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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 HEALTH SYSTEM REFORM - IMSS
ADJUSTMENT LOAN
IN AN AMOUNT OF US$700 MILLION
TO BANCO NACIONAL DE OBRAS Y SERVICIOS, S.N.C.
WITH THE GUARANTEE
OF THE UNITED MEXICAN STATES

May 18, 1998

CURRENCY EQUIVALENTS

Currency Unit: Peso (P$)
US$1.00 = P$8.4 Pesos (May 1998)

FISCAL YEAR

January 1 - December 31

ABBREVIATIONS AND ACRONYMS

BANOBRAS	*Banco Nacional de Obras y Servicios Publicos,* S.N.C.
APL	Adjustable Program Loan
CAS	Country Assistance Strategy
DDF	Health Department of the Federal District
DRGs	Diagnosis-related groups
EAP	Economically Active Population
FONASA	Chilean National Health Insurance Fund
FUNSALUD	Mexican Health Foundation
GDP	Gross Domestic Product
GOM	Government of Mexico
HMO	Health Maintenance Organization
IDF	Innovative Development Fund
IMF	International Monetary Fund
IMSS	Mexican Social Security Institute for Private Sector Employees
IMSS/Solidaridad	Special Basic Health Program for the Uninsured
ISSFAM	Institute of Social Security for the Armed Forces
ISSSTE	Social Security Institute for Public Employees
IVRO	Voluntary affiliation to IMSS insurance
M&E	Monitoring & Evaluation
MAU	Medical Area Unit
MCO	Managed Care Organization
OECD	Organization for Economic Cooperation and Development
PCU	Project Coordination Unit
PEMEX	National Mexico Petroleum Company
RJP	*Régimen de Jubilaciones y Pensiones*: Complementary pension plan for IMSS workers
SECODAM	Ministry of Comptrollership and Administrative Development
SEyM	IMSS Health and Maternity Insurance
SH	Specialty Hospitals
SHCP	Ministry of Finance
SSA	Secretariat of Health
SSFAM	Family Health Insurance Program
SSHF	Social Security Health Fund
SSL	Social Security Law
TAL	Technical Assistance Loan

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MEXICO
HEALTH SYSTEM REFORM – IMSS

LOAN SUMMARY

Borrower: *Banco Nacional de Obras y Servicios Publicos,* S.N.C. (BANOBRAS)

Guarantor: United Mexican States

Implementing Agency: Mexican Social Security Institute (IMSS)

Amount: US$700 million

Terms: The loan is proposed to be fixed rate single currency loan in US dollars with a maturity of up to fifteen years.

Objectives: The proposed loan would support the ongoing implementation of the Government's health system reform, focusing on the modernization of IMSS, designed to: (a) improve the financial management of the health insurance system to ensure financial transparency; (b) introduce new resource allocation and financial mechanisms to improve efficiency and limit the fiscal impact of the proposed reforms; (c) strengthen the institutional and regulatory framework for health insurance to extend coverage to the self-employed and informal sector workers; (d) ensure greater transparency and accountability among providers; (e) develop measures for quality assurance and user rights, and to facilitate user choice; and (f) improve the quality and efficiency of the IMSS health delivery system by supporting the decentralization of decision making, restructuring of the health care delivery network around a population-based system, and the introduction of performance-based incentives for providers.

Description: The reform program for the period 1998-2000 to be supported by the loan would follow a two-pronged approach: (a) developing and implementing health insurance financing reforms and the necessary regulatory framework through (i) separating financing from provision of services, increasing user choice and extending coverage, and (ii) developing and implementing purchasing mechanisms; and (b) institutional strengthening of IMSS through (i) changing its corporate structure for health services administration and (ii) strengthening its health care delivery network.

Benefits: The reform would contribute to the economy and society by: (a) limiting the fiscal burden of the current health system and its concomitant potential distortions, while improving its financial sustainability; (b) improving the system's efficiency and quality of care; and (c) increasing its contribution to equity. It would ultimately

contribute to greater welfare and productivity, based on improved extension of coverage and health status. These benefits would be attained through improved financing and allocation mechanisms, improved service delivery, and the creation of internal markets, all of which should lead to greater accountability within the system.

Risks:

The greatest risk to the proposed operation is backsliding in political commitment. While the current Government supports the reform of the health insurance system, such support needs to remain strong, active and visible to overcome resistance that will inevitably arise in the course of the reform process, particularly at the time of second tranche release. High-level officials in both IMSS and the Ministry of Finance have participated in preparing the reform program and give political support to the process. It will be necessary to continue to internalize the reform within IMSS in order to ensure that personnel at all levels understand the reform objectives and support it. To reduce opposition to change, competition in the market will be introduced gradually and will be accompanied by substantial financial and technical assistance to IMSS. To mitigate political risks, an accompanying Technical Assistance Loan will support a major campaign to disseminate information on program actions and their benefits to IMSS employees and beneficiaries.

A second risk is the sheer technical complexity of the reform, which dictates that many complementary activities be executed satisfactorily and in a highly coordinated fashion. Again, the Technical Assistance Loan is designed to provide IMSS with important technical input to support the implementation of the reform, such as the design of regulations, design of enrollment database system, and direct technical assistance for institutional reform within IMSS.

Poverty Category: Not Applicable

Estimated Disbursement:

The proposed loan for US$700 million will be disbursed in two tranches of US$350 million each. Tranche releases will take place assuming the Government meets effectiveness conditions and the conditionalities related to reform of the IMSS health insurance system, as described in the Letter of IMSS Health Insurance Development Policy (Annex 1) and Matrix of Policy Actions (Annex 3).

REPORT AND RECOMMENDATION OF THE PRESIDENT OF THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED HEALTH SYSTEM REFORM - IMSS ADJUSTMENT LOAN TO BANCO NACIONAL DE OBRAS Y SERVICIOS PUBLICOS, S.N.C. WITH THE GUARANTEE OF THE UNITED MEXICAN STATES

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1. I submit for your approval the following Report and Recommendation on a proposed Loan to *Banco Nacional de Obras y Servicios Publicos*, S.N.C. (BANOBRAS) with the guarantee of the United Mexican States, in the amount of US$700 million to support regulatory, financial and corporate reforms of the Mexican Social Security Institute (IMSS), as part of Mexico's continuing process of health system reform. The loan would be a single currency loan at the Bank's standard fixed rate, with a maturity of up to 15 years, and would be disbursed in two tranches of US$350 million each. It would further be supported by a parallel US$25 million Technical Assistance Loan.

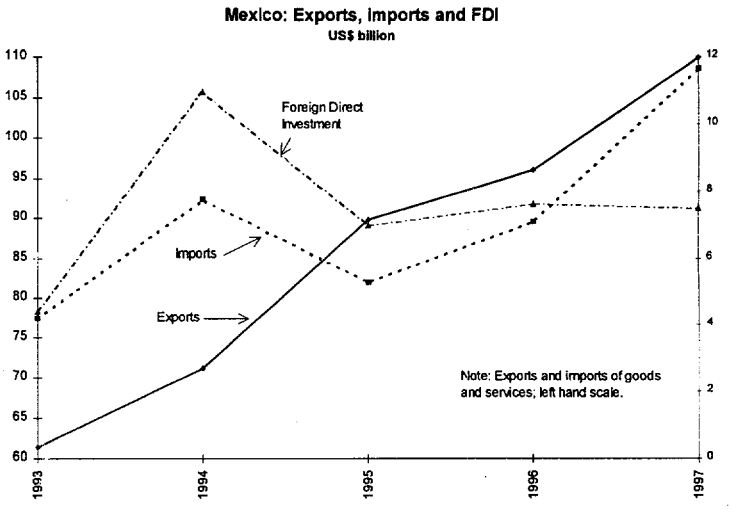
I. THE ECONOMIC SETTING

A. Macroeconomic Performance

2. The Mexican economy rebounded in 1996-97 following the financial crisis at the end of 1994 and the severe recession of 1995 when GDP fell by 6.2 percent and domestic investment dropped by over 30 percent. In 1996, real GDP rose by 5.1 percent, reflecting continued export expansion and a strong recovery in investment. The implementation of tight monetary policies led to a near halving of inflation, a significant lowering of nominal interest rates, and greater stability of the peso. Investor sentiment improved, leading to a substantial rise in foreign direct investment, a marked improvement in Mexico's access to international capital markets, and a substantial increase in international reserves. The economic recovery was consolidated in 1997, and inflation continued to decline. Real GDP growth reached 7 percent in the year with another healthy expansion of investment in excess of 20 percent. Through September 1997, formal sector employment increased by a record 10 percent.

3. As with other emerging market economies, Mexico also was jolted by the events in Southeast Asia in the second half of the year. But contagion effects remained relatively small when compared to the impact on other emerging market economies, such as Argentina and Brazil. Market sentiment toward Mexico remains cautious and the expectation is that, given continued positive performance in the United States' economy and in its stock market in particular, Mexican equities will regain their loss in value, reflecting the strength of the economic recovery since 1995.

2. As shown in the adjacent chart, Mexico's external accounts have experienced a marked improvement since 1994. Exports boomed in 1995, prompted by the large change in the exchange rate and by the contraction in domestic demand. These same forces had the opposite impact on imports. However, imports recovered rapidly with the expansion in domestic output and consumption. Even though the real exchange rate remains about 12 percent more depreciated than in November 1994, it appreciated significantly since 1995, mainly on account of the resumption of capital flows (in the 3rd quarter of 1996 alone, portfolio inflows summed to nearly US$10 billion). The combination of an appreciating real exchange rate and growing domestic absorption have produced a trend reversal in the current account, which has shown a negative balance since the 3rd quarter of 1996. In 1997, the deficit in the current account was US$7.3 billion, and is expected to continue expanding in 1998. Nevertheless, on balance, the levels of the deficit (at about 2-3 percent of GDP) and of external borrowing, are prudent and consistent with a solid long-term creditworthiness position.



3. Underlying the strong performance of the external accounts and of private sector growth has been the supportive role of the Government. The operations of the public sector resulted in an increase in the primary surplus from 2.2 percent of GDP in 1994 to 3.8 percent in 1995-1996, in a context of overall fiscal balance which is expected to prolong into 1997. Despite declines in government expenditures reflected in transfers to public enterprises, lower spending on wages and salaries, and a rephasing of some capital projects, expenditure on social programs was safeguarded. Monetary policy has supported the fiscal stance and has focused primarily on disinflation. Monthly rates of inflation have been on a declining trend since end-1995 and, as a result, the annual rate of inflation has fallen from 51 percent in 1995 to 28 percent in 1996 and to less than 16 percent in 1997.

4. The short- and medium-term prognosis for the conduct of macroeconomic policy, and for the economy as a whole, is positive. In 1998, real growth is expected to slow down to 4.8 percent, in part on account of negative inputs arriving from the Asian issues. The public sector balance is expected to deteriorate for structural and policy-induced reasons, even as the fiscal authorities come under increasing political pressure for authorizing expenditure increases and/or revenue reductions.

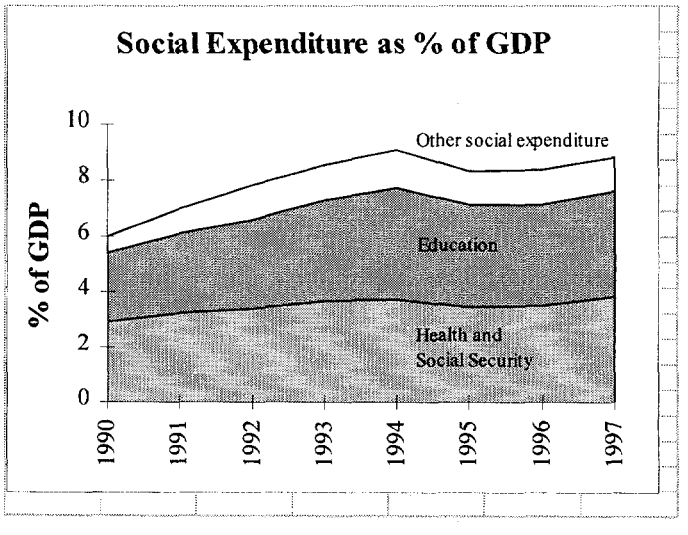
5. Mexico's health system reform program is part of a continuum of reforms addressing public contingent liabilities while promoting measures to improve the quality of public services. Most importantly, the Government, with the support of the World Bank, has implemented a major reform in the pension system covering workers in the private sector. The near-term fiscal cost of this measure is somewhere in the range of 1-2 percent of GDP. The specific measures relating to the public health system addressed through this loan will impose an additional fiscal cost of approximately 0.75 to 1 percent of GDP. Furthermore, other quasi-

fiscal losses and contingent liabilities were allowed to expand and will require additional fiscal outlays in the near future. These losses arise mainly from the successive bailouts and/or rescheduling of the debts held by private banks, firms, households (mortgages and credit card debt), tollways operators, etc., in the wake of the 1995 financial crisis. The total cost of the financial sector rescue programs are now estimated at 12 percent of GDP, or a near term pressure on public finances of another 0.5 percent of GDP.

6. On the macroeconomic side, the success of its recent performance and the credibility of its policies have earned Mexico access to international financial markets and thus, the country does not technically face a short-term funding constraint for its balance of payments requirements. Nevertheless, with a foreign debt stock of US$163 billion and gross servicing requirements estimated at US$36 billion in 1998 and US$41 billion in 1999, Mexico has a complex debt management challenge. In the current internationally volatile environment, securing reliable long-term debt instruments is an essential part of any viable medium-term debt management strategy. And Mexico does face restrictions in its access to longer term debt and/or internationally placed bonds. In this regard, World Bank balance of payments support is critical especially when, at the margin, the macroeconomic impact of the reforms this loan is supporting is to expand domestic absorption. Mexico faces a seriously binding fiscal constraint. Although the Government has carefully measured and balanced its access to domestic capital markets, domestic interest rates are high in real terms and this complicates the management of short-term capital inflows. The structure of foreign financing is sub-optimally inclined to shorter-term funding. The current program of health insurance reforms would exacerbate the difficulties to be faced by the Government in abiding to the fiscal constraint and, hence, in managing short-term capital inflows. World Bank balance of payments support would allow the authorities more room to maneuver while helping safeguard the limits of domestic borrowing and improve the overall quality of the medium-term fiscal response.

B. Social Sector Expenditures

9. The recovery of the Mexican economy has allowed the Government to continue its efforts to increase social sector spending, with particular emphasis on protecting the poor. Between 1990 and 1994, public expenditures in the social sectors increased by more than 55 percent in real terms. As a result, social expenditures increased from 6 percent of GDP in 1990 to 9 percent in 1994 and from 38 percent of total public sector budgeted expenditures to 52 percent. The 1994 crisis implied a short-term shock to social expenditures, reducing them by 12 percent in real terms in 1995. However, the share of total budgeted public expenditures allocated to the social sectors continued to increase—from 52 percent in 1994 to 53 percent in 1995, reflecting the Government's firm commitment to increasing social sector spending. Expenditures continued to increase in real terms in 1995 and 1996, reaching 8.4 percent of GDP in 1996 and almost fully recovering to the 1993 levels. For 1997, social



expenditures are budgeted to continue increasing to 8.8 percent of GDP and 59 percent of the total public sector budgeted expenditures -- the highest historical share (see chart).

10. Public expenditures in the social sector allocated to education and health in 1996 are 43 percent and 42 percent, respectively. Expenditures in the health and social security sector mirrored the changes in social sector expenditures. The 1997 budget signals an increase in health and social security expenditures of 16 percent in real terms, partly resulting from the new social security legislation. This increase would allow health and social security expenditures (4 percent of GDP and 44 percent of the total public expenditures in the social sectors) to surpass, for the first time, the corresponding expenditures in the education sector. Having secured adequate levels of public funding for the social sectors, the Government has now turned the focus to improving the efficiency of public spending, while introducing reforms that aim to improve the quality of public services. The proposed loan would complement Government strategy to increase the efficiency and quality of public services to obtain greater value with public resources.

II. THE HEALTH SECTOR

A. Overview

Health Status

11. Mexico's health indicators have improved markedly over the last 50 years. Life expectancy at birth increased by 30 years between 1940 and 1990, and in 1994 had reached 75 years for women and 69 for men. Mortality rates for children under five years of age fell by more than 37 percent over the last decade, and mortality from pneumonia and diarrhea fell by more than 65 percent. Vaccine-preventable diseases have declined drastically, with no cases of polio or diphtheria reported since 1993. Maternal mortality rates were reduced by 44 percent between 1980 and 1992. Average fertility fell from 4.1 children per women aged 15-44 in 1984 to just 2.9 in 1994. The population growth rate, which peaked at 3.2 percent in the 1970s, had fallen to 2.1 percent in 1990, and is expected to reach 1.7 percent in the year 2000.

12. The Mexican population is also aging rapidly. In 1970, 47 percent of Mexicans were under 15; in 1990 the figure was 39 percent and, in the year 2000, it is expected to be 35 percent. Over the same period, the proportion of Mexicans over 60 is expected to have risen from 5 percent to 7 percent and, by the year 2020, to reach 12 percent. While this is a fairly universal phenomenon, it has important implications for health delivery, expenditures and insurance-based financing.

13. Due to strong economic and regional inequalities, Mexico combines two epidemiological situations: while some areas have health indicators similar to OECD countries, urban slums, rural areas and some states are still subject to a pattern of common infectious diseases and malnutrition typical of low-income countries. For example, life expectancy stands at 53 years among the poor versus 73 years among the wealthy. Similarly, infant mortality ranges from under 20 per 1,000 in the northern states to 50 per 1,000 in the poorer southern states.

14. Mexico's many achievements in the health sector over the past several decades have led to significant improvements in the health status of the population, a broadening of access to basic services, and support of important public health measures. Nevertheless, its health sector faces major structural problems, as measured by financial access to health care, efficiency and,

increasingly, total cost. The following sections provide a brief overview of the organization and financing of the health sector, followed by a description of the Government's reform efforts to reduce the structural problems in the sector and to ensure continued improvements in the health status of the population.

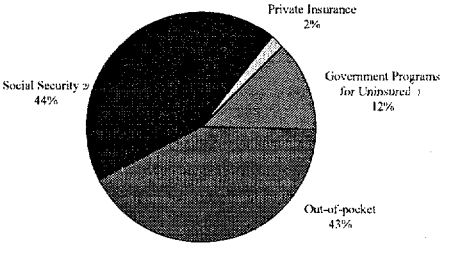
Health Financing And Expenditures

15. Over the past ten years, the Government has made steady progress in increasing public health and social security expenditures. In 1996, Mexicans spent between US$16-18 billion on health care, or 4.7 to 5.3 percent of GDP. On the basis of a population of 93 million in 1996, this yields an estimated per capita expenditure of US$172-194,[1] placing Mexico well below its fellow OECD countries, but in the middle of the range for Latin America.

16. Overall, the two major social security institutions, IMSS and the Social Security Institute for Public Employees (ISSSTE), account for nearly 75 percent of public health expenditure, the Secretariat of Health (SSA) 21 percent, and the Armed Forces (ISSFAM) and parastatals such as PEMEX the remaining 4 percent. However, the adjacent chart shows that the relatively high private sector spending (45 percent) lowers the share of social security spending to 43 percent. Other public spending from SSA, IMSS-Solidaridad (Special Basic Health Program for the Uninsured) and others account for around 13 percent of total spending. In terms of the sources of finance, the vast majority of health spending is funded through individual contributions, either through out-of-pocket payments or social security contributions. The remaining health sector revenues are generated from employers (28 percent), the federal government (20 percent) and the state governments (3 percent).

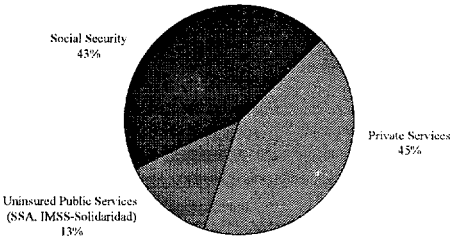
Public and Private Health Expenditure in Mexico

Source of finance



Source: SSA, FUNSALUD and World Bank Estimates
1 Government Programs for Uninsured include: SSA, IMSS Solidaridad, DIF, DDF, PRONASOL and State contributions
2 Social Security includes: IMSS, ISSFAM, ISSSTE and PEMEX.

Distribution of Expenditure by provider, 1994



Source: SSA and FUNSALUD Estimates.

17. The fragmented system of financiers, payers and providers and the lack of adequate risk-pooling mechanisms have led to considerable differences in the level of spending per capita among the SSA, IMSS, ISSSTE and other social security systems. In 1996, annual expenditure per covered person ran from US$21 in IMSS-Solidaridad to US$448 in PEMEX (see table next page). The table also shows the considerable differences between the health expenditure levels in the social security system (US$213 average per member) and the public health system for the uninsured population (US$23 average per person). In 1996, IMSS health care spending reached US$4.2 billion, or US$114 per beneficiary and US$173 per user.[2] Total

1 World Bank calculations based on IMSS, FUNSALUD data and SHCP Public Accounts for 1996.

2 The calculations are based on a 1996 total insured population of 34.3 million and registered user population of 24.6 million.

IMSS health care spending has increased only 5 percent since 1991, dampened by the effect of the 1995 crisis when spending fell by 13 percent. The table below shows the total revenue and expenditure for IMSS from 1991 to 1996, including spending per enrolled beneficiary (including direct insured and their family members).

19. The deficit of IMSS health insurance was a deciding factor behind the change in the health insurance financing system promulgated by the 1995 Social Security Law (SSL, see paras. 37-43). The table also shows that the program's administrative expenditures accounted for roughly 12 percent of total spending, far above the average of around 2 percent for administration of Chile's national health insurance fund (FONASA) and above the average of 11.9 percent for private insurers in the U.S.[3] As a share of total public sector health spending, IMSS health insurance spending accounts for nearly 33 percent (1.3 percent of GDP). Annex 9 contains a more detailed analysis of IMSS' current financial situation as a result of the changes in health insurance financing.

Expenditure per potential and user population, 1996

Institution	Expenditure per potential population (in US dollars)	Expenditure per user population (in US dollars)
Social Security Funds		
IMSS	114	173
ISSSTE	58	91
ISSFAM	216	216
PEMEX	448	448
Uninsured Funds		
SSA	19	51
IMSS Solidaridad	21	21
DDF	28	38

Source: FUNSALUD. El Observatorio de la Salud, 1997

IMSS Revenues and Expenditures, 1991 to 1996
(1996 US$ million)

	Revenues				Expenditures						
Year	Employer-employee	Govt.	Other	Total	Health Care	Other benefits	Admin.	Other	Total	Deficit/ Surplus	Spending/ beneficiary (US$)
1991	3,615	244	113	3,971	3,122	234	382	317	4,054	(83)	104
1992	3,949	270	126	4,345	3,395	243	577	327	4,542	(197)	121
1993	4,334	286	127	4,747	3,712	267	616	357	4,952	(205)	135
1994	4,993	318	171	5,482	3,954	288	653	397	5,292	190	145
1995	4,031	261	193	4,485	3,323	236	556	437	4,553	(68)	133
1996	3,725	218	162	4,105	3,163	201	458	433	4,256	(151)	114

Source: Informe de Gestion, IMSS (1997)

Organization, Coverage, And Delivery Of Health Services

20. Many of the problems of financial access highlighted in the previous section are partly the result of the existence of parallel vertical delivery system. The duplication of facilities and the excess capacity in urban areas is a long-standing problem in Mexico that results in inefficiency and waste. For the most part, the segmentation of the health system is due to the nature of insurance coverage, with access to the health system guaranteed according to employment status and employer, rather than through risk-pooling arrangements according to population or income level.

[3] "Administrative Cost of Health Insurance". Woolhandler and Himmelstein in New England Journal of Medicine. May 2, 1991.

Distribution of Health Sector Coverage, 1995

Insurance Status	Insured		Uninsured		
Institutional Coverage	Private	Social Security	SSA	IMSS Soli-dari-dad	No Access
Population (in millions)	5	39	30	9	10

Higher Income ←——→ Lower Income

Source: Poder Ejecutivo Federal (1995)

21. As shown in the above chart, health care provision remains dominated by the public sector, with a growing but weakly regulated private sector concentrating in the ambulatory care market. Recently, two major corporations have announced plans to invest over US$100 million in Mexico for ambulatory and hospital based care over the next 5 years, signaling the potential expansion of private provision in Mexico. The public sector institutions providing health services include a diverse network of social security institutes, including IMSS and parastatals (e.g., PEMEX), the Secretariat of Health (SSA), IMSS-Solidaridad and the health department of the Federal District (DDF). The following sections describe the characteristics of the main players in the health sector.

22. ***Mexican Social Security Institute (IMSS).*** IMSS provides health insurance coverage and services to around 34 million people, comprised mostly of private sector workers and their families. It is the largest organization within the Mexican health care system, accounting for about 33 percent of public spending on health care in 1996, and employing approximately 350,000 people, of which about 33 percent are medical doctors (33,900) and nurses (80,237). IMSS reports that it performs around 700,000 medical procedures and related services per day, in more than 1,500 provider units, 215 of which are secondary and 41 are Specialty Hospitals. IMSS not only provides health insurance, but also a variety of additional services, including Maternity insurance, Workers Compensation insurance, Disability, Old Age Severance, Pension and Life insurance, and Child Care Centers and Social Benefits.

23. IMSS has started a process of decentralization through the creation of seven Regional Directorates, which has resulted in the staff at the Head Office being reduced from over 13,000 to below 11,000 and the development of a significant role in financial accountability and planning for these Regional Directorates. The consolidation of primary and secondary provider levels into 139 budgetary Medical Area Units during 1997 has provided a strong platform for further delegation of management responsibilities and funding, and possibly further reduction of staff at the central level.

24. The provision of health services at the primary and secondary care level will be the responsibility of the Medical Area Units, which will effectively function within IMSS as public integrated delivery units, taking care of all the health needs of their eligible populations. Over the medium-term, the IMSS Medical Area Units will evolve into budgetholding organizations, which will be fully responsible for primary and secondary care for an average population of

roughly 260,000 members, and, when necessary, purchase specialist or tertiary level services for their patients from the 41 IMSS Specialty Hospitals.

25. ***Social Security Institute for Public Employees (ISSSTE).*** ISSSTE is organized along the same lines as IMSS: it provides health care, retirement and housing benefits to approximately 8.8 million public sector employees. ISSSTE covers employees of the federal government, several government-owned parastatals, and municipal and state governments. Six states have their own ISSSTE system for their employees, but most public sector employees belong to the federal system.

26. ***Secretariat of Health (SSA).*** The SSA covers about 30 percent of the Mexican population. It is responsible for the definition of health sector policies and the regulation, supervision and strategic planning for the health system. It is also responsible for the delivery of public health programs and the control of communicable diseases, as well as the financing and provision of health care services for the uninsured. The SSA includes an extensive network of primary health care facilities and hospitals (about 7,000), ranging from small rural clinics to highly specialized hospitals. In 1996, the Government started an aggressive decentralization process to transfer power from federal institutions to state entities, supported by the Bank's Second Basic Health project (3943-ME).

27. ***IMSS-Solidaridad*** was created to channel health care services to rural populations who lack access to health facilities. IMSS-Solidaridad is supervised by IMSS with bi-partite funding from IMSS and the federal government. The affiliation with IMSS provides the program with political support, indirect subsidies, and a well-developed administrative structure. In June 1996, it was estimated that this program provided services to about 11 million people, with 3,540 rural clinics and 67 hospitals in more than 10,000 localities.

28. The ***Health Department of the Federal District (DDF)*** runs its own health services. Of a potential client population of 3.5 million in 1994, approximately 2.6 million used DDF services. The DDF runs 143 medical units, of which 80 percent are primary health care units. Productivity of services is low, however, as patients often prefer other services within the metropolitan areas.

29. The delivery systems described above are vertically integrated, self-contained systems operating separately from one another, with their own financing system, primary level health clinics and secondary/tertiary level hospitals. All are centrally budgeted and operated by salaried staff.

30. The ***private health care system*** is currently growing rapidly but remains relatively under-developed and weakly regulated. Private providers tend to operate through small-scale clinics and doctors' offices, with only a few large private hospitals (the average number of beds in private hospitals is around 12). Regardless of size, private institutions typically charge based on a fee-for-service arrangement. Overall, the private sector is atomized on the provider side; even within the largest private hospitals, doctors operate independently and contract with hospitals for certain services. Most private sector facilities are located in urban areas with the highest concentration by far in Mexico City. The private health sector includes private health insurance plans, but currently these are estimated to cover only 2.4 percent of the population. It also includes private, Managed Care Organizations (MCOs), although this industry is in its infancy in Mexico. The two most prominent Mexican HMOs, Meximed and Premedica, appeared only within the last five years. Much investment in the managed care sector comes from abroad, particularly from Spain, Chile, and The United States.

III. THE GOVERNMENT'S HEALTH SYSTEM REFORM STRATEGY

A. Achievements To Date – The Reform Framework

31. During 1995, health reform became a Government priority and a new program for 1995-2000 was established. Responsibility for health care provision is assigned to the SSA and IMSS, with the former concentrating on low-income groups who lack access. One intention of the reforms is to restore the SSA as the coordinator and regulator of the entire sector (including social security and private sector institutions) as it delegates service provision responsibilities to state health services. To facilitate the extension of health services, the SSA is in the process of decentralizing its primary health care facilities to the states. IMSS would, in turn, extend social security benefits to those who were previously outside the system, namely the unemployed and those in the informal sector. Under the proposed reform, these populations would enjoy access to medical services through a voluntary, publicly subsidized health insurance scheme.

32. The Government's reform program for the health sector focuses on: (a) limiting the fiscal impact of the proposed health insurance reforms and promote financial transparency in the management of resources; (b) increasing health coverage under the social security system; (c) promoting better quality and efficiency in services provision; and (d) introducing accountability and supervision in health care delivery and finance.

33. ***Reform Principles.*** While the specific strategies to implement the reforms will vary over time, there are a number of common principles that have been embraced to strengthen the health care system:

- a clear ***separation of financing and delivery,*** as a key element in the introduction of competition, transparency and accountability to the health insurance system;
- ***decentralization of responsibility and accountability*** from the center to the level at which management can best respond to user needs;
- ***development of internal market mechanisms*** to ensure that resources follow the patients, rather than the other way around;
- greater ***accountability to patients;***
- the pursuit of the ***highest level of care quality and value with the resources available*** in the system;
- ***gradual introduction of competition,*** both among public health care providers (IMSS and others) and between public and private providers of health care;
- ensure a ***high degree of flexibility,*** allowing for variations in local services in order to respond to specific local needs, test alternative models of financing and provision, and adjust strategies throughout the reform process.

34. During the first half of the 1990s, a number of actions had been undertaken to address the problems in the sector. The main achievements include the decentralization of responsibility for the provision of SSA health services to the states, the definition of a basic public health package for the uninsured population, and the approval of the SSL in December 1995. The initial efforts of the reform process can be viewed as having two major components: (a) the decentralization and extension of coverage, spearheaded by SSA; and (b) improving quality and user choice, spearheaded by IMSS.

SSA Reform

35. ***Decentralization and Extension of Coverage.*** The reform of services for the uninsured relies mainly on further decentralization and devolution of power from the federal health institutions to state institutions for the provision of services. State institutions will assume a new commitment to deliver minimum health care services to the uninsured. A gradual reform process is envisioned, with state health services first taking up the functions of the SSA. In the longer run, state institutions will merge with other decentralized institutions, such as IMSS-Solidaridad.

36. Decentralization is already well underway. A National Health Council was set up in 1995 to supervise the reform process in SSA. A framework agreement between federal and state level authorities and trade unions was signed in August 1996 and individual agreements between 28 states and the Federal Government have also been signed. The current decentralization process is intended to go beyond the limited decentralization of the 1980s. A major improvement is the introduction of minimum health care programs to be provided by the decentralized states. A more transparent capitation formula to distribute federal resources among states has also been defined in order to improve resource allocation efficiency and equity. The reform of the SSA is being supported by the Second Basic Health project (3943-ME) currently under implementation.

The 1995 Social Security Law — IMSS Reform

37. Reform of the social security system was debated during 1995 and a new Social Security Law *(Ley del Seguro Social,* SSL*)* passed in December of that year. The new law was scheduled to take effect in January 1997, but this was later postponed to July 1997. As the largest organization in both the social security and health sectors, IMSS will play a key role in the reform. The framework for IMSS reforms are based on three major instruments: (a) the introduction of mechanisms to stimulate greater efficiency and better quality; (b) changes in financing and delivery schemes: opt-in and opt-out reforms[4] (see para. 40); and (c) a change of financing through the modification of the premium structure.

38. ***Increasing User Choice.*** This reform has already gotten underway on a pilot basis by letting IMSS patients having their choice of general practitioner. The eventual goal is to clearly separate financing and service provision within IMSS, thereby increasing incentives for quality and efficiency in service provision. It is hoped that market mechanisms will allow patients to secure the benefits of competition within IMSS. Establishing internal competition will, in broad terms, require the development of a structure which allows a degree of free movement by patients, capitation payments, and the ability on the part of Medical Area Units and MCOs to control costs, most likely by taking an active role in contracting with providers. Since January 1998, the Medical Area Units have received budget allocations based on a capitation formula, adjusted for age and sex. This constitutes an important first step to promoting competition and user choice within IMSS.

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[4] In the IMSS case, "opting-in" refers to new entrants into the IMSS health care system, ostensibly from the self-employed and informal sector populations. Conversely, "opting-out" refers to a system whereby beneficiaries choose to receive health benefits through alternative providers, which will guarantee a minimal level of service provision in exchange for a fixed fee based on a risk-adjusted capitated payment scheme. However, they remain part of the overall social security financing and insurance system.

39. Actions to promote quality and efficiency would include: (a) introducing greater choice of health care providers within Medical Area Units; (b) assigning clear goals, management responsibilities and instruments to IMSS providers and MCOs; (c) establishing minimum accreditation standards for providers and eligibility criteria for MCOs; and (d) establishing a clear and equitable expenditures allocation mechanism. Finally, accountability will be introduced into the system through clear rules and regulations to be followed by providers and management institutions, decentralization of decision-making and management at public health care and social security institutions, and supervision of compliance with regulations and performance contracts. These actions will be reinforced through the policy conditions of the proposed loan.

40. ***Changes in Health Insurance Schemes — Opting-In and Opting-Out.*** Another key aspect of IMSS reforms includes the extension of coverage under a publicly subsidized insurance scheme (opting-in) and the introduction of managed care through an opting-out scheme under which IMSS members, through their employers, are given the option of receiving a per capita fee to receive services through alternative public and private integrated care systems. These two alternative components will be gradually incorporated to avoid potential risks, including risk selection and segmentation by income level.

Opting-In. The aim of the opt-in reform is to attract the population that falls in the gap between social security and SSA coverage or between social security and the private sector. This population is mainly urban and, while it has the capacity to pay for better health care, does not belong to the formal economy. Hence, under the old system it was unable to register with a social security institution. With the opt-in reform, informal sector families will be able to assume IMSS health insurance at an attractive price under the Family Health Insurance Program (*Seguro de Salud para la Familia,* SSFAM). In addition to introducing the possibility of health insurance for a previously excluded population group, the changes in the SSL have important implications on the financing of health insurance for the self-employed and informal sector workers. Under the previous 1973 Social Security Law, voluntary insurance was available for US$38 per month (305 pesos), financed entirely by worker contributions. With the new law, self-employed and informal sector workers are now able to enroll for IMSS health coverage with a payment of US$24 per month (235 pesos per family) and a public subsidy of around US$15 (116 pesos per direct enrolled).

