	Stainless Steel	12.00	3.20	15.20
1978/81/84	Papeles Ponderosa, S.A.	Pulp and Paper	10.70	5.00	15.70
1978	Tereftalatos Mexicanos, S.A.	Petrochemical	19.00	0.00	19.00
1979/81/87	Hotel Camino Real Ixtapa, S.A.	Tourism	0.00	4.20	4.20
1979/84	Empresas Toltaca, S.A.	Cement	168.00	7.90	175.90
1979	Conductores Monterray, S.A.	Electrical Wire & Cable	18.00	0.00	18.00
1980	Industrias Resistol, S.A.	Particle Board	25.00	0.00	25.00
1980	Vidrio Plano de Mexico, S.A.	Flat Glass	114.90	0.00	114.90
1980	Minera Real de Angeles, S.A.	Mining	110.00	0.00	110.00
1981/86	Celulosicos Centauro, S.A.	Pulp and Paper	59.50	0.00	59.50
1981	Corporacion Agro-Industrial S.A.	Agri-Business	1.30	3.00	14.30
1984	Capital Goods Facility a/	Capital Goods Financing	100.00	0.00	100.00
1984/88	Metalsa, S. A.	Auto Chasis	8.00	1.40	9.40
1986	Proteison, S.A. de C.V.	Agri-Business	2.00	0.80	2.80
1986	Promociones Industriales Mexicanas, S.A. de C.V.	Petrochemical	16.40	0.00	16.40
1986	Celulosa y Papel de Durango, S.A. de C.V.	Pulp and Paper	10.00	3.10	13.10
1987	Agromex Phase I (AES A)	Veg and Fruit Processing	1.50	0.50	2.00
1987	Industrias Sulfex, S.A. de C.V.	Chemical & Petrochemical	2.00	0.50	2.50
1988	Sealed Power de Mexico	Auto Assembly	9.00	0.00	9.00
1988	Spasco, S.A. de C.V.	Cement	46.00	0.00	46.00
1988	Salumi, S.A. de C.V.	Food and Food Processing	20.10	2.00	22.10
1988	Crescent Market Aggregates	Construction Material	37.00	0.00	37.00
1989	Grupo Famsal Visa	Consumer Goods Conglomerat	80.00	0.00	80.00
1989	Serfin	Development Finance	60.00	0.00	60.00
1989	Polimer (ABS)	Petrochemical	14.50	0.00	14.50
	Gross Total Commitments		990.80	55.40	1046.20
	Less Cancellations, Terminations, Repayments and Sales		690.20	28.40	718.60
	Total Commitments Now Held by IFC		300.60	27.00	327.60
	Total Undisbursed (Including Participants)		76.60	0.10	76.70

a/ Investments which have been fully cancelled, terminated, written off, sold, or repaid.

b/ US\$25,000.



Financial Sector Adjustment Loan

Supplementary Data Sheet

Section I: Timetable of Key Events

- (a) Time taken by the Country to prepare program: 2 months
- (b) Program prepared by: Secretariats of Finance and Public Credit, and of Programming and Budgeting
- (c) First Presentation to Bank: end-September 1988
- (d) Departure of Appraisal Mission: October 1988
- (e) Completion of negotiation: May 1989
- (f) Planned Date of Effectiveness: July 1989

Section II: Special Bank Implementation Action

None.

Section III: Special Conditions

The following have been established as loan effectiveness conditions:

- (a) Substantial progress in obtaining adequate financing for Mexico's requirements for 1989-90 (para. 110); and
- (b) BNCE would submit subsidiary agreements to the Bank for passing on the proceeds of the loan to the Government on terms and conditions satisfactory to the Bank.

The following conditions have been established for second tranche release:

- (i) The Government's macroeconomic program is consistent with the objectives of stabilization and recovery of economic growth, as set forth in the Letter of Development, including progress toward more flexible price adjustments (para. 37 and Annexes VII and VIII);
- (ii) An Action Program for the increase in the Federal District's self-generated revenues of at least 10% in real terms over the 1988 level in the 1990 Budget has been adopted (para. 69);
- (iii) An Action Program for the gradual reduction of non-matching federal grants to the states have been adopted in the 1990 Budget (para. 67);

- (iv) An Action Program has been adopted which redefines the role of each development bank and trust fund, including a detailed review of the finances and operation of NAFIN, BANCOMEXT, BANOBRAS, BANEJRAL and ANAGSA; in the meantime, fiscal transfers to SANRURAL and ANAGSA would, as a percentage of GDP, remain within the amounts budgeted for 1989 (para. 101);
- (v) An Action Program has been adopted for the further strengthening of Bank supervision and prudential regulations (para. 94); and
- (vi) Continued substantial progress has been made in obtaining adequate financing for Mexico's requirements for 1989-1990 and over the medium term in the context of the adjustment program and growth targets set forth in "Mexico's Economic Strategy" issued by SHCP (para. 110).

MEXICO  
FINANCIAL SECTOR ADJUSTMENT LOAN

THE ANALYTICAL FRAMEWORK

A. Consistency of Fiscal Policy

A fiscal stance that does not conflict with sustained low inflation, even in the event of unfavorable external developments and continued high real interest rates, is clearly necessary, although possibly not sufficient, to allay inflationary fears. Only if the inflation compatible with public finance requirements is compatible with the inflation rate implied by the exchange rate regime, is the latter going to be sustainable. And this in turn is the cornerstone of the Pacto. Thus medium term consistency requirements, when violated, give a signal that will greatly complicate short term macromanagement. This will require restrictions on both the overall deficit and its mode of financing.

There are three sources of financing public sector expenditure beyond what can be obtained from the regular tax system: external borrowing, monetization and issue of domestic interest-bearing debt. The amount that can be expected from each source will depend on other macroeconomic targets, such as inflation, output growth, interest rates and so on. The revenue from these three sources of financing can be combined into the calculation of a "financeable deficit". This is defined as the deficit that does not require more financing than is compatible with sustainable external borrowing, existing targets for inflation and output growth, and a sustainable internal debt policy. If the actual deficit equals this "financeable" deficit, fiscal policy is consistent with the macroeconomic assumptions and targets underlying the calculation of the financeable deficit.<sup>1/</sup>

Underlying the framework suggested here to calculate the financeable deficit is a model describing private portfolio choice as a function of inflation, output and interest rates. This gives the amount of currency, demand deposits and time deposits the private sector is willing to hold given output, inflation and the level and structure of interest rates. This is coupled with a simple financial sector model incorporating reserve requirements and other bank regulatory policies to derive the demand for reserves by commercial banks. The demand for reserves is then added to the demand for currency already derived to get an estimate of the total demand for base money given inflation, interest rates, and so on. All this is used to derive total revenue from monetization,

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<sup>1</sup> This should be interpreted with care. Consistency with macroeconomic targets does not guarantee that those macroeconomic targets can or will be achieved; only that the fiscal deficit is not inconsistent with them. To actually achieve the stated macroeconomic targets may require other measures, possibly including fiscal retrenchment beyond what is required for consistency as defined here.

net of interest payments on reserves, for different output growth rates, interest and inflation rates and regulatory policies. To revenue from monetization must be added the revenue the government can expect from external and internal debt issue given its external borrowing policies and debt management approach. One can then calculate the financeable deficit.<sup>2/</sup>

The difference between the actual deficit in 1988 and this financeable deficit is called the required deficit reduction, RDR. A deficit cut equal to RDR will restore consistency with other macroeconomic targets. The results of such an exercise for Mexico are summarized in Table 1. The table lists the results for various assumptions on other macroeconomic variables. The operational deficit in 1988 equaled 4.4% of GDP. RDR is measured with respect to that number.

In the calculations underlying the Table, it is assumed that issue of interest-bearing domestic debt is kept down to a rate that will maintain the real value of the domestic debt constant. The reason for not allowing a faster rate of domestic debt issue is the high interest rate it currently carries; at around 30% per year, it is well above the real growth rate of the economy. At this rate, debt-service will escalate as a percentage of GDP if more extensive use is made of debt-issue to finance the deficit. As to foreign financing, different options are explored. The first row of the table assumes that the nominal value of the foreign debt stays constant (CAD=0). The second row looks at the consequences of changing that option to either a constant real value of the debt or to assuming a constant debt-output ratio. The actual deficit in 1988 needs to be cut by 4.4 percent of GDP for compatibility with an inflation target of 15 percent, or the entire operational deficit needs to disappear. This reflects the fact that Mexico receives very little from the inflation tax and seigniorage, because of low growth and the practice of paying interest on reserves. Even for a 50% inflation target, the RDR still amounts to a hefty 3.3 percent of GDP.

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<sup>2</sup> A simple version of this framework was first used in Anand and van Wijnbergen (1989). "Inflation and the Financing of Government Expenditure: An Introductory Analysis with an Application to Turkey," World Bank Economic Review. The current version incorporates external debt considerations and implications of the financial structure for inflation tax revenues and is based on Anand and van Wijnbergen (1988), "Inflation, External Debt and Financial Sector Reform: A Quantitative Approach to Consistent Fiscal Policy with an Application to Turkey". Working Paper No.2731, National Bureau of Economic Research.

**TABLE 1: REQUIRED DEFICIT REDUCTION (RDR) FOR CONSISTENCY WITH VARIOUS MACROECONOMIC TARGETS (AS PERCENT OF GDP).**

<b>1. NO REAL EXCH. DEPRECIATION; CAD=0; OUTPUT GROWTH 1.5%</b>				
-----				
<b>INFLATION TARGETS</b>	<b>p:</b>	<b>0</b>	<b>5</b>	<b>15</b> <b>50</b>
	<b>RDR:</b>	<b>5.1</b>	<b>4.8</b>	<b>4.4</b> <b>3.3</b>
<b>2. NO REAL EXCH. DEPRECIATION; INFLATION 15%; OUTPUT GROWTH 1.5%</b>				
-----				
<b>FOR. BORROWING</b>	<b>CAD:</b>	<b>0</b>	<b>3.1</b> <b>1/</b>	<b>4.0</b> <b>2/</b>
	<b>RDR:</b>	<b>4.4</b>	<b>1.3</b>	<b>0.4</b>
<b>3. NO REAL EXCH. DEPRECIATION; INFLATION 15%; CONST. B*/Y RATIO</b>				
-----				
<b>OUTPUT GROWTH TARGETS</b>	<b>n:</b>	<b>0</b>	<b>1.5</b>	<b>4</b> <b>5</b>
	<b>RDR:</b>	<b>-1.5</b>	<b>0.4</b>	<b>-1.3</b> <b>-1.9</b>
<b>3. INFLATION 15%; OUTPUT GROWTH 1.5%; CONST. B*/Y RATIO</b>				
-----				
<b>REAL EXCH. RATE DEPRECIATION</b>	<b>c:</b>	<b>0</b>	<b>5</b>	<b>10</b>
	<b>RDR:</b>	<b>0.4</b>	<b>3.0</b>	<b>5.7</b>

Notes: 1/ Constant real debt case  
2/ Constant debt/GDP case

c :Rate of depreciation of the Real Exchange Rate  
 CAD :Current Account Deficit  
 n :Growth rate of real GDP  
 p :Inflation Rates  
 RDR :Required cut in fiscal deficit compared with 1988  
 (operational) deficit of 4.4% of GDP  
 B\*,B :Foreign, Domestic Debt  
 Y :GDP

Of course more liberal access to foreign financing changes all that. The second row shows that the current deficit in fact is compatible with an inflation target of 15 percent if enough foreign financing is available to at least maintain the debt/ output ratio constant. A less liberal target would keep the real value of the debt constant; at 1.5% real growth this implies a three percent current account deficit, with a correspondingly higher need to cut back on the fiscal deficit. A three percent current account deficit implies refinancing of about half of interest payments.

The third row of the Table shows how, under a constant debt-output ratio target for foreign borrowing, fiscal leeway increases with output growth. The RDR falls from 2.8 percent of GDP at a zero growth rate to a zero RDR at a four percent real growth rate for GDP.

With real interest rate differentials as large as they are now, debt management takes on a great fiscal importance. Take for example a debt/equity-swap scheme where say 10bUS\$ is retired but a corresponding amount of domestic debt is issued by the public sector to acquire the private equity used in the swap. With a staggering 25 percentage points real interest rate differential, this operation would INCREASE the real interest rate burden by no less than 1.5 percent of GDP, raising the required deficit reduction for a given inflation target correspondingly. The impact on the operational deficit would be smaller, but still 1.2 percent. The smaller effect is because the operational deficit, somewhat inconsistently, counts payment of nominal interest rate charges on foreign debt, rather than just real foreign interest payments, like it does in the case of domestic debt. The whole operation would have a major impact on equilibrium inflation: even as small a debt/equity swap as the \$10 BUS considered here would, at current interest rate differentials, raise equilibrium inflation by no less than 50 percentage points (see van Wijnbergen et al. (1988) for the methods used to arrive at this claim). The numbers are so large because in Mexico the base for the inflation tax is very low; commercial bank reserves basically carry market rates, so the inflation tax base is just currency in hands of the public, an almost negligible amount.

This points at the general issue of domestic debt. At 1.5% real growth and no net increase in foreign nominal debt, the fiscal gap is 4.4 percent of GDP for 15 percent inflation. What if this gap is filled by issuing internal debt rather than foreign debt? Since interest rates on internal debt exceed the real growth rate by such a margin, this funding policy would solve today's fiscal problem at the cost of a substantially more serious one in the following year. This strategy would raise the required deficit reduction for a 15% inflation rate from 3.1 percent to 4 percent of GDP within one year. If continued for six years, the debt-output ratio would have risen from 19 percent to 52 percent of GDP! This clearly highlights the fact that internal debt issue should be avoided at almost any cost in the current situation in Mexico.

The final exercise demonstrates the extent to which high real interest rates are at the root of Mexico's current fiscal problems. Table 2 shows the equilibrium inflation rate, i.e. the inflation rate for which no fiscal adjustment is required, for various real interest rates on Mexico's internal debt. All this on the assumption that no net increase in the nominal value of the foreign debt is allowed (i.e a zero external current account deficit for the public sector).

**Table 2: EQUILIBRIUM INFLATION AND THE REAL INTEREST RATE ON INTERNAL DEBT**

NO REAL EXCH.DEPRECIATION; CAD=0; OUTPUT GROWTH 1.5%			
REAL INT.RATE ON DOM.DEBT R	30	15	10
EQUILIBRIUM INFLATION p	150	22	0

At the current interest rate, the required deficit reduction is 4.4 percent of GDP; alternatively, an inflation rate of 150 percent is needed to cover this amount through inflation tax. At a more reasonable 15 real interest rate, the equilibrium inflation rate, for which no fiscal adjustment is required, falls to 22 percent! At a real interest rate of ten percent, the equilibrium inflation rate falls to zero. Note that as inflation rises, additional revenue from inflation tax falls, necessitating increasingly larger increases in inflation to cover a given increase in the operational deficit. This is because at higher inflation rates the elasticity of money demand increases, thus lowering the additional marginal revenue that a given increase in inflation rates yields as inflation rises.

#### B. Macroeconomic Stability, External Balance and Growth

The model presented below has been used for the macroeconomic projections and is designed to shed light on the key questions raised in this report: can the objectives of external balance and satisfactory output growth be reconciled? What is the role of fiscal policy in this trade off? Which real exchange rate path is compatible with the various policy scenarios and growth requirements? What is the relation between exchange rates and external balance? The model is used in an empirical investigation of the trade off between output growth and external balance, and the role relative prices have to play in this trade off.

Real interest rates play an important role in the model. High real interest rates, by depressing private investment and consumption, create more room for fiscal deficits for any given external balance target. At the same time, high real interest rates complicate fiscal management, since they raise the cost of servicing the domestic part of the public debt. Crucial parameters are the sensitivity of private savings and investment with respect to the real interest rate; these receive detailed attention in the empirical section below.

A second channel between fiscal policy, output growth and external debt depends not so much on the interrelation between aggregate fiscal deficits, real interest rates and the current account, but more on the composition of the public sector expenditure program. A substantial part of aggregate investment in Mexico has traditionally been undertaken by the public sector. As a consequence, the government's allocation of its total expenditure over consumption and investment is an important determinant of output growth for any given aggregate expenditure level and time path of the real interest rate.

Another important relative price that is antagonist in the model is the real exchange rate. The real exchange rate plays a role in the allocation of expenditure over different goods at a given moment of time, similar to the way the real interest rate influences the intertemporal expenditure of expenditure for given intra-temporal allocation (cf van Wijnbergen (1989) for a detailed exposition of the theory underlying this model). This is a rather different approach from most other empirical models, where the real exchange rate, if it is antagonist at all, is often derived from current account considerations. In our setup, the real exchange rate also influences the current account, but in a rather complicated manner, through its impact on aggregate supply and investment behavior. No empirical evidence could be found to support the Laursen-Metzler notion that the real exchange rate also influences consumption expenditure.

It is in fact more natural to think of the real exchange rate as the relative price clearing the market for "Mexican" goods. Its equilibrium value is thus not derived from current account considerations, but from commodity market clearing conditions. The level of external transfers, the composition of government expenditure over home and foreign goods, and commercial policy all have an important impact on the real exchange rate in this approach. Explicit nominal exchange rate policies targeting the real exchange rate may, if successful, cause persistent commodity market disequilibrium ( van Wijnbergen (1989b)).

In the following pages, we provide a simplified exposition of the analytical structure of the model. We then discuss the empirical application to Mexican data.

### B.1 Real Interest Rates, Fiscal Policy and Output Growth.

As long as domestic interest rates are not completely linked to foreign interest rates (plus exchange rate depreciation) there is an additional degree of freedom in macroeconomic policy. Then changes in domestic real interest rates can resolve potential discrepancies between fiscal deficits and external targets through their impact on the net private savings surplus (i.e private saving minus private investment). In the process, private investment and hence output growth will be affected. This is one of the more important links between fiscal policy and output growth embedded in the model. The mechanism is shown in Figure 1. Underlying this figure is the following identity derived from the national accounts, but with behavioral content built into private savings and investment:

$$\begin{aligned} \text{CAS} &= \text{FS} + \text{NPS}(r) \\ &= \text{FS} + \text{PS}(r) - \text{PI}(r) \end{aligned}$$

The private sector's surplus of savings over investment,  $\text{NPS}=\text{PS}-\text{PI}$ , is shown as a function of the real rate of interest. A higher real interest rate will slow down private sector investment and increase private savings, thus increasing NPS. Empirical evidence on these effects is presented in Section 4.3. This is represented by the upward sloping line "NPS" in Figure 1. The sum of NPS and the fiscal surplus (FS; this equals minus the deficit) equals the external deficit that is compatible with given real interest rates and with FS. The external deficit is represented by the line CA in Fig. 1. The horizontal line TCA is the target value for the current account. The real interest rate at which the current account target TCA equals the current account CA is the real rate at which fiscal policy and current account targets are in line.

An increase in the fiscal deficit represents a decline in the fiscal surplus and hence a downward shift in the feasible current account line FCA. To still meet the same current account target, a higher interest rate is needed to call forth the required extra surplus of private savings over private investment ( $r$  shifts from  $r_A$  to  $r_B$ ). A cut in fiscal deficits will thus allow lower real interest rates for given current account targets, and hence higher private investment.



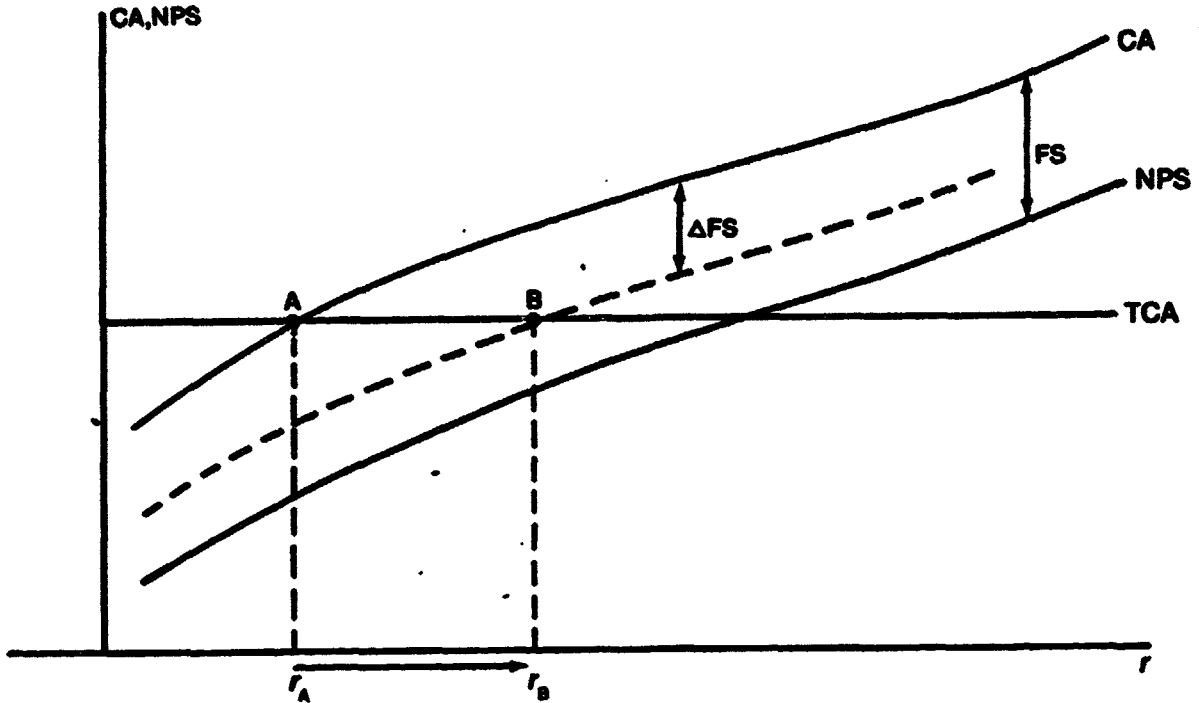


Figure 1

The analysis so far is not enough to tie the link between fiscal deficits and output growth. It has focused on the impact of the fiscal deficit on private investment; output growth depends on total investment, however, not just on private investment. Clearly, the impact of changes in fiscal deficits on output growth depends on whether the underlying adjustment is made out of public investment or out of public consumption. The model therefore breaks down public expenditure in public consumption and investment. Output growth depends on the sum of public and private investment.