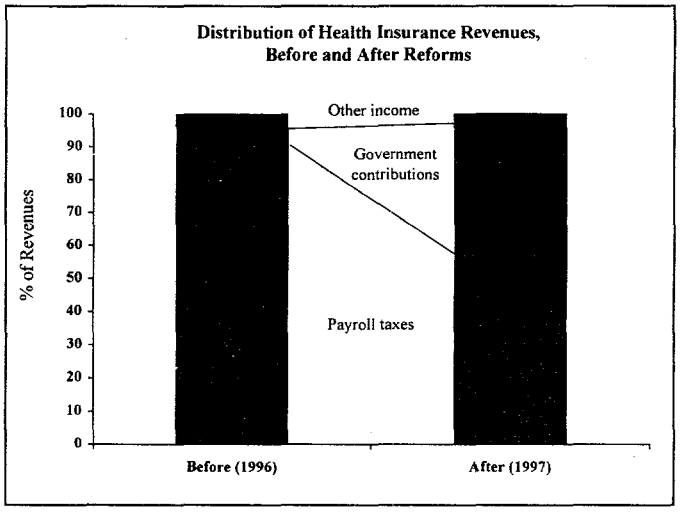
Opting-Out. Opting-out (*prestación indirecta*) is the most far-reaching reform element. The opt-out reform represents a major structural change for the social security system, introducing choice of health care provider for members and opening the door for a major expansion of private managed care and health care provision. The opt-out program will be introduced gradually, to allow IMSS providers time to improve the quality and efficiency of services. The central element of the opt-out reform is an alternative delivery strategy by which IMSS members, through their employers, can opt out of IMSS' delivery system and into coverage by MCOs, as alternative public and private providers. These MCOs will receive a risk-adjusted capitated fee in return for the provision of an integrated health care package, and in turn guarantee provision of health services in place of IMSS. Under the opt-out scheme, IMSS will act as a financier and purchaser, while the MCOs will organize the provider network. In general terms, the opt-out reform is expected to achieve the following goals:

(i) The reform will stimulate two relatively undeveloped industries: insurance and public and private health care provision. It will also serve to encourage competition within the health sector, stimulating greater efficiency and higher quality of care. On the finance side, based on a gradual process, public and private MCOs would compete to capture a new mass market, rather than the more limited market of those wealthy enough to pay for duplicate insurance. On the provider side, primary care physicians, hospitals, and suppliers of pharmaceuticals and medical technology would also compete, innovating and increasing efficiency wherever possible to win contracts with competing insurers.

(ii) Opt-out will reduce employment costs and stimulate formal employment. Due to perceived inadequacies of the social security system, many large employers offer additional private health insurance to employees or assume health related expenses. To the extent that opt-out provisions prove a satisfactory alternative to double insuring, non-wage employment costs will decrease and formerly uninsured workers may join IMSS.

(iii) Finally, opt-out would likely increase user welfare by generating greater user choice among health care providers and raising the quality of medical care and services.

41. *Change in Premium Structure.* Following the SSL, IMSS instituted a change in the premium structure in July 1997 to address chronic deficits (see para. 19) and systemic inefficiencies. Under the new system, the premium is divided into two parts: a flat capitated rate, and a variable contribution linked to income for those earning salaries above three times the minimum wage. Contributions are capped for salaries above 25 times the minimum wage. In sum, the composition of IMSS health insurance financing will change from roughly 95 percent employer and employer contributions and 5 percent Government contributions to 67 percent employer and employee contributions and 33 percent Government contributions. The adjacent figure summarizes the main changes in IMSS financing promulgated under the 1995 SSL.



42. For all salaried employees, employers and the Government will each make a contribution equivalent to 13.9 percent of the 1996 minimum wage (or roughly US$14 per member per month), with the Government share indexed to inflation (IPC) and the employer's contribution indexed to minimum salaries in the Federal District. The share paid by employers will rise to 20.4 percent of the minimum wage by 2007, while payments by the Government will be adjusted according to increases in the minimum wage. For workers earning more than three times the minimum wage, additional contributions will be paid as a fixed share of income: employers will pay 6 percent of the wage above this level and employees will pay 2 percent of the same portion. This total of 8 percent will be gradually reduced to 1.5 percent over the next decade. By 2007, marginal rates of social security health care contribution on salaries above three times the minimum wage will be 0.4 percent for workers and 1.1 percent for employers.

The final 1.5 percent will remain to comply with a constitutional provision that calls for a proportional element in social security contributions (see Annex 9 for a detailed explanation).

43. The changes indicated above will have a significant impact on IMSS financing and coverage and imply an important increase in government contributions to social security. The changes would: (a) reduce part of the incentives to under-report economic activity; (b) allow a wider range of the population to opt into the social security system by reducing the cost of enrollment through a government subsidy for informal sector and self-employed workers; (c) shift a major burden of payroll taxes from employers and employees to general tax revenues; (d) increase the progressiveness of the financing system by eliminating contributions for all workers earning less than 3 minimum salaries and providing public subsidies for insurance to the self-employed and informal sector workers; and (e) allow the opting-out of IMSS members by returning a per capita fixed fee to employers to opt out of IMSS' delivery system and into coverage by MCOs, as alternative public and private providers.

B. The Social Security Law— Issues And Challenges

44. Implementation of the SSL in IMSS will need to consider the following main issues with regard to health insurance in Mexico: (a) how to ensure the financially sustainable implementation of competition and the extension of coverage; (b) how to prepare IMSS health insurance and service delivery network for the introduction of competition from other public and private insurers and providers; and (c) how to introduce the institutional and regulatory framework necessary to oversee the gradual development of health insurance and managed care markets. These issues define the major challenges for the IMSS health reforms, and set the stage for the broader health system reforms.

Limiting the Fiscal Impact

45. The shift in health insurance financing from payroll taxation to general revenue financing will have a significant short-term fiscal implication. While it is expected that government revenues from general taxes will eventually increase due to higher incentives to formal sector employment and lower incentives to evade taxes, over the short-term the impact of the SSL is estimated to increase government contributions to IMSS from 0.07 percent of GDP to 0.7 percent by the year 2010 and from 0.3 percent of government expenditures to roughly 3.4 percent over the same period. Estimated government contributions would jump almost tenfold from US$218 million in 1996 to over US$2 billion in 1998.

46. ***Estimated Impact on IMSS Revenues and Expenditures.*** After years of chronic deficits in the health insurance program, the 1995 SSL would restore IMSS to financial equilibrium — even a surplus in some years — due to the rapid rise in Government contributions, incentives to formal sector employment, and the new insurance schemes for the self-employed and informal sector workers. During loan preparation, a detailed financial model was developed to estimate the impact of the changes in the SSL on health insurance financing and coverage until the year 2010 (see Annex 9).

47. Over the long-term, financial projections using a medium case scenario indicate that IMSS health-related real revenues would more than double, from US$4.1 billion in 1996 to over US$9.6 billion by 2010. On the expenditure side, however, the projections (see box next page) underline the importance of introducing cost-containment mechanisms and of carefully phasing in the opting-out and opting-in policies. Without the introduction of cost-containment

The Financial Projections Model—Impact of the 1995 SSL on IMSS Net Revenues

A financial projection model was developed to simulate the implications of the social security reform on Government expenditures and on IMSS revenues and expenditures to the year 2010. The model was used to determine the short term impact of the reform based on four basic policy issues relevant to the 1995 reforms:

- evaluate the fiscal consequences of the changes in the social security financing and health insurance;
- estimate the impact on IMSS revenues and expenditures of changes in the financing of the health insurance system, and the consequences of demographic changes on total insured and health expenditures;
- simulate the potential impact of the introduction of opting-out and opting-in on expenditures and revenues of Federal Government and IMSS;
- provide long-term estimates on the total potentially insured population of IMSS, given estimated changes in the demographic profile of the population and the Mexican labor market.

[A detailed analysis of the results and the explanation of the model, as well as sensitivity analysis under various assumptions, are presented in Annex 9.]

Addressing these issues is critical to ensure fiscal discipline and to determine the impact of the health insurance reform on overall health sector financing. The medium case scenario shown below assumes the following: zero wage growth over the medium-term; 1 and 2 percent annual increases in fixed and variable costs, respectively; IMSS coverage would reach 35 percent of the economically active population (EAP) by the year 2010; the family health insurance scheme would reach 7 percent of IMSS members; and opting-out would be extended to 3 percent of IMSS members.

	1996	1998	2005	2010
1. Estimated Total Fiscal Costs				
GOM contributions (US$ million)	218	1,764	2,639	3,367
GOM contributions as % of non-financial sector public sector expenditures	0.3 %	2.1 %	2.6 %	2.8 %
GOM contributions as % of GDP	0.07%	0.48%	0.56%	0.60%
2. Estimated Impact on IMSS: Revenues, Expenditures and Coverage				
Health insurance revenues (US$ million)	4,105	5,417	7,590	9,654
Health insurance expenditures (US$ million)	4,256	4,380	6,166	7,974
Total surplus (deficit) (US$ million)	(151)	1,037	1,425	1,680
% EAP in IMSS	29%	29%	32%	35%
3. Total insured population (million)	34.3	36.4	60.0	78.9

measures, IMSS health expenditures would rise to over US$10 billion, once again leading to a financial disequilibrium fueled by medical inflation and an aging population.

48. ***Impact of Demographic and Labor Market Changes.*** The total insured population under IMSS should increase from current levels of 28 percent to around 35 percent of the economically active population (EAP), based on the reduction in payroll taxes, the increase in coverage for informal and self-employed workers, and increases in female labor market participation. Over the medium- to long-term, the aging of the population would have a significant impact on IMSS health insurance revenue and expenditure. Demographic projections estimate that the population over 65 years of age will increase from 6.5 percent to over 10 percent by the year 2015, thus leading to a substantial rise in expected spending and a decline in overall revenues. The demographic changes underscore the need to implement cost-containment reforms and the timeliness of the shift to general revenue financing.

48. The Government is responding to the need to implement reforms in the financial management and reserve policy through a two-pronged approach which addresses the two main policy objectives: (a) transparent management of the different insurance programs,

including improved asset-liability management, and (b) clear targets for investment in the IMSS health care delivery network through the execution of an investment program under the Innovative Development Fund (IDF, see para. 62(d) and Annex 7). *First,* in the short-term, IMSS and the Ministry of Finance (SHCP) have agreed upon a financial strategy that will implement a regulatory and institutional framework – within the context of an IMSS reserves policy – for the transparent administration and allocation of the surpluses that are likely to be formed over the next ten years in the different IMSS insurance programs. Through the implementation of the proposed reserves policy, the Government will gradually address the main issues associated with IMSS financial management and asset-liability. *Second,* over the medium-term, the reserves policy would align incentives among the insurance programs. The framework will be negotiated annually through an agreement between IMSS and SHCP establishing annual targets for the use of IMSS reserves from the different insurance branches, to ensure maximum transparency and avoid the commingling of funds. The implementation of the regulatory and institutional framework will be supported by technical assistance from the Technical Assistance Loan (TAL, see para. 86 and Annex 8) which will accompany this operation.

The Effect of Opting-In and Opting-Out Scenarios

The estimates regarding the impact of opting-out and opting-in are dependent on assumptions about the number of workers that select each of the insurance schemes. The opting-in option for self-employed and informal sector workers has the potential to significantly increase fiscal obligations to the system, over and above the current tenfold increase in Government contributions, as each individual opting in would carry a subsidy of approximately US$168 per year. The potential liability to the Government with 450,000 people opting-in (out of an estimated maximum of 6 to 10 million self-employed and informal sector workers) would be an additional US$80 million per year.

At present, there are an estimated 200,000 people affiliated under the opting-out scheme (1.5 percent of the total insured population), mainly in the banking and financial sectors and several of the country's largest employers. The changes in the legislation and the Government's reform program aim to increase this number by extending the program to companies with roughly 15,000 workers or 50,000 beneficiaries (workers and their families). Assuming the program were to reach a 10 percent opting-out level, the estimated outflows from IMSS under the proposed system (returning a risk adjusted capitation payment to employers to purchase services from alternative insurers/providers) would increase from less than US$100 million now to over US$1 billion by the year 2010. Failure to regulate and actively manage the opting-out provision represents a potential weakening of IMSS' financial base due to adverse selection and cream skimming, namely the opting-out of "good risks" while leaving the institution with relatively "bad risks," those who contribute less to the system but use it more. Furthermore, opting-out has the potential to increase IMSS health expenditures as the opting-out program essentially costs IMSS twice: first through the cash payment made to an outside provider, and second through the fixed, or sunk, costs that stay with the institution. The increased average costs derived from these actions may have detrimental effects in IMSS financing and may require additional government support if not adequately managed.

Extending Coverage

50. The first major issue is extending coverage of the social security system to reduce wide disparities in the level of coverage among labor market sectors and geographical regions. While the majority of urban, formal sector workers are covered through either IMSS or ISSSTE, coverage is extremely limited among rural workers, the self-employed, and informal sector

workers. Outside of major urban areas, coverage by IMSS is low: 42 percent of formal, private sector workers are enrolled in IMSS, while IMSS coverage of all private sector rural workers is only 4.6 percent. Coverage is even lower among the self-employed and informal sector workers at only 3 percent.

51. Even among the 34 million Mexicans covered by IMSS, access remains a serious problem due to inefficiencies within the system and a lack of client focus. IMSS services at both the ambulatory and hospital level are characterized by long waiting times and poor service. A study of IMSS family medicine units found that, on average, patients had to wait two hours for an appointment lasting 10 minutes, while waiting lists for elective surgery reach up to 15 months for selected procedures. For the estimated 6 to 10 million self-employed and informal sector workers the problem of access is even more acute.[5] The extension of coverage to these workers, specifically through the proposed publicly subsidized health insurance system, would have to be balanced against the fiscal costs of doing so and the capacity of IMSS to provide additional services with the existing infrastructure and personnel.

Preparing IMSS for Competition

52. The second major issue facing IMSS policymakers is related to reducing institutional inefficiencies in the provision and financing of health services, associated with the need to improve the quality of care and to prepare the IMSS health care delivery network for increasing competition from the private sector.

53. ***Reducing Inefficiency in the Delivery of Health Care Services.*** Evidence that the system as a whole is inefficient is highlighted by comparing Mexico's health outcomes given the amount of money spent with those of other countries. This aggregate evidence is fairly convincing that Mexico could do better when measured in terms of two key non-health outcome indicators—access and efficiency. Several indicators point to the lack of value for money in the health system. Nearly 10 percent of the population remains without access to the health system and less than 5 percent of rural, formal sector workers are covered by health insurance; moreover, for the population enrolled in IMSS, access to services is often complicated by long waiting times. Nearly 55 percent of IMSS users complained about excessive waiting times in IMSS facilities compared with 26 percent for private facilities. In terms of efficiency, the fact that total health care spending has been growing—even as some key indicators of health status have not improved—suggests that the system is facing a mounting problem of inefficiency. The pattern of IMSS spending favors less cost-effective hospital services — roughly 85 percent of total IMSS health spending — over highly cost-effective primary care services or over more cost-effective technologies. Moreover, the duplication of providers has led to excess capacity and waste: in many IMSS hospitals occupancy rates are well below 70 percent while others are saturated with long waiting lists. Risk pooling and provider compensation arrangements need to be designed to contain costs, extend access, and promote the provision of greater quality care and value for money. Two of the major sources of inefficiency within IMSS are centralized management and deficiencies in the financing and management of service delivery.

54. Centralized management and vertical integration limit the efficiency of health care service provision. Despite the fact that the IMSS is Mexico's largest institution with over 350,000

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5 Based on estimates of self-employed and informal sector workers as a share of EAP (approx. 15 to 25 percent). *Evolución de los Mercados Laborales en México*, Enrique Dávila.

employees and roughly 1,600 provider units, until 1997 nearly all management decisions were made at the central level. The vertical integration of the institutions is coupled with centralized, "top-down" budgeting and management. Care providers across regions are by-and-large centrally budgeted by line items for both their operational and development budgets. Budgeting has followed historical patterns rather than the health needs of the population. The centralized management and historical resource allocation system, coupled with a lack of performance-related pay systems, have contributed to a general lack of accountability which has resulted in: (a) an unequal distribution of resources across regions and populations, and even within medical institutions (in addition to inter-institutional differences); (b) a lack of responsiveness to local health needs; (c) a lack of responsiveness to clients; and (d) no incentives for efficiency.

55. *Improving the Quality of IMSS Health Care Services.* Lack of competition, inadequate control mechanisms, obsolete equipment, chronic deficits, and deficient management practices have led to increasingly poor quality health services in the IMSS. A major survey of Mexican public attitudes toward health care was carried out in 1994.[6] Fifty-nine percent of Mexicans thought that the current system "has some positive aspects but requires fundamental change." Another 24 percent were less content and thought that "the system works so badly that it needs to be rebuilt completely." Results from recent household surveys indicate that between 65 and 70 percent of respondents rate private health care services as of better quality than IMSS. Among the insured population of the social security systems, dissatisfaction with the quality of service has led many to seek health care outside the institution with which they are affiliated so they are often enrolled in more than one system. Their principal reasons were: (a) poor service; (b) lack of resources, such as drugs and well trained personnel; (c) lack of access; and (d) high costs. In addition, the study revealed that quality issues are not limited to the lack of resources, personnel and technical problems: 40 percent of patients felt they were not treated adequately, 61 percent considered services too bureaucratic, 8 percent did not receive medical treatment when needed, and 26 percent had to postpone an intervention for economic reasons. Any lasting reform of IMSS care network will have to instill a strong user orientation in both administrative and medical service personnel, supported by a meaningful performance-based incentive system linked to customer satisfaction. In addition, investment in new administrative support systems and biomedical equipment, accompanied by updated training, will be necessary.

Development of An Institutional and Regulatory Framework

56. The regulatory framework for the health insurance market is a limiting factor to the development of greater competition and improved quality and efficiency in Mexico. The Government's proposed reform program will rely heavily on the capacity to formulate and enforce regulations designed for a contractual relationship between the IMSS and its providers. While progress has been made to improve information systems and to hire better trained personnel, institutional capacity is generally quite weak, and the support systems—MIS, accounting, financial administration, and quality control—are inadequate to manage in the competitive environment envisioned under the reform.

57. Specifically, the proposals to promote competition through the opting-out scheme, along with the need to regulate the purchase of services through its own Medical Area Units,

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[6] The survey was carried out by Dr. R. Blendon of the Harvard School of Public Health and FUNSALUD. Personal interviews were conducted with 1,419 users.

will require strengthening of the institutional capacity within IMSS and, at the same time, the SSA. Regulations will need to be developed to define the content of the basic health benefits package and ensure that all Medical Area Units and private MCOs are delivering it to their members, introduce new resource allocation mechanisms for the purchasing of services, develop quality control and performance benchmarks to allow regulatory agencies to evaluate the quality and efficiency of service provision, and, moreover, introduce clear guidelines to set and enforce minimum financial standards and insurance-related provisions necessary for the operation of MCOs and the private health insurance market.

58. The Government has established a Task Force for Health Reform, including members of IMSS, SSA, SHCP, and other governmental agencies to set the framework for sector reform and oversee its implementation. This constitutes an important first step towards the development of a regulatory framework to oversee the purchasing of health services from IMSS Medical Area Units and the gradual extension of purchasing to private MCOs.

C. The Long-Term View Of Reform

59. The long-term result of the Government's health system reform would be a system in which: (a) an essential health package is defined and accessible to the full population; (b) the responsibility for the provision of health services to the population with no pre-payment capacity is assigned to SSA; (c) a single fund receives resources from all sources (government contributions, employers and employees) corresponding to all social security institutions and transfers resources to MCOs — including public, e.g., IMSS Medical Area Units, or non-public, e.g., private MCOs — on a risk-adjusted capitation basis; (d) the MCOs assume the risk of delivering the services included in the comprehensive care package with the capitated allocation from this fund, and rules are set in place to resolve market failures; (e) the internal market is fully developed, whereby the IMSS Medical Area Units and MCOs use DRGs[7] or case-based payment systems to purchase services from public and private providers which comply with minimum accreditation criteria and standards for service delivery; (f) there is an independent supervisory capacity to ensure that the services provided meet quality and financial regulations; (g) additional market mechanisms are fully operational to allow the Medical Area Units and MCOs to act as budgetholding organizations, purchasing services for their populations; and (h) there is a fully developed market for supplementary health insurance to complement the comprehensive care package with a supplemental package providing for improved quality and service. A more detailed discussion can be found in Annex 4.

D. Reform Implementation — IMSS

60. ***Instruments and Timing.*** For the short-term — i.e., 1998-2000, the Government has opted to concentrate an important part of its reform implementation efforts on IMSS, mainly because (a) the 1995 SSL will have an immediate impact on IMSS financing and sets the framework for structural reforms, and (b) IMSS is likely to remain the most important public health care provider for some time. The reform program for the period 1998-2000 to be supported by the loan would follow a two-pronged approach: (a) developing and

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[7] DRGs, or diagnosis-related groups, is one of several methods of patient classification systems that have been developed as an instrument for clinical management and hospital payment systems. The underlying principle of the system is based on grouping similar diagnostic categories, using the ICD-9 classification system, according to expected resource utilization for a given group. The system allows health managers to benchmark a number of quality and productivity indicators according to diagnostic group.

implementing health insurance financing reforms (opting-in) and the necessary regulatory framework through (i) separating financing from provision of services, (ii) increasing user choice and extending coverage, and (iii) developing and implementing purchasing mechanisms; and (b) institutional strengthening of IMSS through (i) changing its corporate structure and (ii) strengthening its health care delivery network. The reform comprises the following instruments/activities:

Developing The Regulatory Framework

61. For the development of a regulatory framework, the following actions are necessary:

(a) ***Establishing Risk Pooling, and the Separation of Financing and Provision: The Social Security Health Fund (SSHF).*** The pooling of risks under a single financing system will be designed to contain costs, extend access and promote greater quality of care and value for money. The separation of financing and provision and the introduction of provider compensation systems are important steps in order to ensure that the system is managed transparently, efficiently and under an even playing field for all institutions involved. The separation of financing and provision requires that the activities being provided are governed by explicit contracts, or management agreements, between the financing agency and the provider.

The pooling of risks and the separation of financing and provision within IMSS will be carried out by establishing a Social Security Health Fund (SSHF). The SSHF will play a fundamental role in realizing the potential for increased choice and competition established within the health system introduced by the SSL. The SSHF will pool funds of those who opt out of IMSS, as well as funds from those workers who opt in (mainly the self-employed and informal sector workers). The SSHF will consolidate all IMSS health resources, including Sickness and Maternity, Family Health Insurance Program (SSFAM), Pensioners' Medical Care and Workers Compensation programs, and will allocate funds to each Medical Area Unit and, eventually, to IMSS MCOs on a capitated basis. Over the medium-term, the capitation payments will include additional resources to allow Medical Area Units and MCOs to purchase care from the Specialty Hospitals using DRG or case-based payment mechanisms.[8] At the same time, the SSHF will continue to directly finance a package of high-technology, high-cost cases at Specialty Hospitals on a diagnosis-related basis (DRGs).

In the long term, the pooled-risk funds, such as SSHF, could merge all mandatory health contributions in the Mexican system, including those of other public health insurance institutions. As such, the SSHF could evolve into a national health insurance fund open to all medical institutions comprising the Mexican health care system and purchasing services from all public and non-public providers or MCOs.

During the first phase of the reforms, representatives from SHCP, SSA, SECODAM, and other governmental agencies (the "SSHF Committee") will provide advisory functions and help monitor the SSHF to promote transparency of the supervision and regulatory regime.

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[8] The purchasing of health care at Specialty Hospitals by Medical Area Units will require that the new organizational and functional structures are fully operational to allow the Medical Area Units to act as budgetholders or purchasers. Until such time, the Medical Area Units will receive capitation payments that do not contain resources for purchasing care at the Specialty Hospitals and the SHIF will continue to finance the Specialty Hospitals through direct budget transfers.

Over the medium-term, a properly strengthened supervisory body, acting independently of all agents and with clear rules of the game would be established in order to have a properly working system of managed competition. In addition, a technical unit will be established within IMSS to support the execution of the operational activities of the SSHF. The main responsibilities of IMSS and its technical unit vis-à-vis the SSHF include: (a) setting standards for the budgeting, financial management, accounting and financial reporting of MCOs, starting with IMSS Medical Area Units; (b) assessing, approving, and monitoring the implementation of the capitation and DRG formulae; (c) coordinate with SSA to regulate private MCOs (d) setting the rules for enrollment of new members in MCOs, the movement of members among MCOs, as well as the rules and regulations for opting-in and opting-out; (e) appointing an auditor to monitor and audit the collection system and its performance as well as the financial processes of the MCOs; and (f) creating and administering an Innovative Development Fund (IDF, see para. 62(d) below and Annex 7) to assist IMSS providers in financing the purchase of modern medical equipment and modernization of health care facilities. Annex 5 provides additional information on the structure and operating procedures of the SSHF.

(b) ***Establishing a Capitated System of Payment for Service Delivery.*** The development of a risk-adjusted capitation system is a key element to ensure greater efficiency and equity. The first phase of the reform—initiated in 1997 and extended to all Medical Area Units in 1998—includes the allocation of resources to IMSS Medical Area Units on a capitated basis. Later phases will include the use of this system as the principal allocative mechanism to distribute resources to MCOs under the opting-out system. For 1998, the Medical Area Unit budgets have already been distributed on a capitated basis. Over the next two years, additional variables will be included in the capitation formula to account for differences in the health needs of the populations in the Medical Area Units. A complementary action would be to complete the definition of Integrated Health Care Models to be used in the contracting of services with MCOs. In addition to the basic health package provided by the SSA for the population without pre-payment capacity, it is necessary to clearly define the content and cost of the integrated health care model that will be provided by IMSS Medical Area Units and private MCOs.

(c) ***Creating a Database of Beneficiaries.*** A database of all beneficiaries is necessary for the proper management and monitoring of the health insurance system, the introduction of free choice, and the implementation of a capitated payment system. The database will allow IMSS to consolidate the capitation resource allocation mechanism by improving the quality of data on Medical Area Unit populations, and to maintain an updated registry of all members, their insurance status and other variables which will affect the capitation formula. This information will become increasingly important as the opting-out program is extended.

(d) ***Establishing a Regulatory Framework for Increased User Choice.*** In the medium term, user choice will be introduced by allowing selection: (i) of family doctors within a given Medical Area Unit; (ii) among IMSS Medical Area Units; (iii) among IMSS Medical Area Units and MCOs (both private and public) under an opting-out scheme; and (iv) of Specialty Hospitals by budgetholding Medical Area Units that purchase high technology services. In order for user choice to work properly, regulation and contracting arrangements must be set in place to establish the quality and quantity of services to be provided and the rights and obligations of beneficiaries and providers. The regulations to

be issued must include minimum regulations for purchaser-provider organizations (i.e., MCOs) and minimum regulations regarding service delivery.

Regulations for MCOs and other providers must set clear rules to prevent cream skimming and under-provision of health services and establish clear penalties in case of non-compliance. Specific attention will be paid to avoid segmentation by income levels. Finally, clear liquidation and closure mechanisms must be established for those MCOs and providers that do not comply with regulations and standards. These procedures must make sure that affiliates' rights are protected at all times.

(f) *Creating a Supervisory Authority.* A supervisory authority is required to authorize MCOs, establish regulations, and supervise compliance by all agents in the system. A lack of capacity to regulate the health care market dictates that the supervisory function will have to be assumed under the SSHF during the first several years of the reform. Over the medium-term, a properly strengthened supervisory body, acting independently of all agents and with clear rules of the game would be established in order to have a properly working system of managed competition.

Institutional Strengthening of IMSS

62. The following actions are necessary:

(a) *Restructuring the IMSS Corporate Structure.* As a vital complement to the decentralization process and to promote the separation of financing and provision of services within IMSS, major changes will be necessary at all levels of IMSS' organizational structure. This structure will need to have clearly defined roles and to be strengthened at each level. The specific activities and functions for each are described in Annex 6.

(b) *Decentralizing IMSS.* Continuing on the efforts initiated during earlier stages, additional decentralization of management responsibility and accountability is a critical element to improve efficiency and improve responsiveness to the health needs of the population. Decentralization of IMSS will be supported by ensuring that key policy decisions will be taken to: (i) transfer decision-making to the adequate decentralized level; (ii) ensure that resources flow transparently to the decentralized decision-making authorities; and (iii) provide the decentralized units with adequate institutional capacity (budgeting procedures, treasury systems and internal control systems).

(c) *Strengthening IMSS Service Delivery Capacity.* The success of the reforms will depend to a large extent on the strengthening of the IMSS health care delivery network. Financial support will be provided to Medical Area Units and Specialty Hospitals to strengthen their delivery capacity and to improve the quality and efficiency of their services. Further support will be provided to develop the Medical Area Units into autonomous, self-managed, integrated health delivery units.

(d) *Establishing an Innovative Development Fund (IDF).* The strengthening of IMSS service delivery capacity, particularly at the Medical Area Unit level, will require additional investments in equipment, information systems, and other measures to improve their production process so as to be more client-oriented and attempt to optimize costs. The actions to be taken include: better management of patient flows, increased introduction of outpatient services, and a more effective referral and counter-referral system between levels of care. The IDF, operating within the SSHF, will be an effective tool for IMSS to improve the quality and efficiency of care. The IDF will: (i) replace obsolete medical equipment and

technology to increase productivity and quality of services and rationalize operating and maintenance costs; (ii) improve the management of health facilities at the primary, secondary, and tertiary levels; (iii) provide IMSS with a flexible instrument that will allow health facilities to adjust their production capacity in an evolving competitive market; and (iv) strengthen the organization and development of Medical Area Units. The IDF will receive gradual financing of US$200 million, as start-up capital, according to an investment program timetable; replenishment in subsequent years will be made according to an investment program, based on IMSS budgetary capacity and execution of the investment program.

In addition to providing capital to finance basic investment needs to ensure minimum levels of quality and competitiveness, the IDF will use a competitive, demand-driven mechanism to link additional investments with IMSS reforms. Specifically, the IDF will evaluate management improvement subprojects and additional investments using a point system taking into consideration: (i) progress by Medical Area Unit in improving its management, contracting, and financing functions; (ii) linkage with priority health problems; (iii) expected reduction in waiting lists; (iv) reduction in unnecessary referrals; (v) degree of integration with the health network in the Medical Area Unit; and (vi) innovations in management of health facilities and health delivery systems. Annex 7 provides further details on the operation of the IDF.

Next Phase of the Reform

63. Once the above actions have been substantially achieved, the reform would move to its next phase to:

(a) ***Include Other Institutions.*** Although the reform starts with IMSS (and the SSA under a different loan), future reform efforts will likely include other institutions managing compulsory contributions for health such as ISSSTE, PEMEX and others.

(b) ***Promote Universal Health Insurance.*** Over the medium- to long-term, the reforms are aimed at promoting the development of risk pooling mechanisms that can integrate financing sources from all social security institutions (ISSSTE and others) and non-social security institutions (i.e., SSA) and purchase health services—for both the basic package currently provided by SSA and the managed health care model to be defined under the proposed reforms—from a wide array of providers including IMSS, ISSSTE, SSA and private providers. The fund would operate as a national, or sub-national, Health Insurance Fund to provide comprehensive coverage to the entire population.

E. Bank Assistance

64. The Government has requested Bank assistance for its health system reform. In the first phase, Bank support is concentrating on IMSS and will include budgetary support to help meet the Government's immediate obligations under the SSL and technical input into the design and implementation of the reform and the strengthening of IMSS. The Government has provided a Letter of IMSS Health Insurance Development Policy (Annex 1). Bank support would consist of two complementary, parallel operations: (a) an adjustment operation, the subject of this Report, and (b) a Technical Assistance Loan (TAL) (see para. 86 and the Project Appraisal Document, Report No. 17349-ME).

65. ***Loan Objectives.*** The objective of the proposed loan is to support the initial implementation phase of reforms, which focus on improving the efficiency and equity of the health insurance system and increasing the quality and efficiency of health care service provision within IMSS. Specifically, the loan will support the design and implementation of major policy changes that aim at:

- Improving the financial management of the IMSS health insurance system to ensure financial transparency, introduce new resource allocation mechanisms, and limit the fiscal impact of the proposed health care reforms;
- Strengthening the institutional and regulatory framework for health insurance to extend coverage to the self-employed and informal sector workers, ensure greater transparency and accountability among providers, develop measures for quality assurance and users' rights, and promote user choice; and
- Improving the quality and efficiency of the IMSS health delivery system by supporting the decentralization of decision-making, restructuring of the health care delivery network around a population-based system, and the introduction of performance-based incentives for providers.

Country Assistance Strategy (CAS)

66. The loan is consistent with the CAS objectives of growth, stability, social development, and the modernization of the state set forth in the Mexico CAS (Report 16135-ME) discussed by the Executive Directors in December 1996.[9] The proposed loan would directly address three of the five actions for the health sector identified in the CAS and support several other CAS objectives. Specifically, the proposed loan would support the development of policy actions aimed at the following objectives:

- *Establishing a financially viable health insurance systems under the new SSL* by developing the institutional and regulatory framework necessary to contain costs, reduce risk selection, improve quality and develop adequate supervision capacity.
- *Increasing the role of the private sector in delivery health services* through the opting-out system that allows for IMSS members to select private providers of insurance and services rather than IMSS. The project would support the development of contracts, performance indicators to measure efficiency and quality of private providers, as well as the regulatory instruments to allow for a prudent implementation of competition in the Mexico health sector.
- *Decentralizing more responsibilities to the subnational levels under an equitable system of federal transfers:* IMSS has already made significant progress in promoting the decentralization of responsibility and accountability to subnational levels by: (i) proposing changes in the organizational and functional structure to devolve functions and responsibility to the Regional level and to the Medical Area Units; (ii) decentralizing part of the budget preparation process and increasing the authority of local levels over budget execution; and (iii) designing and implementing a resource allocation system based on a risk-adjusted capitation formula. The proposed project would support continued development of these actions, as detailed in the project description.

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9 A CAS Update Report has been scheduled for Board discussion on April 14, 1998.

67. Other CAS objectives which will be supported by the proposed loan include *growth*, which would be supported by (a) improving the incentives for employment in the formal sector by lowering the burden of payroll taxes; (b) increasing the efficiency of the health system, thereby reducing its distortionary effects on the economy; and (c) increasing long-term productivity and welfare gains resul[illegible] a healthier population. Economic and social *stability* would be enhanced by improving the fiscal and financial sustainability of the health system, and by its contribution to social equity, a crucial element for social and political stability. *Social development* would be supported through investment in the population's health. This would be enhanced through the project's support of investment in public health and primary care and by extension of coverage. Social development would also be supported by the overall improved efficiency of spending in the social sector. *Modernization of the state* would be enhanced since the reform would aid Mexico in following other OECD nations in guaranteeing each citizen a right to a social package of care provided by accountable public and private institutions.

68. ***Past Lending.*** This is the first time that the Government of Mexico has requested Bank assistance for an adjustment loan for the social sectors. It is the product of several years of policy dialogue and sector analysis. Although Bank lending for the social sectors in Mexico started in the 1980s with technical training projects, it is only since 1991 that the Bank's Mexico portfolio in the social sectors has grown – from US$332 million in FY91 to US$2.3 billion in FY98. To date, the social sector portfolio represents about 30 percent of the Bank's active lending program for Mexico.

69. Even though Bank involvement in the Mexico health sector dates from only 1991, Bank knowledge of the sector and active participation in health has increased steadily. The first Basic Health Care Project (FY91), supported by a US$180 million loan (3272-ME), was successfully completed in FY96. The Essential Social Services loan (3912-ME) for US$500 million, with a substantial amount allocated to the health sector, was designed after the 1994 peso crisis to support Government social spending to programs directly benefiting the poor. The Second Basic Health project (FY96), with a US$310 million loan (3943-ME), supports measures to improve the coverage and quality of basic health services in the eleven poorest states and to devolve to the states functional and budget authority for health services delivery. Implementation thus far has been above the Bank's overall portfolio performance. The Bank's strategy has focused so far on the uninsured population and basic health programs, which is the target of the SSA programs. The new SSL, with a clear focus on reforming health insurance and the pension system, offers the Bank a unique opportunity to initiate lending related to policy reforms in the health sector. The policy lending started with the FY96 Contractual Savings Development Program (Ln. 4123-ME). This proposed loan would be a logical next step to the Bank's social sector lending program in Mexico.