Of course, interest rate arbitrage between domestic and foreign rates may eliminate any leeway for the domestic real interest rate to reconcile fiscal deficits with current account targets. In that case, another degree of freedom is lost. For any given rate of real depreciation, the link between fiscal deficits and the current account is direct if real interest rates at home and

abroad cannot diverge more than the expected real rate of depreciation. The remarkably close link between the fiscal deficit and the current account in Mexico (cf Figure 2) suggest that interest arbitrage is in fact taking place in Mexico; the no-arbitrage version of the model, with real rates reconciling fiscal deficits and external balance, thus seems too extreme. We hence have used the model for given real interest rates, rather than fixing the fiscal deficit and having the real interest rate adjust endogenously. Of course the real exchange rate is not fixed in the real world, nor is its rate of change exogenously given. Policy measures will have a direct or indirect impact on both level and rate of change of the real exchange rate. To this we turn now.

## B.2 Commodity Market Clearing and the Real Exchange Rate.

The presentation has until now focused on the current account, fiscal deficits, and the real rate of interest. But what about the real exchange rate? Popular discussions of the current account invariably involve the latter variable. This stems from an approach where the current account is analyzed using partial equilibrium trade flow equations, with little attention for the underlying macroeconomic and intertemporal aspects. Modern theory is questioning some of the predictions of this approach. The real exchange rate of course does have an impact on the current account, but in a much more ambiguous and indirect manner than in the standard open economy models inherited from the fifties and sixties. The approach adhered to here starts from the simple observation that the real exchange rate can be viewed as the relative price of Mexican (non-oil) goods (we will omit the "non-oil" qualification in the remainder of this section) in terms of foreign goods. The "market" which the real exchange rate clears (possibly only after periods of disequilibrium), is the market for Mexican goods. The real exchange rate is thus a static relative price in that it measures the rate at which two different (aggregate) commodities can be exchanged at a given moment of time. The real interest rate measures the rate at which commodities can be exchanged at different moments of time, through savings or investment processes; it thus is an intertemporal relative price.

Consider the determinants of aggregate demand and supply in that market. Figure 3 provides a diagrammatical elaboration (see Edwards and van Wijnbergen (1988) for a similar approach in a static framework). First aggregate demand for Mexican goods. One component comes from Mexican consumers (and investors). At a more appreciated real exchange rate ( $de < 0$ ), Mexicans will tend to allocate their aggregate expenditure towards foreign goods rather than towards Mexican goods. Similarly, an appreciated real exchange rate will, *ceteris paribus*, cause lower export sales (foreign demand falls off). This is represented by the upward sloping curve  $A_1$  in Figure 3.

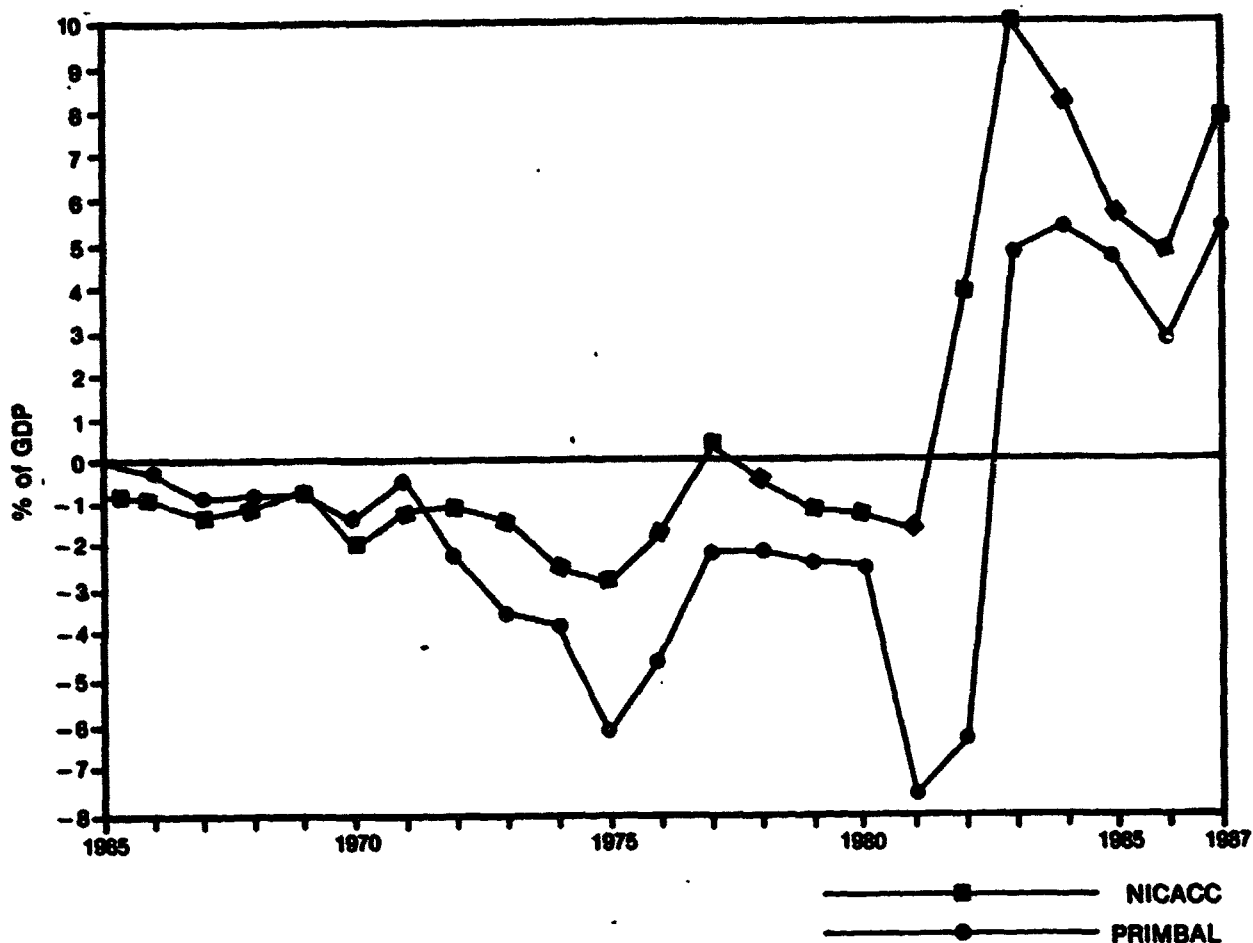


Figure 2

Aggregate supply of Mexican goods is likely to increase when the real exchange rate appreciates (again,  $de < 0$ ), if only because then intermediate imports will become cheaper in terms of Mexican goods (see the econometric evidence presented below). The aggregate supply curve  $A_s$  therefore slopes down in Fig. 3 (note that  $e$  is defined as foreign over domestic prices, or the inverse of the relative price of home goods). The "equilibrium" exchange rate is the rate at which aggregate supply and demand for Mexican goods are in equilibrium: the intersection of  $A_s$  and  $A_d$  in Fig. 3. Above that intersection, there is excess demand for home goods and output will be supply determined: the exchange rate is undervalued (excessively depreciated). Below the intersection, supply exceeds demand and output is hence demand determined. The real exchange rate is overvalued and there is Keynesian unemployment.

An increase in government expenditure on home goods would shift the  $A_d$  curve down and so reduce excess supply and Keynesian unemployment problems (dotted line in Fig. 3). As a consequence, the commodity market clearing, "equilibrium" real exchange rate would fall ( $de > 0$  from E to F in Fig. 3).

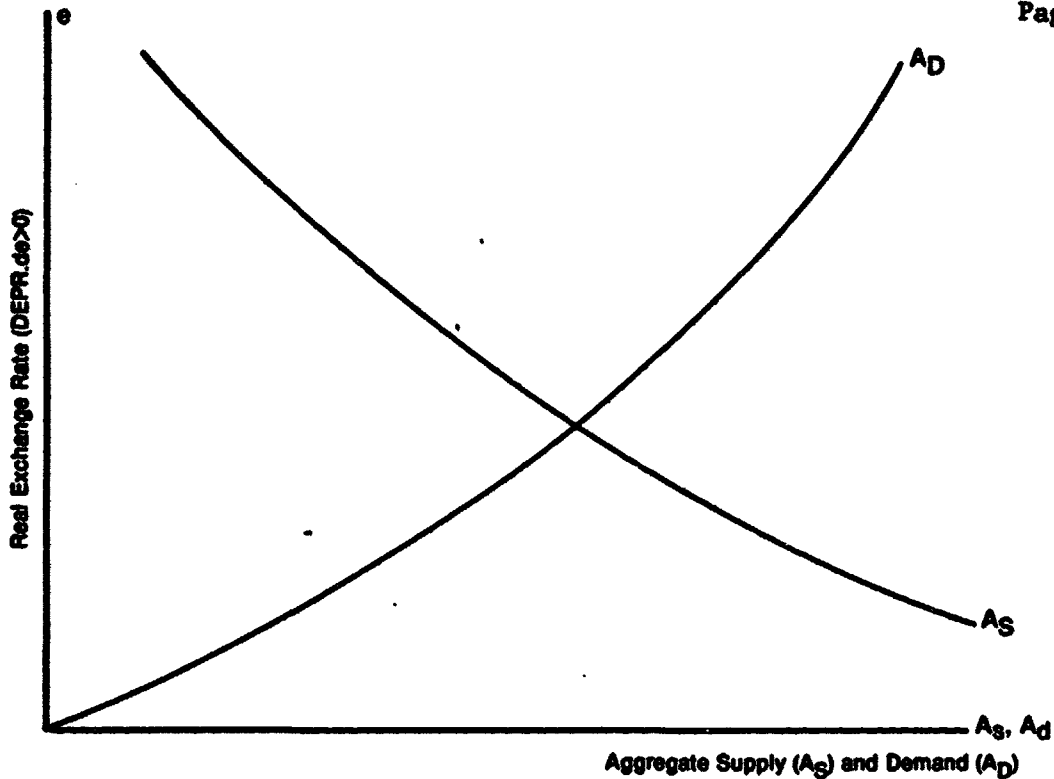


Figure 3

**B.3 The Real Exchange Rate, Interest Rates and the Current Account.**

What about the current account? First note that the real exchange rate that equilibrates aggregate demand for Mexican goods with their aggregate supply, can do so at any level of the external deficit. An external deficit indicates that aggregate expenditure, by Mexicans but on foreign and domestic goods, exceeds aggregate income. It provides no indication however, that aggregate demand, by Mexicans and by foreigners, but now on Mexican goods alone, is in excess of aggregate supply of Mexican goods at the going real exchange rate.

That does not mean that the real exchange rate and the current account are entirely unrelated. Figure 4 draws on the preceding ones and demonstrates how the current account, the real interest rate and the real exchange rate interact. Consider first commodity market equilibrium, but now not in "e-A" space, but with the real exchange rate and interest rate on the axes. Assume that at E commodity market equilibrium obtains. If one then moves to the left (the exchange rate appreciates,  $de < 0$ ), excess supply develops. This was also demonstrated in Fig. 3. To restore equilibrium, demand need to be curtailed; one way of doing that is raising real interest rates; that lowers demand for all consumption and investment goods (see the empirical evidence presented below), thus also for domestic goods. The commodity market equilibrium locus thus slopes upward in r-e space.

Consider next the combinations of r and e that will allow achievement of

a particular current account target, say  $CAS^*$ , for given fiscal policy. If at E that target is achieved, moving up (higher  $r$ ) will lead to overachievement: higher real interest rates will, ceteris paribus, reduce private consumption and investment and thus lead to a CA improvement. Which way will the exchange rate have to move to bring the CA in line with its target? As theory suggests, and the empirical analysis presented below confirms, the answer is sometimes unclear. Theory suggests that for constant rate of time preference the exchange rate has no effect on the private consumption (Razin and Svensson (1983)). The empirical analysis presented below shows that this is in fact the case for Mexico. On the other hand, investment will be affected negatively, mostly because of the impact on intermediate import prices of a devaluation, but this effect takes place with a one year lag only. In the short run the only effect at play is the negative impact of a real depreciation on aggregate supply. Thus in the short run a real devaluation is in fact likely to deteriorate the current account. However, in the longer run the negative impact on investment will reverse this, like in the standard J-curve effect, although through a different mechanism. This means that to restore the CA to its target in the short run a depreciation is needed (the CA curve slopes also upward, like the GM curve; see Fig. 4.B), but in the longer run an appreciation will be necessary, leading to a negative slope (Fig. 4.A). Since this analysis has a medium run focus, we still concentrate on the case where the slope is negative.

What does this analysis suggest will happen if, say because of "inertial" inflation and a fixed nominal exchange rate, the real exchange becomes overvalued? This is represented by the move from E to D in Fig. 4.5.A. First of all, there will be excess supply of domestic goods and hence falling exports, declining capacity utilization, and Keynesian unemployment. What happens to the current account depends on whether the CA curve slopes up or down; if down, it deteriorates when moving from E to D and if up it actually improves. If the two effects wash out, nothing will happen to it. In the medium run however, a deterioration is more likely according to the empirical analysis presented below. If the government responds to the rising unemployment and falling capacity utilization by raising government purchases of domestic goods rather than devaluing, the GM curve shifts to the left and the commodity market problem is resolved. However, especially if this fiscal expansion is not matched by increased revenues, the CA will deteriorate and the CA curve shifts up. This means that the original CA target will increasingly get out of reach. Thus an overvalued exchange rate will lead to unemployment and possibly to a deteriorating CA as time goes by, or to no unemployment but a real CA problem if fiscal policy is used to offset the employment effects of the overvalued exchange rate. In this case the appropriate policy response to falling exports and sluggish capacity utilization is in fact a real depreciation, to which a nominal depreciation may contribute.

Of course, like in the preceding subsection, interest rate arbitrage takes away one degree of freedom: the real interest rate, for given rate of depreciation, confines the economy to the line at  $r^* + \hat{e}$ . It will also pin down the growth rate, for given any public investment program; this can be seen in the left quadrant of diagram 4.

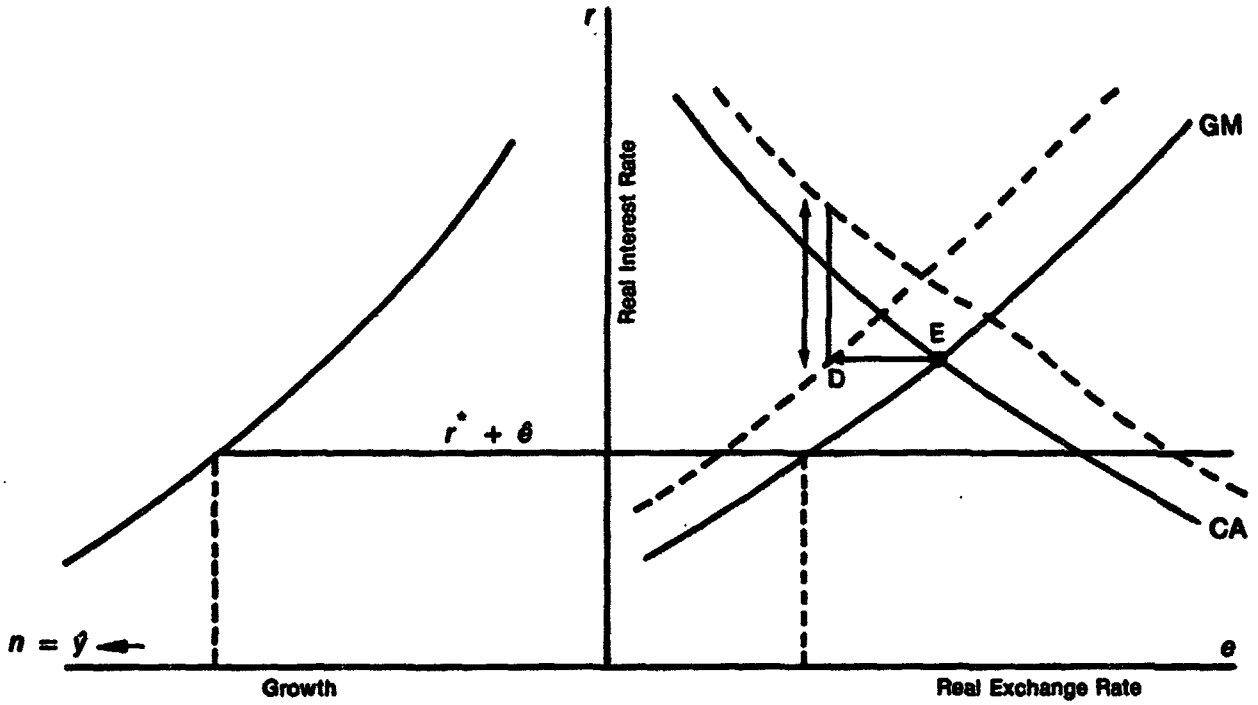


Figure 4.A

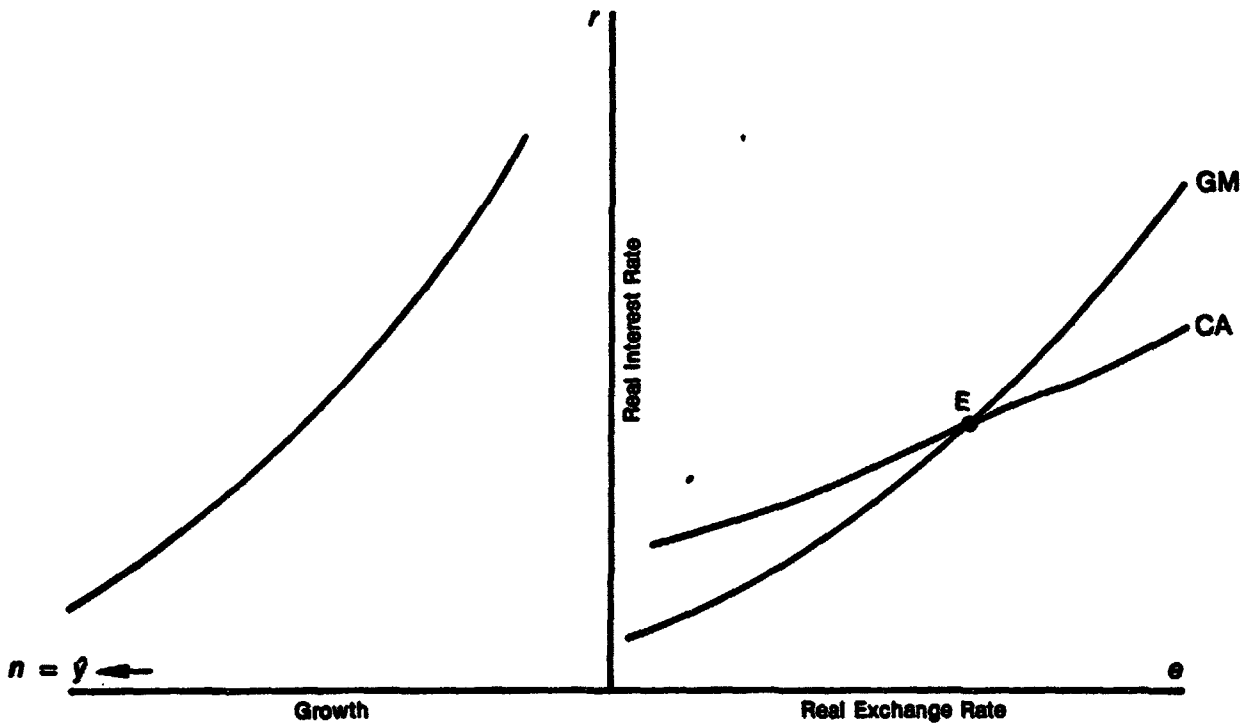


Figure 4.B

**B.4 Empirical Results****Aggregate Supply and Aggregate Demand**

Consider first aggregate expenditure. Government expenditure, both on consumption and on capital goods, is considered a policy instrument. Consumption expenditure depends on estimates of permanent and temporary income, and on the after tax real rate of interest. The measure of permanent income is based on a simple trend regression of real disposable income on time, with a trend break from 1984 onwards (i.e. the decline in 1983 is interpreted as a surprise). The results of this regression are:

$$(1) \quad \log(y_{DR,t}) = 2.19 + (0.063 - D83PLUS*0.017)*t$$

(64.9)    (21.3)                    (7.21)

$R^2=0.96$   $DW=1.58$  1965-1987

Inflationary expectations are derived from a four year weighted average of actual CPI inflation rates. The predicted value of this weighting procedure is used in the calculation of real after tax interest rates. The nominal rate used is the nominal after tax time deposit rate series presented in Gil-Diaz (1988) for 1965-1986, and the three month after tax time deposit rate for 1987. With these definitions of temporary and permanent income and of the real interest rate, the econometric results for private consumption are:

$$(2) \quad \log(C_{pr,t}) = 5.18 - 0.44 \log(1+rr_{TD,t}) + 0.70*\log(Y_{DR,T})$$

(25.6) (1.83)                                    (4.41)

$$+ 0.86*\log(Y_{DR,T})$$

(12.2)

$R^2=0.97$ ,  $DW=1.14$ , 1970-1987

The results are promising; a coefficient with respect to permanent income that is highly significant, but not significantly different from one; a coefficient on temporary income that is significantly lower than the coefficient on permanent income; and, finally, a significant (at the 10 percent level) and negative coefficient on the real after tax deposit rate. However, the low value of the DW coefficient indicates some remaining specification error. The regression results deteriorated significantly when the real exchange rate was included; that variable never received significant coefficients and was thus omitted. This finding has important consequences for the assessment of the impact of a real devaluation on the current account.