70. ***Future Lending.*** As indicated in the CAS, the Bank lending program for the social sectors supports Government plans to implement far-reaching structural measures covering the following sectors:

- *Health System Reform,* including continuing the modernization of IMSS and improvement of the financing and efficiency of services delivery;
- *Education,* improving the quality of school entrants through expansion in pre-school education specifically for indigenous children, upgrading primary education through the investment of cost-effective inputs (teaching materials, in-service teacher training),

expanding access to lower and secondary education in under-served areas. The strategy also supports Government effort to consolidate decentralization of education services in the states;

- *Higher Education Financing,* extending the availability of student loans for low and middle income students to increase equitable access to higher education in Mexico;
- *Poverty Reduction,* including nutrition programs directed towards poor families and school children, particularly girls to improve their access to basic education.

71. The health system reform process in Mexico will require continuing support from the Bank over the coming years. The Bank and the Government are considering an Adaptable Program Loan (APL) to provide the necessary support to extend the health system reform to remaining social security institutions and other public providers. During the operation's Mid-Term Review scheduled for March 1999, discussions on the general framework for the APL will be started and the program prepared during calendar year 1999. Following completion of the proposed structural adjustment loan, the APL could become effective during calendar year 2000, thereby providing a flexible framework to allow the following administration to extend the health system reform into the next century.

Rationale For Bank Involvement

72. The share of public resources allocated to the social sectors underscores the importance of improving the efficiency and quality of services in the health sector within the scope of improving the overall efficiency of resource allocation in Mexico. The Bank has long been concerned with improving the efficiency and quality of the health sector in Mexico, and has supported the extension of coverage and strengthening of the primary health care network and the social security system through prior lending operations. The Bank is in a position to bring to this operation a great deal of expertise in health sector reform from other countries, in order to maximize the potential of the 1995 SSL.

73. The Bank's collective experience in health care reforms worldwide has contributed to the reform's technical design and the introduction of implementation arrangements that would enhance successful operation. In addition, the Bank's involvement in the provision of advice and technical support in the area of pensions and social security in Mexico culminated in a pension reform project which is in the implementation stage. The proposed operation will complement the pension reform project and is an essential part of the overall strategy to improve the financial situation of IMSS and manage the transition to increased government contributions to social security. In this regard, the Bank plays a constructive catalytic role to build consensus among the various reform partners (in this case, IMSS, SSA, and SHCP), building on the partnership and trust developed during the preparation of the Contractual Savings Development Program and the implementation of the Basic Health projects.

Justification for Adjustment Lending

74. The proposed loan would provide immediate support to the Federal budget to ease the transition from payroll tax financing to general revenue financing and to meet the Government's short-term obligations to health insurance financing IMSS, estimated at US$2.2 billion in 1998. Furthermore, the proposed loan would provide support to meet the increased costs of extending coverage foreseen as a response to broad economic recovery from the 1995 crisis and the introduction of new schemes to increase coverage among the self-employed and informal sector workers, estimated at at least $80 million annually (see box page 15 and Annex

9). In addition, the one-time costs associated with restructuring IMSS, strengthening the IMSS provider network, and increasing financial outlays to finance capitated payments to employers for the purchase of private insurance under the opting-out scheme, will require short-term financing.

75. On the macroeconomic side, the success of its recent performance and the credibility of its policies have earned Mexico access to international financial markets and thus, the country does not technically face a short-term funding constraint for its balance of payments requirements. Nevertheless, with a foreign debt stock of US$163 billion and gross servicing requirements estimated at US$36 billion in 1998 and US$41 billion in 1999, Mexico has a complex debt management challenge. In the current internationally volatile environment, securing reliable long-term debt instruments is an essential part of any viable medium-term debt management strategy, and Mexico does face restrictions in its access to longer term debt and/or internationally placed bonds. In this regard, World Bank balance of payments support is critical especially when, at the margin, the macroeconomic impact of the reforms this loan is supporting is to expand domestic absorption. Mexico faces a seriously binding fiscal constraint. Although the Government has carefully measured and balanced its access to domestic capital markets, domestic interest rates are high in real terms and this complicates the management of short-term capital inflows. The structure of foreign financing is sub-optimally inclined to shorter-term funding. The current program of health insurance reforms would exacerbate the difficulties to be faced by the Government in abiding to the fiscal constraint and, hence, in managing short-term capital inflows. World Bank balance of payments support would allow the authorities more room to maneuver while helping safeguard the limits of domestic borrowing and improve the overall quality of the medium-term fiscal response.

76. ***Experience with Adjustment Lending in Mexico.*** The Bank experience with adjustment lending in Mexico in the late 1980s and early 1990s has been mixed. Although most of the development objectives supported by the operations were eventually achieved, implementation lagged. Implementation delays were the results of the disparity between expectations of quick adjustment disbursements and the deliberate pace in concluding sensitive policy reforms. The main lesson from this experience is that adjustment operations should be designed with early, broad-based Government commitment to policy reforms and timely implementation, and to carefully link disbursements to clear and significant conditionality. Based on the lessons learned, the proposed adjustment loan: (a) has been prepared by Mexican and Bank teams in true partnership fashion, building on policy reforms already underway (as opposed to acting as a trigger point), and (b) will be completed by a TAL (see para. 86 and Annex 8) which will closely track programs under the adjustment operation and provide timely technical input as needed.

77. ***Coordination with IMF.*** The policy reforms supported under this operation, and in particular the increased transparency of IMSS-related health care revenues and expenditures and of the transfer mechanisms (i.e., the SSHF) are congruent with the IMF's objectives for Mexico. Despite the lack of a current standby agreement (the last one expired a few months ago), the IMF and the Government are in general agreement over fiscal policy. The IMF has been consistently apprised of the progress of this operation and the policy reforms contemplated therein, and has raised no objections.

IV. THE PROPOSED LOAN

A. Loan Description

78. An adjustment loan of US$700 million is proposed, consisting of a US dollar single currency loan to be disbursed in two tranches in accordance with conditions for tranche release noted below and in the Matrix of Policy Actions (Annex 3). The Borrower is BANOBRAS, S.N.C., with the guarantee of the United Mexican States, and the Implementing Agency is IMSS. The first tranche of $350 million is to be available upon loan effectiveness, anticipated for June 1998. The second tranche release of US$350 million is estimated to be available in the second quarter of FY00. The loan is expected to be closed by June 2000. At that time, it is expected that an APL will have been negotiated with the Government to ensure the continuity of the ongoing reform program (see para. 71).

B. Loan Size and Tranche Conditionalities

79. As detailed in the Matrix of Policy Actions, the loan would have conditionality based on the objectives of strengthening the health insurance financing and regulatory framework, assisting IMSS with the restructuring of the health care delivery organization, and preparing the IMSS health care delivery network for increasing competition by reducing inefficiencies and improving quality. Annex 2 also contains graphic representations of the operation's conceptual framework and main conditionalities and of the linkages between the operation's objectives and strategies and supporting actions under the TAL. The second tranche has been designed to maximize the policy changes that can be achieved with each tranche (approximately 15-18 months apart), with the major policy decisions allocated under the first tranche and subsequent tranche reinforcing the policy decision and supporting the development of key instruments. In addition to the specific conditions listed below, tranche release would also be contingent on compliance with the Letter of IMSS Health Insurance Development Policy and the effectiveness conditions in the legal agreement.

Health Finance and Regulatory Framework

80. ***Social Security Health Fund.*** The establishment of the SSHF is the principal risk pooling mechanism to make health services more accessible and efficient, and over the medium- to long-term it will promote horizontal integration among public and private providers. The main measures and actions include:

First Tranche

(i) SSHF approved by *Consejo Técnico* of IMSS, via approval of operational guidelines according to following principles: (a) contributing to risk pooling, limiting adverse selection, and incorporating catastrophic risks; (b) promoting competition and user choice, notably through subcontracting and opting-out; (c) developing contractual and financing mechanisms that facilitate the development of an internal market in IMSS; (d) maintaining the independent supervision capacity of the health system; and (e) framework for investment through IDF;

(ii) IMSS legal opinion confirming legal basis of SSHF;

(iii) Presentation of Terms of Reference for strengthening the supervisory capacity of existing control mechanisms for financial and health care delivery regulations, including: (a)

quality of care and user satisfaction; (b) monitoring management contracts[10] between SSHF and MCOs, and MCOs and Providers; (c) increasing the availability of user information; and (d) financial reporting and solvency requirements; and

(iv) Presentation of a draft agreement between SHCP and IMSS regarding the regulatory and institutional framework for the management of IMSS reserves, with specific emphasis on the financing of health insurance reserves, management of outstanding liabilities, and the IDF.

Mid-Term Review. Steps to be taken between First and Second Tranche (not disbursement conditions).

(i) *Review of the design of the regulatory and supervisory framework proposed for the SSHF; and*

(ii) *Issuance of regulations for the management of the financial reserves of the IMSS health insurance fund, including inter alia: (a) annual targets for IDF, management of other liabilities and general reserves; (b) investment instruments; (c) guidelines for acceptable levels of financial risk; (d) scope and timing of investments; and (e) minimum levels of liquidity.*

Second Tranche

(i) The SSHF has been operating since its inception in a manner fully consistent with the SSHF Operational Guidelines, the SSHF Implementation Plan and applicable SSHF reserves and liabilities management regulations;

(ii) The Guarantor and IMSS have prepared a joint strategy for sound long-term management of IMSS' liabilities; and

(iii) IMSS has established and is operating a database of IMSS beneficiaries, to serve as a mechanism for administering and monitoring: (a) medical benefits paid by IMSS for its beneficiaries; and (b) health service provider choices made by such beneficiaries.

81. ***Increasing User Choice And Extending Coverage.*** The measures to be taken to increase user choice and extend insurance coverage form the basis for ensuring the sustainable implementation of the 1995 SSL. The measures outlined below would facilitate the gradual introduction of competition into the health care system by allowing IMSS members to opt out of the system into private MCOs and would increase the opportunities for informal sector workers and the self-employed to opt into a publicly subsidized health insurance scheme within IMSS. The main actions and their timing include:

First Tranche

(i) Presentation of Draft Regulations allowing for IMSS affiliates to opt out through the *prestación indirecta* program; and

(ii) Presentation of an action plan for choice of primary health care physicians.

Mid-Term Review. Steps to be taken between First and Second Tranche (not disbursement conditions).

(i) Draft strategy allowing for IMSS affiliates to choose among Medical Area Units;

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[10] These refer to purchasing agreements, or administrative arrangements, as referred to in the loan agreement.

(ii) *Issuance of regulations and guidelines for firms to choose between IMSS and public and private MCOs (opting-out), covering inter alia: (a) integrated health care model (benefits package) and financing; (b) instruments to limit risk selection; (c) minimum quality standards; (d) financial standards; (e) protection of users' rights; (f) penalties for non-compliance; and (g) supervision and evaluation;*

(iii) *Issuance of regulations and guidelines by IMSS allowing for free choice of physician in selected Medical Area Units;*

(iv) *Issuance of regulations and guidelines by IMSS governing opting-in.*

Second Tranche

(i) IMSS has prepared a strategy to allow beneficiaries to choose the Medical Area Unit from which they will obtain medical services;

(ii) IMSS has been allowing, and continues to allow, IMSS beneficiaries to choose alternative insurance providers in order to be covered by public or private medical managed care provision schemes, all in compliance with regulations issued by IMSS to that effect (which regulations, *inter alia*, satisfactorily protect beneficiaries' rights by requiring minimum service quality and financial soundness standards);

(iii) IMSS has been allowing, and continues to allow (in compliance with regulations issued by IMSS to that effect), all IMSS beneficiaries in at least thirty Medical Area Units to choose their own primary care physician from among those IMSS physicians belonging to the beneficiaries' Medical Area Unit;

(iv) In compliance with regulations issued by IMSS to that effect, at least 200,000 new beneficiaries[11] have (during the period specified in the Loan Agreement) enrolled in the IMSS publicly subsidized insurance system for the self-employed and informal sector workers.

82. ***Development Of Purchasing Mechanisms.*** The development of the purchasing function is a critical aspect related to the introduction of competition among IMSS providers and between IMSS providers and private providers. The measures to be taken focus on actions to develop: (a) contractual arrangements between IMSS as financing agent (i.e., SSHF) and the providers of health care services (IMSS and non-IMSS); (b) gradual implementation of resource allocation mechanisms (capitation and diagnosis-based systems); (c) evaluation systems and performance-based incentives.

First Tranche

(i) Presentation of draft model management contracts and guidelines for contracting between: (a) IMSS and Medical Area Units; and (b) IMSS and Specialty Hospitals; and

(ii) Presentation of Terms of Reference for developing a patient classification system, including an Action Plan for implementing a hospital payment system based on diagnosis-related groups (DRGs), or some other patient classification system.

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[11] "New beneficiaries" excludes students (enrolling as such) and State or municipal workers, and the number of "new beneficiaries" is calculated on a net basis (thus excluding those who enrolled in, but subsequently dropped out of, the IMSS social security voluntary or obligatory regimes during the measurement period in question).

Mid-Term Review. Steps to be taken between First and Second Tranche (not disbursement conditions).

(i) Review progress on implementation of purchasing mechanisms and the introduction of new provider reimbursement mechanisms.

Second Tranche

(i) IMSS has signed and is implementing management contracts with at least thirty Medical Area Units, whereby, *inter alia*: (a) IMSS will gradually allocate resources to such Medical Area Units through risk-adjusted capitation mechanisms; (b) the performance of the Medical Area Units will be assessed through specified evaluation systems; and (c) incentives will be established to reward improved Medical Area Unit health service delivery performance;

(ii) Such capitation mechanisms are being fully applied, on a pilot basis, to reimburse primary care physicians (in at least five of said thirty Medical Area Units) for their health delivery services;

(iii) IMSS has presented to the Bank an evaluation of its experience with the implementation of the contracts referred to in point (i) above;

(iv) IMSS has signed and is implementing management contracts, with at least five of its Specialty Hospitals, whereby, *inter alia*, IMSS is fully allocating resources to such Specialty Hospitals through diagnosis related or patient classification mechanisms;

(v) Fifteen IMSS hospitals (other than the five Specialty Hospitals mentioned in point (iv) above) have been using, and continue to use, diagnosis related or patient classification systems for internal administrative purposes.

Institutional Strengthening of IMSS

83. Despite a number of important changes over the past three years in the organizational structure of IMSS, the present structure remains overly centralized, with weak management systems and little management autonomy and accountability at the decentralized levels. The proposed reorganization will aim to address two key issues facing IMSS policymakers. *First*, to promote the clear separation of financing and delivery of services, through the development of internal market-based mechanisms and a process of decentralization and modernization of the central level management. *Second*, the gradual introduction of competition – both among IMSS providers and with private providers. This will require organizational changes within the IMSS health services administration that will promote increased efficiency and quality in the delivery of services by strengthening management, increasing accountability to patients, introducing quality assurance, and more decision-making at local levels.

84. ***IMSS Corporate Restructuring of Health Services Administration.*** The modernization of IMSS within this reform framework would involve: (a) changing the vertical corporate structure of the organization and administration to separate financing from provision; (b) devolution of responsibility and authority from the center to sub-national levels – Regional Directorates, Medical Area Units, and individual hospitals and clinics; and (c) redefinition of the functions of the central level administration. The measures to be taken to support the policy changes include:

First Tranche. The Government would present a Plan and Timetable for the completion of the IMSS corporate restructuring, including:

(i) Presentation of Action Plan and timetable for the corporate restructuring of IMSS Health Care System ("*Modelo Integral de Atención a la Salud*"); and

(ii) Approval by IMSS of guidelines for the operation of the Medical Area Units.

Mid-Term Review. Steps to be taken between First and Second Tranche (not disbursement conditions).

(i) Presentation of a Corporate Restructuring Plan for IMSS health care system, including organizational and functional changes for central level administration, development of Medical Area Units, management of the health delivery network; and

(ii) Evidence of progress in designing and implementing restructuring plans in at least ten budgetholding Medical Area Units.

Second Tranche

(i) IMSS has been, and continues to be, reforming its corporate structure in compliance with the terms and timetable of a restructuring plan issued by IMSS (which plan, *inter alia,* emphasizes the decentralization of IMSS administration to, and greater autonomy for and competition among, Medical Area Units);

(ii) At least fifteen Medical Area Units and five Specialty Hospitals have each prepared operational development plans for purposes of reforming administration of such Medical Area Units and Specialty Hospitals; and

(iii) Each of said fifteen Medical Area Units and five Specialty Hospitals is implementing its operational development plan referred to above, in accordance with such plan's terms.

85. ***Strengthening the IMSS Health Care Delivery Network.*** The gradual liberalization of the health insurance market and the need to improve quality and efficiency necessitate the preparation of IMSS health care providers for competition. The measures to be taken will support the development of activities in the Medical Area Units and the Specialty Hospitals to improve quality and efficiency of the IMSS delivery system. The development activities to be supported focus on improving management capacity at the point of service delivery, designing and implementing financial performance incentives to measure and improve the performance of providers and staff, implementing management information systems, introducing greater accountability to patients through user advocacy boards and members representatives, promoting quality assurance programs at all levels of the delivery network, and introducing technology assessment to improve the cost-effectiveness of investments in technology and equipment. The measures to be taken include:

First Tranche. The measures to be taken by board presentation would ensure IMSS commitment to strengthen the health care delivery network through the following condition:

(i) Issuance of an IDF Operational Manual, including eligibility criteria and procedures to request financial support from the IDF for development purposes, along with a 3-year investment program for investment and approval of subprojects under the IDF.

Mid-Term Review. Steps to be taken between First and Second Tranche (not disbursement conditions).

(i) Compliance with operating guidelines for IDF; and

(ii) The establishment of a Quality Assurance Board with a fully-defined membership, organization, authority, functions, and responsibilities, and a draft Quality Assurance Program covering operating procedures and an implementation plan.

Second Tranche

(i) At least 60 percent of the funds included in the IDF Investment Program have been committed in accordance with the provisions of the IDF Operational Manual;

(ii) At least half of said committed funds have already been disbursed from the IDF to said suppliers or contractors;

(iii) IMSS has been, and continues to be, improving the quality of its health care delivery services, particularly in at least five Medical Area Units in urban zones, in accordance with the terms of a quality assurance plan issued by IMSS and under the guidance of a quality assurance board operating within IMSS; and

(iv) IMSS has taken, and continues to take, actions aimed at improving accountability towards its beneficiaries, which actions include establishment of a consumer advisory board at the national level, use of client satisfaction surveys and acceptance of beneficiary representatives to act as formal contacts between IMSS and patients.

C. Technical Assistance

86. To provide the Government with necessary technical resources to design and implement the reform, a parallel TAL (loan of $25 million) has also been prepared and will be presented to the Board concurrently with this operation. Terms of Reference for most of the studies and technical assistance activities have been prepared and were reviewed during appraisal. The TAL will include (a) direct technical assistance to help design and implement policies and regulations, (b) management training programs, (c) direct technical assistance to selected Medical Area Units and Specialty Hospitals, (d) public awareness campaigns, and (e) a comprehensive evaluation component. The Technical Assistance program designed to support this operation is described in Annex 7. A Project Coordinating Unit (PCU) under the TAL will help coordination, track progress of the reform, and support the meeting of conditionalities under this loan.

D. Disbursement and Auditing

87. ***Disbursements.*** The proposed health system reform will be supported by a World Bank adjustment loan of US$700 million, to be disbursed in two tranches, according to the distribution shown in the table below, and conditioned on a positive evaluation of progress achieved in carrying out health reforms, on maintenance of a suitable macroeconomic framework, and compliance with the conditions specified in paras. 80-85 and the Matrix of Policy Actions (Annex 3).

Disbursement Plan (US$ million)

Source	1st Tranche	2nd Tranche	Total
World Bank	350	350	700

88. BANOBRAS as the Borrower and financial agent for the loan would be responsible for submitting withdrawal applications and would maintain separate records and accounts for all

transactions under the Loan. The Borrower will open an account in the Central Bank. Upon Bank notification of release for each tranche, proceeds of the loans will be deposited by the Bank in this account at the request of the Government. If after deposit in this account, the proceeds of the loan are used for ineligible purposes (i.e., to finance items imported from non-member countries, or goods or services in the standard negative list), the Bank will require the Borrower to either: (a) return that amount to the account for use for eligible purposes; or (b) refund the amount directly to the Bank, in which case the Bank will cancel an equivalent undisbursed amount of the loan.

89. *Auditing.* BANOBRAS will maintain separate records for all transactions under the loan. Upon the Bank's request, the Borrower will have the deposit account audited in accordance with standard Bank requirements.

E. Lessons Learned

90. The reform concept and process supported by the operation are of a long-term nature and politically and institutionally involved. Nations that have followed reform principles similar to those proposed include Germany, the Netherlands, Israel and, more recently, Russia, as well as Latin American nations supported by the Bank, including Chile, Costa Rica, and Argentina. All have evolved from employer-based insurance schemes. The key lesson learned from the unfolding collective experience is that no two systems are alike and therefore each system must be carefully considered on its own merits and its proper socio-economic context. Nevertheless, the following universal lessons which are critical to the loan can be identified:

- *The need for political will and leadership.* This has been demonstrated by the Government and IMSS in their reform initiative and their active participation and ownership in the choice of key project alternatives.
- *Flexibility.* Because of the nature of the reform process and the lessons learned, it is not possible to anticipate all issues which will arise. However, the reform's ability to adapt to issues as they arise is reflected in the structural nature of the loan and its conditionalities.
- *Cost of transition.* Even rich nations tend to allocate resources toward reform design, and not toward its implementation. This is often a key obstacle to reform, unwittingly reinforcing innate political and institutional opposition. The size of the loan and the nature of the Bank's technical support – including needed technical assistance under the parallel TA operation, training, and pilot testing – provide Mexico with a unique opportunity to overcome this obstacle.
- Conditions for tranche release should be clearly defined and easily monitored for compliance; and
- Priorities for technical assistance should be carefully identified and supported with rigorous supervision.

F. Monitoring And Reporting

91. Monitoring and reporting will be facilitated through the close coordination of activities and implementation agencies supported by the TAL and technical assistance from the Bank. Under the TAL, IMSS will set up a comprehensive monitoring and evaluation system to track the implementation of the proposed reforms and measure their medium- to long-term effects on the health care market. Results of the evaluation would serve as an input to IMSS and other governmental bodies to make decisions on furthering the reform process. Under the TAL, a

PCU will also be financed, providing the Bank a convenient, single point of contact for the implementation of the overall program. Performance indicators under the TAL also parallel closely policy actions to be taken under the adjustment operation and will provide the Bank with an early opportunity to assist the Government as needed during the implementation of the reform.

G. Program Objective Categories

92. The loan belongs to the category of *Economic Management* by helping the Government develop policy and tools to limit the fiscal impact of health finance reform and stimulate growth in the formal employment sector. The loan will also have long-term effects in *Private Sector Development* by opening avenues for true private sector competition in the delivery of publicly financed health services. *Poverty Alleviation* would also be supported through the extension of social security coverage to informal sector workers and the self-employed. Additional support to the poverty reduction objectives would be attained indirectly by improving the quality of IMSS health services, and thus health outcomes, and providing a progressive subsidy favoring those workers earning less than 3 minimum salaries.

93. ***Environmental Aspects.*** The program is not expected to have any environmental impact; it has been thus rated C.

H. Impact, Benefits And Risks

94. ***Benefits.*** The reform would contribute to the economy and society by: (a) reducing the fiscal burden of the current health system and its concomitant potential distortions, while improving its financial sustainability; (b) improving the system's efficiency; (c) providing incentives for private sector participation; (d) raising the quality of care; and (e) increasing its contribution to equity. The reform would ultimately contribute to greater welfare and productivity, based on improved health status and satisfaction with the system. These benefits would be attained through improved financing and allocation mechanisms and the creation of internal markets, all of which should lead to greater accountability within the system. Specifically, the modernization of the IMSS should result in the elimination of deficits and the potential creation of monetary surpluses following efficiency gains, particularly in urban centers. These gains, combined with an improved corporate structure, appropriate management, and incentive systems, would help IMSS to improve the quality of care and service and to allocate its resources more equitably.

95. The reform will have important macroeconomic effects for Mexico. The design and implementation of a series of policy and regulatory changes will help to mitigate the long-term financial liability of the Government with respect to IMSS health insurance through the design of cost-containment strategies for IMSS and of regulations to limit the financial risk to IMSS with regard to the opting-out and opting-in schemes. Lastly, the implementation of the publicly subsidized health insurance program for the self-employed and informal sector workers could have an important effect on labor market development and overall labor productivity.

96. ***Risks.*** The greatest risk to the proposed operation is backsliding in political commitment. While the current Government supports the reform of the health insurance, such support needs to remain strong, active and visible to overcome resistance that will inevitably arise in the course of the reform process. The use of two tranches, while intended to lock-in policy reforms by the end of the current administration, may also introduce undue rigidity into

loan conditionalities at the end of a hard-to-predict reform process. High-level officials in both IMSS and SHCP have participated in preparing the reform program and give political support to the process. Loan conditionalities have been carefully crafted to ensure an adequate balance between flexibility and the need for identifiable and unambiguous minimum indicators of policy reform progress. However, it will also be necessary to continue to internalize the reform within the IMSS in order to ensure that personnel at all levels understand the reform objectives and support it. To reduce opposition to change, the introduction of competition in the market will advance in stages and will be accompanied by substantial financial and technical assistance to the IMSS. To mitigate political risk of the operation, the accompanying technical assistance project will support a major campaign to disseminate information on program actions and their benefits to IMSS beneficiaries and the population at large.

97. A second related risk is the difficulties that may arise within IMSS, both institutionally and politically, in the decentralization of health services. Continued centralized decision-making, budgeting and purchasing will inhibit efficiency improvement and competition. There is strong support for the decentralization process which has already started at IMSS. The information campaign and efforts to inform staff at IMSS regarding the reform process will help overcome political resistance to the decentralization efforts. On the other hand, the TAL includes important resources to help IMSS carry out the decentralization process with adequate technical support.

98. A third risk is the sheer technical complexity of the reform, which dictates that many complementary activities be executed satisfactorily and in a highly coordinated fashion. Again, the Technical Assistance Loan is designed to provide IMSS with important technical input to support the implementation of the reform, such as the design of regulations, design of enrollment database system, and direct technical assistance for institutional reform within IMSS.

V. RECOMMENDATION

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

James D. Wolfensohn
President

by Caio Koch-Weser

Attachments
Washington, D.C.
May 1998

ANNEXES

LETTER OF HEALTH SECTOR DEVELOPMENT POLICY
[TRANSLATION]

Mexico City, May 20, 1998

Mr. James D. Wolfensohn
President
International Bank for Reconstruction and Development
1818 H Street, N.W.
Washington, DC 20433

Dear Mr. Wolfensohn:

Despite the economic crisis in late 1994, the Mexican government has made a series of macroeconomic adjustments without abandoning structural change policies within key sectors of the economy. In accordance with the 1995-2000 National Development Plan, the government has placed particular importance on social development, endeavoring in particular to increase spending on education and health and to make it more efficient, in compliance with the constitutional requirement that efforts be constantly devoted to increasing equity in Mexican society.

With regard to the Health Sector Reform Program for which the Mexican government is requesting support from the World Bank, I am pleased to present for your consideration the principles, objectives and strategies of the public policies that are being applied within the Mexican Social Security Institute (IMSS) over the 1995-2000 period as part of this Program.

The importance of the health sector reform project lies in the broad significance of activities in this sphere, since they enable a society to maintain appropriate levels of family well-being and security, increase the productivity of workers, and reduce losses due to illness. Moreover, providing access to health services has a redistributive effect, and serves to reduce poverty.

The 1995-2000 Health Sector Reform Program establishes guidelines for IMSS. The latter is key to the strategy of structural change launched more than three years ago by the Federal Government to deal with deficiencies and new challenges in the area of health.

The long-term model for the reform seeks to establish a health system with universal coverage based on the principle of solidarity, and granting all Mexicans access to a comprehensive range of health services, regardless of their ability to pay. The intent is to promote efficiency and quality in service delivery, creating a more competitive system and an effective regulatory framework that will also foster, over the long term, the establishment of a financially viable National Health System.

Health services in Mexico are currently facing a series of difficulties that are being addressed by means of a long-term plan. The main problems are examined in the paragraphs below.

Centralization. The operations of public health agencies are characterized by a form of centralization that tends to bureaucratize their procedures and resource allocation mechanisms, as well as dilute responsibilities in their various control structures. This problem arises when decision-making at the operational level lies with the institutional structure and not at the level of the hospitals, medical units or regions, thus reducing the scope for establishing incentives to

reward good performance and hindering the timely delivery of services, the ability to control costs, and efficient resource use.

Inadequate Coverage. A major cause for concern is that the coverage provided by the National Health System is inadequate. According to Ministry of Health (SSA) figures, at the beginning of the current administration more than 10 million Mexicans were without regular access to health services. Most of them live in scattered rural areas and in marginalized urban areas, without access to social security or to SSA or federal services.

On the other hand, coverage is low among informal sector workers. Even though there exists enough social and fiscal capacity to include them, a large portion of this population does not belong to the social security system despite being economically active.

Inefficiencies in the Provision of Services. One of the obstacles to universal coverage has been a duplication of supply in some areas on the part of social security institutions, the private sector, and SSA. This has resulted in increased spending on health and a reduction in the system's effectiveness in providing universal access. Shortcomings in quality and timeliness of services have led to duplication in financing. This problem provides an additional incentive for consumers to under-report their real levels of income to IMSS, and for employers in the informal sector to create jobs without social security coverage.

Given the importance of the measures adopted by the Institute and its relative importance as the country's largest provider of medical services, it is inevitable that it has become the linchpin of the reform, the basic objectives of which are as follows: expansion of coverage, increased efficiency and equity in service delivery, and changes in the financing structure for providing health services.

The activities to be implemented under the 1998-2000 program call for continuation of the comprehensive IMSS modernization project that began with the 1994 legal reform. This led to the establishment of the Regional Directorates and the beginnings of the process of "deconcentrating" the Institute. IMSS received a strong boost as a result of the financial strengthening provided for under the new Social Security Law, which became effective in July 1997. The above activities can be grouped under six guiding principles that define the various policies and mechanisms, and these are described in greater detail below.

(1) Separation of Financing and Provision of Services

The purpose is to draw a clear distinction between the functions of financing services and delivering them. Such separation enables resource allocation to be more responsive to the community's health needs, as determined by its epidemiological and demographic characteristics rather than its ability to pay. This provides advantages with regard to transparency and the redistribution of income according to the principle of solidarity, these being two of the underlying objectives of the social security system; the separation also helps strengthen the management capacity of the units providing health services by transferring effective responsibility to them.

The proposed structure is based on aggregating all the health risks of the insured population and providing financing through a common fund in which will be pooled all the contributions from each of the various programs of medical insurance (i.e., Sickness and Maternity, including resources for Pensioners' Medical Care; Family Health; and Workers Compensation), with funds subsequently being transferred to the decentralized providers, in accordance with prospective allocative mechanisms (i.e., capitation, adjusted for risk) and case-based payment

(diagnosis-related payment). It will be possible to extend this system of financing to cases in which services are contracted out in accordance with the relevant legislation. It should be noted that this policy in no way contravenes the requirement in the new law governing IMSS that separate accounts must be maintained for recording income and expenditures for each line of insurance.

A committee will be established to have responsibility for supervising the implementation of these policies and regularly providing the IMSS Consejo Técnico with full information and advice. It will oversee and report on progress toward the social security objectives of solidarity and service, submitting this information to the higher government and supervisory authorities, and to the general public.

The following are some of the main aims of this policy: (a) to guarantee that equitable rules apply to the allocation of resources to units providing medical services; (b) to lay down principles governing the establishment of contingency reserves for use when unforeseen events threaten normal service delivery; (c) to define the capital investment budget and principles to govern project appraisal; (d) to ensure that budgetary activities are consistent with the IMSS integrated health care model and with policies for empowering beneficiaries.

(2) The "Deconcentration" of Powers and Responsibilities

The introduction of a new model of budgeting and resource allocation, as well as the separation of the financing and service delivery functions, provide an opportunity for the introduction of a new model of institutional management. IMSS began to study these budget models in 1995, and since 1996 it has been gradually promoting their use in resource allocation and budgeting. The basis for this strategy is to strengthen the IMSS Medical Area Units, making them into institutions with greater autonomy as health-care providers. Although the IMSS Medical Area Units have existed for some decades, the consensus is now their management capacity should be strengthened so that the community can be involved in decision-making to a greater degree.

The changes call for action on the institutional strengthening of IMSS. Many of these measures have focused on designing new institutional policies for managing human resources and financial and administrative systems in keeping with the organizational changes. In addition, new models of labor relations are being studied; these include the use of incentives for increasing productivity and enhancing flexibility in personnel management.

(3) The Development of Transparent and Equitable Mechanisms for Resource Allocation

A key element in ensuring increased efficiency and equity in resource allocation is the development of a risk-adjusted capitation system. As part of the first phase of the reform, this resource allocation system has started being applied to the IMSS Medical Area Units. Since 1997, the budget allocated to each area has been partly based on capitation, and this project will develop the necessary instruments for institutionalizing allocative mechanisms and ensuring that they are properly supervised and evaluated.

At the same time, IMSS has made progress on studying systems for classifying patients, the purpose being to increase its medical management capacity, as well as its capacity for cost measurement, budgeting, and service planning. These systems will be gradually introduced into the management process.

(4) Improvements in Quality and Timeliness in Care Delivery

One of the objectives of the reform is to improve the quality of services, and so considerable efforts have been devoted to preparing additional measures that will directly contribute to this purpose. Among these are the development of an IMSS quality control system, based on the principles of continuous improvement, and strengthening of the participatory councils for consumers, so that they can have a greater voice in the development of mechanisms for improving service quality.

The modernization of IMSS's technological resources and of management is enabling it to become more efficient and to be competitive with other providers, and this will lead to greater client satisfaction.

Although in themselves the measures described above give adequate confidence with regard to the potential success of the reform, it has been decided to seek additional support in the form of technical assistance to support implementation of the reform over the next few years, together with a public awareness campaign directed toward the general public and IMSS staff.

(5) The Gradual Introduction of Elements of Free Choice and Responsiveness to the Needs of Beneficiaries

Our goal is to establish a flexible system of health care provision in which workers of both sexes, retirees, and their beneficiaries will have greater freedom of choice with regard to their physicians and institutions. Expanding the range of choice will make the health system as a whole more responsive and lead to a greater degree of consumer satisfaction.

The first step will be to allow IMSS beneficiaries to choose their family physician from among those available within the unit to which they belong. In the medium term, consumer choice would be extended to apply to Medical Area Units as well as individual family physicians. This measure will help create a favorable framework for increasing the efficiency of health services by establishing incentives to productivity and efficiency.

Increased scope for choice enables demand to function as a mechanism for identifying which physicians and institutions are the most able or provide the best services. Consequently, IMSS intends to implement policies for rewarding good performance, measuring this by means of productivity and efficiency indicators.

(6) IMSS' Investment Program

The allocation of capital investment resources must be complementary to the budgeting of current expenditures, and in the short term the purpose of such allocation will be to correct any inequalities in the installed capacity of facilities, in light of patients' needs.

The adoption of an Operational Manual for an Innovative Development Fund is intended to regulate the financial allocations and investment in medical equipment and technology undertaken by Medical Area Units and hospitals, thus improving IMSS' decision-making capacity, modernizing the institution, and expanding hospital management capacity.

The allocation and appraisal process for capital investment projects will be managed as part of the Social Security Health Fund. This is a resource allocation mechanism for promoting competition at regional level among health services providers so that those that prove best fitted for the task and those with the most pressing needs will be responsible for implementing investment projects relating to the provision of equipment and the improvement of hospital management, thus increasing their operational efficiency. In addition, it will be possible to

increase the portion of health sector spending devoted to investment in technological innovation. In addition, this mechanism represents:

- An opportunity to extend the IMSS Investment Program to cover the considerable increases in numbers of beneficiaries in newly emerging areas and overcoming the backlog resulting from an excessively long period in which investment lagged behind needs;
- The opportunity for technological renewal in the Institute, in accordance with criteria based on social and medical cost-efficiency, given that—because of the investment backlog—all too often it has to make do with obsolete technology that is expensive to operate and is less medically efficient than is desirable and possible;
- The generation of resources for priority medical research and technology production, while ensuring their continuity;
- A guarantee that all project preparation and implementation relating to investment in equipment and hospital management would meet the real needs of beneficiaries;
- A more appropriate targeting of resources, so that they will be allocated where they are most needed and/or best utilized.

Establishing the Fund will make it possible to overcome one of the most serious problems confronting the Medical Area Units; i.e. the lack of adequate and timely resources for undertaking the infrastructure investment projects necessary for their efficient operation. It is very important to note that initially every equipment investment project will have to be combined with a management improvement program on the part of the hospitals and units making up IMSS' provider network.

Over the last two years, IMSS has made considerable efforts to increase its project appraisal and management capacity, and it has prepared an Investment Program for the 1998-2000 period that will make it possible to renovate its infrastructure and increase its development in newly emerging areas. Over the last several months, IMSS has worked with the Ministry of Finance to develop a Financial Management Strengthening Program in IMSS under the provisions of the federal decree for budgetary management. This project was recently approved by IMSS' Consejo Técnico and will be presented to the Comisíon Intersecretarial de Gasto-Financiamiento in order to finalize the Financial Management Strengthening Program. An important element of this process will be a significant increase in the Institute's 1998-2000 investment program. The Financial Management Strengthening Program will help maintain IMSS' financial equilibrium in both the short- and long-term while preserving its ability to react in an appropriate manner both to potentially significant increases in demand and to address past deficiencies in the investment program.

(7) Evaluation of Reform Policies and Activities and their Impact on Health Care Provision and Health Outcomes

The objective of the activities referred to above is to improve health conditions for the population. In addition to its deconcentration policy, IMSS has evaluated its management information systems, and has developed systems covering epidemiological information and medical and hospital activities. The Institute plans to strengthen and introduce innovations in its productive activities and in the gathering and analysis of data, to improve the quality of information, and to adopt innovative measures for strengthening the management capacity of its operational units. It is believed that this evaluation will provide a basis for improving management, enhancing its policies, and guiding the general public and raising its awareness so as to obtain its support and cooperation.

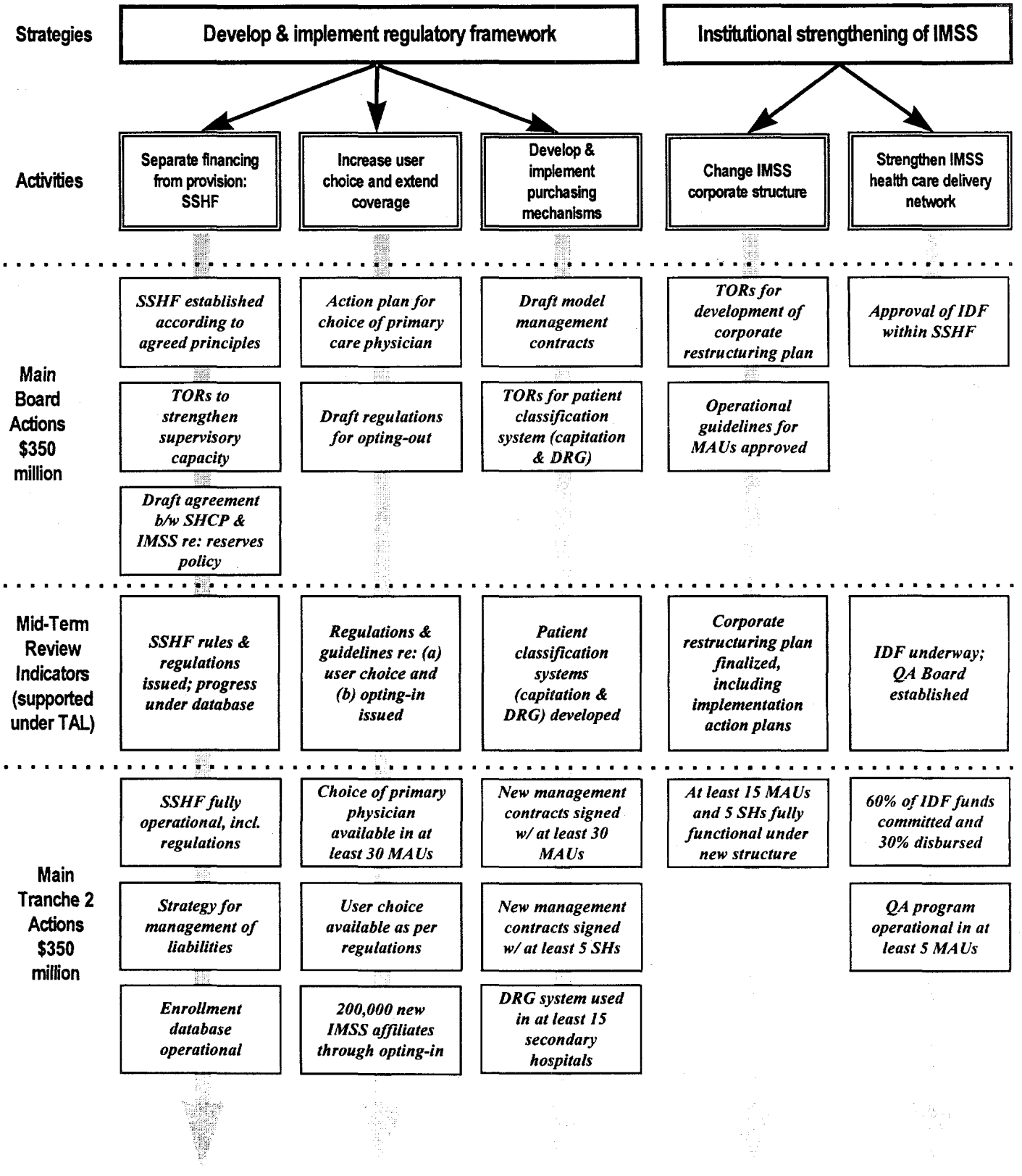
The above policies and measures confirm the role of the state as the financing source for the health system while recognizing the need to strengthen the Institute's care provider units while, at all times, putting the beneficiary as the heart of the system with respect to both resource allocation and service quality assessment.

Thus, we can be sure that this is a solidly based project that will bring about continuous improvements in Mexico's health sector, which we acknowledge to be the key to economic and social development and one of the best investments that our country can make.

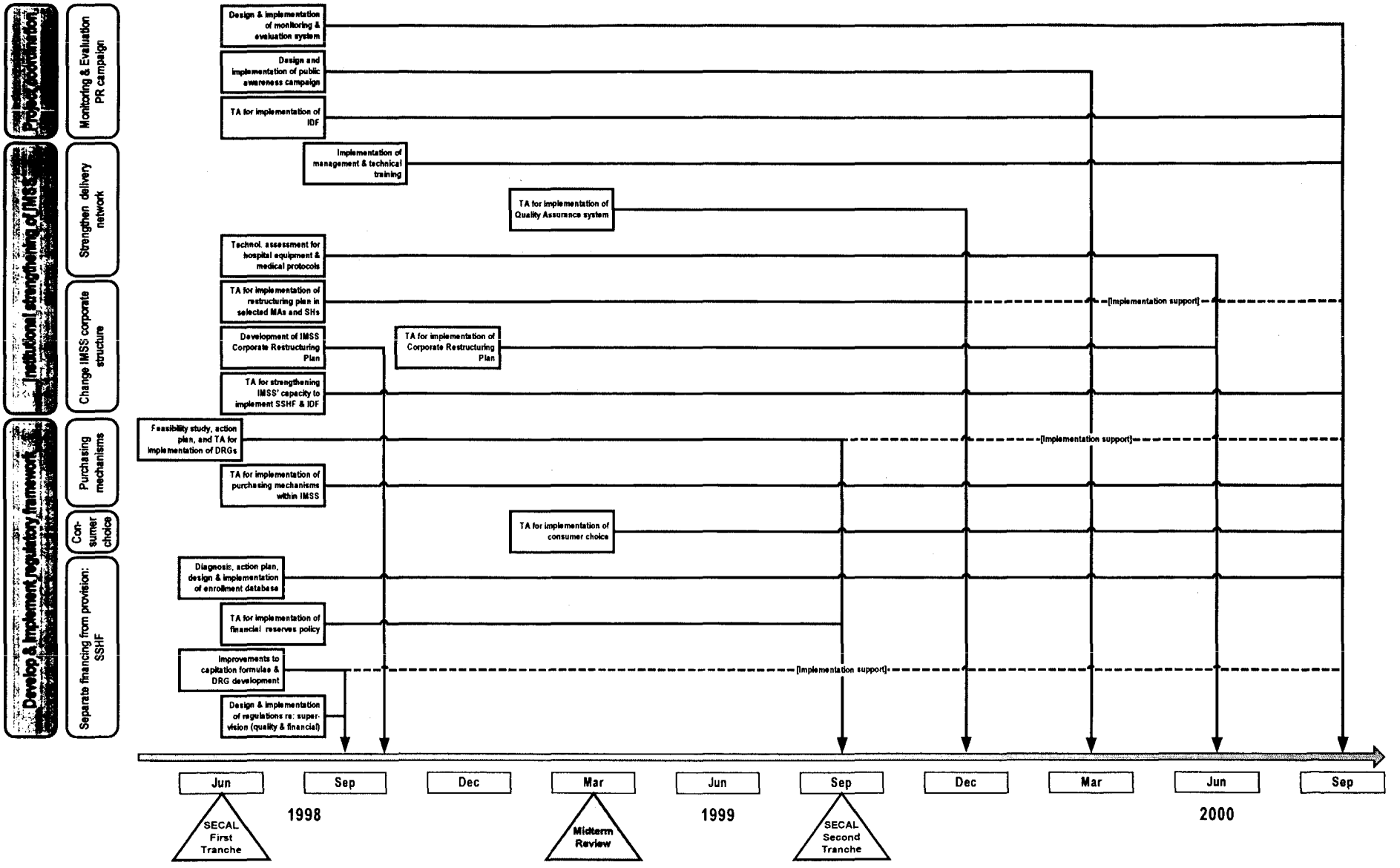
José Angel Gurría Treviño
Minister of Finance

Genaro Borrego
Director General, IMSS

CONCEPTUAL FRAMEWORK – OBJECTIVES, STRATEGIES, AND MAIN CONDITIONALITIES



HEALTH SYSTEM REFORM TECHNICAL ASSISTANCE LOAN
LINKAGES TO ADJUSTMENT OPERATION AND PROJECT IMPLEMENTATION PLAN



MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
I. General Conditions			
A. Maintenance of Overall Policy Framework	Presentation of Signed Policy Letter		
	Compliance with loan agreement effectiveness conditions		Compliance with loan agreement section 2.02 (d) conditions
II. Health Finance and Regulatory Framework			
A. Reforms to Health Insurance Financing in IMSS	SSHF approved by Consejo Técnico of IMSS, via approval of operational guidelines according to following principles: (i) contributing to risk pooling, limiting adverse selection, and incorporating catastrophic risks; (ii) promoting competition and user choice, notably through subcontracting and opting-out; (iii) developing contractual and financing mechanisms that facilitate the development of an internal market in IMSS; (iv) maintaining the independent supervision capacity of the health system; and (v) framework for investment through IDF; IMSS legal opinion confirming legal basis of SSHF; and		The SSHF has been operating since its inception in a manner fully consistent with the SSHF Operational Guidelines, the SSHF Implementation Plan and applicable SSHF reserves and liabilities management regulations;

MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
	Presentation of Terms of Reference for strengthening the supervisory capacity of existing control mechanisms for financial and health care delivery regulations, including: (i) quality of care and user satisfaction; (ii) monitoring management contracts;[1] between SSHF and MCOs, and MCOs and Providers; (iii) increasing the availability of user information; (iv) financial reporting and solvency requirements; and	Review of the design of the regulatory and supervisory framework proposed for the SSHF;	
	Presentation of a draft agreement between the SHCP and IMSS regarding the regulatory and institutional framework for the management of IMSS reserves, with specific emphasis on the financing of health insurance reserves, management of outstanding liabilities and the IDF	Issuance of regulations for the management of the financial reserves of the IMSS health insurance fund, including inter alia: (i) annual targets for IDF, management of other liabilities and general reserves; (ii) investment instruments; (iii) guidelines for acceptable levels of financial risk; (iv) scope and timing of investments, and *(v)* minimum levels of liquidity	The Guarantor and IMSS have prepared a joint strategy for sound long-term management of IMSS' liabilities; and IMSS has established and is operating a database of IMSS beneficiaries, to serve as a mechanism for administering and monitoring: (a) medical benefits paid by IMSS for its beneficiaries; and (b) health service provider choices made by such beneficiaries

[1] These refer to purchasing agreements, or administrative arrangements, as referred to in the loan agreement

MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
B. Increasing user choice and extending coverage of voluntary affiliation insurance within IMSS (opting-out and opting-in)	Presentation of Draft Regulations allowing for IMSS affiliates to opt out[2] through the prestacion indirecta program; and	Draft strategy allowing for IMSS affiliates to choose among Medical Area Units;	IMSS has prepared a strategy to allow beneficiaries to choose the Medical Area Unit from which they will obtain medical services.;
(i) Facilitating user choice and competition amongst Medical Area Units and MCOs;		Issuance of regulations and guidelines for firms to choose between IMSS and public and private MCOs (opting-out), covering inter alia: (i) integrated health care model (benefits package) and financing; (ii) instruments to limit risk selection; (iii) minimum quality standards; (iv) financial standard; (v) protection of users' rights; (vi) penalties for non-compliance; and (vii) supervision and evaluation	IMSS has been allowing, and continues to allow, IMSS beneficiaries to choose alternative non-IMSS insurance providers in order to be covered by public or private medical managed care provision schemes, all in compliance with regulations issued by IMSS to that effect (which regulations, inter alia, satisfactorily protect beneficiaries' rights by requiring minimum service quality and financial soundness standards).;
(ii) Promoting user choice of primary physicians; and	Presentation of an action plan for choice of primary health care physicians	Issuance of regulations and guidelines by IMSS allowing for free choice of physician in selected Medical Area Units; and	IMSS has been allowing, and continues to allow (in compliance with regulations issued by IMSS to that effect), all IMSS beneficiaries in at least thirty Medical Area Units to choose their own primary care physician from among those IMSS physicians belonging to the beneficiaries' Medical Area Unit;

[2] In the IMSS case, "opting-out" refers to a system where beneficiaries choose to receive health benefits through alternative providers, which will guarantee a minimal level of service provision in exchange for a fixed fee based on a risk-adjusted capitated payment scheme. However, they remain part of overall social security financing and insurance system. Conversely, "opting-in" refers to new entrants into the IMSS health care system, ostensibly from the self-employed and informal sector populations.

MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
(iii) Promoting the extension of coverage through voluntary affiliation insurance (opting-in)		Issuance of regulations and guidelines by IMSS governing opting-in	In compliance with regulations issued by IMSS to that effect, at least 200,000 new beneficiaries[3] have (during the period specified in the Loan Agreement) enrolled in the IMSS publicly subsidized insurance system for the self-employed and informal sector workers
C. Development of Purchasing Mechanisms	Presentation of draft model management contracts and guidelines for contracting between: (a) IMSS and Medical Area Units; and (b) IMSS and Specialty Hospitals; and Presentation of Terms of Reference for developing a patient classification system, including an Action Plan for implementing a hospital payment system based on diagnosis-related groups (DRGs), or some other patient classification system	Review progress on implementation of purchasing mechanisms and the introduction of new provider reimbursement mechanisms	IMSS has signed and is implementing management contracts with at least thirty Medical Area Units, whereby, inter alia: (i) IMSS shall gradually allocate resources to such Medical Area Units through risk-adjusted capitation mechanisms; (ii) the performance of the Medical Area Units shall be assessed through specified evaluation systems; and (iii) incentives shall be established to reward improved Medical Area Unit health service delivery performance; Such capitation mechanisms are being fully applied, on a pilot basis, to reimburse primary care physicians (in at least five of said thirty Medical Area Units) for their health delivery services;

3 "New beneficiaries" excludes students (enrolling as such) and State or municipal workers, and the number of "new beneficiaries" is calculated on a net basis (thus excluding those who enrolled in, but subsequently dropped out of, the IMSS social security voluntary or obligatory regimes during the measurement period in question).

MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
			IMSS has presented to the Bank an evaluation of its experience with the implementation of the management contracts referred to above; (IMSS has signed and is implementing management contracts, with at least five of its Specialty Hospitals, whereby, inter alia, IMSS is fully allocating resources to such Specialty Hospitals through diagnosis related or patient classification mechanisms; Fifteen IMSS hospitals (other than the five Specialty Hospitals mentioned above) have been using, and continue to use, diagnosis related or patient classification systems for internal administrative purposes
III. Institutional Strengthening of IMSS			
A. Corporate Restructuring and management decentralization of IMSS Health Care System	Presentation of Action Plan and timetable for the corporate restructuring of IMSS Health Care System ("Modelo Integral de Atención a la Salud"); and	Presentation of a Corporate Restructuring Plan for IMSS health care system, including organizational and functional changes for central level administration, development of Medical Area Units, management of the health delivery network; and	IMSS has been, and continues to be, reforming its corporate structure in compliance with the terms and timetable of a restructuring plan issued by IMSS (which plan, inter alia, emphasizes the decentralization of IMSS administration to, and greater autonomy for and competition among, Medical Area Units);

MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
	Approval by IMSS of guidelines for the operation of the Medical Area Units	Evidence of progress in designing and implementing restructuring plans in at least ten budgetholding Medical Area Units.	At least fifteen Medical Area Units and five Specialty Hospitals have each prepared operational development plans, for purposes of reforming administration of such Medical Area Units and Specialty Hospitals; and Each of said fifteen Medical Area Units and five Specialty Hospitals is implementing its operational development plan referred to above, in accordance with such plan's terms.
B. Strengthening the IMSS health care delivery network	Issuance of an IDF Operational Manual, including eligibility criteria and procedures to request financial support from the IDF for development purposes, along with a 3 year investment program for investment and approval of subprojects	Compliance with operating guidelines for IDF; and The establishment of a Quality Assurance Board with a fully-defined membership, organization, authority, functions, and responsibilities, and a draft Quality Assurance Program covering operating procedures and an implementation plan.	At least 60 percent of the funds included in the IDF Investment Program have been committed in accordance with the provisions of the IDF Operational Manual; At least half of said committed funds have already been disbursed; IMSS has been, and continues to be, improving the quality of its health care delivery services, particularly in at least five Medical Area Units in urban zones, in accordance with the terms of a quality assurance plan issued by IMSS and under the guidance of a quality assurance board operating within IMSS; and

MATRIX OF POLICY ACTIONS

(Actions in *italics* are included in Letter of Sector Policy only, to be monitored as part of the overall program implementation

Component	First Tranche	Steps to be taken between First and Second Tranche (Mid-Term Review)	Second Tranche
			IMSS has taken, and continues to take, actions aimed at improving accountability towards its beneficiaries, which actions include establishment of a consumer advisory board at the national level, use of client satisfaction surveys and acceptance of beneficiary representatives to act as formal contacts between IMSS and patients
C. Investment in Technical assistance			
D. Public Awareness Campaign on IMSS Reform		Presentation of Communication Strategy for Public Awareness Campaign	

HEALTH SYSTEM REFORM – THE LONG-TERM VIEW

1. ***Reform Objectives.*** The Government reform program for the health sector focuses on four main objectives: (a) to limit the fiscal impact of the proposed health insurance reforms and promote financial transparency in the management of resources; (b) to increase health coverage under the social security system; (c) to promote better quality and efficiency in services provision; and (d) to introduce accountability and supervision in health care delivery and finance.

2. Responsibility for health care provision is assigned mainly to the SSA and IMSS, with the former concentrating on low-income groups with no capacity for pre-payment, who live mainly in rural areas and lack access to multiple health providers. In addition, many of the urban and rural poor are covered by the IMSS-Solidaridad program. To facilitate the extension of its health services, the SSA is in the process of decentralizing the provision of services to the states. IMSS would in turn extend social security benefits to those who were previously outside the system, namely the unemployed and those in the informal sector. Under the proposed reform, these populations would enjoy access to medical services through a voluntary co-payment scheme partly financed by the state.

3. Improved quality and efficiency would be obtained by: (a) introducing greater choice of health care providers; (b) assigning clear goals, management responsibilities and instruments to public health providers and MCOs; (c) establishing minimum accreditation standards for providers and eligibility criteria for MCOs; and (d) clear and equitable expenditures allocation mechanisms. Finally, accountability will be introduced into the system through clear rules and regulations to be followed by providers and health care management institutions, decentralization of decision-making and management in public health care and social security institutions and supervision of compliance with approved regulation and management contracts.

4. ***The Long-Term Model.*** A long-term view would have as an end result, or structure of the reform process, would be a model in which: (i) an essential health package is defined and accessible to the full population; (ii) the responsibility for the provision of health services to the population with no pre-payment capacity is assigned to SSA; (iii) a single fund receives resources from all sources (government contributions, employers and employees) corresponding to all social security institutions (IMSS, ISSSTE, PEMEX, and others) and transfers resources to managed care organizations (MCOs) -- including public, e.g., IMSS Medical Area Units, or non-public, e.g. private HMOs or MCOs -- on a risk adjusted, capitation basis; (iv) the MCOs assume the risk of delivering the services included in the comprehensive care package with the capitated allocation from the SSHF and rules are set in place to resolve market failures; (v) the internal market is fully developed, whereby the IMSS Medical Area Units and MCOs purchase services from public and private providers which comply with minimum accreditation criteria and standards for service delivery; (vi) there is an independent supervisory capacity to ensure that the services provided meet quality and financial regulations; (vii) additional market mechanisms are fully operational to allow the Medical Area Units and MCOs to act as budgetholding organizations, purchasing services for their populations from IMSS and other Specialty Hospitals; and (viii) there is a fully developed market for supplementary health insurance to complement the comprehensive care package with a supplemental package providing for improved quality and service.

5. ***Instruments and Timing.*** The long-term model requires the implementation of a set of instruments which will start with the proposed loan, some of which need to be in place in order to implement the others (see Policy Matrix, Annex 1). The instruments and sequence are as follows:

A. Definition of Integrated Health Care Model: The SSA has defined a basic health package for the population without pre-payment capacity. Access to such package for the target population, as well as the strengthening of SSA is being implemented with Bank support through the Second Basic Health Care Project (3943-ME). The benefits provided under the integrated health care model to be provided by Medical Area Units and MCOs would be set in monetary terms in order to fix annual health expenditure caps and annual spending increases. The expenditure levels established in such fashion would then be allocated on the basis of a capitated payment system. DRGs will be incorporated as payment mechanism, specially for the high-cost and high-technology medical services not included in the comprehensive package.

B. Establishment of a Capitated System of Payment for Service Delivery: In such a system, Medical Area Units and MCOs are paid on a per capita basis, adjusted for risk, for managing and organizing the delivery of services to affiliates registered under their umbrella. It is most important that the capita payment be adequately priced in relation to the comprehensive package to be delivered. It is also important that rules be clearly set regarding the delivery of services (secondary and tertiary) not included within the comprehensive health package. IMSS initiated the implementation of capitation system in 1997, and further expanded the system to the 139 Medical Area Units for the budget year 1998. Despite the considerable achievements, it is necessary to improve the capitation formula, which currently includes only age and sex, to include additional variables that serve as proxies for demand and the cost of care.

C. IMSS Corporate Structure – Health Insurance: The decentralization process within IMSS requires substantial efforts of institutional strengthening and time. Adequate decentralization of activities and management from the Central Level to Specialty Hospitals and Medical Area Units requires that: (i) decision-making be transferred to the adequate decentralized level; (ii) resources flow smoothly to the decentralized decision-making authorities; and (iii) the decentralized units have adequate institutional capacity (budgeting and accounting procedures, procurement system, governing bodies, and internal control and information systems). The decentralized units – namely Medical Area Units and Specialty Hospitals – would be fully built up and conform to a structure in line with the long term view of the IMSS corporate structure and health system. The Government, with support from the Bank, has already started the decentralization of the SSA through block grants to the states. Similarly, IMSS started decentralizing activities from the center to seven Regional Directorates and 139 Medical Area Units.

- Central Level: The Central Level, including SSHF and other normative offices, will have the following functions and responsibilities: (i) regulation of activities under its responsibility, including the establishment of financial and accounting standards, administrative procedures, contractual requirements, minimum accreditation requirements; (ii) collection of funds and allocation of resources to MCOs on a capitated basis; (iii) policy on management information systems; (iv) human resource policy and management development; (v) procurement regulation and the negotiation of national reference prices for certain goods; (vi) supervision of decentralized activities, quality assurance and clinical audits; (vii) liaison with other health care organizations; and technical support to Specialty Hospitals and Medical Area Units.

- Regional and Delegational Offices: Regional and Delegational Offices will serve mainly to support the Medical Area Units. The Medical Area Units will be entities with significant responsibilities and may face some initial difficulty in recruiting skilled staff, notably accountants. To support the Medical Area Units with their newly-delegated responsibilities, these Offices will provide technical support and supervision to the Medical Area Units related to planning, public health programs, procurement procedures, management information systems, human resources management and training, and quality assurance and audit.

- Medical Area Units: The Medical Area Units will be responsible for providing primary, secondary and preventive care, under an integrated care model, for an average population of 260,000 beneficiaries. Over the medium term, they will act as budgetholding institutions, purchasing tertiary health care services from Specialty Hospitals under a second internal market. A Medical Area Unit will typically comprise several Family Health Units and one or more secondary hospital. Management of the Medical Area Unit will be under the authority of a Medical Area Unit Director and a Medical Area Unit committe with participation of all health facilities in the Medical Area Unit. The main management functions will include: (i) financial accounting and budgetary control; (ii) procurement of equipment and supplies; (iii) facilities management and maintenance; (iv) human resources management and training; (v) public health and infectious disease control; (vi) quality assurance and utilization review; (vii) management information systems; and (viii) planning and contracting of services.

- Specialty Hospitals: During the first phase of the reforms, these facilities will continue to provide services to the IMSS members, receiving budgetary allocations from the central level SSHF that will be linked to overall production and quality. Over the medium-term, the 41 Specialty Hospitals would provide tertiary care and other specialized services to Medical Area Units through a contracting process whereby Medical Area Units obtain the services they require by means of specific administrative agreements, specifying: (i) services to be provided; (ii) number of procedures to be produced; (iii) cost per procedure; (iv) referral process; (v) length of contract; (vi) arrangements for termination; (vii) variation, extension or renewal of contract; (viii) reimbursement mechanisms; and (ix) quality and efficiency indicators to be used in the evaluation process. Specialty Hospitals will also be allowed to sell their services to MCOs. Along the lines of the Medical Area Units, and to enable them to operate efficiently, the Specialty Hospitals will have responsibility for financial accounting and budgetary control, procurement, human resource management and other functions to ensure managerial autonomy and accountability.

D. Risk Pooling and the Separation of Financing and Provision: The Social Security Health Fund: The pooling of risks under a unique financing system is designed to contain costs, promote equity, extend access and promote greater quality of care and value for money. The separation of financing and provision and the introduction of provider compensation systems are important steps in order to ensure that the system is managed transparently, efficiently and under an even playing field for all institutions involved. The separation of financing and provision requires that the activities being provided be governed by explicit management contracts between the financing agency and the provider.

Establishing a Social Security Health Fund (SSHF) will carry out the pooling of risks and the separation of financing and provision within IMSS. The SSHF will play a fundamental role in developing the potential for increased choice and competition established within the health

system introduced by the 1995 SSL. The SSHF will pool funds of those who opt out of IMSS, as well as funds from those workers who opt into (mainly the self-employed and informal sector workers). The SSHF will pool resources from the IMSS Sickness and Maternity, Family Health Insurance Program (SSFAM), Pensioners' Medical Care and additional payments for health care services from the Workers compensation program (*Riesgos de Trabajo*).

Resource allocation to each Medical Area Unit and, eventually, to MCOs will be based on a capitation basis adjusted for factors such as age, sex, regional morbidity and mortality indices of the MCOs geographic area of influence. Over the short-term, the central office SSHF will continue to act as a purchaser of care from the Specialty Hospitals, allocating budgetary transfers in function of actual production levels and compliance with quality-related parameters. Over the long-term, the Specialty Hospitals will have to compete for resources from budget holding Medical Area Units purchasing services through DRG, and from private sector MCOs. The risk pooling would be consolidated in the long-term, as the SSHF would pool all mandatory health contributions in the Mexican system, including those of other public health insurance institutions. As such, the SSHF could evolve into a national health insurance fund open to all other medical institutions in the Mexican health care system and purchasing services from all public and non-public providers, or MCOs (see Annex 5 for additional information on the structure and operating procedures of the SSHF).

SOCIAL SECURITY HEALTH FUND (SSHF)

I. Objectives

1. The proposed reform takes advantage of the potential of the Social Security Law (SSL) while overcoming the legislation's potential risks and the system's weaknesses. The proposed system follows the principles of health system financing reform in OECD nations and avoids critical perils of legislation similar to the SSL in other Latin American nations.

2. The proposed health financing system has four interrelated parts. The first deals with the link between the federal budget and IMSS health budget, which could be extended to other medical institutions and to a federal health financing system. This part aims to provide an optimal fiscal framework for the management of the national health budget. The second part concerns the establishment and operations of a new Social Security Health Fund (SSHF) that would become, in the long term, a national health financing institution for the entire system. This part aims to promote a national health policy while improving user choice and efficiency through competition. The third part addresses the issue of private-public mix mainly from the perspective of health finance. Here the effort is to try to harness private finance in a way that would contribute to the entire system. The last part concerns the financing of investments through the establishment of an Innovative Development Fund, part of the SSHF, that would rationalize investments in the system and provide resources for its modernization. This section is detailed in Annex 7.

II. General Revenues and the IMSS Health Budget

3. *Issues.* IMSS' health budget is financed through mandatory contributions by employees, employers, and the federal budget. The SSL shifts a major burden of health financing to the federal budget. This in itself is, in principle, a desirable move. First, it could align health finance with principles similar to those of the rest of public finance. Second, it could make the allocation to health part of overall social and economic policy. These principles govern the so-called Commonwealth health systems (e.g., the United Kingdom, Australia, and the Scandinavian nations) where health is financed principally through general revenues.

4. As per the SSL, IMSS health revenues are driven by legally pre-determined contributions from all three sources. These revenues are not subject to either health or overall fiscal policy. Specifically, the levels of funding available to IMSS are unrelated to:

- a normative level of health spending;
- the efficiency of IMSS health operations;
- the direct tax burdens of IMSS finance; and
- the fiscal burden of IMSS revenues on the budget.

5. In addition, the financial reserves accruing to IMSS due to the SSL, in the absence of organizational reforms, are likely to (a) induce an increase in the cost of care delivered by IMSS and (b) increase further inequities in the system. This situation needs to be remedied under the proposed Government reform program with support from the Bank loan, to enable the Government to define sustainable policies that will maximize the health and welfare of the population. The solutions proposed here are meant to be consistent with the SSL and with a sound macro-economic and fiscal management of the health system.

6. ***Objectives.*** The health financing system involving the government and IMSS needs to be looked at from both the perspective of IMSS (or eventually the entire health system) as well as the economy as a whole.[1] From the perspective of IMSS health system, the objectives should be:

- a stable, sustainable, and controllable flow of revenues over time;
- minimum exposure of financial reserves to the impact of general inflation;
- minimum exposure of financial reserves to financial risk (unrelated to inflation);
- maximize the potential to use surpluses in the health insurance financing to absorb the one-time costs associated with the structural reform of IMSS

7. It is desirable to minimize the unanticipated downward swings in health financing that can follow general inflation, and declining levels of income (mainly from wages) during the business cycle.[2] In part, these issues are addressed by the changes in the health financing system which include two elements that make the financing system self-correcting. First, health insurance revenues are indexed to inflation and the minimum wage, thus passing the inflation risk to the central government and protecting IMSS from the shocks. Second, the possibility of declining levels of income limiting IMSS revenues is mitigated by the link between expenditures (clearly linked to wages) and income; if income were to fall from a fall in wages, expenditures would fall in parallel to maintain financial equilibrium.

8. At the same time, there is an equally important risk associated with a lack of policy associated with the management of the financial reserves of the IMSS insurance programs. While the overall reserves of IMSS are subject to the general policies of internal credit policy--- IMSS annually negotiates a reserves target for macro policy reason--there is no explicit mechanism to regulate the use of surpluses over and above the reserve target.

9. The Government is responding to the need to implement reforms in the financial management and reserve policy through a two-pronged approach, which addresses the two main policy objectives: transparent management of the different insurance programs, including improved asset-liability management, and clear targets for investment in the IMSS health care delivery network through the execution of the investment program under the IDF. *First,* in the short-term, IMSS and SHCP have agreed upon a financial strategy that will implement a regulatory and institutional framework – within the context of an IMSS reserves policy – for the transparent administration and allocation of the surpluses that are likely to be formed over the next ten years in the different IMSS insurance programs. Through the implementation of the proposed reserves policy, the Government will gradually address the main issues associated with IMSS financial management and asset-liability. *Second,* over the medium-term, the reserves policy would align incentives among the insurance programs. The framework will be negotiated annually through an agreement between IMSS and SHCP establishing annual targets for the use of IMSS reserves from the different insurance branches, to ensure maximum transparency and avoid the commingling of funds.

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1 While the discussion focuses on IMSS, it can be generalized to other institutions and the system as a whole.

2 Cash flow issues are not considered here explicitly. This flow needs to be managed according to prudent financial management rules.