The second interest sensitive component of aggregate expenditure is private investment (fixed capital formation). Private investment depends on real interest rates, the relative price of intermediate inputs and the output capital ratio as a proxy of capacity utilization, for which no data are available before 1980. The real interest rate used is based on the pre-tax nominal interest rate reported in Gil-Diaz (1988); this rate is converted into a real rate using a VAR of GNP deflator inflation on its own past values going back three years, plus

a constant term. The predicted values of this equation are used as proxy for inflationary expectations; this proxy, in turn, is used to derive the real interest rate,  $rr_{GNP}$ . The measure of intermediate imports prices is the dollar-based unit-value of intermediate imports deflated by the dollar-based Mexican GNP deflator. This yields the following results:

$$(3) \quad \log(I_{pr,t}) = 0.75 - 0.60*\log(1+rr_{GNP}(-1)) - 0.26*\log(1+rrr_{GNP}(-2)) + 1.59*\log(y_t/K_t) - 0.30*\log(P_{Mint}(-1))*E(-1)/P_{GNP}(-1)$$

(0.80) (2.64) (1.05) +  
(7.18) (2.12)

$R^2=0.95$ ,  $DW=1.23$ , 1970-1987

The results show a strong negative dependence of private fixed capital formation on real interest rates and on the relative price of intermediate imports in terms of final goods. Both enter with a lag, as should be expected;  $I_{pr}$  is actual investment expenditure, not orders.

Private investment and consumption expenditure plus total government expenditure and inventory accumulation (considered exogenous in the current version of the model) make up aggregate expenditure.

Aggregate supply of non-oil Mexican goods depends on the beginning of period capital stock, on the relative price of intermediate imports and on the relative final price of Mexican goods in terms of an index of foreign competitors prices abroad. The latter is measured as an aggregate of the dollar-based WPI in Mexico's main trading partners, with 1980 export weights.

$$(4) \quad \log(y_t/K_t) = - 2.02 + 0.39*\log(P_{GNP}/P_f) + 0.18*\log(P_{GNP}(-1)/P_z(-1)) - 0.13*PDL(\log(P_{Mint}(-1)/P_{GNP}(-1)))$$

(2.15) (5.51) (2.95)  
(1.64)

$R^2=0.96$ ,  $DW=1.38$ , 1974-1987

The equation shows a strong positive response to the (inverse of the) real exchange rate: a real appreciation increases aggregate supply. Also, an increase in the relative price of intermediate imports or a decrease in the capital stock both lower aggregate supply.

Aggregate employment,  $N_t$ , depends on the real product wage and on aggregate non-oil output:

$$(5) \quad \log(N_t) - \log(N_{t-1}) = 0.006 - 0.13*(\log(W/P_{GNP}) - \log(W(-1)/P_{GNP}(-1))) + 0.54*(\log(y_t) - \log(y_{t-1}))$$

(1.11) (1.87)  
(5.22)

$R^2=0.67$ ,  $DW=1.74$ , 1966-1987

A small negative real wage elasticity, significant at a ten percent level, and an income elasticity substantially below one.



Next year's capital stock depends on this year's and on total fixed capital formation:

$$(6) \quad K_{t+1} = (1-0.04)*K_t + (I_{pr,t}+I_{g,t})$$

The assumption of a four percent depreciation rate is based on SPP data with some correction for the likely understatement of true depreciation in the national accounts in inflationary periods due to historical cost accounting practices.

The intertemporal part of the model is rounded out by the current account identity:

$$(7) \quad CA = y_t + X_{oil} * P_{oil,s} * E/P_{GNP} - i * B_{r,SE}/P_{GNP} - C_{pr,t} - I_{pr,t} - G_t$$

## B.2 Allocation of Expenditure and the Real Exchange Rate

The part of the model presented in the previous section focused mostly on intertemporal trade. It thus dealt with the allocation of current production and expenditure over the present and future periods, rather than over domestic and foreign goods. In line with that focus, the most important relative price variable was the real interest rate. In this section, the focus is intratemporal trade, allocation of expenditure over current Mexican versus current future goods, and the relevant relative price variable is the real exchange rate.

Consider first the allocation of domestic expenditure over foreign and domestic goods. We do this by explicitly estimating import demand equations for the different import categories. The volume of capital goods imported,  $M_{cap}$ , depends on the relative price of capital goods imports versus investment goods in general ( the GNP deflator for investment) and on aggregate investment:

$$(7) \quad \log(M_{cap}) =$$

$$14.11 - 1.12 * \log(P_{mcap,s} E/P_{INV}) - 0.74 * \log(P_{mcap,s}(-1) E(-1)/P_{INV}(-1))$$

(5.93) (5.63) (2.72)

$$+ 0.71 * \log(I_{pr} + I_g) - 0.88 * MQUSH(-1)$$

(5.77) (4.52)

$R^2=0.94$ ,  $DW=1.40$ , 1970-1987

The variable MQUSH is the fraction of imports covered by QRs; it is included in an admittedly crude attempt to capture to many changes in trade regime that have taken place in Mexico over the sample period. The results show relatively high elasticities, all estimated with great precision ( high t-statistics). The trade regime variable seems to pick up the degree of repressiveness of the trade regime: it enters with a strong negative sign.

Consider next consumption goods imports,  $M_{con}$ :

$$(8) \quad \log(\text{Mcon}) =$$

$$2.34 - 2.12 \cdot \log(P_{\text{mcon},s}^E / P_{\text{CPI}}) - 1.23 \cdot \log(P_{\text{mcon},s}^{(-1)E(-1)} / P_{\text{CPI}}^{(-1)})$$

$$(0.94) \qquad (4.85) \quad (2.7)$$

$$+ 1.31 \cdot \log(C_{\text{pr}}) - 0.96 \cdot \text{MQUSH}(-1)$$

$$(4.15) \qquad (2.54)$$

R<sup>2</sup>=0.82, DW=1.54, 1970-1987

Once again high and significant price elasticities and a strong negative impact of the proxy for trade intervention. Finally demand for intermediate imports, Mint:

$$(9) \quad \log(\text{Mint}) = - 18.7 - 0.64 \cdot \log(P_{\text{mint},s}^E / P_{\text{GNP}}) + 2.84 \cdot \log(y)$$

$$(2.20) \quad (5.29) \qquad (10.2)$$

$$- 0.96 \cdot \text{MQUSH}(-1)$$

$$(1.34)$$

R =0.91, DW=1.40, 1970-1987

This equation shows a somewhat lower, although highly significant price elasticity, and an unusually high income elasticity.

One can deduce total demand for Mexican goods by domestic residents in any given period by combining the import demand equations with the equations for aggregate domestic expenditure, and scaling by the relevant relative prices. To complete the analysis of commodity market equilibrium in the market for (non-oil) Mexican goods, an additional element is needed, however: foreign demand for Mexican goods or export demand.

In the specification of the export demand equation, we assumed that Mexican exporters compete not so much with domestic producers in Mexico's export markets, but with other exporters to the same markets. This is a reasonable assumption, given that Mexico's two main export markets are the US and the EEC. Empirical analysis for other developing countries tends to confirm this view ( cf Kharas (1988), van Wijnbergen and Arslan (1989)). This means that the relevant activity variable is aggregate imports into Mexico's export markets (weighted by their share in Mexico's total exports), and the relevant relative price variable is the ratio of Mexico's export price over the aggregate price index of imports into Mexico's export markets. This yields:

$$(10) \quad \log(\text{XD}_{\text{noil}} / \text{XD}_{\text{noil}}^{(-1)}) = 1.55 - 0.95 \cdot \log(\text{RPXPF} / \text{RPXPF}^{(-1)})$$

$$(0.96) \quad (2.79)$$

$$- 0.12 \cdot \log(\text{RPXPF}^{(-1)} / \text{RPXPF}^{(-2)}) + 1.50 \cdot \log(\text{MF} / \text{MF}^{(-1)})$$

$$(0.40) \qquad (3.38)$$

R<sup>2</sup>=0.59, DW=2.56, 1968-1987

where RPXPF=(P<sub>X,s</sub>/P<sub>MF</sub>), the dollar price of Mexican non-oil exports over the aggregate dollar-based price index of imports into Mexico's export markets. MF is the volume of imports into those markets (again, weighted by each country's

share in Mexico's total non-oil exports). Analysis of the error structure suggested estimation in terms of rates of change rather than of (log) levels. The equation performs reasonably well: significant price elasticities and a high, significant "income" elasticity. However it would probably be useful to distinguish different export markets.

The model is completed by a commodity market clearing equation for current Mexican non-oil goods:

$$(11) \quad y_t = C_{pr,d} + I_{pr,d} + G_d + XD_{noil}$$

In this set-up, the relative price of exports in terms of aggregate home goods,  $RPXPF = (P_{X,s}/P_{MP})$ , is considered exogenous. This is relaxed in the next section.

An Extension: Export Supply Considered Explicitly

In the analysis presented so far, no explicit distinction was made between supply of home goods for domestic versus for foreign markets. Hence there is only one domestic output price. In practice however, it is more than likely that such an explicit supply does exist, either because of product differentiation or because of non-competitive market structure and different degrees of competition in home and foreign markets. A shorthand way of capturing this would be to endogenise the relative price of exports versus goods sold at home and estimate an explicit export supply function, according to which firms choose to sell at home or abroad depending on that relative price. Commodity market equilibrium would then involve two separate equations, one for goods sold at home and one for goods sold abroad.

$$(12) \quad \log(XS_{noil}/y_t) - \log(XS_{noil}(-1)/y_t(-1)) =$$

$$0.12 + 0.12*\log(RPKY/RPKY(-1)) + 0.51*\log(RPKY(-1)/RPKY(-2))$$

$$(0.41) \quad (0.63) \quad (2.76)$$

$R_2 = -0.31$ ,  $DW = 1.97$ , 1966-1987

with  $RPKY = P_{X,s}E/P_{GNP}$ . The  $R^2$  is low, as is to be expected for an equation estimated in rates of change; but supply elasticity with respect to price is significant and of the "right" sign. In this set-up, equation (11) is replaced by commodity market clearing for goods sold at home and for goods sold abroad:

$$(11a) \quad y_t - XS_{noil} = C_{pr,d} + I_{pr,d} + G_d$$

$$(11b) \quad XS_{noil} = XD_{noil}$$

The extra relative price variable is  $RPKY$ .

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MEXICO  
FINANCIAL SECTOR ADJUSTMENT LOAN

Key Macroeconomic Indicators

	Actual				Projected					
	1985	1986	1987 p/	1988 e/	1989	1990	1991	1992	1993	1994
GDP	2.7	-4.6	1.4	1.1	2.0	3.5	3.5	4.1	4.6	4.9
GDP/Capita Growth Rate	-0.1	-1.4	0.4	-0.9	0.0	1.5	1.5	2.0	2.0	2.0
Consumption/Capita Growth Rate	-0.8	-7.7	-0.9	2.2	0.7	-1.0	-0.8	-0.2	3.0	4.4
Total DOD (US\$, Bill)	90875	101054	107892	104100	109503	113520	117509	120032	123933	127704
DOD/XG&NFS	350.9	402.0	392.0	300.2	330.9	316.1	290.3	270.4	257.2	240.5
DOD/GDP	53.1	77.9	75.4	50.8	54.0	54.0	54.9	52.1	49.2	40.5
Debt Service (US\$, Bill)	13700	12014	13314	17404	10713	10273	10153	10504	10374	10002
Debt Service/XG&NFS	49.0	50.0	49.4	60.5	51.7	50.9	45.7	42.5	38.1	31.0
Debt Service/GDP	8.2	9.9	9.3	9.9	8.3	8.0	8.5	8.0	7.3	6.1
Interest/XG&NFS	30.0	30.1	29.5	30.7	33.0	31.7	28.3	25.4	22.7	20.3
Interest/GDP	6.1	6.4	5.7	5.0	5.5	5.5	5.2	4.8	4.3	3.9
Gross Investment/GDP	21.9	18.5	18.0	20.3	19.0	21.5	23.0	25.7	25.0	25.3
Change of Stocks	2.7	0.9	0.2	1.0	1.2	1.2	1.2	1.2	1.2	1.2
Private	1.7	0.0	-0.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Public	1.0	0.1	-0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Capital Formation	19.2	17.0	18.0	18.5	17.0	20.3	22.4	24.5	24.0	24.1
Private/GDP	13.2	11.0	13.4	14.1	13.0	15.0	17.5	19.2	18.0	19.1
Public/GDP	6.0	6.0	5.5	4.4	4.2	4.5	4.9	5.3	5.0	6.0
National Savings/GDP	22.0	17.2	21.3	18.7	17.1	19.0	21.9	23.9	24.0	23.3
Gross Private Savings	19.5	16.0	13.5	10.2	15.0	16.0	14.5	15.5	15.0	15.0
Gross Public Savings	3.1	1.2	7.9	0.5	2.1	3.0	7.4	8.4	0.4	7.5
Gross Domestic Savings	20.0	22.0	25.0	22.0	21.4	24.1	26.0	27.7	27.5	26.5
Exports of G&NFS Real Growth Rates	-4.1	1.5	12.2	7.3	4.2	5.7	5.7	5.9	5.9	6.0
Non-Oil Export of G&NFS Growth Rate	-2.2	1.0	11.0	0.0	7.4	7.4	7.3	7.4	7.4	7.4
Exports/GDP	15.4	16.9	19.2	10.3	10.1	17.3	10.5	10.9	10.1	10.3
Imports of G&NFS Real Growth Rates	13.3	-14.4	1.9	33.9	5.7	5.0	8.1	0.0	0.1	9.1
Imports/GDP	10.5	12.0	12.0	14.0	13.7	14.7	10.1	10.9	17.4	10.1
Current Account (US\$, Bill)	1287	-1073	3001	-2927	-3020	-3505	-3079	-4217	-4005	-5500
Current Account/GDP	0.7	-1.3	2.7	-1.7	-1.9	-1.7	-1.7	-1.0	-1.0	-2.0
Resource Balance/GDP	4.9	4.3	7.3	2.3	2.4	2.0	2.4	2.0	1.7	1.2
Terms of Trade (1985=100)	-1.2	-30.0	14.1	-10.5	2.2	0.0	0.0	0.0	0.0	0.0
Primary Balance/GDP	5.0	3.4	4.9	5.0	7.4 <sup>1/</sup>	7.1	8.2	8.0	7.7	6.3
Operational Balance/GDP	-3.9	-4.9	2.5	-4.4	-2.7 <sup>1/</sup>	-1.3	1.9	2.5	2.0	0.9
Memorandum Item										
Oil price (US\$ per barrel)	25.4	11.0	10.2	12.2	14.0	14.7	15.4	10.0	10.0	17.3

1/ In addition, the government expects to raise 0.4% of GDP in 1989 through assets sales.

Sources: Government figures and Bank staff estimates.

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MEXICO  
FINANCIAL SECTOR ADJUSTMENT LOAN  
Balance of Payments

	1985	1986	1987	1988 e/	1989	1990	1991	1992	1993	1994
<b>A. Exports of Goods &amp; NFS</b>	27669	21875	27520	28905	32337	35911	39690	43712	48179	53142
1. Merchandise	21664	16931	20656	20658	23037	25419	27923	30569	33580	36749
Oil	14767	6307	8030	6709	7307	7672	8617	8338	8672	9618
Non-Oil	6897	9724	12626	13949	15730	17747	19065	22231	24829	27730
2. Non-Factor Services	5945	5844	6264	8247	9300	10492	11768	13143	14679	16394
In-Bond Industries	1268	1295	1598	2326	2623	2959	3319	3707	4140	4624
<b>B. Imports of Goods &amp; NFS</b>	18475	16312	17111	24814	27528	30573	34532	39062	43926	49845
1. Merchandise	18212	11432	12223	18993	20970	23290	26306	29757	33462	37971
2. Non-Factor Services	5263	4880	4888	5911	6557	7283	8226	9305	10464	11874
<b>C. Resource Balance</b>	9134	5563	10409	4091	4809	5330	5150	4650	4253	3297
<b>D. Net Factor Income</b>	-8698	-7761	-7196	-7593	-9238	-9537	-9580	-9550	-9574	-9611
1. Factor Receipts	2136	1915	2248	2781	2837	3027	3045	3021	2939	2848
Other Interest	446	349	649	1064	764	916	974	992	948	892
Interests Retained Abroad	1376	1114	1269	1288	1600	1600	1520	1440	1360	1280
Workers Remittances	314	352	391	437	473	511	550	589	631	676
2. Factor Payments	11634	9516	9444	10374	12675	12603	12544	12577	12513	12450
Interest Payments	10150	8342	8116	8877	10945	11394	11232	11123	10954	10788
Remitted Dividends	388	335	385	485	427	448	504	509	616	666
Reinvested Dividends	232	587	662	749	427	440	504	509	616	666
Other	266	252	281	283	276	290	303	315	320	341
3. Net Transfers	1002	465	668	575	684	634	663	689	717	745
<b>E. Current Account Balance</b>	1237	-1673	3881	-2927	-3926	-3505	-3679	-4217	-4605	-5568
<b>F. Long-Term Capital Inflow</b>	291	1146	4356	276	7529	6099	6464	5916	5965	6848
1. Direct Investment	491	1523	3248	2980	2852	2154	2403	2673	2863	2998
a. New Foreign Investment	270	944	2386	2132	1625	1714	1899	2104	2247	2332
b. Reinvestments	232	587	662	749	427	440	504	509	616	666
c. Other	-10	-9	200	100	0	0	0	0	0	0
2. Net LT loans	294	1622	4636	-2935	5477	3945	4061	3242	3102	3850
a. Disbursements	5326	6331	9326	5672	11244	10924	10991	10704	10522	9966
of which: financing gap	0	0	0	-0	5398	5510	6391	7130	7197	6480
b. Repayments	5122	4709	4690	8607	5767	6979	6928	7462	7420	6116
3. Other Items (Net)	-434	-1999	-3522	230	--	--	--	--	--	--
<b>G. Other Items (Net)</b>	-3026	1512	-1313	-4475	-1600	-1600	-1520	-1440	-1360	-1280
1. Net Short Term Capital	-1798	691	-3157	-3610	--	--	--	--	--	--
2. Errors and Omissions	-2038	821	1844	-864	--	--	--	--	--	--
<b>H. Change in Gross Reserves</b>	-2320	985	6924	-7127	2103	984	1295	259	0	0
1. Use of IMF Credit	610	1091	1103	-104	612	36	37	-578	-744	-608
2. Changes in Net Reserves	-2930	-106	5821	-7023	1491	948	1228	837	744	608
<b>Shares of GDP (current US\$)</b>										
1. Resource Balance	4.9	4.3	7.3	2.3	2.4	2.6	2.4	2.0	1.7	1.2
2. Total Interest Payments	6.1	6.4	5.7	5.0	5.5	5.5	5.2	4.8	4.3	3.9
3. Current Account Balance	0.7	-1.3	2.7	-1.7	-1.9	-1.7	-1.7	-1.8	-1.8	-2.0
4. LT Capital Inflow	0.1	1.2	3.2	-1.7	2.7	1.9	1.9	1.4	1.2	1.4
5. Net Credit from the IMF	0.3	0.8	0.8	-0.1	0.3	0.0	0.0	-0.2	-0.3	-0.2
<b>Memorandum Item</b>										
GDP (Millions of US\$)	102347	129001	143126	177111	200095	207869	214212	231780	252152	274984
<b>Foreign Exchange Reserves</b>										
1. Net International Reserves	2833	2757	8578	1555	3946	3944	5172	6009	6753	7421
2. Gross International Reserves	5806	6791	13715	6508	8091	9625	10890	11149	11149	11149
3. Gross Reserves in Months Imports	1.8	2.6	4.5	2.0	2.3	2.4	2.5	2.4	2.2	2.0
<b>Exchange Rates</b>										
1. Nominal Official X-Rate	257.0	611.4	1306	2250	2492	2854	3298	3646	4032	4458
2. Real Effective X-Rate Base 1985	111.7	145.9	151.4	122.4	118.3	122.1	128.2	128.2	128.2	128.2

Sources: Government figures and Bank staff estimates.

## FINANCIAL SECTOR ADJUSTMENT LOAN

## Projected Foreign Exchange Requirements

	1985-88	1989-90	1991-94	1989-94
<b>Gross Disbursements</b>				
Multilateral	5,420	4,893	8,360	13,253
of which: IBRD	4,479	4,450	7,186	11,635
Bilateral	5,783	3,576	5,100	8,678
Private	18,359	10	0	10
IMF Purchases	2,436	2,682	1,515	4,197
Financing Gap	0	10,907	27,198	38,105
<b>Total</b>	<b>31,998</b>	<b>22,069</b>	<b>42,173</b>	<b>64,241</b>
<b>Net Disbursements</b>				
Multilateral	2,893	2,879	1,729	4,608
of which: IBRD	2,466	2,894	1,873	4,768
Bilateral	3,000	1,703	1,494	3,197
Private	2,428	(6,716)	(13,178)	(19,894)
IMF Purchases	1,748	648	(1,953)	(1,305)
Financing Gap	0	10,907	27,198	38,105
<b>Total</b>	<b>10,061</b>	<b>9,422</b>	<b>15,289</b>	<b>24,712</b>

## Debt Service Assumptions

	1989-90	1991-94	1989-94				
<b>Principal Repayments</b>							
Multilateral	2,013	6,632	8,645				
of which: IBRD	1,555	5,313	6,868				
Bilateral: Scheduled	1,873	3,666	5,479				
Projected	1,873	4,640	6,513				
Private: Scheduled	6,726	11,404	18,130				
Projected	6,726	13,178	19,904				
IMF: Scheduled	2,034	2,776	4,810				
Projected	2,034	3,468	5,502				
Financing Gap: Scheduled	0	0	0				
Projected	0	0	0				
<b>Total: Scheduled</b>	<b>12,646</b>	<b>24,418</b>	<b>37,064</b>				
<b>  Projected</b>	<b>12,646</b>	<b>27,917</b>	<b>40,564</b>				
<b>Interest Payments</b>							
Multilateral	1,928	4,620	6,548				
of which: IBRD	1,424	3,786	5,190				
Bilateral	1,683	3,263	4,945				
Private	15,258	21,754	37,012				
IMF	881	1,509	2,390				
Financing Gap	1,173	9,184	10,357				
<b>Total</b>	<b>22,339</b>	<b>44,095</b>	<b>66,434</b>				
<b>Key Ratios</b>							
	1988	1989	1990	1991	1992	1993	1994
Interest/XGS	32.2	36.0	33.9	29.9	26.4	23.4	20.5
DOD/XGS	328.6	311.6	291.6	275.2	258.6	242.4	228.2
Net Disbursements/Interest	-33.1	50.0	34.6	36.2	29.1	28.3	35.7
Net Transfers/GDP	-6.7	-2.7	-3.6	-3.3	-3.4	-3.1	-2.5

Sources: Government figures and Bank staff estimates.