10. ***Proposed Link Between the Federal Budget and IMSS Finance.*** The solution proposed here aims to enable the Government to strike a balance between the different institutional objectives just stated while subjecting IMSS independent budget to overall fiscal policy. The solution is based on the following principles that are proposed recommendations to be met under the loan:

(a) A baseline level of health spending per capita over time is set, starting with the 1996 level;

(b) A universal *capitation formula* which reflects normative, efficiency, and equity considerations is determined;

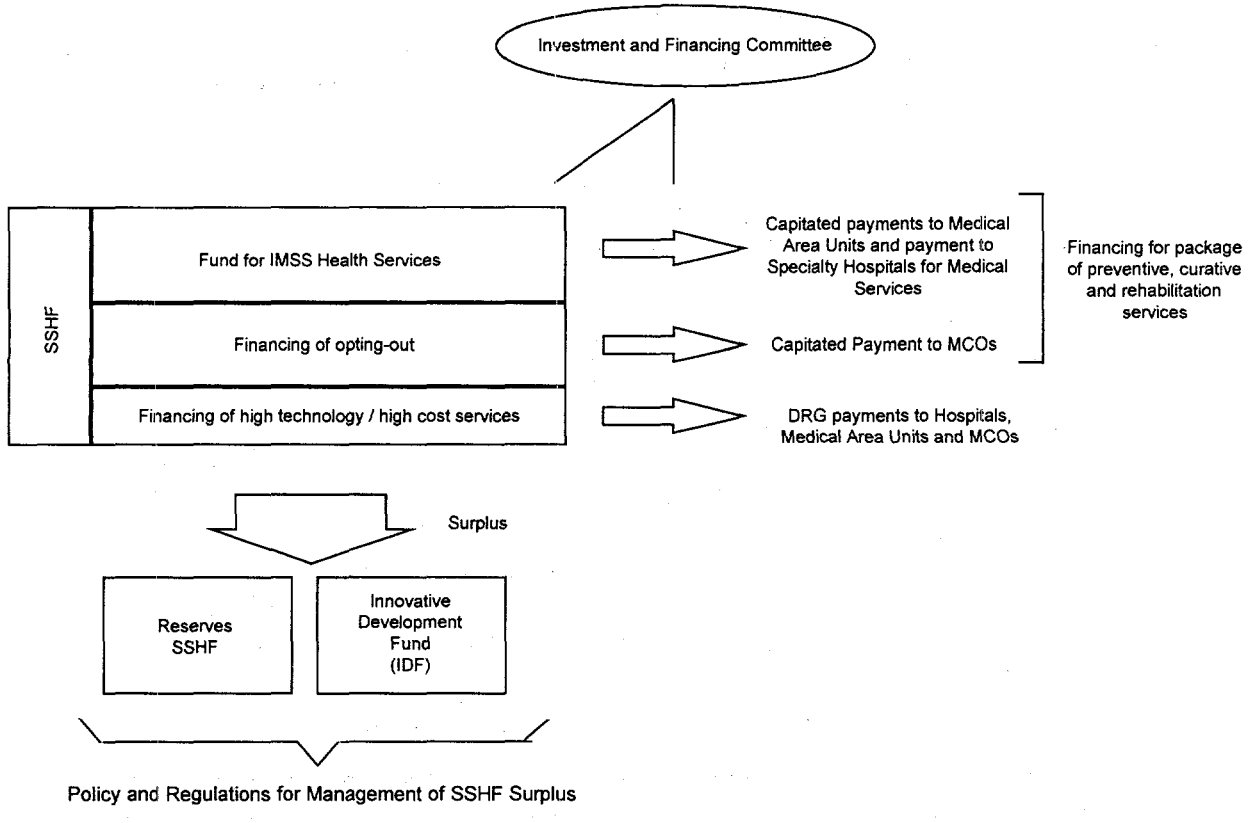
(c) An institutional mechanism which would periodically adjust levels of spending and capitation coefficients according to changing circumstances is put in place;

(d) IMSS will set annual targets for reserves for each of the health-related social security programs, e.g. Health and Maternity, Pensioners' Health Insurance, Worker's Compensation, and SSFAM which will be funded through annual revenues;

(e) All resources for IMSS health will be concentrated in the SSHF. For this purpose, long term goals will be defined to finance the monetary benefits of Health and Maternity, Family Health Insurance Program, Pensioners' Health Insurance Program, and Workers Compensation. The annual surpluses from the SSHF will be used to finance: (i) health insurance reserves; (ii) IDF resources and working capital for strengthening the IMSS provider network, estimated at US$360 million for the period 1998-2000; and (iii) catastrophic reserves to insure against health risks, such as epidemics; and

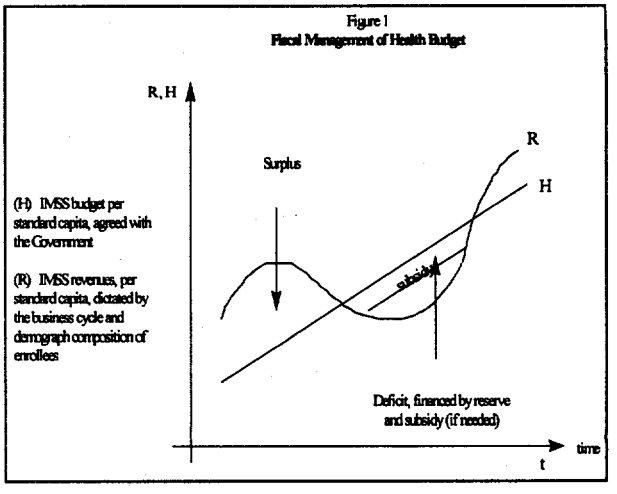
(f) The government guarantees the agreed level of spending during any phase of the business cycle – any excess in agreed spending over revenues, would be financed with SSHF reserves against macroeconomic risk; additional risk pooling mechanism will be implemented to guard against catastrophic risks. The agreed level of expenditure will take into account the covariation with aggregate quantities. That is, give a sudden decrease in real revenues, average expenditure could be maintained in items that significantly affect the quality of service, whereas other expenditures shall be adjusted in accordance with general movements in the national economy.

11. These arrangements are not to diminish the Government's right, within its regulatory powers, to change the "health tax" rates levied on employers and households for as long as it helps maintain the agreed levels of spending, subject to periodic adjustments.



12. This solution, illustrated notionally in the above figure, shows how IMSS would invest any surpluses in a manner to optimize the distribution of resources between competing objectives. The reserves policy would propose a gradual implementation of the following recommendations in regard to the reserve policy for the use of SSHF funds: (i) a fixed proportion of IMSS expenditures will be kept as working capital; (ii) a fixed proportion of the surplus, after working capital is defined, would be used to stabilize spending and establish reserves for each of the IMSS insurance programs, in line with annual surplus targets. For health, the surplus funds would finance, over the medium-term, a health insurance reserve comprised of a fixed percentage of annual Health and Maternity, Family Health Insurance Program, Pensioners' Health Insurance Program, and Workers Compensation revenues, to safeguard the operations of the SSHF; part of this reserve will be managed according to evaluations of specific risks, such as epidemics, floods, etc.; and (iii) the remaining funds will be used to fund the Innovative Development Fund (IDF), in accordance with compliance with annual targets for disability and advancement with the implementation of the health care reforms. The IDF will operate as a transparent and cost-effective mechanism to strengthen the IMSS providers by increasing investment in the health care network as a function of management changes associated with the reform program. In summary, the development of the reserve strategy would allow IMSS greater financial transparency and an increase in the investment program of IMSS health care providers, in line with annual targets for disability levels and progress in the implementation of health care reforms. These actions would be critical to ensure that the short-term surplus is used to purchase the best value health care for the money.

13. An additional element of the reserve policy is to protect IMSS revenues against downturns in the business cycle. In essence, the proposed policy is based on the establishment of financial entitlements, and the subsequent setting of risk-adjusted capitated payments to be made to the IMSS Medical Area Units and the MCOs. This solution, illustrated in the adjacent figure, means that the Government "insures" IMSS' budget against the potential effects of the business cycle while IMSS practically 'deposits' any surpluses in its tax-driven revenues with in a manner best suited for the economy. This solution is a second-best to a situation whereby the Government plays a similar role but with a fully discretionary allocation to the health budget, based on health tax rates and a budgetary contribution, which reflects both fiscal policy and health policy (as expressed through a normative level of health spending, and the capitation system).



III. The New Social Security Health Fund

14. *Issues.* The opting out and opting in provisions of the SSL provide ample potential for (a) increasing choice and competition in the system that could, in turn, increase quality of service and care as well as client satisfaction, and (b) expanding coverage and equity. This potential can be developed through institutions which would strengthen the public finance virtues of the health financing system (risk pooling, redistribution capacity, potential control over spending, ease of conduct of health and economic policy) in a manner that is amenable to the fiscal management of the system as outlined above. Moreover, if Mexico is to follow other OECD nations, in the long term, it should strive to have a unified national public finance system for a universal package of care which includes public health and rehabilitative and curative care. The system being adopted, which can be extended beyond IMSS, would be an important first step in this direction. This system takes maximum advantage of the opting out option while minimizing its risks.

15. *The Social Security Health Fund (SSHF).* The SSHF would lay the groundwork for the operation of a much larger, risk pooling mechanism that would operate as a national level Health Fund. The SSHF would thus assume the role of financier and purchaser (possibly executing the purchaser role through regional or sub-national units), while the IMSS Medical Area Units, private MCOs and providers from other social security institutes (ISSSTE, PEMEX, etc.) would compete for funds from the SSHF and organize competing networks of integrated health care systems. Initially, the SSHF would manage all IMSS health-related funds and allocate resources to the Medical Area Units. Given that it is likely that the Medical Area Units can be strengthened only gradually over the next several years, the SSHF will have to maintain a two track approach to the implementation of the reforms: some of the Medical Area Units will operate under reformed procedures, while others will continue to operate under the previous administrative arrangements. As the manager of competition among the Medical Area Units and the MCOs, the SSHF's primary responsibility would be to obtain the maximum

value for the IMSS health care dollar.

16. To achieve these long-term objectives, the SSHF would:

- promote competition and user choice through separation of finance from management and provision of care, and decentralization;
- maintain and expand public finance principles within IMSS;
- contribute to risk-pooling, while reducing segmentation in the system through a unified financing mechanism;
- provide a framework for a unified national social health insurance system with an independent statutory nature, eventually integrating all health funds raised through mandatory contributions/taxes (including ISSSTE, PEMEX, and others); and
- establish an independent regulatory and supervisory capacity -- initially through the establishment of a Task Force for the Regulation of Managed Competition, operating within IMSS, and eventually fully autonomous - to oversee the managed competition among MCOs.

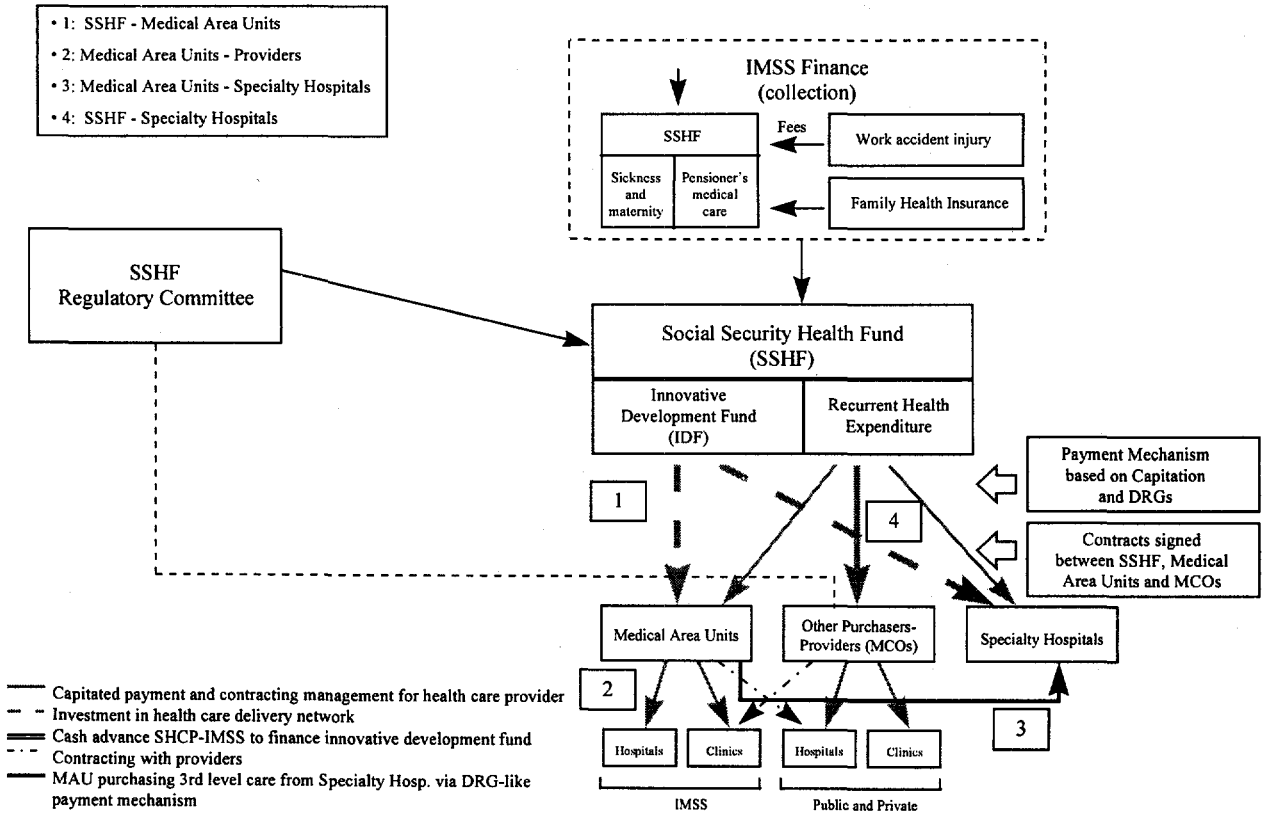
17. To these ends, the SSHF would be both a financial management and regulatory agency vis-a-vis the purchase of services from the Medical Area Units and through the administration of the managed care market of MCOs. Political and institutional realities prevent the establishment of a national statutory fund at this time, therefore, the SSHF will be established under the auspices of IMSS and confined to financing the integrated health care model under IMSS, including the management of funds from the Family Health Insurance and the payment to private MCOs under the opting out scheme. In other words, the financing of public health currently handled through the SSA and the financing of ISSSTE, PEMEX and and other social security institutions would not be financed by the SSHF. Consequently, the key actions to be taken at this time, include:

- The SSHF is established and governed under IMSS corporate structure, with an advisory SSHF Committee composed of representatives of SHCP, SSA, SECODAM and other agencies;
- The SSHF could eventually have regional branches which would be allocated funds for regions on a capitation basis that would in turn purchase care from Medical Area Units and private MCOs;
- The SSHF combines into a *single non-discretionary fund* monies of the Sickness and Maternity Program, Pensioners' Medical Care Program, Family Health Insurance Program, and receives payment from the Workers' Compensation program;
- The SSHF charges, on an agreed fee-for-service basis, the Work Accident Injury Program for medical costs of injured workers billed by the MCOs (alternatively, MCOs can bill directly the Workers Compensation Program, depending on regulations); and
- The SSHF adopts a universal, risk-adjusted capitation-based allocation rule (see previous section) for allocation of funds to IMSS Medical Area Units and other MCOs which may start operating under the managed care provision.
- A regulatory committee will be established under the authorization of the IMSS Board of Directors to oversee the development of the operational guidelines of the SSHF and to

eventually regulate the purchasing of services from the Medical Area Units and the MCOs.

18. The following figure provides a schematic representation of how the SSHF will operate, including the flow of resources to Medical Area Units and private MCOs. As shown in the figure, the SSHF will employ 4 key elements to achieve a meaningful separation of financing and provision. First, the SSHF will allocate resources on a capitated basis to the Medical Area Units and the MCOs (see point 1 in the figure). Under this arrangement, the SSHF will establish a contractual relationship with the Medical Area Unit that clearly identifies the Medical Area Units objectives, the range of services that will be purchased, quality and efficiency indicators, the average prices that will be compensated and outlines an explicit incentive scheme to reward those Medical Area Units that achieve satisfactory evaluations. Second, the Medical Area Units will subsequently be responsible for managing the provision of care within the MAU by creating a contractual arrangement, or through integrated management, with the providers in the Medical Area Units (see point 2). During the second stage of the reforms, the Medical Area Units will also assume responsibility for purchasing medical services from the Specialty Hospitals and for purchasing services from providers located within and outside of the respective Medical Area Units through DRGs or other cost transfer mechanism (see point 3). Lastly, the SSHF will establish a similar contractual arrangement with the Specialty Hospitals and employ procedure, or case-based, payment systems, e.g. DRGs, to transfer resources to the Specialty Hospitals (see point 4).

Separation of Financing and Delivery of Healthcare



19. ***Management of the SSHF.*** The SSHF would be managed by IMSS' regular

administrative bodies, with advice provided by a SSHF Committee composed of representatives from SHCP, SSA, SECODAM, and other governmental agencies. In addition, a technical unit would be established within IMSS to carry out the technical activities related to regulation, financing and control of the SSHF operations.

- The SSHF will set standards for the budgeting, financial management, accounting and financial reporting of MCOs, starting with IMSS. Each MCO will be required to operate according to these standards as a condition of initial licensure and subsequent renewal. The SSHF will monitor the performance of the MCOs to assure compliance with these standards.
- IMSS will assess and approve the capitation formula which will determine the MCOs' budgets and will monitor internal allocation within the MCOs to assure that the objectives of the capitation formula are be met, including regional and geographical coefficients.
- IMSS will set the rules for enrollment of new members in MCOs, the movement of members among MCOs, as well as the rules and regulations for opting-in and opting-out.
- will appoint an auditor to review the financial processes of the MCOs.
- Within the structure of IMSS, a small technical unit will be established to carry out the day-to-day activities of the SSHF. This unit will be multidisciplinary and will have the responsability for establishing annual operational rules and regulations of the SSHF and carrying out most of the functions associated with purchasing and evaluation of management contracts with Medical Area Units and MCOs.
- The SSHF will also constitute an Innovative Development Fund (IDF, see Annex 7) for investment in equipment and construction to assist Medical Area Units in financing the purchase of modern medical equipment and construction of health care facilities. Policies and procedures for the allocation of these funds will be developed and included in an Operational Manual, including eligibility and subproject approval criteria, and the nature of the financing to the MCOs.

20. ***Membership Enrollment in MCOs***. The process for enrollment of members in all MCOs will be defined by rules and regulations established by IMSS, or by the terms of the contract with each MCO. It is recommended that at the start there be a status report of the membership in each MCO as it appears in the information relayed by each to the national database maintained by IMSS. IMSS will have the right to run computerized checks and clarifications on these databases.

21. The result of this process will be a verified national database, which will provide an initial benchmark. From this point and onwards, the database will be updated by the MCOs and the employers according to a determined process, which will be approved by the SSHF. This process must permit the updating of the movement of members between MCOs in accordance with the regulations for opting-in and opting-out of these organizations, as well as other changes such as births, deaths, immigration and lags in the payment of premiums in accordance with the rules established by the SSHF. At regular intervals (monthly, quarterly or biannually), the national database will be "closed" and each MCO will receive an updated list of its current membership. These will form the basis for determining the number of active members in every category according to the capitation formula and will determine the amount of funds to be allocated to each health care organization for the coming interval.

22. ***Assuring Stability and Preventing Undue Stress in the Financing System.*** Some concern has been expressed that the mobility of beneficiaries among insurers without any limitations is liable to lead to undue stress to the system or portions of it. In order to prevent this situation, a number of limitations may be implemented:

- In the first few years, the movement of members between health care organizations will be permitted on a collective basis only, by employer. This principle may require the establishment of rules which will allow flexibility for specific cases such as enabling patients suffering from severe diseases who are undergoing long-term treatment to continue to receive treatment in the same institution by an agreement between health care organizations which will permit the new organization to purchase the services from the former organization. This may be particularly relevant in cases of work injuries or disabilities resulting from work accidents. There may need to be separate rules enabling people from the informal sector who have never been enrolled in IMSS to join an MCO for the first time on an individual basis.
- A ceiling will be set for the number of employer/employees permitted to opt out of their present MCO during the course of the year. If the number wishing to opt out exceeds the ceiling, the latest "comers" will be permitted to opt out in the coming year.

  If, over time, it becomes clear that these concerns are exaggerated, these limitations may be reduced or altogether eliminated. People may be permitted to transfer membership to a new MCO on an individual basis and the ceilings may be increased each year.

IV. Private-Public Mix

23. ***Issues.*** Private finance plays a major role in the Mexican health system, but is driven to a substantial degree by dissatisfaction with the publicly financed system mainly of IMSS and ISSSTE. Moreover, this role is played out in conjunction with this system; personnel working in the system use it for referral to their private practice, spend short days on their public job in favor of private practice. That is, the public system may subsidize private practice.

24. Indeed, a situation whereby the same providers work both under 'public' and 'private' management contracts creates opportunities to exploit poorly informed users, manipulate the package of benefits financed through public management contracts, and increase the incomes of both providers and insurers while abusing public infrastructure.

25. At the same time, given the magnitude of private finance in the Mexican health system and its apparent impact on the publicly financed system, there would be merit to use private resources for the benefit of the entire system and engage its potential in the proposed reform process. In other words, Mexico needs to entice private finance in favor of the public system, reversing the nature of subsidy, by making the national system more attractive to the public at large.

CORPORATE RESTRUCTURING OF IMSS

Key Achievements to Date

1. Despite regular minor alterations, the fundamental administrative structure of the head office of IMSS has remained unchanged for many years. One of the most important organizational changes of recent years came with the creation of the Regional Directorates in 1995. Gradually, the responsibilities of these offices have been expanded, and they now play a significant role in financial accountability and planning. Their role is planned to expand over the coming years as they take on increasing responsibility for the appraisal of capital projects. However, the development of a new organizational structure will necessitate a re-appraisal of their role. The decentralisation process has moved steadily since 1995. Since that date the total staff of head office has been reduced from over 13,000 to below 11,000. The creation in 1997 of budgetary Medical Area Units provides a strong basis for further devolution of decision-making.

The Principles Underlying The Proposed Re-Organization

2. Opinion is evolving within IMSS about the exact nature of the required organizational change. Certain common principles can be identified:

- Changes which **build on existing structures and the Government's goals** for health sector development
- A clear **separation of funding and delivery**
- **Decentralization** of responsibility from the center to the level at which management can best respond to user need
- **Removal of unnecessary bureaucracy** to improve efficiency
- **Strengthening of management capacity** at the point of service delivery
- Capitation and the development of an internal market to ensure that **funds follow the patient**
- Gradual introduction of **competition**, both between IMSS providers of health care and outside of IMSS
- Greater **accountability** to patients, and more thorough **quality assurance**
- **Flexibility** to allow for
  - variations in local services in order to respond to specific local need
  - pilots of new models of service delivery or financing
  - change and further reform over time

A New Organizational Structure

3. IMSS will introduce a new corporate management structure which separates the funding of health care from the delivery of health care services. The SSHF will be established as the basic mechanism to ensure the transparent separation of activities. While the SSHF will initially purchase, or allocate, resources from the central level, it is likely that the organizational structure will retain the Regional Directorates as an extended arm of the SSHF at the central level.

4. In the medium-term, the delivery of health care services will continue to be provided by Medical Area Units at primary and secondary care levels and by Specialty Hospitals at tertiary care levels. Currently separate systems of budgetary and referral MAUs exist. Under this operation a number of selected Medical Area Units will take on more autonomous budgeting and management functions. At least initially, they will continue to receive technical support from regional Technical Support Offices.

5. The initial implementation of the Medical Area Units would be phased as follows:

- Start immediately with trial sites to develop the concept and clarify how Medical Area Units will function;
- Identification of approximately 30 Medical Area Units to be included in the initial phase of corporate restructuring over the next 18 months.

The Roles And Responsibilities Of Different Levels In The New Structure

6. ***Medical Area Units.*** The Medical Area Units will function as integrated health care delivery units, or IMSS MCOs within the new structure and will be responsible for providing all the primary, secondary and preventive care of all their members with the per capita allocation received from SSHF. Once the payment mechanisms are developed, they will purchase tertiary health care services from Specialty Hospitals as appropriate.

7. Within the Medical Area Units, users will be allowed to choose their family doctor. In order to function successfully this would require good information systems and adequate training and backup for family doctors and their support staff. The implementation of user choice among family physicians will begin immediately in the 30 selected Medical Area Units, however, careful evaluation will be undertaken to introduce changes in the model before it is extended to the remaining Medical Area Units. It is essential that a policy be developed to ensure that family doctors not be exposed to the full risk of an individual patient requiring very high cost treatment.

8. A Medical Area Unit will typically comprise several Family Health Units and one or more secondary hospitals and will have its own management structure encompassing the following functions:

- financial accounting and budgetary control
- procurement of equipment and supplies
- facilities management and maintenance
- human resources management and training
- public health and infectious disease control
- quality assurance and medical audit
- management information systems
- planning and contracting services

9. The size and managerial competence within the Medical Area Units differ significantly across the country. In order to ensure flexibility in approaches to the internal management organization of the Medical Area Units, pilot programs will be established to assess the effectiveness of different approaches. Three different models should be considered:

- Separate management structures for hospitals and for primary care facilities

- Integrated management structures for hospitals and for primary care facilities
- Management of primary care facilities acting as purchasers of hospitals services

10. ***Delegations.*** Delegations are administrative structures operating at the local level, with responsibility for oversight of the quality and efficiency of the health facilities in a given geographical area and functions related to collections. With the creation of the Medical Area Units, many of these functions are to be integrated into the management structure of the Medical Area Unit, and, therefore should no longer have a role in the management of health care delivery by the Medical Area Units. They would be invited to contribute to the work of the already-established User Advisory Councils to be set up in each Medical Area Unit.

11. ***Specialty Hospitals.*** Over the medium-term, the 41 Specialty Hospitals will provide tertiary care and other specialized services to Medical Area Units through a contracting process whereby Medical Area Units and private MCOs obtain the services they require. Under either financing arrangement—direct purchasing from the center or from budgetholding Medical Area Units—the separation of financing and provision will be ensured by means of an agreement which specifies the following:

- services to be provided
- number of procedures
- cost per procedure
- referral process
- length of contract
- arrangements for termination, variation, extension or renewal of contract
- reimbursement mechanism
- quality and efficiency indicators used for evaluation

12. In order to improve efficiency throughout the health care delivery system, the Specialty Hospitals will eventually be allowed to sell their services to other organizations outside of IMSS including ISSSTE, SSA, PEMEX and private health care organizations (MCOs). To enable the management of Specialty Hospitals to operate efficiently, they would need to develop independent capability to carry out the following functions:

- financial accounting and budgetary control
- procurement of equipment and supplies
- estate management and maintenance
- human resources management and training
- management information systems
- planning and contracting
- quality assurance and medical audit

13. ***Central Level.*** It would be responsible for the design and implementation of the new regulations related to the integrated health model.

14. A process of providing technical support to hospitals has already started through the establishment of Operational Support Units at certain hospitals. The new, smaller Health Services Directorate will be responsible for the following functions:

- public health policy
- policy on management information systems
- medical education, training and research

- human resources policy and management development
- procurement regulations and the negotiation of national prices for certain goods
- overall quality assurance and clinical audit
- a national user advisory council
- liaison with other health care organizations
- technical support for Specialty Hospitals

15. ***Regional Support to Health Services Delivery.*** The Medical Area Units will be new entities with significant responsibilities. Given the current management weakness at the MAU level, Medical Area Units will require regular support. Each Region will establish a Technical Support Office providing back-up and supervision to the following Medical Area Unit functions:

- planning and public health
- procurement procedures
- management information systems
- human resources management and training
- quality assurance and utilization review

Funding Mechanisms and Structures

16. The funding of IMSS health care services will come from the SSHF, which will allocate funds to IMSS Medical Area Units and alternative providers on a capitation basis. Over the medium-term, administration of national funds could be allocated to the Regional level by age, sex and additional socio-economic indicators that serve as proxies for demand. The Regional level office would, in turn, apply tailored capitation formulae (taking full account of health need, morbidity, mortality, indices of deprivation etc.) to allocate funds to Medical Area Units within their geographic region. The factors used to tailor the capitation formula at the regional level should be made available to the national and local User Advisory Councils.

17. Specialty Hospitals and Medical Area Units would have full budgetary responsibility for the operational funds allocated to them. Standing Financial Instructions regulating the control of income and expenditure at each management unit would be issued by the IMSS head office, which will continue to have an auditing function on the use of IMSS funds.

18. Specialty Hospitals and Medical Area Units will have full responsibility for the procurement of equipment and supplies in accordance with regulations and procedures approved by IMSS Head Office.

19. The Central Health Services Directorate will develop and monitor the implementation of procurement practices and procedures and would negotiate prices for certain goods. They would not conduct any procurement.

20. The Technical Support Offices at the regional level would give technical assistance with procurement practices and procedures carried out at the Medical Area Unit level.

The Management of Health Services Delivery

21. A new post of Medical Area Unit Director has been created to take overall responsibility for the management of each Medical Area Units. Each Medical Area Unit Director will take responsibility for identifying the staffing requirements for their units and for establishing new

policies and procedures for the day-to-day operation of their facilities.

22. Serious consideration should be given to delegating freedom to the Medical Area Unit Director to negotiate staffing levels and, at a later stage, staff terms and conditions of service within a national framework. Remuneration of the Medical Area Unit Directors should also be linked to achievements of the MAU, in terms of productivity and efficiency.

23. Management of the Medical Area Unit would be overseen by a board of directors comprised of the directors of each of the medical facilities within the MAU. The president of the Board would be elected by a simple majority by board members from all medical centers. Community participation would be ensured by the User Advocacy Boards and the establishment of an ombudsman position within each Medical Area Unit.

24. In order to strengthen the capacity of Medical Area Unit Directors to respond to the challenge of MAU management, a comprehensive management training and development program is being prepared by the Central Health Services Directorate to equip managers for the new responsibilities they will be expected to take on. The development of the program will be supported by the Technical Assistance Loan, and would encompass the following activities:

- internal and external training of existing managers
- recruitment and training of new managers
- graduate management training program to recruit and train top managers for CEO, finance, procurement, human resources and management information systems posts

Issues Related to the Procurement Function

25. The procurement function at the Medical Area Unit level would be responsible for the specification and purchase of all goods and services for the Medical Area Unit duly authorized by the budget holders in accordance with Standing Orders, Standing Financial Instructions and procurement procedures approved by the IMSS Head Office.

26. The Director of Procurement will be fully trained and experienced in purchasing and supplies in health care and would have oversight of the warehousing, storage and security of supplies purchased by the Medical Area Unit. The Director will be expected to develop policies and procedures specific to the Medical Area Unit following guidance and technical support from the Regional Technical Support Office. The Director of Procurement will be directly accountable to the Director of the Medical Area Unit and not to the Finance Director.

27. The procurement function should be able to make use of nationally negotiated contracts unless it is possible to demonstrate that local purchasing of certain goods and services are less expensive and of similar or better quality. Similar arrangements should apply to the procurement function in the Specialty Hospitals.

INNOVATIVE DEVELOPMENT FUND (IDF)

Introduction

1. The changes in the Social Security Law (SSL) introduce two major changes that will affect the development of IMSS over the next several years. First, the changes in the health insurance financing system will likely lead to surpluses in the system. In order to ensure that these surpluses are used to purchase the maximum value of health for the IMSS insured population, it is necessary to introduce structural changes in the management of the organization and its providers. The second issue that is highlighted as a result of changes in the health insurance systems is related to increasing competition from the private sector. In order to allow for competition on even grounds between IMSS providers (Medical Area Units) and MCOs, it is necessary to update investment in equipment, design and implement information systems, and introduce measures to improve their production process so as to be more client-oriented and to attempt to reduce costs, notably through better management of patient flows, increased introduction of outpatient services, and a more effective referral and counter-referral system between levels of care.

2. In some areas this will imply expansion of capacity, in others it may require the reduction of hospital beds. To be in a position to operate in the new reformed health care system, Medical Area Units and hospitals will have to introduce new management and financial systems to monitor and control their costs, better allocate their resources, and negotiate performance management contracts with the SSHF. This will imply training of their staff, development of their technical skills (particularly in the area of operation and maintenance of new biomedical equipment) as well as special care about waste disposal. They will also need to introduce new budgeting, accounting, and management information systems to allow them to enter into purchasing agreements that may involve more sophisticated provider payment systems. This investment by Medical Area Units in management improvement and equipment renewal would be financed under an Innovative Development Fund (IDF). The objectives and operating criteria for the IDF are described in this Annex.

Objectives

3. The objectives of the Fund are to: (i) replace obsolete medical equipment and technology to increase productivity and quality of services and rationalize operating and maintenance costs; (ii) improve the management of health facilities at the primary, secondary, and tertiary levels; (iii) provide IMSS with a flexible instrument that will allow health facilities to adjust their production capacity in an evolving competitive market; and (iv) strengthen the organization and development of Medical Area Units.

Size and Allocation of Fund

4. The IDF will receive gradual financing of US$200 million, as start-up capital, according to an investment program timetable; replenishment in subsequent years will be made according to an investment program. The fund would be divided into two parts: (i) a Basic fund which would use 80 percent of the IDF; and (ii) a Competitive Fund which would use 20 percent of the total fund. The Basic Fund would finance the renewal of equipment and the basic management improvement considered essential for the modernization of IMSS' medical services. The competitive Fund would principally support the Medical Area Units (about 40 over the 18

months) and would provide focused direct assistance in developing and improving their management and financing functions, in line with criteria agreed with the Bank. Additional financing would be provided to Medical Area Units that demonstrate the most progress in the implementation of new management and contracting systems under the Competitive Fund. While the Basic Fund would finance subprojects in all 139 Medical Area Units, specific allocation of resources under the competitive fund will depend on the criteria established during project preparation and the degree to which the proposals support or advance management reforms within the Medical Area Unit or Specialty Hospital.

5. An initial allocation of funds contemplates the following distribution by levels of care, representing objectives that would need to be adjusted in function of the implementation of the Competitive Fund.

	Year 1	Year 2	Year 3	TOTAL
Third Level	10%	15%	19%	16%
Second Level	30%	40%	58%	43%
First Level	60%	45%	23%	41%

Management of the Fund

6. The IDF would be constituted within the Social Security Health Fund and would be governed in the same manner as the SSHF (see Annex 5). IMSS, on a quarterly basis, would: (i) approve general policies and rules of operation; (ii) approve the annual budget (once a year); (iii) authorize the IDF to negotiate financing; (iv) approve subprojects presented by third-level hospitals, administrative subprojects, and all subprojects of the Competitive Fund (all other subprojects would be approved at the Medical Area Unit or regional levels); and (v) review overall IDF performance.

Direct Beneficiaries

7. Direct beneficiaries would be medical facilities within Medical Area Units (both family medicine centers and hospitals), Specialty Hospitals and IMSS administrative units.

Sponsors

8. Sponsors (or presenters) of subprojects would consist of: (i) Directors of health units; (ii) Directors of Medical Area Units and regions; and (iii) IMSS Department of Medical Services. However, all proposals originating at the level of Medical Area Unit would have to be presented by the Director of the Medical Area Unit, with the approval of its Operations Committee. This action would support the strengthening of the Medical Area Units and promote the rationing of projects within the Medical Area Units.

Subproject Cycle

9. The subproject cycle and eligibility and appraisal criteria would be included in an Operational Manual, satisfactory to the Bank. They are summarized below.

(a) ***Promotion.*** The Coordination Unit (PCU) to be created under the Technical Assistance Loan would invite sponsors to identify subprojects for financing under the project. Representatives from the PCU would visit Medical Area Units and Regions to transmit

and explain subproject eligibility and appraisal criteria. Technical assistance would be provided to weaker Medical Area Units and Regions.

(b) ***Preparation.*** Subprojects would be prepared by sponsors using: (i) the eligibility and appraisal criteria included in the Operational Manual; and (ii) the guidelines for subproject preparation and appraisal.

(c) ***Appraisal and Approval.*** Subprojects presented by first and second-level facilities would be appraised and approved at the Medical Area Unit level. Subprojects presented by third-level hospitals, administrative subprojects (e.g. subprojects to strengthen the management capacity of Medical Area Units), and all subprojects of the Competitive Fund would be approved at the central level. Technical committees would be created to that effect.

(d) ***Signing of Subproject Agreement.*** An agreement would be signed between IMSS and the sponsor, delineating the obligations and rights in undertaking subprojects, assigning responsibilities to the respective parties, and specifying criteria for the sustainability of the subproject.

(e) ***Implementation.*** For each subproject, contracting would be undertaken for civil works, goods, and consultants, using procurement procedures satisfactory to the Bank. Within five days of the end of each month, the sponsors would remit a subproject statement of expenditures to the IMSS institutional level at which the subproject was approved.