MEXICO  
FINANCIAL SECTOR LOAN

Financing Requirements: 1989-94

Sources and Needs of Foreign Exchange 1/  
(in billions of US\$)

1989-91			
Needs		Sources	
Current Account Deficit	11.1	Direct Foreign Investm.	6.6
of which: Interest Paym	33.6	Multilaterals (net)	4.3
Other Capital	4.7	of which: IBRD	3.6
Gross Reserves	4.3	Bilaterals (net)	2.1
Amort. Commercial Banks	6.6		
Other Creditors (net)	4.2	Total Identified Inflows	13.6
		Financing Gap	17.3
-----		-----	
Total	30.3	Total	30.3

1992-94			
Needs		Sources	
Current Account Deficit	14.4	Direct Foreign Investm.	8.5
of which: Interest Paym	32.9	Multilaterals (net)	-1.6
Other Capital	4.1	of which: IBRD	1.2
Gross Reserves	6.3	Bilaterals (net)	0.1
Amort. Commercial Banks	7.4		
Other Creditors (net)	2.3	Total Identified Inflows	7.6
		Financing Gap	26.8
-----		-----	
Total	26.4	Total	26.4

1989-94			
Needs		Sources	
Current Account Deficit	25.5	Direct Foreign Investm.	15.1
of which: Interest Paym	66.4	Multilaterals (net)	3.3
Other Capital	8.8	of which: IBRD	4.8
Gross Reserves	4.6	Bilaterals (net)	2.2
Amort. Commercial Banks	13.3		
Other Creditors (net)	6.6	Total Identified Inflows	26.6
		Financing Gap	38.1
-----		-----	
Total	58.7	Total	58.7

1/ Note: Other Capital is the bookkeeping counterpart to the current account item: Interest Retained Abroad.

Sources: Government figures and Bank staff estimates.

MEXICO

FINANCIAL SECTOR ADJUSTMENT LOAN

TECHNICAL ASSISTANCE FOR TAXATION

Background

1. One of the root causes of Mexico's economic crisis in 1982 was the increasingly lax fiscal management in the public sector since the 1970s. After repeated short-lived attempts to stabilize the economy had failed, the Government in 1987 demonstrated the necessary political will to go through with a sustained fiscal reform, in an effort to eliminate the imbalances and distortions in the economy. The program, initially relying heavily on measures designed to contain expenditures, has been extended to focus on priority revenue issues. These measures consisted of a thorough reform of the value added tax system, corporate and personal income tax codes, and tax administration. Despite these measures, the tax base and revenue performance have remained below those of other middle income countries with comparable level of economic development. Therefore, to reinforce the Government's fiscal efforts, a major tax administration program is being launched by the Secretariat of Finance and Public Credit (SHCP), which would be supported through a technical assistance component under the FSL.

2. The SHCP had first introduced modern computing equipment for income tax administration in 1962, with a view to setting up a centralized registry of tax payers, while the regional offices of the fiscal administration continued to operate tax revenues manually. In 1980 manual processing gave way to integrated and fully computerized revenue administration. Eight centers were set up in large cities and the Federal District and one national computing center was created in the capital. In addition, some 45 fiscal administration offices supervised the more than 1300 federal treasury offices that operated throughout the republic. To reduce costs and simplify administration, the number of these treasury offices had been reduced to 278, each serving currently in excess of 15000 tax payers, with responsibility to operate the registry of tax payers, collections, accounting and cashiers.

3. Customs installed a central information system in the 1970s, which supported the operation of 15 control centers. Currently, some 40 customs offices administer Mexico's external trade, covering all ports of entry through all modes of transport. In mid-1988 Mexico introduced the GATT consistent harmonized information system for the documentation and classification of all export and imports, which requires some adjustments in procedures.

Weaknesses of the Existing Systems

4. A major decentralization effort has been undertaken over the last five years, but the process has not yet been completed, because all the

necessary equipment and systems are not yet in place. The task that lies ahead of SHCP is to put in place a system that is internally compatible and allows the central authorities to exercise supervision, control and adequate audit.

5. Efficiency in income tax collection leaves something to be desired, because the existing computer hardware and the software employed are not fully compatible, do not allow supervision with an acceptable confidence level because of limited capacity, make ex-post auditing difficult, and in some instances impossible, leave unduly wide margins for evasion, and the available staff is not well trained at all levels of the nationwide tax administration to reap the full benefit even of the existing systems, let alone the required familiarity with the fully automated system.

6. The national center has two IBM 3031 computers, using an operational system that has not been maintained properly since 1986. IBM 3380 disks are used, which have faster processing speeds, but because of systemic interface problems, the full efficiency of the more modern equipment cannot be achieved. The regional fiscal administration centers are using IBM 43XX computers, with a DOS VSP 2.0 operational system, which are also somewhat obsolete.

7. In view of the above, modernization is required in the national center, both in terms of hardware and software. Of the 45 fiscal administration centers scattered around the nation, some 27 need to improve their computing capacity, in order to improve the quality of supervision and auditing, and to establish a secure control base for information. In addition, some 82 of the 278 federal treasury offices need improved computing equipment to conclude the automation of their various functions, such as registries, collection, accounting and cashiers. As can be seen, the SHCP has already advanced considerably on the upgrading of hardware capacity, but the above additional improvements are urgently needed to conclude the process. Furthermore, considerable improvements will be needed in procedures and software development, to acquire the desired degree of automation, without which SHCP could not fully benefit from the almost complete decentralization of income tax administration.

8. Customs is also faced with new circumstances, which are likely to tax its administrative and informational capacity beyond tolerable limits. The introduction of the new harmonized trade classification system, the unprecedented growth in both imports and non-oil exports in recent years and the need to increase customs revenues by minimizing irregularities and enabling effective audits to be made, all require some improvements in the existing system. The most promising steps are the proposed decentralization and automation of customs administration throughout the 40 entry points, 15 control centers and the information center in the Federal District. Under the existing procedures, the data recorded on magnetic tape is being controlled ex-post, after the merchandise left customs. This involves some 17 steps. The proposed automation would allow that the "pedimento", the merchandise transaction, is checked and controlled, including all 17 steps, before the merchandise is taken out of customs. This would greatly reduce errors and minimize revenue losses.

**Proposed Tax Administration Program**

9. To conclude the decentralization and automation of income tax administration and customs, putting in place procedures which permit proper supervision, ex-ante controls, auditing and secure data base systems, SHCP has undertaken a program to purchase, install and start-up new hardware, develop software systems and train specialized SHCP personnel.

10. New equipment would be provided in 109 treasury and fiscal administration offices, and 56 customs offices. It is proposed that the equipment and systems to be used would be fully consistent between tax and customs administration, so that in case of temporary breakdowns the data disks can be processed without delay using the hardware of the other office.

11. The program is estimated to cost about US\$15.0 million, including a modest contingency allowance of US\$0.5 million, as follows:

<u>Component</u>	<u>Cost in US\$ (millions)</u>
Equipment	10.7
Start-up, software development and training	3.8
Contingencies	<u>0.5</u>
Total Cost	15.0

12. The proposed program would be carried out by several agencies under SHCP under the overall coordination of the Directorate General of Tax Collection. The technical specifications of all equipment to be purchased would be developed by Mexico's statistical office, INEGI, which has responsibility for all computer purchases within the public sector. Budget authorizations for the proposed expenditures would be made by SPP. The "Oficialia Mayor" of SHCP would be the contracting agency, as is the case for all procurement by the Secretariat. The technical assistance program would be directly implemented by the Directorate General of Tax Collection and the Directorate General of Customs. The overall effort is being coordinated personally by the Director General of Tax Collections, whose office has responsibility for improving tax administration in Mexico.



SECRETARIA  
DE  
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MINISTRY OF FINANCE AND PUBLIC CREDIT  
México, D.F. May, 12, 1989

MR. BARBER B. CONABLE  
PRESIDENT  
WORLD BANK  
Washington, D.C.

1. During the last several years and with the purpose of correcting the existing imbalances and distortions in the Mexican economy, the Mexican government has undertaken a comprehensive economic adjustment program. This program has contributed to establish the necessary conditions for the implementation of a medium term economic development program whose main objectives are to resume an adequate rate of economic growth, to consolidate price stability and to promote the gradual recovery of real wages.
2. In order to achieve such objectives, the program requires actions that ensure macroeconomic consistency, while increasing public and private savings, promoting the structural changes required to foster economic efficiency and encouraging productive investment and the recovery of domestic consumption.
3. In order to assure an adequate level of economic growth, Mexico's economic program requires a significant reduction in the net transfer of resources to its external creditors. This reduction will be attained through the combination of debt service and debt service reduction schemes, a multiyear commitment to refinance certain payments due in the next coming years and the restoration of market access to voluntary credit.
4. In December 1988 the government and the various sectors of the Mexican society agreed on the "Pacto para la Estabilidad y Crecimiento Económico" (PECE), with the initial objective of consolidating price stability. In accordance with the PECE, the public sector prices and tariffs were adjusted, minimum wages were increased by 8% and the daily depreciation of the Peso was resumed. Fiscal, monetary and exchange rate policies are consistent with the gradual recovery of investment and production and with the achieved lower levels of inflation and the strengthening of our international reserves.



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5. Both expenditure and income policies for the public sector are in line with the objectives set forth in the 1989 budget approved by Congress. The primary fiscal surplus, after oil price corrections, will be of the order of 7.3% of GDP, the operational deficit will be around 2.5% of GDP, while public sector borrowing will decline to 7% of GDP. Public sector prices and tariffs are consistent with our inflation targets, while protecting the purchasing power of the low income groups, and with the strengthening of the public sector finances and the improvement of the overall allocation of public resources. Every development in this area will be closely monitored to allow for timely adjustments. In order to improve public sector efficiency, the government will further strengthen its planning, budgeting and investment evaluation processes.

6. Mexico has recently undertaken an important tax reform in order to increase its total fiscal revenues, while promoting greater economic efficiency and international competitiveness, and improving income distribution.

7. In an effort to modernize our tax system, the government is studying further measures that will increase the total fiscal base, will lower the tax rates and will simplify the tax collection system, thus improving its administration. To this end, we will continue to decentralize and computerize the process of income tax registration and collection.

8. In order to improve the total fiscal revenue, while giving incentives to the states, municipalities and the Federal District to actively participate in the collection of taxes, several measures will be taken to increase their own share from the collected taxes and to target federal resources to the most needed areas.

9. In order to ensure an efficient financial intermediation and the channeling of resources to productive investment and industrial modernization, the government has taken a series of reforms in the financial sector. Commercial banks were strengthened through merger and capitalization schemes, equity shares were issued and sold in the capital markets, the subsidized credit schemes have been gradually cut back and the money markets regulations have been modernized. In order to stimulate competition, the role of the development banks and trust funds is under current revision and prudential regulations and supervision are being continuously improved. The remaining financial subsidies will be rationalized and more precisely targeted.