(f) ***Supervision*** would be undertaken by Medical Area Units, Regions and Sub-regional entities, and the central level for the respective subprojects that they would have approved. This would have two different forms. First the implementation of the equipment of health facilities would be followed to ensure compliance with timetables and quality. Part of that supervision may be contracted out to private consultants. The second aspect would be the follow-up of improvement in management and quality of services. This would involve the follow-up of progress in training and technical assistance and the tracking of monitoring indicators that measure improvements in outputs.

Eligibility Criteria

10. Eligibility criteria are necessary but not sufficient conditions that must be met by the subprojects. Subprojects that do not fulfill the eligibility criteria would be immediately returned to the sponsor. Those that qualify would be analyzed using appraisal criteria.

(a) ***Type of Subprojects.*** Subprojects for the Basic Fund should belong to one of the following categories: (i) medical equipment; (ii) auxiliary equipment (e.g., kitchen and washing equipment); (iii) computer equipment; (iv) civil works rehabilitation and equipment (e.g. electrical, water or gas connections) required to install new medical or auxiliary equipment; (v) management improvement, including training and technical assistance in the areas of planning and budgeting, contracting of services, introduction of new payment systems (e.g., DRGs, per capita), management information and costing systems, project preparation and appraisal, and monitoring indicators for impact evaluation; and (vi) incremental recurrent costs (e.g., some key inputs to ensure operation during the first year).

Subprojects for the Competitive Fund (where facilities and Medical Area Units would compete within Regions) would include the following: (i) investment in equipment and rehabilitation of civil works not contemplated under the Basic Fund; (ii) proposal to improve management systems, and implement contracting mechanisms using new provider payment systems; and (iii) proposal of specific training that would help implement the subproject. This Competitive Fund would give to IMSS facilities and other parts of IMSS the flexibility required to adapt to a changing environment under the health system reform, by taking measures that cannot be identified now.

(b) ***Supply and Demand Study.*** Each subproject would include a supply and demand study to justify the investment.

(c) ***Management Improvement.*** Each subproject proposal would include: (i) an agreement that the top management of the health facility as well as some key technical staff (e.g., biomedical engineers) would follow management courses to be organized by IMSS; and (ii) a proposal to introduce innovations in the health delivery model to improve efficiency and quality (e.g., increase in outpatient services).

(d) ***Support of health priorities.*** The investment in equipment must help to address at least one of the 15 main health problems facing IMSS beneficiaries. These priorities have been defined during project preparation using a combination of: (i) expected life-years lost; (ii) strategic priorities of IMSS; and (iii) judgment of a panel of experts.

(e) ***Sustainability.*** The sponsor should have the fiscal and management capability to carry out the subproject as demonstrated in the analysis undertaken as part of subproject preparation. The capacity of a health facility to implement the subproject would be based on an analysis of the following: (i) availability of trained personnel to operate the new equipment; (ii) availability of funds to finance recurrent costs (based on historical budgets and new financing mechanisms to be introduced by IMSS; (iii) availability of a biomedical engineer in each delegation and in each third-level hospital corresponding to the health facility that presents a subproject; (iv) availability of a biomedical technician in each hospital of second or third level that presents a subproject; and (v) an operation and maintenance plan.

(f) ***Implementation Plan.*** Each subproject would include a plan with start-up and completion dates and phases of implementation.

(g) ***Impact Indicators.*** Each subproject would present a set of indicators (e.g., of efficiency or quality) that would be used to measure the impact of the subproject.

(h) ***Model Subprojects.*** About 5-6 subproject prototypes would be made available to sponsors who would adapt them to their specific needs. These would include combinations of investment in equipment and management improvement along the lines of innovations that IMSS would like to introduce or expand.

Appraisal Criteria

11. The subprojects presented would be appraised using the following criteria.

(a) ***Economic Evaluation.*** Analysis of supply and demand, taking into consideration existing capacity within the health facility or neighboring ones and possible modifications in capacity through changes in operating methods (organization,

working hours, etc.).

(b) ***Technical Evaluation.*** This would include: (i) complying with guidelines for the restructuring of Medical Area Units; (ii) ensuring that the equipment requested fits within IMSS norms for a given type of health facility; (iii) comparison of proposed equipment cost with IMSS standard equipment cost list; and (iv) analysis of architectural plans, including auxiliary equipment (thermo-mechanical, electrical, and gas distribution, safety).

(c) ***Institutional Evaluation.*** Analysis of availability of specialized staff to operate and maintain the equipment.

(d) ***Financial Evaluation.*** Availability of budget to finance recurrent costs.

(e) ***Environmental Evaluation.*** Analysis of possible negative environmental impact (solid, liquid, and gaseous wastes) and of proposed measures to mitigate the negative effects.

(f) ***Ranking.*** Competitive Fund subprojects would be ranked for approval using a point system taking into consideration the following elements: (i) progress by Medical Area Unit in improving its management, contracting, and financing functions; (ii) link with priority health problems; (iii) expected reduction in waiting lists; (iv) reduction in unnecessary referrals; (v) degree of integration with the health network in the Medical Area Unit; and (vi) innovations in management of health facilities and health delivery systems.

Amortization

12. The TAL will assist IMSS in designing an amortization mechanism to ensure later availability of resources to replace equipment at the end of its life. Funds equivalent to the depreciation of the equipment financed are proposed to be deducted from regular budget transfers from IMSS to health facilities using capitation payments under the SSHF (Annex 5) and held in provision for eventual replacement.

Operational Guidelines

13. The Operational Manual would include the following guidelines: (i) guidelines for preparation of subprojects; (ii) subproject presentation form; (iii) appraisal methodology; (iv) guidelines for supervision of installation and operation of equipment; (v) impact evaluation procedures; (vi) disbursement procedures; and (vii) procurement guidelines.

Supporting Systems

14. The IDF would benefit from two major supporting systems: (i) a management information system to track subprojects at each stage of the project cycle; and (ii) a data bank with technical specifications and equipment costs. Existing system (or new, as appropriate) would be strengthened to provide this capability.

MATRIX OF TECHNICAL ASSISTANCE

Area/ Activity under SAL	Actions supported under TAL	Timeframe	Estimated Cost*	Observations
I. Health Finance and Regulatory Framework				
A. Separating Financing from Provision: SSHF				
(a) Social Security Health Fund (SSHF): Separation of Financing and Delivery of health care services	sultancy to support the design of regulations governing quality and financial aspects of purchase of health services (i.e., supervision)	June 1998 to September 1999 (main design phase)	US$1,500,000	The first phase of the work will establish the basic regulations needed to allow for choice of health providers and the introduction of new management models for the Medical Area Units (1st 8 months) Later phases will support evaluation, modification and preparation of necessary regulation
(b) Resource allocation (capitation & DRG-or-equivalent systems)	Consultancy to support improvements to the capitation formula, including inter alia: (i) an equitable capitation formula, (ii) a strategy for smoothing out per standard capita allocation among Regions and Medical Area Units, and (iii) reimbursement mechanism for high-technology, high cost care	May to September 1998 (main design phase)	US$500,000	Later phases will support the finetuning of the capitation formula
(c) Financial administration of IMSS Reserves Policy	Technical support for the implementation of the reserve and financial management policy of IMSS	June to September 1999	US$450,000	

* Costs are estimated. Actual costs may vary.

Area/Activity under SAL	Actions supported under TAL	Timeframe	Estimated Cost	Observations
(d) Health insurance enrollment database	Consultancy to prepare an Action Plan and Terms of Reference for the design and implementation of an affiliation data base for health insurance as the basis for a benefit eligibility and capitation system	May to August 1998	US$100,000	Initial phase of the design would evaluate the current information systems and prepare terms of reference for the design and implementation of actual system
	Design and implementation of the information system.	2+ years	US$3,000,000	System design and implementation would be financed by World Bank and IMSS, due to the high cost associated with the product
B. Increasing User Choice and Extending Coverage				
(a) Promoting User Choice	TA for the implementation of choice of health provider and of opting-in, including the preparation of regulations and design of other basic instruments	January 1999 to September 2000	US$500,000	
C. Develop and Implement Purchasing Mechanisms				
(a) Development and Implementation of Contracts between SSHF and in IMSS Medical Area Units and Specialty Hospitals	Consultancy to support the implementation of purchasing function within IMSS	June 1998 to September 1999 (main activities)	US$1,000,000	Consultancy would have to culminate with the signing of contracts with Medical Area Units and Specialty Hospitals.
(b) Patient Classification System for hospital payment	Consultancy to support a feasibility study and design of an action plan for the development and implementation of a patient classification system (e.g. DRGs) as a clinical management and payment mechanism	April to June 1998	US$100,000	Initial work undertaken to establish best strategy for IMSS and review international best practice in patient classification systems.
	Consultancy to implement a patient classification system for IMSS hospitals	June 1998 to June 1999	US$1,800,000	Once the feasibility study has been undertaken, the consultancy would support the implementation of the patient classification systems. The output would be the systems operating and the purchase of the necessary software.

* Costs are estimated. Actual costs may vary.

Area/ Activity under SAL	Actions supported under TAL	Timeframe	Estimated Cost	Observations
II. Strengthening the IMSS' Institutional Framework for Health Care Finance and Delivery				
(a) Strengthening of IMSS' ability to implement the SSHF and IDF	Consultancy to support the implementation of the SSHF and IDF	Project life	US$950,000	Consultancy would support the implementation of alternative provider payment systems, management of financial reserves, supervisory functions and other regulatory activities, and the investment program
(b) Corporate Restructuring and management decentralization of IMSS Health Care System	Consultancy to support the development of an IMSS restructuring plan	June to October 1998	US$500,000	Product would be a Corporate Restructuring Plan including main actions, financing, time table, operating manuals and support systems
	Consultancy to support the implementation of the corporate restructuring plan within the IMSS health care administration	October 1998 to June 2000	US$1,300,000	Second phase of corporate restructuring would include the implementation of the action plan
(c) Restructuring of the health care delivery system through the development of Medical Area Units	Consultancy to support the design and implementation of restructuring plans within IMSS Medical Area Units	June 1998 to June 1999	US$3,500,000	Consultancy would support implementation of restructuring plan in approx. 5-10 Medical Area Units. Extension would be carried out by IMSS with light supervision by firm.
(d) Restructuring of the health care delivery system through the restructuring of Specialty Hospitals	Consultancy to support the implementation of management improvements in specialty hospitals	June 1998 to December 1999	US$2,400,000	Consultancy to support the management changes in approx. 5 specialty hospitals. And prepare for contracting and DRG systems
(e) Technological assessment of high-cost hospital equipment and medical protocols	Consultancy to carry out assessment	June 1998 to June 2000	US$1,100,000	Assessment would support investment choices under IDF
(f) Quality Assurance	Consultancy to support the implementation of the IMSS quality assurance system, including quality indicators and MIS	January to December 1999	US$300,000	Quality assurance program has been designed, consultancy would support its implementation

* Costs are estimated. Actual costs may vary.

Key Activity (Loan SAL)	Actions supported under TAL	Timeframe	Estimated Cost*	Observations
III. Management and Technical Training				
Investment in Human Resources	Implementation of management and technical training plan, including, inter alia, management of health services, alternative provider payment schemes, and cost-accounting	Project life	US$7,000,000	TAL would finance the administration of the training plan by a third party organization and the associated training activities
IV. Project Administration and Evaluation				
(a) Support to Implementation of the IDF	Technical assistance provided to support the implementation and ongoing operations of the IDF	Project life	US$1,800,000	
(b) Public Awareness Campaign on IMSS Reform	Design and implement of a public awareness campaign to bolster support for the reforms.	June 1998 to March 1999	US$1,000,000	TAL would finance the design and implementation of the plan, including publicity and management of the communications strategy
(c) Project Evaluation	Design and implementation of the monitoring and evaluation system	Project life	US$1,200,000	TAL would finance the design and implementation of the evaluation and monitoring system throughout the execution of the loan

* Costs are estimated. Actual costs may vary.

THE FINANCIAL PROJECTIONS MODEL: SIMULATIONS OF THE IMPACT OF HEALTH INSURANCE REFORMS

I. Introduction

1. In 1995 a series of reforms in the SSL proposed dramatic changes in the financing of social security coverage provided by IMSS. The changes aim to improve the competitiveness of the Mexican labor market by reducing the wage tax and increasing the central government contributions to finance health care services, and extending coverage of the social security system under IMSS through the introduction of two new insurance schemes to increase enrollment of self-employed and small business owners. It is expected that the changes in the social security system will correct the financial disequilibrium that the IMSS has suffered during the past several decades.

2. According to the text of the SSL, "the changes in health insurance system reaffirm the Government's commitment and participation in the social security system; establish a more transparent financial mechanisms; provide the conditions for increasing coverage, in order to achieve universal coverage of the population; and foment the development of the labor market, which will lead to greater social benefits and improved welfare of the population. The search for these objectives will have a significant impact on the financing of social security in Mexico, as well as the fiscal obligations of the Government to finance its increased participation in the health insurance system of IMSS.

3. In order to evaluate the financial and fiscal impact of the proposed financing reforms, it is necessary to develop a simple financial projections model to simulate the impact of the reforms in the context of a dynamic demographic and financial environment. In addition, the model provides for the flexibility necessary to simulate alternative policy scenarios currently under discussion in Mexico. The two basic policy options explored in the current analysis include: (i) increased participation in the opting-out policy (*prestación indirecta),* which essentially allows IMSS beneficiaries to opt out of the IMSS provider network, by devolving to members a lump sum risk-adjusted capitation payment; and (ii) providing public subsidies for insurance to the self-employed and informal sector workers (opting-in).

4. This annex summarizes the most important features of the model, describes the sources of data used, explains the operation of the different modules or components, shows how the components are integrated to produce estimates of the financial and fiscal impact of the reforms, and presents summary results of the implementation of the financing reforms. The paper is divided into five sections. The first section provides an overview of the current financial situation of IMSS and highlights the key aspects of the proposed reforms. The second section outlines the basic modeling approach, describes the key variables and the expected results. The following section establishes the baseline data and assumptions used in the model. The fourth section outlines the alternative scenarios that are evaluated. The fifth section highlights the principal results of the financial projection, including the impact on IMSS finances, the fiscal impact, the effect of the health insurance schemes for the self-employed and the informal sector, and the implementation of a public health package. Detailed financial projections are provided in the full document available in project files.

II. Current Financial Situation of IMSS

5. The extension of coverage of social security, increasing medical costs, an aging population, and fluctuations of the economy have placed steady pressure on the Mexican social security system. IMSS was traditionally financed through a tripartite compulsory insurance scheme covering workers in the formal economy and their employers, based on twelve and a half percent (12.5%) of nominal wage earnings, with government contributions limited to a small subsidiary role and financing of a limited group of public workers. The burden of the compulsory payroll tax falls mainly on employers (70%), followed by a smaller share for employees (25%) and government (5%).

6. Total revenues through the current system have proven insufficient to cover the health care costs of the IMSS, including hospital and maternity care. Over the past 5 decades, the annual deficits have been subsidized by funds allocated from the other insurance schemes, such as pensions and child care. Until 1988, the health insurance system of IMSS was in chronic deficit. In 1989 the government increased payroll taxes from 9% to 12% of nominal wages. Under continuing financial pressure, payroll taxes were increased again in 1993 to 12.5% of nominal wages and the ceiling on wages was raised to the equivalent of 18 times the minimum wage. And in 1994, the ceiling on taxable income was raised to 25 times the minimum wage. Despite the adjustments in the financing system, health care expenditures continued to outpace revenues.

7. In 1996, annual expenditures were equivalent to approximately US$4.26 billion, while annual revenues were limited to US$4.1 billion, thus producing a deficit of an estimated US$151 million. Table 1 displays the annual revenues and expenditures for the health and maternity care programs (*Seguro de Enfermedad y Maternidad SEyM*) of IMSS for the period 1991 to 1996.

Table 1: IMSS Annual revenues and expenditures: 1991-1996
1996 US$ millions

	Revenues				Expenditures						
Year	Employer-employee	Govt.	Other	Total	Health Care	Other benefits	Admin.	Other	Total	Deficit/ Surplus	Spending/ beneficiary (US$)
1991	3,615	244	113	3,971	3,122	234	382	317	4,054	(83)	104
1992	3,949	270	126	4,345	3,395	243	577	327	4,542	(197)	121
1993	4,334	286	127	4,747	3,712	267	616	357	4,952	(205)	135
1994	4,993	318	171	5,482	3,954	288	653	397	5,292	190	145
1995	4,031	261	193	4,485	3,323	236	556	437	4,553	(68)	133
1996	3,725	218	162	4,105	3,163	201	458	433	4,256	(151)	114

8. In part, the deficit shown in Table 1 may be attributable to increasingly high levels of under-reporting and evasion in the Mexican social security system. Beginning in 1990, total membership in social security began a rapid decline from approximately 45% of the Economically Active Population to roughly 38%, in 1996. On the revenue side, a 1993 employment survey shows that under 3% of all workers covered by IMSS social security earned between 1 and 3 minimum wages, while official IMSS statistics indicate that 19% of the members report earnings below 3 minimum salaries. The wide disparity in reported wages is

an additional source of lost revenues for the IMSS. Additionally, nearly 50% of the privately insured population also contributes to the social security system, thereby creating an additional disincentive to report full income levels. The recurrent deficits in the health insurance system of IMSS led the government to implement changes in the financing system, which aim to ensure the financial viability of the system.

9. ***Changes in the Financing System.*** In 1995, faced with chronic deficits in the health insurance programs of IMSS, the government proposed a series of major reforms in the financing system of social security. The reforms, which were to be implemented on July 1, 1997, aim to establish a more transparent financing mechanism, allowing for a progressive increase in coverage, increased levels of competitiveness in the Mexican labor force and economy by lowering the tax burden on wages, and increased government contributions to social security. The following table summarizes the principal changes in the financing of the Mexican social security system.

Table 2: Principal Changes in IMSS Financing for Medical and Maternity Insurance

Financing Prior to July 1, 1997	Rate	Revised Financing Scheme (post July 1997)	Rate
Formal Sector Workers			
Compulsory Payroll Tax up to 25 minimum salaries	12.5%	Fixed indexed contributions for all workers affiliated to IMSS	13.9% of minimum salary in DF
• employer	70%	• employer	13.9%, indexed to Min. Wage DF
• employee	25%		
• government	5%		
		• government	13.9%, indexed to CPI
		Over 3 minimum salaries, additional contribution of 8% of the difference between worker's wage and 3 minimum salaries, plus fixed indexed contributions (13.9% for employer and 13.9% government):	
		• employer	6%
		• employee	2%
Insurance for Self-Employed			
Fixed per member contribution		• Employee contribution, as a % of indexed minimum salary	22.4%
		• Government subsidy, as a % of indexed minimum salary	13.9%

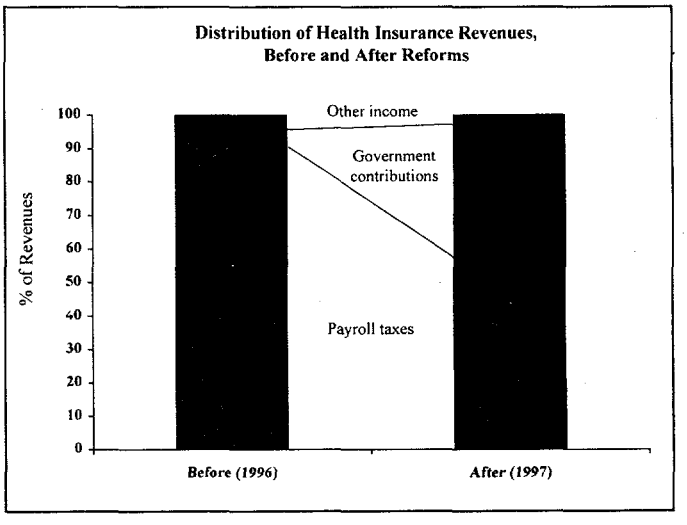
Note: based on previous work on the impact of the reforms: "Mexico: Health Reform under the 1995 Social Security Law, Issues and Actions", March 1996, and the 1995 Social Security Law.

10. The changes indicated in the previous table would have a significant impact on IMSS financing and coverage, and imply an important increase in government contributions to financing social security in Mexico. In summary, the major changes in the financing system would:

- Shift the burden of payroll taxes from employers and employees to general tax revenues by converting the 12.5% payroll tax to an indexed employer and GOM contribution equivalent to 13.9% of the minimum daily wage for the Distrito Federal, or roughly US$173 per capita per annum, respectively, for all workers earning less than 3 minimum wages;
- Gradually increase the progressiveness of the financing system, by eliminating worker contributions for those with incomes lower than 3 minimum wages, and increasing employer contributions to 6% of additional wages above the 3 minimum wage level and employee contributions to 2% of the difference between nominal wages and the 3 minimum wage level. In addition, the law would reduce the rate on employee's marginal income gradually over 10 years, to reach a level of 1.5%;
- Create two new forms of publicly subsidized health insurance for the informal sector and self-employed workers, based on indexed per capita contributions of US$ 229 per year for workers and US$ 173 per member per year GOM subsidy. Under the first of these insurance schemes, the Family Health Insurance (FHI), the worker contribution is matched by a government subsidy and coverage is extended to the entire family. The second insurance plan for self-employed workers, IVRO, includes the same government subsidy and provides pension and workers compensation;
- Allow the opting-out of IMSS members (*prestación indirecta)* by returning a risk adjusted capitation payment to employers to purchase private health insurance. Under the proposed system, the allocation is based on the average IMSS expenditures per capita, according to the age and sex of the employee opting-out. This would vary from the current opt-out provisions which returns on average between 30 and 70% of total contributions; and
- Additional provisions to stimulate the outsourcing of ancillary services and the purchase of high technology services in the private sector.

11. ***Impact Of Changes In The Legislation — The Social Security Law.*** As a result of the changes outlined in the previous section, the Mexican social security system faces a major challenge to ensure the financial viability of the health insurance system over the medium-to long-term. On the revenue side, the additional government contributions would increase IMSS revenues, thereby eliminating the chronic deficits in the health insurance system, and creating a sizable burden on public finances. On the expenditure side, rapid changes in the epidemiological and demographic profile, technological change, the fixed costs associated with maintaining IMSS provider network, and the costs associated with financing the opting-out scheme, would dramatically increase projected expenditures. The impact on IMSS and public financing would be focused in the following areas:

12. ***Change in Premium Structure.*** IMSS instituted a change in the premium structure in July 1997 to address chronic deficits (see para. 13) and systemic inefficiencies. Under the new system, the premium is divided into two parts: a flat rate, and a progressive element for those earning salaries above three times the minimum wage. Contributions are capped for salaries above 25 times the minimum wage. In sum, the changes will change the composition of IMSS health insurance financing from roughly 95% employer and employer contributions and 5% Government contributions to 67% employer and employee contributions and 33% Government contributions. The following figure summarizes the main changes in IMSS financing promulgated under the 1995 SSL.



42. For all salaried workers, employers and the Government will each make an equal contribution equivalent to 13.9% of the 1995 minimum wage, with the Government share indexed to inflation (CPI) and the employer's contribution indexed to minimum salaries in the Federal District. The share paid by employers will rise to 20.4% of the minimum wage by 2007, while payments by the Government will be adjusted according to increases in the minimum wage. For workers earning more than three times the minimum wage, additional contributions will be paid: employers will pay 6% of the wage above this level and employees will pay 2% of the same portion. This total of 8% will be gradually reduced to 1.5% over the next decade. By 2007, marginal rates of social security health care contribution on salaries above three times the minimum wage will be 0.4% for workers and 1.1% for employers. The final 1.5% is due to remain in effect to comply with a constitutional provision that calls for a proportional element in social security contributions.

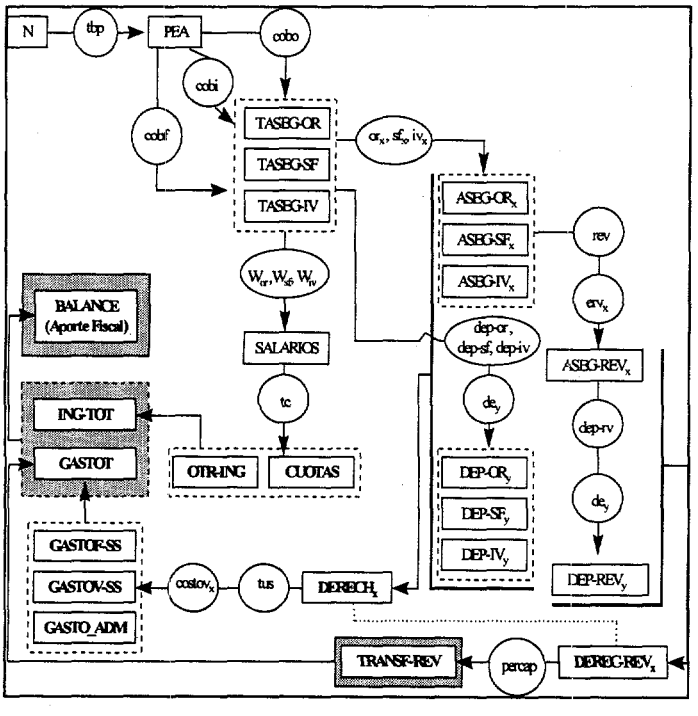
43. The changes indicated above will have a significant impact on IMSS financing and coverage, and imply an important increase in government contributions to social security. The changes would: (a) reduce part of the incentives to under-report economic activity; (b) allow a wider range of the population to opt into the social security system by reducing the cost of enrollment through a government subsidy for informal sector and self-employed workers; (c) shift a major burden of payroll taxes from employers and employees to general tax revenues; (d) increase the progressiveness of the financing system by eliminating contributions for all workers earning less than 3 minimum salaries and providing public subsidies for insurance to the self-employed and informal sector workers; and (e) allow the opting-out of IMSS employees by returning a per capita fixed fee to employers to purchase private health insurance.

III. Methodology

15. The financial projections model developed is based on the integration of data from IMSS, household surveys, labor market studies, and national demographic and economic statistics into a unified framework to produce a dynamic model to simulate various policy scenarios. The basic modeling approach is based on the use of baseline data, which is consistent with IMSS and Government short-term projections, as a starting point and then projecting, over a ten year period, the impact of the policy changes in the 1995 SSL. The emphasis is based on the incorporation of the best available data into a flexible framework that can easily be improved or modified in the interest of policymakers. The model developed utilizes the following basic input:

- Projections of national population, by age and sex
- Economic activity participation rates of different groups

- General coverage rates of the Economically Active Population (EAP), by Basic Plan, IVRO and Family Health Insurance
- Distribution by age of the insured members (direct and family members), in the Basic Plan, IVRO and in the Family Health Insurance
- Health Service utilization rates, by age and gender
- Distribution of health expenditure, by age and gender
- Contribution rates according to the new SSL, including the participation of the Central Government, worker and employer
- Average salary of the insured members and minimum salaries in the Federal District
- Per capita allocations for opting out and the provision of a public health package
- Coefficients of dependents per insured member for Basic Plan, IVRO and others
- Macroeconomic variables: GDP, Public Expenditure, CPI, minimum salaries, etc.



Graph 1: Schematic model of variable interaction

16. In addition, several projections are included to simulate the financial impact of the implementation of a Basic Package of Public Health care. Two options are considered here: (1) coverage for the whole population, including those insured members of IMSS and the remaining population covered by other insurance providers or the SSA, and (2) simulations for the population not covered. To carry out these estimates a cost per capita of roughly US$20 per year is used as a baseline projection; this parameter can be easily modified to simulate different scenarios with respect to per capita allocations. The present methodology can be easily adapted to incorporate additional scenarios with other social security programs, such as ISSSTE, PEMEX, etc.

17. ***Expected Results.*** The preliminary model development is focused on the simulation of the financial and fiscal impact of the financing changes in the SSL. While the basic model is a based on a strict interpretation of the changes in contribution rates and government contributions, the incorporation of demographic changes, overall coverage rates for IMSS health insurance and macroeconomic projections provide the basis for estimates of the net impact of the changes. All estimates are presented in real terms and are based on the 1996 exchange rate of 7.60 pesos to the US dollar.

18. The model is formulated in order to allow for the transparent evaluation of the impact of alternative scenarios, assuming differentiated ranges for key demographic, utilization and financial variables, as well as alternative policy scenarios. The main variables that can be modified in the model, include:

- Participation of the population in the economic activity
- Coverage of the different health care programs
- Contributions rates to social security
- Population affiliated to the opting out scheme
- Amount per capita transferred for opting out and to finance the public health package
- Total utilization rate of the health services
- Average cost per person with right to health care services (fixed and variable)
- Average number of dependents for each primary insured member
- Dependents for each primary insured member in opting out scheme
- Structure by age of the different populations
- Minimum salary for the D.F.
- Average salary rates (contractual wages)

19. Based on changes in these parameters, alternative scenarios are generated for contributing salaries, income from contributions, total IMSS health insurance revenue, total IMSS health insurance expenditures, overall financial equilibrium for IMSS health insurance, and total expected fiscal contributions.

IV. Baseline Information and Initial Assumptions

20. Based on data and information from IMSS, the World Bank and National Statistics from INEGI, it is possible to calibrate the financial projections model. The application of any projections model is based on a series of initial assumptions, baseline data and basic hypotheses with respect to changes in the model's variables. Simplifying assumptions are often required, to face the practical limitations of existing data and to translate highly complex calculations into a comprehensible and manageable framework that will provide valuable information to policymakers in Mexico.

21. Because the objective of the modeling is to carry out policy simulations, the assumptions in the different scenarios, and the variations in the demographic, economic and financial parameters, must be understood as approximations to acceptable situations.

22. The principal limitations of this model are: (1) it includes only scenarios for the population covered by the IMSS, and therefore does not consider the possible effects of the law on other social security schemes such as ISSSTE; (2) the individual level variations in behavior of IMSS users are not considered; and (3) it is assumed that the composition of services provided by IMSS and the cost of these services is constant over the period of evaluation. Thus, epidemiological changes that might affect the composition of demand and the cost of health care are not reflected; however, the model may capture some of these effects through the use of utilization rates by age group and the rates of increasing variable costs. The basic assumptions include:

- The structure of wages is constant over time;
- There is a level of health expenditure, relatively constant, which is not proportional to the volume of beneficiaries. This expenditure is considered as the fixed costs of the system;

accordingly, the transfer of resources and the responsibility of provision under opting out would not proportionally reduce this fixed expenditure;

- The age structure of the beneficiaries (primary insured members and dependents) changes over time, allowing for the simulation of the effect of aging on system costs; and
- Utilization rates of health care services are constant over time[2].

23. Following is a detail of practical aspects, related to the baseline information:

- The official projection of the national population was used as input, the baseline is 93.2 million inhabitants in 1996 and reaches 112 million in the year 2010.
- An increase in the gross rate of participation in economic activity is considered, according to historical trends in the Mexican economy. This index would go from 40% to 46% between the years 1996 and 2010, reflecting principally greater female participation in the economy.
- The coverage of IMSS with respect to the economically active population (EAP) starts off from a level of 28% and reaches levels of 28%, 35% and 40% by the year 2010, according to "low", "middle" and "high" scenarios, respectively.
- An alternative measure of projected IMSS coverage, based on the elasticity of new contributors with respect to increases in GDP (historical estimates yield an elasticity of 0.67), closely mirrors estimates of total coverage under the model.
- The specific coverage rates of the different insurance schemes (Basic Plan, Family Health care and IVRO) are contemplated within the total coverage of the EAP. Also, the model assumes a final target in the year 2010 for coverage in each of these insurance schemes, and then assumes a linear growth rate per year to achieve the target. The baseline data for the FHI scheme is based on existing coverage of the self-insured population (*seguro facultativo).*
- The total population opting-out is assumed to reach 1.47% (existing levels), 2.5% and 10%, under the low, middle and high scenarios, respectively.
- As mentioned earlier, the expenditures have been separated in two components: one fixed, to reflect certain sunk costs, more or less independent from the volume of users, and the other variable over time, assuming annual real increases in the spending.
- The initial total health care expenditure for IMSS was used as baseline to establish an initial relative level of fixed expenditure (60%), and the difference between total expenditure and fixed expenditure is then allocated as variable cost. In both cases (fixed and variable component), modifications can be simulated through out time: for example, total fixed expenditure in the year 2010 is n times that of the initial year; or, the average variable cost, by age, increases at an annual rate of r%.
- A total health care expenditures are calculated based on the average expenditure by age group, the utilization rates by age group and the total beneficiaries in each age group.
- The rest of the expenditure components, such as Administration and Others, are projected as a fixed proportions of the health care expenditures, based on the relative proportion calculated for the year 1996.
- With respect to wage contributions, the total expected revenue for each insurance scheme is based on the total number of direct insured and estimates of contribution rates as a percentage of the Minimum General Wage for the Federal District (SMGDF in Spanish). The

calculation of the equivalent rates is based on the initial salary structure according to the distribution of the primary insured members by salary range, applying in each case, the established rates in the SSL; using the existing salary structure of IMSS contributors, the absolute contributions are established for each health insurance scheme and for each contributor (workers, employers, government). The absolute contribution rate for each insurance scheme is later translated into equivalent rates relative to the SMGDF.

- Implicitly, this procedure assumes that the salary structure will remain constant over time, or that SMGDF will retain the existing proportion with respect to the total salary distribution. The calculations for the average wage, as a share of the SMGDF, are based on estimates that 70% of the new members affiliating with the IMSS will contribute in the range of 1 to 3 minimum salaries, while the remaining 30% will contribute in the range of 3 minimum wages, and above. This assumption is based on an analysis of existing contributors by income level.
- Net revenues to IMSS excludes the contributions of the 362,000 IMSS workers since there is no real income from these contributors. Nonetheless, the GOM will have to continue to make contributions for these members according to the law.
- Baseline estimates for the number of persons that could potentially enroll in the FHI are based on the assumption that the incorporation of these workers would include the 200,000 independent workers currently affiliated, in addition to 180,000 workers that voluntarily affiliate after a loss of benefits in the Basic Plan and 200,000 state and municipal employees eligible for the program. The incorporation of the target population of 580,000, however, would not be immediate; estimates assume that the FHI program would include all of these potential members over a period of 2 years.
- The age structure of the different insured populations, is adjusted over time, to simulate changes in their composition. In the case of the primary insured members, the distribution by age group for the three insurance schemes is assumed to mirror overall changes in the composition of the EAP; however, if the information were available, the model allows for the differentiated modeling of the age structures for each insurance scheme. For the insured family members (dependents) the variation of the age structure is modeled according to existing projections of the age distribution of the national population.
- The total number of insured family members is projected through the utilization of dependent coefficients (children and spouses) for each primary insured member, according to age. Once the total of dependents is obtained, these are distributed by age according to the relative distribution, adjusted over time. For practical reasons, the index of dependents for each primary insured member is assumed equal for the three insurance schemes (BP, FHI, and IVRO), as well as the population that selects the opting out system.

V. Alternative Scenarios

24. The model includes three basic modules: demographic variables, financial variables and macroeconomic variables, that generate the results. In each of these modules there are several variables that can be modified, assuming different rates in coverage, utilization and real annual growth rates. The following sections outline the basic scenarios that are used in the preliminary projections, however, future scenarios may vary.