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10. Among the measures recently undertaken in order to improve the efficiency and the competitiveness of the financial sector, the interest rates have been liberalized, and forced lending to the government provisions via reserve requirements were eliminated. These measures will necessarily enhance the market efficiency and will stimulate a more competitive environment for the financial institutions, while promoting savings and investment.

11. The federal government has recently outlined the specific actions to be undertaken in order to improve public enterprises efficiency and to rationalize their holding of assets. The number of public enterprises has already been reduced and more non-strategic and non-priority corporations will be sold to the private sector. In order to attain a gradual reduction of fiscal transfers, public enterprises will be strengthened and a more competitive environment will be created.

12. Mexico's active participation in the world economy will stimulate efficiency and will foster economic growth. Trade policies will attain to consolidate a more efficient productive structure and a modern and competitive economy. In addition to the significant reduction of effective protection accomplished during the last years, the Mexican authorities are continuing the process of reducing tariff dispersion and will pursue with the elimination of any remaining distortions.

13. The Government of Mexico has a long standing and very successful record of comprehensive social programs which were put in place to make war against poverty. Upon assuming office, the present Administration launched the "Programa Nacional de Solidaridad" to fight against extreme poverty in the country. The program covers more than 1200 "municipios" in the poorest states, including Chiapas, Guerrero, Oaxaca, Guanajuato, Puebla, Tlaxcala, Querétaro, San Luis Potosí, and Zacatecas. Urban poor in the metropolitan areas of Mexico City, Monterrey, Guadalajara and Zacatecas are addressed through special targeted programs.

14. These programs against poverty aim to provide immediate relief in order to alleviate the short term impact of the adjustment. The various Government agencies are developing long term programs in the different subsectors with a view to improve their targeting and delivery mechanisms.



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15. As a result from the measures outlined in this letter, which as a whole provide a sound, healthy and consistent macroeconomic environment, investment will gradually resume and economic growth will be restored to 6% per annum by 1993. It is clear, however, that fiscal expenditures cannot be the engine for growth, as a permanent reduction in inflation will require sustained fiscal discipline, and the vulnerability of the balance of payments will impose the need for cautious public finance policies and targets over the medium term.

16. Private Sector, both domestic and foreign, will have to undertake a very active participation in productive investment. Economic growth can not be compromised as it constitutes the only means to create the millions of badly needed job opportunities.

17. In order to achieve our growth targets, net transfers to Mexico's external creditors will have to be held below 2% of GDP per year. The Government has reached agreement with the IMF and has initiated discussions with the creditor nation governments, the bilateral agencies and the commercial banks in order to work out arrangements for a multi-year financial program, in line with Mexico's economic objectives and which will recognize Mexico's economic adjustments and accomplishments.

PEDRO ASPE ARMELLA  
MINISTER OF FINANCE AND PUBLIC CREDIT



MEXICO - Financial Sector Adjustment Loan

<u>Issues</u>	<u>Objectives</u>	<u>Actions taken Before Board Presentation</u>	<u>Actions to be taken Before Second Tranche</u> (As of November 30, 1989)	<u>Other Measures</u>
<b>A. <u>Area of Macroeconomic Management and Public Sector Planning</u></b>				
<b>1. <u>Macroeconomic Consistency</u></b>				
- In order to ensure a stable macroeconomic environment in 1989, the projected operational deficit should be consistent with expected inflation, GDP growth and possible foreign borrowing.	- A macroeconomic environment for 1989-90 with low inflation and minimum uncertainty about the main thrust of the economic policy.	- A satisfactory 1989 Budget has been approved by Congress, envisaging: (a) an increase in tax revenues of 0.9% of GDP; and (b) an operational deficit of 2.8% of GDP and a primary surplus of 7.8% of GDP. This is consistent with the macro-economic targets for 1989.	- Satisfactory assessment of the medium-term macroeconomic framework including progress towards more flexible price adjustments.	- Periodic consultations with the Bank on the macroeconomic framework and on progress toward more flexible price adjustments.
<b>2. <u>Public Sector Planning and Budgeting</u></b>				
- Improvements in investment efficiency towards a better planning and budgeting systems.	- Within the overall objective of recovering economic growth via revived investments, the Government needs to achieve greater efficiency in planning, preparing and implementing public investments.			(a) By September 1, 1989 present terms of reference to the Bank for a study of investment evaluation and programming, economic, financial and technical criteria for investment evaluation, establishment of a centralized unit for investment monitoring and issuing manuals; (b) by October 15, 1989 commence

<u>Issues</u>	<u>Objectives</u>	<u>Actions taken</u> <u>Before Board Presentation</u>	<u>Actions to be taken</u> <u>Before Second Tranche</u> (As of November 30, 1989)	<u>Other Measures</u>
8. <u>Public Sector Revenues</u>	- Increases in tax revenues through tax reform and improved tax administration.	- To increase tax revenues in a sustainable manner, a Technical Assistance component has been included in the project to help implement measures to improve tax administration.	- Corporate tax changes that have been implemented in the 1989 budget and action taken to improve tax administration are expected to reverse erosion of corporate taxes.	such study; (c) by April 15, 1990 provide to, and discuss with Bank an acceptable Plan of Action for measures in respect of (a) above; and (d) monitor implementation of new budgeting and payment procedures for externally funded investment projects, and exchange views, by August 31, 1989, with the Bank on implementation of additional measures, if necessary.
- Erosion in tax base, cumbersome tax administration.				

<u>Issues</u>	<u>Objectives</u>	<u>Actions taken Before Board Presentation</u>	<u>Actions to be taken Before Second Tranche (As of November 30, 1989)</u>	<u>Other Measures</u>
<b>4. <u>State and Local Finances</u></b>				
- Fall in the state governments' own tax revenues.	- Improvement in own tax raising efforts.		- The 1990 Budget to be presented to the consideration of Congress will include an action program to gradually reduce non-matching grants to the states. According to the Plan, expenditures of line Ministries in the states (i.e., non-matching grants), additional over 1989 levels, will be spent in an increasing manner thru Razo 26 (i.e., PDR/PNS development programs), which requires states to match these expenditures.	
- Very serious deterioration in user charges and property taxes in the Federal District, requiring mounting transfers to cover services.	- Reduce budget transfers to the Federal District.		- Action Program, for increases in the Federal District's self-generated revenues by at least 10% in real terms in its 1990 Budget to be presented to the consideration of Congress with respect to the actual 1988 level.	
<b>B. <u>Financial Sector</u></b>				
<b>1. <u>Forced Lending to Public Sector</u></b>				
- Private Sector had extremely limited access to banking sector funds, because banks were forced to lend a large part of their funds to the Government and other favored sectors of the economy.	- Commercial banks should not be compelled to lend to the government or to any sector. Their lending should respond to market forces.	- Recent reforms have eliminated forced lending to the Government and other favored sectors of the economy.		

Issues	Objectives	Actions taken Before Board Presentation	Actions to be taken Before Second Tranche (As of November 30, 1989)	Other Measures
2. <u>Competitive Environment</u>				
- Reduced bank competition and deposit mobilization.	- To foster greater competition between banks thereby raising efficiency, and to mobilize more deposits.	- Interest rates on Bank deposits have been liberalized; Transfer of client's balances between banks and brokerage houses has been allowed; these reforms have put these institutions on an equal footing.		
3. <u>Development Banks and Credit Subsidies</u>				
- Role of Development Banks and Trust Funds unclear.	- To improve administrative efficiency and ensure that subsidies are well targeted and controlled.	- New loans through Development Banks and Trust Funds will not carry any interest subsidies, except for those to low income producers in agriculture (PBI). Therefore, average subsidy level will decline as existing sub-loans mature. Subsidies will be measured in comparison to the average cost of funds (CPP). Subsidies to PBIs will not exceed, as a percentage of GDP, the level of 1988.	- Action Programs, for the redefinition of the role of each Trust Fund and Development Banks, including in particular a review of the operations and finances of NAFIN, BANCOMEXT and BANDERAS, and restructuring of BanRural and ANAQSA; so that their efficiency of operations will improve, and fiscal transfers through BanRural and ANAQSA would be substantially reduced. In the meantime, the fiscal transfers through the Budget to BanRural and ANAQSA will not exceed the budgeted level approved by Congress for 1989 (0.27% of GDP); except debt assumptions that are part of the agreed upon financial restructuring agreements.	

<u>Issues</u>	<u>Objectives</u>	<u>Actions taken Before Board Presentation</u>	<u>Actions to be taken Before Second Tranche</u> (As of November 30, 1989)	<u>Other Measures</u>
4. <u>Bank Regulations and Supervision</u>	- To safeguard the solvency of the banking system and brokers.	- Terms of Reference of a study of prudential regulations and supervision to be submitted for Bank review by May 15. <sup>1/</sup>	Transfers are defined to include transfers through the budget and assumptions of portfolio losses. In addition, the Government will take the necessary actions so as to fully eliminate in 1990 the implicit transfers arising from the capitalization of IBRD and IDB loans through FICART, as was proposed and approved by Congress in the 1989 Budget.	
- Need to strengthen supervision of commercial Banks, and brokerage houses (prudential regulations).			- Action Program for the strengthening of prudential supervision. This Action Program is expected to address, among others, the following areas: (a) classify banks' loan portfolios according to default risk; (b) more stringent provisioning for loan losses and interest accruals; (c) disclose the state of each bank's financial state in detail to the public; and (d) improve and enforce the supervision of brokers.	

<sup>1/</sup> Condition already met.

Issues	Objectives	Actions taken Before Before Board Presentation	Actions to be taken Before Second Tranche (As of November 30, 1989)	Other Measures
D. <u>Social Sectors</u>				
- Declining public expenditures have reduced outlays for social programs. Service levels in the different regions are uneven.	- Improve delivery mechanisms of social programs targeted to the truly needy.	- The "Programa Nacional de Solidaridad," launched in December 1988, adequately addresses the issues of extreme poverty and helps alleviate the short term impact of adjustment under an action plan affecting 1200 "municipios". The 1989 budget allocation approved by Congress is US\$480 million equivalent, the Executive Branch will propose to Congress an increase for 1990.	- Satisfactory implementation of the Program.	
E. <u>External Finance</u>				
- Mexico's adjustment program and recovery of growth needs external financing in an amount necessary to cover the current account deficit and maintain reserves at reasonable levels.	- Ensure adequate financing consistent with adjustment and growth targets.		- Continued substantial progress in obtaining adequate financing for Mexico's requirements for 1989 and 1990 and the medium term in the context of the adjustment program and growth targets set forth in "Mexico's Economic Strategy" issued by SHCP.	- <u>By effectiveness.</u> Substantial progress has been made in obtaining adequate financing for Mexico's requirements for 1989 and 1990 in the context of the adjustment program and growth targets set forth in "Mexico's Economic Strategy" issued by SHCP.

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# MEXICO

- National capital
- State capitals
- Principal cities or towns
- Divided highways
- Selected main roads
- Railroads
- Rivers
- Principal airports
- State boundaries
- International boundaries

PACIFIC OCEAN

Gulf of Mexico

Bay of Campeche

KILOMETERS 0 100 200 300 400 500  
 MILES 0 100 200 300

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