Coverage of the Economically Active Population:

- Baseline: 34.8% of the EAP covered by IMSS

Alternative scenarios for target coverage by the year 2010:

- Pessimistic scenario: 28% of the EAP
- Medium scenario: 35% of the EAP
- Optimistic scenario: 40% of the EAP

Distribution of coverage among the three main insurance schemes
Target rate for the year 2010:

	28%	38%	40%
Basic Plan	35	35	40
Family Health	5.0	7.0	10
IVRO	2.0	3.0	3.0

Financial Variables:

Fixed Costs: are assumed constant at 60%, however, different levels of fixed and variable costs can be simulated under the model

Real growth rate in fixed costs:
Low scenario: 3% real growth in fixed costs
Medium scenario: Real accumulated growth of 1% per year
High scenario: Real accumulated growth of 3% per year

Real growth rate in variable costs
Low scenario: Real growth of 5% per year
Medium scenario: Real accumulated growth of 2% per year
High scenario: Real accumulated growth of 3.5% per year

Wage growth
Low scenario: Real growth of 4% in 1997, 2% in 1998 and 0% thereafter
Medium scenario: Real growth of 3.5% in 1997, 2% in 1998 and 0% thereafter
High scenario: Real growth of 3.5% in 1997, 2% in 1998 and 1.0% thereafter

Per capita allocation for opting-out:
Scenario: 835 pesos per person per year (US$105).

25. Remaining variables such as coverage and increases in fixed and variable costs follow the 3 scenarios presented in the current section. The per member per year allocation can be adjusted to simulate alternative scenarios.

Macroeconomic Projections:

Real GDP Growth:
According to World Bank and Ministry of Finance projections, the three scenarios use the following growth rates for GDP:
1998: 5%
1999-2000: 3.0%
2001-2010: 3.5%
Public expenditures as % of GDP: Assumed constant at 22.5% of GDP

VI. Results

26. The results of the model depend on the assumptions used in the projections model and the three scenarios indicated in previous section. In this section, the main results are divided into three areas: (i) the impact of the changes in the SSL on IMSS financing and government contributions; (ii) the impact of the proposed insurance schemes, Family Health Insurance and IVRO, on the overall coverage; and (iii) the impact on IMSS financing and fiscal contributions for the implementation of opting out.

27. ***Impact on IMSS Financing and Fiscal Obligations.*** The proposed changes in the financing scheme of social security in Mexico would reverse the historic deficit in IMSS financing and rapidly increase government contributions. The first scenario presented is based on IMSS financial projections until the year 2005. While these results are similar to the estimates presented in the sections on alternative scenarios, the model is not based on dynamic, but rather linear, assumptions on demographic and financial parameters. Under this base scenario, characterized by steady growth in expenditures (1.7% per annum), zero wage growth and declining coverage of the economically active population (from 29% to 27%), IMSS total real expenditure would increase by nearly 44% from US$ 4.3 billion in 1996 to US$6.2 billion in 2010. While the deficit of nearly US$151 million in 1996 would be eliminated. The 7 years of surplus, however, would allow IMSS to accumulate a reserve of approximately US$2.2 billion.

Table 3: IMSS' Financial Projections
(US$ millions)

	Baseline 1996	1998	2000	2005
Total IMSS Expenditure	4,256	5,471	5,806	6,197
Total IMSS Earnings	4,105	5,539	5,924	6,481
Net Revenue	-151	68	118	284
Reserves	-	234	746	2,211
Total Insured IMSS (% of EAP)	29%	30%	28%	27%
Total Insured IMSS	34,321,910	37,806,137	43,921,886	50,779,696
Fiscal Implications				
Payment of "cuotas"	218	2,087	2,209	2,427
Gov. Contribution as % GDP	.07%	.5%	.51%	.52%
Gov. Contribution as % Pub. Spending	.33%	2.3%	2.4%	2.5%
Assumptions: Average wage (expressed in # of minimum wages)		2.98	2.98	2.98
Real growth in average wage		0.00	0.00	0.00
Real interest rate earned (%)		2.0%	2.0%	2.0%

28. The following section summarizes the results of several alternative scenarios developed by using the dynamic model described in the present annex. Under the ***low scenario,*** characterized by rapid growth in total fixed (3.5% per annum) and variable expenditures (5% per annum), zero wage growth and nearly constant coverage of the economically active population, IMSS total real expenditure would increase by nearly 43% from US$ 4.3 billion in 1996 to US$8.9 billion in 2010. While the deficit of nearly US$151 million in 1996 would be eliminated over the short-term, the rapid increase in expenditures would outpace revenue increases, and the deficit would return in the year 2005. The 6 years of surplus, however, would allow IMSS to accumulate a reserve of approximately US$3 billion, thereby offsetting the negative flows at the end of the period.

29. For the most part, the increase in total revenues would be accounted for by the rapid increase in government contributions to social security expected during the first year of full implementation (1998). Over the period 1996 to 2010, total fiscal contributions would increase from just over US$218 million to nearly US$2.6 billion, fueled by an increase of nearly 80% in total IMSS contributors and the extension of coverage to the informal sector. As a percentage of public spending, government contributions would increase from around 0.33% of public expenditures prior to the reforms, to around 2.2% in the year 2010 with the reformed financing scheme. At the same time, government transfers to IMSS would increase from 0.07% of GDP in 1996 to just under 0.47% in 2010 with the reforms.

Table 4: Low Scenario
(US$ millions)

	Baseline 1996	1998	2005	2010
Total IMSS Expenditure	4,256	4,496	6,656	8,882
Total IMSS Revenue	4,105	5,285	6,610	7,838
Net Revenue	- 151	789	- 46	- 1,044
Reserves		1,575	5,215	2,926
Total Insured IMSS (% of EAP)	29%	29%	28%	28%
Total Insured IMSS	34,321,910	36,173,199	52,696,397	64,594,631
Fiscal Implications				
Payment of Cuotas (Fiscal cost)	218	1,951	2,237	2,619
Gov. contribution as % GDP	0.07%	0.47%	0.48%	0.47%
Gov. contribution as % Pub. Spending	0.33%	2.07%	2.21%	2.17%

30. Under the ***medium scenario***, which is characterized by 1% accumulated growth in fixed and a 2% increase in variable expenditures, zero wage growth and an increase in coverage of the economically active population from 28% to 35%, IMSS total real expenditure would increase from US$4.3 billion in 1996 to nearly US$8 billion in 2010. At the same time, total revenues would rise from US$4.1 billion in 1996 to over US$9.7 billion by the year 2010. Under this scenario, net revenues would reach over US$1.7 billion by the year 2010, and the reserve would grow to over US$23 billion.

31. In terms of the fiscal implications, over the period 1996 to 2010, total fiscal contributions would increase from just over US$218 million to nearly US$3.4 billion, fueled by an increase of nearly 130% in total IMSS contributors and the extension of coverage to the informal sector. The increase in coverage would be derived from changes in the labor market, and aging population, and a slight increase in the coverage target for IMSS insured. As a percentage of public spending, government contributions would increase from around 0.33% of public expenditures prior to the reforms, to around 2.8% in the year 2010 with the reformed financing scheme. At the same time, government transfers to IMSS would increase from 0.07% of GDP in 1996 to 0.6% of GDP in 2010 with the reforms.

Table 5: Medium Scenario
US$ millions

	Baseline 1996	1998	2005	2010
Total IMSS Expenditure	4,256	4,380	6,166	7,974
Total IMSS Revenue	4,105	5,417	7,590	9,654
Net Revenue	- 151	1,037	1,425	1,680
Net Reserve	-	1,920	12,623	23,299
Total Insured IMSS (% of EAP)	29%	29%	32%	35%
Total Insured IMSS	34,321,910	36,403,471	60,075,999	78,951,076
Fiscal Implications				
Payment of Cuotas	218	1,764	2,639	3,367
Gov. contribution as % GDP	0.07%	0.48%	0.56%	0.60%
Gov. contribution as % Pub. Spending	0.33%	2.13%	2.60%	2.80%

32. Under the ***high scenario***, which is characterized by 3% accumulated growth in fixed and a 3.5% annual increase in variable expenditures, 1% wage growth and an increase in coverage of the economically active population from 28% to 40%, IMSS total real expenditure would increase by over 100% from US$4.3 billion in 1996 to US$10.2 billion in 2010. At the same time, total revenues would rise from US$4.1 billion in 1996 to over US$12.6 billion by the year 2010. Under this scenario, net revenues would reach over US$2.4 billion by the year 2010, as a result of the increase in coverage and the rise in real wages, and the net reserve would reach US$26.3 billion.

33. In terms of the fiscal implications, total fiscal contributions would increase to nearly US$4.5 billion between 1996 and 2010. As in the low and medium scenarios, the increase in coverage would be derived from changes in the labor market, and aging population, and a slight increase in the coverage target for IMSS insured. Under this optimistic scenario for coverage, government contributions as a percentage of public spending would increase from around 0.33% of public expenditures prior to the reforms, to over 3.7% in the year 2010 with the reformed financing scheme. At the same time, government transfers to IMSS would increase from 0.07% of GDP in 1996 to just over 0.8% of GDP in 2010 with the reforms.

34. ***Impact of Alternative Health Insurance Schemes for Self-employed and Informal Sector Workers.*** The introduction of two new insurance schemes for the self-employed has the potential to significantly increase coverage of social security in Mexico. At present, the voluntary insurance scheme for the self-employed and informal sector workers is limited to around 250,000 workers, due to a lack of incentives to affiliate and little or no promotion of the program by IMSS. It is estimated that the new insurance schemes, would attract a large percentage of the self-employed and informal sector workers that have the capacity to pay for health insurance.

35. While the two new programs, FHI and IVRO, have the potential to increase coverage to the self-employed and informal sector, it is important define the eligibility requirements, benefit package and control systems to avoid the risks associated with self selection and moral hazard. The current estimates of expenditures, revenues and total coverage of these programs

assume that the age-sex distribution of enrolled members is equivalent to that of the population enrolled in the Basic insurance scheme of IMSS. Nonetheless, the model allows for the simulation of alternative scenarios, assuming both higher utilization rates for this group (moral hazard) and differences in the age structure and the number of dependents per insured member.

36. Table 6 summarizes the estimated increases in coverage for these two programs under the low and high scenarios. Under the low scenario, the programs would grow from current levels of roughly 250,000 workers covered to around 2.6 million workers in the year 2010. The government subsidy for the workers in the FHI scheme, equivalent to 13.9% of the indexed minimum wage, would increase from under US$20 million in 1997 to over US$355 million in the year 2010.

37. The high scenario presents a fairly optimistic scenario for IMSS coverage of the self-employed and the informal sector. Under this scenario, the number of workers covered by the family health insurance would grow to over 5 million, while the number of members affiliated to the IVRO program would reach 1.5 million self-employed and informal sector workers. The public subsidies under this scenario would be significant. Government spending to finance public subsidies of these programs would reach over US$800 billion by the year 2010.

Table 6: Projection of total coverage, by insurance scheme

	Baseline 1996	Low Scenario 1998	Low Scenario 2010	High Scenario 1998	High Scenario 2010
Total National Population	93,181,633	96,254,388	111,983,885	96,254,388	111,983,885
IMSS contributors	12,255,133	13,512,615	21,854,994	14,188,205	31,106,206
IMSS Basic H.Ins. scheme	12,255,133	13,118,522	18,257,300	14,188,205	31,106,206
IMSS Family Health Insurance		281,496	2,569,781	562,991	5,139,562
IMSS IVRO		112,598	1,027,912	168,897	1,541,869
Total IMSS insured (incl. dependents)	34,321,910	38,012,710	64,594,631	39,913,229	83,978,246
Total Govt. Subsidy (US$ millions)		38,934,682	355,435,690	37,164,710	801,027,664
% population covered by IMSS	40%	41%	46%	41%	46%

38. ***Impact of Opting-out on IMSS Financial Balance.*** The present section summarizes the impact on IMSS revenues and expenditures of the extension of the proposed opting-out (*prestación indirecta).* This policy option, which is not part of the legislative changes but figures prominently in the menu of policy options to improve the efficiency and quality of IMSS health care services, would devolve to paying members a fixed cuota in order to privately purchase health insurance. As indicated in a previous World Bank Paper ("Mexico Health Reform under the 1995 Social Security Law", March 1996), the policy would free IMSS from the financial management and provision of health services for a segment of the population, while likely

enhancing quality and choice for a large sector of the population with the capacity to pay for private health insurance.

39. Two alternative financing options are considered in the current simulations. The first scenario, which resembles the current situation for workers opting-out of IMSS, would devolve 70% of the worker-employer contributions to IMSS in order to finance part of the private insurance premiums that the firms would purchase for their workers. This proposal runs the risk of encouraging the opting-out of the population with the lowest risk of poor health, namely those with high concentrations of young and healthy workers. While the current simulations do not model situations of adverse selection of the young and low utilization populations, the model allows for future simulations of the impact this situation on IMSS financing. The scenario presented in the preliminary estimates of the impact of opting-out affect IMSS total expenditures in two ways. First, the devolution of 70% of cuotas is considered as a transfer payment to enrolled firms. This scenario considers an average wage of 2.5 times the average wage of members who do not opt out. The second impact is captured through the ratio of fixed to variable expenditures. The sunk costs of the system, or the fixed costs, are not lowered by the reduction in utilization of members opting-out of the system, while the variable costs would be reduced due to a reduction in total utilization.

40. The second scenario considers the implementation of a risk adjusted per capita payment instead of the devolution of 70% of worker-employer contributions. While this scenario would likely reduce the problems of adverse selection indicated above, it would still have a significant impact on IMSS expenditures. This scenario considers the transfer of a per capita payment, adjusted for age and sex, equivalent to the capitation payments that would apply internally for IMSS. That is, the per capita payment to be returned to workers would attempt to simulate the expected cost of care. Under this scenario, the average yearly payment per capita is estimated at just over US$105 per capita, with a low of US$43 for the population aged 5-9 years of age, and a high of US$1,900 for the population aged 75-79 year. Once again, the basic impact of this policy would be reflected through an increase in IMSS expenditures.

41. The simulations are presented using three alternative scenarios with respect to the total population eligible for opting out. According to estimates by FUNSALUD of the use of private insurance among IMSS members and the total population, 5.3% of all IMSS insured members are also privately insured, while 1.9% of the Mexican population has private health insurance. The three scenarios for coverage of the opting-out scheme are based on these survey estimates and the existing coverage of the opting-out scheme. The low scenario, which assumes that 100% of IMSS members with private insurance would choose the opting-out scheme, translates into a coverage rate of 5% of the IMSS insured opting-out. The second and third scenarios will depend to a great extent on the size of the transfer. The closer the transfer approximates the actual costs of private insurance, the greater the possibility of extending coverage to the insured population without the capacity to pay the difference between the cost of private insurance and public social security.

42. The scenarios of primary insured members who choose opting out are expressed as coefficients with respect to total of IMSS beneficiaries, and assume an increase of 10% of the primary insured members of the IMSS for the first three years of projection, and after a linear increase until it reaches a determined goal (e.g., 20% of total direct insured) in the year 2005. In the low scenario, for example, the proportion of primary insured members in opting out scheme reaches 4.5% of the total direct insured member of IMSS in the year 2004, and remains

constant thereafter. The initial assumption of 10% annual increases is based on estimates of the primary insured members who work for companies that could potentially pay the difference between the per capita allocation for opting out and the cost of private insurance. The low scenario simulates a situation where nearly all existing members with double coverage (IMSS and private insurance) choose the opting-out scheme. The medium scenario, assumes that the transfers would allow for an additional segment of IMSS insured to choose the opting-scheme, increasing this scheme to 10% of the total IMSS insured. The high scenario represents a situation in which the transfers for the purchase of private insurance would closely resemble the cost of private insurance, thereby increasing total coverage to 20% of total IMSS direct insured population.

43. Table 7 on the next page summarizes the results of the simulations, demonstrating the effect of the three scenarios for total coverage as well as the two alternative financing schemes (70% contributions and a per capita risk adjusted payment). The results shows that the impact on IMSS total expenditures would be significant, ranging from 2.2% in the low case scenario to a high of 13% in high case scenario. At the same time, it is clear from the simulation that the devolution of 70% of worker-employer contributions would have a significantly higher cost than a risk adjusted per capita payment in function of IMSS costs per capita.

Table 7: Simulation of Impact of Opting-out

		Low Scenario		Medium Scenario		High Scenario	
	Baseline 1996	1998	2010	1998	2010	1998	2010
Total National Population	**93,181,633**	96,254,388	111,983,885	96,254,388	111,983,885	96,254,388	111,983,885
IMSS Contributors	**12,255,133**	**13,512,615**	**21,189,906**	**12,998,384**	**25,623,388**	14,188,205	29,191,800
Members Opting-Out	**191,330**	199,227	321,268	204,622	674,864	209,188	3,110,621
Total population covered by opting out	**543,860**	568,838	963,708	584,243	2,024,387	597,278	9,330,916
Coverage of opting-out/ total IMSS contributors (%)	**1.6%**	**1.5%**	**1.5%**	**1.6%**	**2.6%**	**1.5%**	**10.7%**
% total population	**0.58%**	**0.59%**	**0.86%**	**0.61%**	**1.81%**	**0.62%**	**8.33%**
Total Expenditures for Opting-out (US$ millions)							
with return of 70% worker-employer pmts.		**88**	**128**	**90**	**263**	**92**	**1,353**
% of Total IMSS Spending		2.1%	2.4%	2.0%	3.3%	2.0%	13.0%
with per capita payment equal to IMSS costs		**66**	**117**	**90**	**263**	**92**	**1,353**
% of Total IMSS Spending		1.5%	1.3%	2.0%	3.3%	2.0%	13.0%

44. Under the low scenario, with a target coverage rate of 1.5% for the insured population opting-out, the total number of direct insured opting-out would rise from just under 200,000 workers to over 300,000 by the year 2010. Total expenditure for the program with a 70% transfer and a risk adjusted capitation payment would increase from US$88 million in 1998 to over US$128 million by the year 2010, and US$66 million in 1998 and US$117 million, respectively. In terms of total IMSS spending, however, the low scenario would have only a minor effect on total spending, increasing as a share of total expenditures from around 2% to 2.4% in the case of a 70% transfer, and 1.5% and 1.3% with the capitation system.

45. The impact on IMSS financing under the medium and high scenarios would be considerably higher. Under the medium scenario, total direct insured members opting-out would rise from 204,000 workers in 1998 to around 674,000 workers in 2010, with total coverage reaching nearly 2% of the total population. Total expenditures would increase from US$90 million in 1998 to nearly US$263, under the 70% transfer scenario. As a share of total IMSS expenditures, the opting-out scheme would account for between 2% and 3.3% of total spending.

46. The final scenario depicts an optimistic scenario of the growth of private insurance coverage in Mexico. Under this scenario, the number of persons covered by opting-out would increase from just under 0.6% of the total population to over 8%. The total expenditures by IMSS to finance private insurance would increase to over US$1.3 billion, or 13% of total expenditures.

47. ***Summary of Results.*** The previous section presents preliminary estimates on the impact of the SSL reforms on the IMSS financial situation, as well as the fiscal implications the changes. It is clear from the simulations that chronic deficits of the IMSS health insurance schemes would be immediately offset by the dramatic increase in public financing through general revenues. Through the simulation of different scenarios, it is possible to summarize the impact of the SSL changes, and the implementation of opting-out and the financing of the basic public health package, on government and IMSS finances. While both the opting-out and the basic package would have a high cost in terms of annual expenditures, it appears viable from a financial standpoint that the increase in IMSS revenues would allow for the sustainable financing of these programs.

48. It is also important to highlight that the results presented in the current document are broad estimates of the effect of the proposed changes on IMSS financing and public obligations to the social security system. Future estimates will require the simulation of additional scenarios that take into account the possible effects of adverse selection and moral hazard on IMSS expenditures, modeled through alternative scenarios of the age and income distributions of the population opting-out, as well as different scenarios of the utilization of these populations. In addition, future estimates will consider the impact on IMSS expenditures of the reforms proposed on the provision side, which aim to increase efficiency and quality of the health care services provided by IMSS providers.

49. In summary, the principal results of the simulation include:

- A significant increase in the income of IMSS. According to the selected scenario, IMSS revenues will increase from around US$4.1 billion in 1996 to US$ 7.8 billion in the low scenario and to US$ 12 billion in the year 2010 under the optimistic scenario.
- Elimination of the regime's deficit. An increase in the fiscal contribution would imply a surplus that would vary between US$ 1.5 billion in the low scenario and US$ 2.3 billion in the high scenario for the year 2010.
- An increase in the fiscal contributions from US$ 218 million in 1996 to US$2.6 billion, US$3.4 or US$4.5 billion in the year 2010, in the low scenario, medium and high scenarios, respectively.
- The fiscal contribution will increase from 0.07% of the GDP in 1996 to 0.5% in 2010 in the low scenario and to 0.8% in the high scenario. Also, the fiscal contribution as a

percentage of the public expenditure will increase from 0.33% to 2.2% in the low scenario and to 3.7% of the public expenditure in the year 2010 under the high scenario.

- The number of primary insured members by the IMSS will increase from approximately 12 million in 1996 to 21 million in the low scenario and to 31 million in the year 2010 under the high scenario.
- The effect of aging in the population has a significant impact in the expenditure. Given the utilization rates in this group, the expenditure of the IMSS will increase in approximately 10% as a result of population aging.
- An increase in the number of persons covered by opting out from around 200,000 in 1996 to about 674,000 and 3.1 million in 2010, under the medium scenario and high scenarios, respectively.
- The cost for opting-out amounts to US$ 128 million in the year 2010 in the low scenario and US$ 1.4 billion in the year 2010, under the high scenario.

GLOSSARY

Accountability to patients: process by which IMSS health care providers are held responsible and express commitment to the insured population.

Basic health package: set of health care services that a provider must guarantee to its insured population.

Budgetholding organizations: refers to a provider organization, including clinics and hospitals, that receives resources from IMSS through capitation or patient based allocation mechanisms, and has the full authority to control its expenditures and internal budgeting, including the purchase of secondary services from other providers (medical and non-medical).

Capitation formula: budgetary instrument used to allocate resources to providers of health services on a population basis, adjusting the amount of resources allocated to budgetary units by specific risk factors, such as age, sex and other factors that effect the demand for health services.

Competition: refers to mechanisms to allow users to have some choice of physician or medical area. Competition, as envisioned within IMSS, will be based on the quality of services, rather than price, as no monetary transfers are involved between users and physicians or IMSS operating units.

Cost-effective technologies: r efers to technologies that provide the best performance available, in terms of productivity, effectiveness and quality per monetary unit spent.

Decentralization: refers to the transfer of responsibility and decision making from the central level to the specialty hospitals and to the medical area units. Under Mexican law, there is a difference between "decentralizacion" as a transfer of processes to state or municipal governments, and "desconcentracion", as a transfer to regionalized federal dependencies. For IMSS, the second meaning applies.

Diagnosis Related Groups (DRGs) or case-based payment systems: one of several methods of patient classification systems developed as instruments for clinical management and hospital payment systems. The underlying principle of the system is based on grouping similar diagnostic categories, using the ICD-9 classification system, according to expected resource utilization for a given group. The system allows health managers to benchmark a number of quality and productivity indicators according to diagnostic group.

Extending coverage: increasing the number of members affiliated with IMSS.

Fee-for-service: payment mechanism through which providers are paid in function of the units of service provided to the patients. Typically, these payment systems are based on pre-established fee schedules and the patient or a third party insurer directly makes a payment to the health provider in exchange for its services. IMSS does not operate any fee-for-service scheme for the insured population.

Fiscal burden: refers to the cost that the Ministry of Finance (SHCP) has to assume to pay for the increased budgetary transfers to IMSS.

Head Office: IMSS central administration, which currently includes the following areas: General Director, Medical Services, Finance, Legal, Non-medical Benefits, Administrative, Affiliation and Collection departments.

Increasing user choice: refers to the process by which IMSS will allow users to have choice within the IMSS system.

Innovative Development Fund (IDF): set of internal IMSS regulations for the management of budget allocations dedicated to modernize IMSS infrastructure and equipment. In order to obtain resources from this fund in a Medical Area unit or in a Specialty Hospital, each project will be evaluated by a central level committee. Only projects that prove to be cost effective will be financed.

Integrated health care package (Comprehensive care package): defined set of preventative, curative and rehabilitative health care services that must be provided to the insured population. For IMSS, this is defined as the Comprehensive Health Services Model ("Modelo de Atención Integral a la Salud).

Integrated health delivery units: budgetholding units that comply with the requirements established through the SHIF guidelines and mechanisms that provide healthcare services to the insured population.

IMSS Financial Strengthening Program, 1998-2000 (Programa de Fortalecimiento Financiero): Medium term program prepared by IMSS management aimed at the strengthening of IMSS financial mid- and long-term cycle. It commits IMSS to saving a certain amount of resources for the creation of reserves for each individual insurance branch, and also for some long-term liabilities such as IMSS Workers' pension scheme. It also includes the IMSS Investment Program for 1998-2000, initiatives to improve financial, budgetary and general accounting process and related information systems, and other elements.

IMSS Investment Program, 1998-2000: Document prepared by IMSS management to identify investment needs in infrastructure, equipment and maintenance. It proposes the reinforcement of social, medical and financial cost-effectiveness criteria.

Managed Care Organizations (MCOs): non-IMSS, publicly financed, integrated health care delivery units, responsible for providing the integrated health care package to a predefined population, and managing the process of purchasing health care services for that population, using a combination of proprietary installations and sub-contracts with other providers.

Management Agreement or Contract: administrative agreement, internal to IMSS system, to allocate resources of IMSS health insurance to medical area units and third level hospitals. These agreements would set clear and measurable objectives and indicators on quality,

productivity, user satisfaction and budget execution, and set the framework for decentralizing health care services. These agreements will take into account various elements such as budget allocations, geographical area, evaluation methods, responsibilities of the medical zone or the specialty hospital, cost transfer through Diagnostic Related Groups, and other terms. Mechanisms for evaluation of these agreements shall be internal to IMSS.

Market: internal interactions of IMSS users and units for service provision based upon a set of policies to allow choice by users. These policies strive to promote cost-adjusted quality-based competition. In particular, IMSS operating units shall not enter into commercial contracts between each other or with IMSS central offices.

Medical Area Units: health care units composed of at least one second level hospital, and several first level family clinics (UMFs). IMSS is currently geographically divided in 139 Medical Area Units (zonas medicas), each with a user population and infrastructure.

Minimum health care programs: *refers to the comprehensive health care package defined* above.

Opting-in: mechanism through which independent and informal sector workers have the alternative to pay insurance premiums to IMSS, and be insured through IMSS voluntary scheme, as described in the Social Security Law.

Opting-out: mechanism through which workers affiliated with IMSS have the choice between receiving health care from IMSS as a provider or from other providers, in terms of laws and regulations in effect. In any case, users remain part of the overall social security financing and insurance system and comply with terms of laws and regulations in effect.

Payment mechanisms: refers to the instruments used to transfer resources between IMSS as a financial agent and service units. Two common methods include capitation and case based payment systems that group types of patients and assign monetary values to the treatment (see DRG).

Performance-based incentives for providers: *incentives and mechanisms established to* promote the improvement in the quality of services provided by IMSS health care delivery network. Performance-based mechanisms may link specific performance and development objectives with a variable salary or bonus.

Provider: IMSS Medical Area Unit or Specialty Hospital that belongs to social security health care delivery network.

Provision: process of providing healthcare services to IMSS insured population.

Purchasing: in the case of IMSS, it refers to the budgeting and management agreements whereby Medical Area Units and Specialty Hospitals commit themselves to agreed clinical activity target levels and quality standards in exchange for process specific budget allocations in accordance with the SSHF operational guideline.

Reform: refers to the "Programa de Reforma del Sector Salud" issued in March 1996.

Social Security Health Insurance Fund: refers to the global resources available to IMSS by law to provide health services, and the set of internal regulations to allocate budgetary resources.

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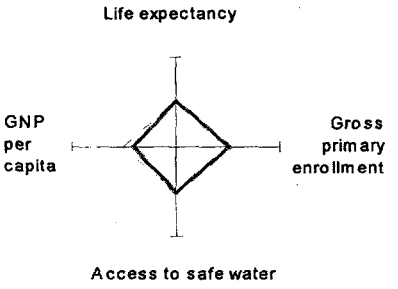
Mexico at a glance

8/18/97

POVERTY and SOCIAL	Mexico	Latin America & Carib.	Upper-middle-income
Population mid-1996 *(millions)*	93.4	485	479
GNP per capita 1996 *(US$)*	3,640	3,710	4,540
GNP 1996 *(billions US$)*	340.0	1,799	2,173
Average annual growth, 1990-96			
Population *(%)*	1.9	1.7	1.5
Labor force *(%)*	2.8	2.3	1.8
Most recent estimate *(latest year available since 1989)*			
Poverty: headcount index *(% of population)*	..	..	..
Urban population *(% of total population)*	75	74	73
Life expectancy at birth *(years)*	72	69	69
Infant mortality *(per 1,000 live births)*	33	37	35
Child malnutrition *(% of children under 5)*	..	..	..
Access to safe water *(% of population)*	87	80	86
Illiteracy *(% of population age 15+)*	10	13	13
Gross primary enrollment *(% of school-age population)*	111	110	107
Male	..	..	..
Female	..	..	..

Development diamond*

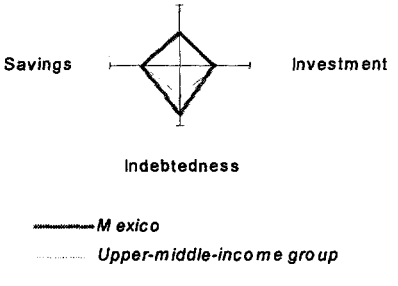


KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1975	1985	1995	1996
GDP *(billions US$)*	94.4	183.6	287.0	334.7
Gross domestic investment/GDP	22.3	20.8	19.7	20.9
Exports of goods and services/GDP	5.7	15.5	21.7	22.4
Gross domestic savings/GDP	19.0	25.9	22.7	23.4
Gross national savings/GDP	17.2	22.1	19.4	20.7
Current account balance/GDP	-4.4	0.4	-0.6	-0.6
Interest payments/GDP	1.2	5.1	3.9	3.3
Total debt/GDP	19.3	52.8	57.8	47.0
Total debt service/exports	41.1	50.7	33.8	42.8
Present value of debt/GDP	..	..	55.5	..
Present value of debt/exports	..	..	216.3	..

	1975-85	1986-96	1995	1996	1997-05
(average annual growth)					
GDP	4.6	2.4	-6.2	5.1	4.9
GNP per capita	1.7	0.3	-9.3	3.7	6.7
Exports of goods and services	11.7	6.1	33.3	16.6	7.7

Economic ratios*

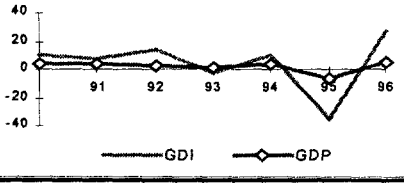


STRUCTURE of the ECONOMY

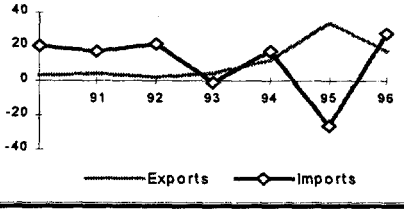
	1975	1985	1995	1996
(% of GDP)				
Agriculture	10.8	8.7	5.7	5.9
Industry	29.9	33.5	27.9	28.8
Manufacturing	21.9	23.5	20.8	21.5
Services	59.4	57.8	66.4	65.3
Private consumption	71.6	64.8	66.9	66.5
General government consumption	9.3	9.3	10.4	10.1
Imports of goods and services	9.0	10.4	18.8	19.9

	1975-85	1986-96	1995	1996
(average annual growth)				
Agriculture	3.1	0.6	1.0	1.2
Industry	4.7	2.9	-7.8	10.4
Manufacturing	4.1	3.2	-4.8	10.9
Services	4.8	2.3	-6.2	3.4
Private consumption	3.7	3.1	-9.5	2.3
General government consumption	6.3	1.6	-1.3	3.7
Gross domestic investment	1.7	4.9	-34.8	27.5
Imports of goods and services	2.0	14.4	-26.8	27.8
Gross national product	4.2	2.6	-7.7	5.7

Growth rates of output and investmen



Growth rates of exports and imports (%



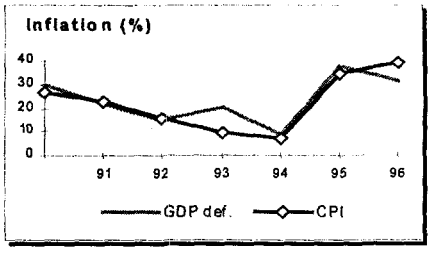
Note: Sectoral shares in the National Accounts are expressed are percentages of GDP at factor cost.

*The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

Mexico

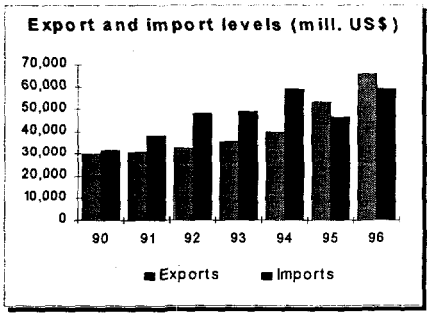
PRICES and GOVERNMENT FINANCE

	1975	1985	1995	1996
Domestic prices				
(% change)				
Consumer prices (ave.)	15.2	57.7	34.9	39.0
Implicit GDP deflator	15.5	56.5	37.9	31.5
Government finance				
(% of GDP)				
Current revenue	..	31.4	22.8	22.8
Current budget balance	..	-1.6	2.7	0.1
Overall surplus/deficit	..	-6.2	-0.1	-0.3



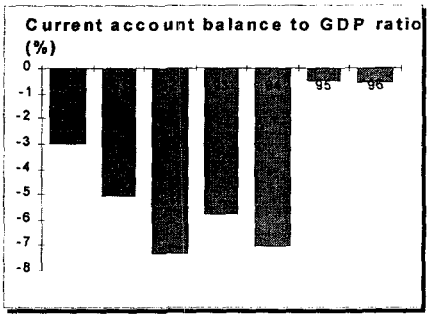
TRADE

	1975	1985	1995	1996
(millions US$)				
Total exports (fob)	..	22,931	53,363	65,495
Fuel	..	14,767	8,423	11,654
n.a.	..	..	..	..
Manufactures	..	6,245	40,379	49,800
Total imports (cif)	..	14,533	46,274	58,964
Food	..	1,082	5,335	6,657
Fuel and energy	..	..	..	..
Capital goods	..	3,165	8,697	10,922
Export price index *(1987=100)*	..	125	103	105
Import price index *(1987=100)*	..	99	81	79
Terms of trade *(1987=100)*	..	127	128	133



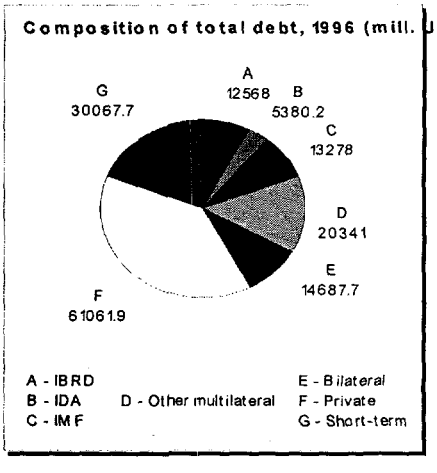
BALANCE of PAYMENTS

	1975	1985	1995	1996
(millions US$)				
Exports of goods and services	6,066	27,726	63,028	76,274
Imports of goods and services	8,466	19,915	55,275	69,195
Resource balance	-2,400	7,811	7,754	7,079
Net income	-1,783	-8,998	-13,290	-13,532
Net current transfers	59	1,986	3,960	4,531
Current account balance, before official capital transfers	-4,124	800	-1,576	-1,922
Financing items (net)	4,327	-3,223	11,167	3,696
Changes in net reserves	-204	2,423	-9,591	-1,774
Memo:				
Reserves including gold *(mill. US$)*	1,893	4,997	16,847	19,433
Conversion rate *(local/US$)*	1.3E-02	0.3	6.4	7.6



EXTERNAL DEBT and RESOURCE FLOWS

	1975	1985	1995	1996
(millions US$)				
Total debt outstanding and disbursed	18,231	96,867	165,743	157,384
IBRD	1,123	4,034	13,823	12,568
IDA	0	0	0	0
Total debt service	2,613	15,293	23,556	35,860
IBRD	116	597	2,372	2,372
IDA	0	0	0	0
Composition of net resource flows				
Official grants	8	78	31	..
Official creditors	381	809	10,343	-8,192
Private creditors	3,365	-831	5,586	11,639
Foreign direct investment	609	491	9,526	7,619
Portfolio equity	0	0	519	2,995
World Bank program				
Commitments	310	928	2,142	187
Disbursements	188	840	1,732	1,051
Principal repayments	39	335	1,411	1,409
Net flows	150	505	321	-359
Interest payments	78	262	961	962
Net transfers	72	243	-641	-1,321



Mexico
Health System Reform - IMSS
Economic Indicators

Indicator	Actual 1992	1993	1994	1995	1996	Projected 1997	1998	1999	2000	2005
National accounts (as % GDP at current market prices)										
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture[a]	6.7	6.3	5.7	5.5	6.1	5.8	5.8	5.8	5.8	5.8
Industry[a]	28.1	26.8	26.9	27.9	28.4	27.7	28.3	28.7	28.9	29.0
Services[a]	65.2	66.9	67.4	66.6	65.5	66.5	65.9	65.6	65.3	65.2
Total Consumption	81.7	82.9	83.1	77.5	74.6	74.7	77.3	77.7	76.6	75.8
Gross domestic investment	23.3	21.0	21.7	19.8	23.3	24.9	23.5	23.5	24.8	24.8
Government investment	3.8	3.8	3.8	3.3	3.8	3.1	3.1	3.2	3.4	3.4
Private investment	15.8	14.8	15.6	12.8	14.2	17.3	18.4	19.3	20.4	20.4
Increase in stocks	3.7	2.4	2.4	3.7	5.3	4.6	2.0	1.0	1.0	1.0
Exports (GNFS)[b]	15.2	15.2	16.8	30.4	32.5	30.8	31.2	31.7	32.3	34.2
Imports (GNFS)	20.3	19.2	21.7	27.8	30.3	30.5	32.0	32.9	34.0	34.7
Gross domestic savings	18.3	17.1	16.9	22.5	25.4	25.3	22.7	22.3	23.5	24.3
Gross national savings[c]	16.6	15.1	14.7	19.2	22.7	23.3	20.8	20.3	21.2	21.7
Memorandum items										
Gross domestic product (US$ million at current prices)	363609	403196	420776	286296	329475	396605	428879	465167	503547	751890
Gross national product per capita (US$, Atlas method)	3490	3800	4090	3320	3640	3700	4130	4540	4820	6590
Real annual growth rates (%, calculated from 1993 prices)										
Gross domestic product at market prices	3.6%	2.0%	4.4%	-6.2%	5.2%	6.9%	5.5%	5.2%	5.2%	5.5%
Gross Domestic Income	3.8%	1.9%	4.5%	-7.9%	5.3%	6.6%	5.2%	5.1%	5.1%	5.3%
Real annual per capita growth rates (%, calculated from 1993 prices)										
Gross domestic product at market prices	1.6%	0.0%	2.5%	-7.8%	3.4%	5.0%	3.6%	3.3%	3.3%	3.6%
Total consumption	2.3%	-0.3%	2.4%	-10.1%	0.1%	4.3%	6.1%	3.7%	1.6%	3.5%
Private consumption	2.6%	-0.4%	2.7%	-11.1%	0.5%	4.3%	6.3%	3.6%	1.4%	3.5%

(Continued)

Mexico

Health System Reform - IMSS

Economic Indicators (Continued)

Indicator	Actual					Projected				
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2005
Public finance (as % of GDP at current market prices)[d]										
Current revenues	23.7	23.1	22.8	22.8	23.2	22.8	21.4	21.4	21.6	21.6
Current expenditures	18.6	19.5	19.2	19.6	19.4	19.5	19.1	19.1	19.1	18.5
Current account surplus (+) or deficit (-)	5.0	3.6	3.5	3.2	3.7	3.3	2.3	2.2	2.5	3.1
Capital expenditure	3.6	3.0	3.7	3.2	3.7	3.8	3.9	4.0	4.2	4.2
Overall Balance	1.5	0.7	-0.1	0.0	0.0	-0.5	-1.6	-1.8	-1.7	-1.7
Monetary indicators										
M2/GDP (at current market prices)	26.9	27.6	29.7	30.6	28.3	..	..	..	..	..
Growth of M2 (%)	22.8	14.5	21.7	33.3	26.2	..	..	..	..	..
Private sector credit growth / total credit growth (%)	158.4	182.5	132.8	-99.7	90.5	..	..	..	..	..
Price indices(1993 =100)										
Merchandise export price index	103.6	100.0	108.0	114.0	115.9	117.3	118.7	121.3	123.9	140.9
Merchandise import price index	98.6	100.0	102.5	108.1	108.5	110.8	113.0	115.6	118.5	134.8
Merchandise terms of trade index	105.0	100.0	105.3	105.5	106.8	105.9	105.0	104.9	104.6	104.6
Real exchange rate (US$/LCU)[e]	107.4	101.5	105.3	152.9	134.5	112.9	112.9	112.9	112.9	112.9
Consumer price index (% growth rate, period average)	15.5%	9.8%	7.1%	34.9%	34.4%	18.5%	14.2%	12.0%	10.2%	5.0%
Consumer price index (% growth rate, end of period)	11.9%	8.0%	7.0%	51.7%	27.0%	15.7%	13.0%	11.0%	9.5%	5.0%
GDP deflator (% growth rate)	14.4%	9.5%	8.3%	37.9%	29.6%	17.4%	14.0%	12.0%	10.0%	5.0%

a. GDP components estimated at factor cost, as a % of GDP at factor cost.
b. "GNFS" denotes "goods and nonfactor services."
c. Includes net unrequited transfers excluding official capital grants.
d. Consolidated non-financial public sector
e. "LCU" denotes "local currency units." An increase in US$/LCU denotes appreciation.

Mexico

Health System Reform - IMSS

Balance of Payments

Indicator	Actual					Projected				
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2005
Balance of Payments (US$m)										
Exports (GNFS)[a]	55387	61305	71184	89207	106779	122239	133804	147586	162481	256775
Merchandise FOB	46196	51886	60882	79542	96000	110573	120953	133388	146763	231003
Imports (GNFS)[a]	73617	76916	91616	81454	99700	120893	137223	153264	169476	260851
Merchandise FOB	62129	65367	79346	72453	89469	106343	121120	135651	150299	232111
Resource balance	-18230	-15611	-20432	7753	7079	1346	-3419	-5678	-6995	-4076
Net current transfers (including official current transfers)	1114	3117	2527	2206	4531	4827	5191	5583	6004	8633
Current account balance (after official capital grants)	-24438	-23399	-29662	-1577	-1922	-6274	-11901	-15153	-18178	-23244
Net private foreign direct investment	4393	4389	10973	9526	7619	11000	11000	11500	12000	13000
Long-term loans (net)	-22	2494	4628	16329	4314	6739	3536	7614	6114	9151
Official	619	24	-598	10334	-7793	2708	-3322	-4532	-3536	109
Private	-641	2471	5226	5995	12107	4031	6858	12147	9650	9151
Other capital (net, including errors and omissions)	21087	22457	-4330	-14688	8242	2500	-3000	-4000	-5000	-5000
Change in reserves[b]	-1020	-5941	18391	-9591	-1768	-8965	-5635	-7961	-4936	-3907
Memorandum items										
Resource balance (% of GDP at current market prices)	-5.0%	-3.9%	-4.9%	2.7%	2.1%	0.3%	-0.8%	-1.2%	-1.4%	-0.5%
Current account balance % of GDP at current market prices)	-6.7%	-5.8%	-7.0%	-0.6%	-0.6%	-1.6%	-2.8%	-3.3%	-3.6%	-3.1%
Real annual growth rates (1993 prices)										
Merchandise exports	8.2%	16.4%	8.7%	23.7%	18.7%	13.8%	8.1%	7.9%	7.7%	5.9%
Merchandise imports	23.2%	3.8%	18.4%	-13.4%	23.0%	19.6%	11.7%	9.5%	8.1%	5.9%

a. "GNFS" denotes "goods and nonfactor services."
b. Includes use of IMF resources.

Mexico

Health System Reform - IMSS

External Capital and Debt

Indicator	Actual					Projected				
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2005
Total debt outstanding and disbursed (TDO) (US$m)[a]	112265	131572	140006	166104	157125	163023	163300	165467	168796	199325.7
Net disbursements (US$m)[a]	2164	13041	6489	26451	-4971	5904	277	2167	3329	8961
Total debt service (TDS) (US$m)[a]	20812	24218	21943	26887	40786	31813	35614	40509	41239	56302
Debt and debt service indicators (%)										
TDO/XGS[b]	184.1	197.9	181.3	173.4	141.6	123.9	113.2	104.1	96.7	72.8
TDO/GDP	30.9	32.6	33.3	58.0	47.7	41.1	38.1	35.6	33.5	26.5
TDS/XGS	34.1	36.4	28.4	28.1	36.8	24.2	24.7	25.5	23.6	20.6
Concessional/TDO	1.1	1.1	1.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0
IBRD exposure indicators (%)										
IBRD DS/public DS	11.2	15.5	15.0	13.8	8.1	10.9	9.8	8.6	8.6	6.0
Preferred creditor DS/public DS (%)[c]	22.9	33.2	30.9	27.4	19.5	21.3	29.2	33.3	22.7	8.8
IBRD DS/XGS	3.1	2.9	2.6	2.5	2.1	1.8	1.6	1.6	1.4	0.9
IBRD TDO (US$m)[d]	11966	12322	13038	13823	12568	12110	12305	12162	11506	11271
Share of IBRD portfolio (%)	12.1	11.9	11.8	12.0		..	..	..	..	..
IFC (US$m)										
Loans	67	53	133	63						
Equity and quasi-equity /e	64	36	21	12						
MIGA										
MIGA guarantees (US$m)	0	0	0	0	0	..	..	..	..	..

a. Includes public and publicly guaranteed debt, private nonguaranteed, use of IMF credits and net short-term capital.

b. "XGS" denotes exports of goods and services, including workers' remittances.

c. Preferred creditors are defined as IBRD, IDA, the regional multilateral development banks, the IMF, and the Bank for International Settlements.

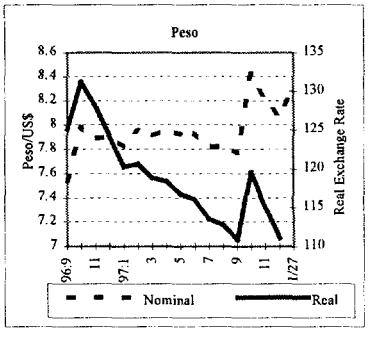
d. Includes present value of guarantees.

e. Includes equity and quasi-equity types of both loan and equity instruments.

MEXICO: MACROECONOMIC INDICATORS

CURRENCY

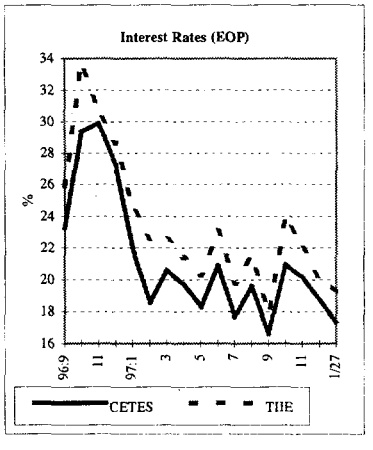
	1996	1997	98:Jan 21	Jan 22	Jan 23	Jan 26	Jan 27
Spot: Peso/$ Nominal Exchange Rate							
Period Average	7.59	7.92					
End-of-Period	7.90	8.07	8.30	8.28	8.32	8.29	8.31
	1996	1997	Aug	Sep	Oct	Nov	Dec
Real Exchange Rate Index (Nov 94 = 100)	124	111	113	111	120	115	111



INTEREST RATES

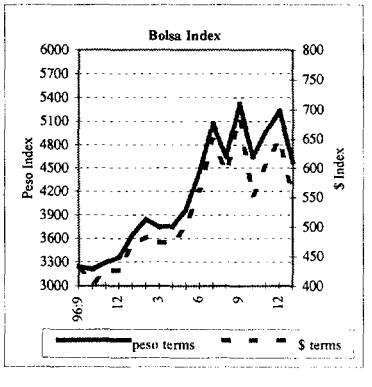
(Annual figures quoted are end-of-year closes)

	1996	1997	Dec 30	98:Jan 6	Jan 13	Jan 20	Jan 27
GOVERNMENT SECURITIES:							
Cetes (28 day) (Primary Auction Rate)	25.7	18.8	18.8	18.4	18.7	17.4	17.3
REPURCHASE AGREEMENTS (GOVERNMENT SECTOR):							
Overnight Repo Rate	25.0	20.5	20.5	18.8	18.5	18.0	16.7
INTERBANK MARKET:							
TIIE	28.6	20.1	20.1	19.6	20.1	19.7	19.2



STOCKS

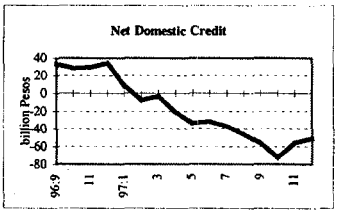
	1996	1997	98:Jan 21	Jan 22	Jan 23	Jan 26	Jan 27
Bolsa Index Peso Terms	3361	5229	4618	4550	4543	4527	4583
Cumulative Adv/Decline since 12/31/96			37.4	35.4	35.2	34.7	36.4
Bolsa Index $ Terms	426	648	557	549	546	546	552
Cumulative Adv/Decline since 12/31/96			30.8	29.0	28.3	28.3	29.6



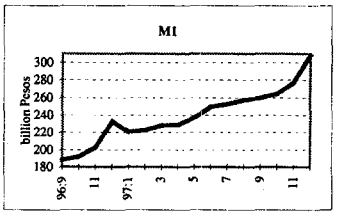
MEXICO: MACROECONOMIC INDICATORS

MONEY

BANCO DE MEXICO: (billion Pesos)	1996	1997	1998 Jan 2	Jan 9	Jan 16	Jan 23
Monetary Base	84	109	109	102	103	98
Net Domestic Credit	34	-51	-55	-63	-63	-72



MONEY SUPPLY:	1996	1997	97:Sep	Oct	Nov	Dec
M1 (billion Pesos)	233	308	260	265	278	308
(Year-on-Year % Change)	40.7	32.5	37.5	37.8	36.7	32.5
M4 (billion Pesos)	1166	1506	1394	1434	1451	1506
(Year-on-Year % Change)	32.5	29.1	33.3	33.6	32.2	29.1

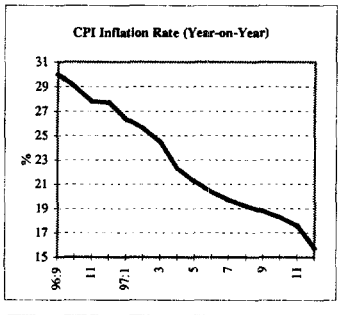


COMMERCIAL BANK CREDIT OUTSTANDING:

To Private Sector (billion pesos)	511		472	475	494	504

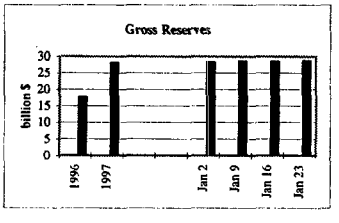
INFLATION

	1996	1997	97:Aug	Sep	Oct	Nov	Dec
CPI							
(Month-on-Month Change)			0.9	1.3	0.8	1.1	1.4
(Year-to-Date Change)	27.7	15.72	10.6	12.0	12.9	14.4	15.7
(Last 3 Mos, Annualized)			11.1	12.7	12.4	14.5	14.1
PPI							
(Month-on-Month Change)			0.8	0.9	1.1	1.5	0.4
(Year-to-Date Change)	25.33	10.64	6.5	7.5	8.7	10.3	10.6
(Last 3 Mos, Annualized)			8.6	10.6	12.0	14.7	12.2



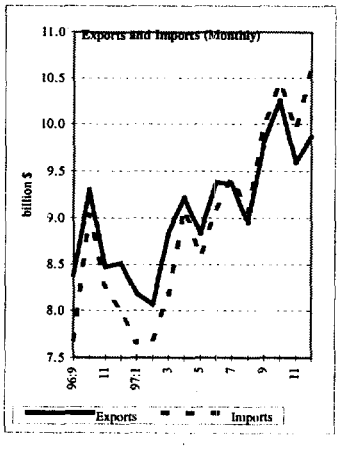
INTERNATIONAL RESERVES

(billion $)	1996	1997	1998 Jan 2	Jan 9	Jan 16	Jan 23
Gross Int Reserves	17.5	28.0	28.2	28.5	28.3	28.6
Net Int Reserves	6.3	19.8	20.3	20.4	20.3	20.4



TRADE

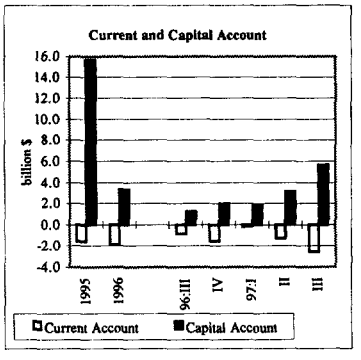
	1996 b$	1996 % Chg	97:Jan-Dec b$	97:Jan-Dec YOY % Chg	97:Dec b$	97:Dec YOY % Chg	97:Dec MOM % Chg
Exports	96.0	20.7	110.4	15.0	9.9	16.0	2.8
Oil	11.7	38.4	11.3	-2.7	0.8	-30.3	-22.3
Manufacturing	80.3	20.7	94.7	18.0	8.7	23.7	5.6
Maquila Exports	36.9	28.7	45.1	22.2	4.1	31.8	1.4
Others	4.0	-11.4	4.3	6.4	0.4	11.1	10.6
Imports	89.5	23.5	109.8	22.7	10.6	32.4	6.5
Consumer Goods	6.7	24.8	9.3	39.9	1.1	50.1	9.0
Intermediate Goods	71.9	23.1	85.4	18.8	7.8	28.5	2.8
Maquila Imports	30.5	16.5	36.4	19.3	3.3	36.9	2.8
Capital Goods	10.9	25.6	15.1	38.2	1.7	41.8	25.2
Trade Balance	6.5		0.6		-0.72		



MEXICO: MACROECONOMIC INDICATORS

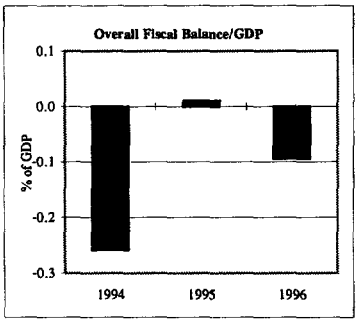
BALANCE OF PAYMENTS

(billion $)	1995	1996	96:III	IV	97:I	II	III
Current Account	-1.6	-1.9	-0.8	-1.5	-0.2	-1.3	-2.5
Current Account as % of GDP	-0.6	-0.6	-1.0	-1.8	-0.2	-1.3	-2.5
Capital Account	15.7	3.3	1.2	2.0	1.8	3.1	5.6
of which:							
Direct Foreign Invest	9.8	7.6	1.7	2.7	1.8	3.0	5.2
Change in Reserves (- means an increase)	-9.6	-1.8	-0.2	-1.9	-2.5	-1.7	-2.7



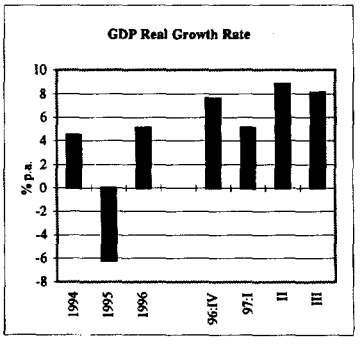
FISCAL ACCOUNTS (NON-FINANCIAL PUBLIC SECTOR)

(Year-to-Date, % of GDP)	1994	1995	1996	96:IV	97:I	II	III
				(billion Pesos)			
Budgetary Revenues	22.9	22.9	22.8	185.3	166.4	168.8	166.2
(Excludes Revenues from Privatization)							
Oil Revenues	6.4	8.1	8.7	64.42	65.5	67.5	62.4
Non-Oil Revenue	16.5	14.8	14.1	120.9	101.0	101.2	103.8
Budgetary Expenditures	23.0	22.9	23.0	207.1	154.6	160.8	167.3
of which: Interest	2.3	4.6	4.3	45.4	25.6	21.6	26.9
Non-Budgetary Items	0.1	0.0	0.1	2.1	2.8	1.3	1.1
Overall Balance	-0.3	0.0	-0.1	-22.0	9.0	9.3	0.1



GROWTH

	1994	1995	1996	96:IV	97:I	II	III
GDP Real Growth Rate	4.5	-6.2	5.1	7.6	5.1	8.8	8.1
(Percent Change from Previous Year)							
Consumption	4.4	-8.4	2.5	4.0	2.9	6.3	6.2
Investment	9.9	-34.8	27.5	49.4	24.1	33.2	24.0
Exports	17.4	33.0	18.7	20.5	18.6	15.3	17.1
Imports	20.5	-12.8	27.8	35.2	28.7	27.0	23.2
GDP Real Growth Rate (Seasonally Adj Quarterly Growth Rate; Source: INEGI)					1.9	1.1	1.4

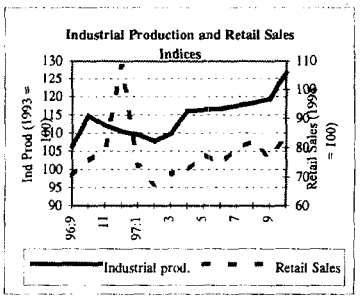


MEXICO: MACROECONOMIC INDICATORS

PRODUCTION AND SALES

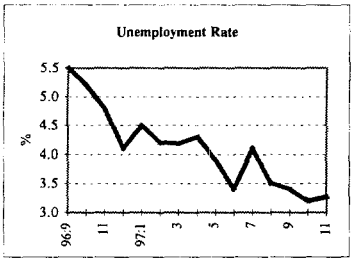
(Year-on-Year Change)

	95:Dec	96:Dec	97:Jul	Aug	Sep	Oct	Nov
Industrial Production	-3.6	11.2	10.3	8.1	12.5	10.4	8.6
Manufacturing	-2.2	11.2	11.2	7.4	13.3	10.8	9.8
Construction	-12.8	15.0	9.7	11.5	13.1	11.2	6.9
Wholesale Sales		9.2	3.4	5.7	8.3	7.6	4.7
Retail Sales		-1.9	6.7	9.3	8.7	11.0	10.6



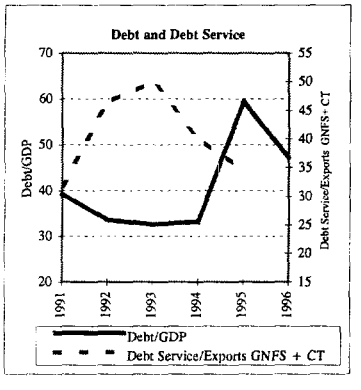
EMPLOYMENT AND WAGES

	1995	1996	97:Aug	Sep	Oct	Nov	Dec
Unemployment Rate	5.5	4.1	3.5	3.4	3.2	3.3	2.8
Mfg Employment (Year-on-Year Change)	-7.5	4.8	5.5	5.3	5.3		
Mfg Average Real Wages (Year-on-Year Change)	-21.6	-5.0	0.3	0.8	2.3		



EXTERNAL DEBT

	1994	1995	1996	96:IV	97:I	II	III
Total Debt Outstanding (End-of-Period, billion $)	140.0	165.9	157.1				
MLT Debt	96.8	112.6	113.8				
Private Non-Guaranteed	17.5	18.6	20.3				
Public and Pub Guar	79.3	94.0	93.4				
ST Debt + IMF Credit	43.2	53.3	43.3				
IBRD Debt	13.0	13.8	12.7	12.6	11.7	11.7	11.6
IMF Credit	3.9	15.8	13.3	13.3	10.3	9.7	9.4
U.S. ESF Net Drawings	0.0	12.0	3.5	3.5	0.0	0.0	0.0



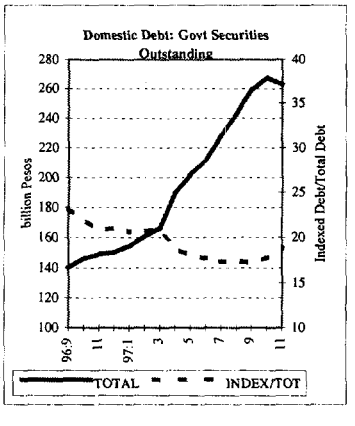
DOMESTIC DEBT (NON-FINANCIAL PUBLIC SECTOR)

	1994	1995	1996
Estimated Net End-of-Year Stock (% of GDP)	13.8	9.8	8.5

Excludes debt issued for bank and debt support programs

GOVERNMENT DOMESTIC SECURITIES OUTSTANDING:

	1994	1995	1996	97:Nov
Total (billion Pesos)	264	168	150	263
Ajustabonos	30	41	26	16
Bondes	8	36	60	83
Cetes	41	48	59	130
Tesobonos	-30	-53	0	0
UDIbonos	0	0	5	34



Indexed Debt = Ajustabonos + Tesobonos + UDIbonos

MEXICO
Statement of Loans/Credits - Schedule D (MOP)
As of March 31, 1998 (in millions of US Dollars)

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original Amount in US$ Millions				Difference Between expected and actual disbursements a/	
					IBRD	IDA	Cancellations	Undisbursed	Orig	Frm Rev'd
Number of Closed Loans/credits: 203										
Active Loans										
MX-PE-7711	IBRD42760	1998	NAFIN	RURAL DEV. MARG.AREA	47.00	0.00	0.00	47.00	3.51	0.00
MX-PE-43163	IBRD42060	1997	BANOBRAS	FEDERAL ROADS MODZTN	475.00	0.00	0.00	475.00	0.00	0.00
MX-PE-7700	IBRD41370	1997	GOVT OF MEXICO	COMMUNITY FORESTRY	15.00	0.00	0.00	14.50	1.75	0.00
MX-PE-7726	IBRD41520	1997	GOVERNMENT	AQUACULTURE	40.00	0.00	0.00	40.00	2.33	0.00
MX-PE-7732	IBRD41010	1997	GOVERNMENT	RURAL FIN. MKTS T.A.	30.00	0.00	0.00	29.50	14.96	0.00
MX-PE-40685	IBRD39370	1996	NACIONAL FINANCIERA (NAFI	INFRA. PRIVATZTN TA	30.00	0.00	0.00	20.53	18.53	0.00
MX-PE-7689	IBRD39430	1996	NAFIN	BASIC HLTH II	310.00	0.00	0.00	245.03	28.02	21.83
MX-PE-7713	IBRD40500	1996	GOM	WATER RESOURCES MANA	186.50	0.00	0.00	178.38	7.60	0.00
MX-PE-34161	IBRD3838A	1995	NAFINSA	FINANCIAL SEC T.A.	5.32	0.00	0.00	2.97	1.58	12.38
MX-PE-34161	IBRD3838B	1995	NAFINSA	FINANCIAL SEC T.A.	13.80	0.00	0.00	13.80	1.58	12.38
MX-PE-34490	IBRD3805A	1995	NAFIN	TECH EDU/TRAING	187.49	0.00	0.00	179.95	121.47	60.27
MX-PE-40462	IBRD39120	1995	NAFIN	ESSENTIAL SOCIAL SER	500.00	0.00	0.00	18.29	18.30	18.30
MX-PE-7607	IBRD3778A	1995	GOVERNMENT	RAINFED AREAS DEVELO	41.96	0.00	0.00	21.85	3.82	-9.45
MX-PE-7702	IBRD3790A	1995	SEDESOL	SECOND DECENTRALZTN	303.39	0.00	0.00	233.49	129.54	46.11
MX-PE-7612	IBRD37520	1994	BANOBRAS	SOLID WASTE II	200.00	0.00	193.06	1.71	-4.23	0.00
MX-PE-7701	IBRD3704A	1994	NAFIN	ON-FARM & MINOR IRRI	119.36	0.00	0.00	111.10	86.08	1.09
MX-PE-7707	IBRD37510	1994	BANOBRAS	WATER/SANIT II	350.00	0.00	0.00	181.56	166.54	0.00
MX-PE-7710	IBRD37500	1994	BANOBRAS	N. BORDER I ENVIRONM	368.00	0.00	273.40	65.36	259.06	22.38
MX-PE-7725	IBRD3722A	1994	NAFIN	PRIM.EDUC.II	254.36	0.00	0.00	214.81	184.83	6.15
MX-PE-7648	IBRD35590	1993	BANOBRAS	MEDIUM CITIES TRANSP	200.00	0.00	23.00	137.78	122.71	0.00
MX-PE-7694	IBRD3543A	1993	NAFIN	TRNSPRT AIR POLL CON	79.96	0.00	0.00	79.96	123.08	35.00
MX-PE-7723	IBRD36280	1993	BANOBRAS	HWY RHB & SAFETY	480.00	0.00	0.00	200.67	8.67	0.00
MX-PE-7724	IBRD3542A	1993	NAFIN	LABOR MARKET & PROD.	11.25	0.00	0.00	3.93	3.94	0.00
MX-PE-7667	IBRD3419A	1992	NAFINSA	IRRIG SCTR	100.63	0.00	0.00	100.63	150.60	.60
MX-PE-7676	IBRD3475A	1992	NAFIN	SCIENCE/TECH	6.50	0.00	0.00	3.36	2.36	2.36
MX-PE-7672	IBRD3359A	1991	NAFIN	MINING SCTR	41.51	0.00	0.00	41.05	41.06	0.00
MX-PE-7704	IBRD3358A	1991	NAFIN	VOC TRNG SCTR	18.99	0.00	0.00	17.01	32.03	17.03
MX-PE-7615	IBRD28240	1987	BANOBRAS	URBN TRNSPRT I	125.00	0.00	34.02	2.04	41.01	1.99
Total					4,541.02	0.00	523.48	2,681.26	1,570.73	248.42

	Active Loans	Closed Loans	Total
Total Disbursed (IBRD and IDA):	1,336.33	21,008.59	22,344.92
of which has been repaid:	60.24	10,847.64	10,907.88
Total now held by IBRD and IDA:	3,957.47	10,185.05	14,142.52
Amount sold :	0.00	92.34	92.34
Of which repaid :	0.00	92.34	92.34
Total Undisbursed :	2,681.26	27.26	2,708.52

a. Intended disbursements to date minus actual disbursements to date as projected at appraisal.
b. Rating of 1-4: see OD 13.05. Annex D2. Preparation of Implementation Summary (Form 590). Following the FY94 Annual Review of Portfolio performance (ARPP), a letter based system will be used (HS = highly Satisfactory, S = satisfactory, U = unsatisfactory, HU = highly unsatisfactory): see proposed Improvements in Project and Portfolio Performance Rating Methodology (SecM94-901), August 23, 1994.

Note:
Disbursement data is updated at the end of the first week of the month.

MEXICO
Statement of IFC's Held and Disbursed Portfolio
As of March 31, 1998 (in millions of US Dollars)

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1984/87/94/96	Metalsa	0.00	0.00	6.00	0.00	0.00	0.00	6.00	0.00
1987	VULICA	7.50	0.00	0.00	0.00	7.50	0.00	0.00	0.00
1987/91	CALICA	4.79	0.00	0.00	0.00	4.79	0.00	0.00	0.00
1988/91/92/93/95	Apasco	22.20	0.00	0.00	102.80	22.20	0.00	0.00	102.80
1988/94/95	Sigma	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00
1989	Cemex	1.86	0.00	0.00	1.00	1.86	0.00	0.00	1.00
1989	Grupo FEMSA	0.00	9.43	0.00	0.00	0.00	9.43	0.00	0.00
1989/90	Banca Serfin	16.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00
1990	Petrocel	6.50	0.00	3.00	3.50	6.50	0.00	3.00	3.50
1990/91	Condumex	7.76	0.00	0.00	3.18	7.76	0.00	0.00	3.18
1990/92/96	BANAMEX	62.61	0.00	0.00	98.07	60.21	0.00	0.00	98.07
1991	CEDETEL	3.13	.77	0.00	6.09	.63	.77	0.00	6.09
1991	Vitro Flotado	13.22	0.00	0.00	5.53	13.22	0.00	0.00	5.53
1991/96	GIBSA	27.05	0.00	10.00	90.95	27.05	0.00	10.00	90.95
1992	Banorte-Arancia	4.17	0.00	0.00	0.00	4.17	0.00	0.00	0.00
1992	Banorte-SABROZA	3.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00
1992	Toluca Toll Road	8.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
1992/91	Vitro	0.00	10.17	0.00	0.00	0.00	10.17	0.00	0.00
1992/93/95/96	Grupo Posadas	25.66	5.00	5.00	46.57	25.66	5.00	5.00	46.57
1992/96/97/98	Grupo Probursa	0.00	10.16	.21	0.00	0.00	10.11	.21	0.00
1993	Derivados	7.70	0.00	0.00	15.05	7.70	0.00	0.00	15.05
1993	GIDESA	12.50	8.00	0.00	25.50	12.50	8.00	0.00	25.50
1993	GOTM	1.40	0.00	0.00	1.32	1.40	0.00	0.00	1.32
1993	Masterpak	8.40	0.00	0.00	16.20	8.40	0.00	0.00	16.20
1994	CTAPV	4.67	0.00	2.53	0.00	4.67	0.00	2.53	0.00
1994	Interceramic	13.00	0.00	6.00	12.25	13.00	0.00	6.00	12.25
1994/96/98	Aurum-Heller	0.00	2.80	0.00	0.00	0.00	2.80	0.00	0.00
1995	Baring Venture	0.00	9.09	0.00	0.00	0.00	5.00	0.00	0.00
1995	Mexplus Puertos	0.00	3.04	0.00	0.00	0.00	3.04	0.00	0.00
1995/96	Baring Mex. FMC	0.00	.18	0.00	0.00	0.00	.17	0.00	0.00
1996	GIRSA	30.00	0.00	10.00	115.00	7.50	0.00	2.50	85.00
1996	NEMAK	0.00	0.00	6.00	0.00	0.00	0.00	6.00	0.00
1997	Banco Bilbao MXC	80.00	0.00	30.00	0.00	0.00	0.00	30.00	0.00
1997	Comercializadora	6.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00
1997	Gen. Hipotecaria	0.00	1.43	0.00	0.00	0.00	1.43	0.00	0.00
1997	Grupo Minsa	20.00	10.00	0.00	30.00	20.00	10.00	0.00	30.00
1997	TMA	5.10	0.00	0.00	10.40	5.10	0.00	0.00	10.40
1998	Grupo Calidra	12.00	6.00	0.00	10.00	0.00	6.00	0.00	0.00
Total Portfolio:		414.22	81.07	78.74	600.91	288.82	76.92	71.24	553.41

Approvals Pending Commitment

		Loan	Equity	Quasi	Partic
1997	ALTAMIRA	17.80	0.00	1.00	38.00
1997	CHIAPAS FMC	0.00	.02	0.00	0.00
1997	FONDO CHIAPAS	0.00	5.00	0.00	0.00
1998	FORJA QUIMMCO	13.00	3.00	0.00	13.00
1998	HIPOTECARIA EQ	0.00	1.20	0.00	0.00
1998	MERIDA III	30.00	0.00	0.00	90.00
1998	ZN MEX FMC	0.00	.05	0.00	0.00
1998	ZN MXC EQTY FUND	0.00	20.00	0.00	0.00
Total Pending Commitment:		60.80	29.27	1.00	141.00