

ARCHIVES  
ROOM IS11-400

0450

**FOR  
AGENDA**

SM/01/229

CONTAINS CONFIDENTIAL  
INFORMATION

July 17, 2001

To: Members of the Executive Board

From: The Acting Secretary

Subject: **Mexico—Financial System Stability Assessment**

This paper provides background information to the staff report on the 2001 Article IV consultation discussions with Mexico (SM/01/223, 7/13/01), which is tentatively scheduled for discussion on Friday, August 3, 2001. At the time of circulation of this paper to the Board, the Secretary's Department has not received a communication from the authorities of Mexico indicating whether or not they consent to the Fund's publication of this paper.

Questions may be referred to Mr. Leone (ext. 38628), Mr. Cortés (ext. 34172), and Mr. Pancorbo (ext. 34274).

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the WTO Secretariat on Wednesday, July 25, 2001; and to the European Commission, the European Investment Bank, the Inter-American Development Bank, and the Organisation for Economic Cooperation and Development, following its consideration by the Executive Board.

Att: (1)

Other Distribution:  
Department Heads

INTERNATIONAL MONETARY FUND

MEXICO

**Financial System Stability Assessment**

Prepared by the Monetary and Exchange Affairs and Western Hemisphere Departments

Approved by V. Sundararajan and Claudio Loser

July 16, 2001

- The Financial System Stability Assessment (FSSA) is based on the work of the joint IMF-World Bank (WB) mission that visited Mexico from March 1 to March 23, 2001, in the context of the Financial Sector Assessment Program (FSAP). The mission met with senior officials and staff of institutions and agencies involved in the supervision and regulation of the Mexican financial system. These included the Secretariat of Finance and Public Credit (SHCP), the Bank of Mexico (BOM), the National Banking and Securities Commission (CNBV), the National Insurance and Sureties Commission (CNSF), the National Pension Funds Commission (CONSAR), the Institute for the Protection of Savings (IPAB), and the National Commission for the Protection of Users of Financial Services (CONDUSEF). The mission also met with representatives of commercial banks, development banks, trust funds, insurance companies, brokerage houses, private pension funds, credit rating agencies, auditors, lawyers, and accountants. Follow-up discussions were held with the authorities from May 21 to May 25, 2001, in the context of the 2001 Article IV consultation.
- The FSAP team was led by Alfredo M. Leone (IMF, MAE) and Augusto de la Torre (WB, LCR) and included: Ricardo Velloso, Mariano Cortés, Antonio Pancorbo, and Adriana Rota (Staff Assistant) (all IMF); Santiago Herrera, Alain Laurin, Thomas Glaessner, Leora Klapper, Jeppe Ladekarl, Mike Lubrano, Manuel Peraita, Gregorio Impavido, Lajos Brokos, Mario Guadamillas, Bertrand Renaud, and Loic Chiquier (all WB); Bruno Carrasco (European Central Bank); Rudolph Zepeda (U.S. Federal Reserve); Carlos Conesa (Bank of Spain); Íñigo de la Lastra (National Commission of Securities Markets of Spain); Jonathan Katz (IOSCO, U.S. SEC); and Rodrigo Rodriguez (U.S. FDIC). Eliot Kalter (WHD) joined the mission during its last few days in the field. The mission was assisted by Carlos Muñoz (IMF Resident Representative) who also joined some of the discussions.
- The sound implementation of macroeconomic policies, the bank restructuring and consolidation process, and the strengthening of links to the U.S. economy following the 1994-95 crisis made the Mexican economy and its financial system more resilient to shocks, and provided a favorable background for its continued healthy development. The banking system does not pose a risk to the financial stability of the Mexican economy, but still has to resume broad-based and sound lending to the private sector. Other financial sectors are not expected to be a source of systemic risk in the near future. However, some problems remain. There are no clear rules to prevent a troubled institution, without proper guarantees, to have continued access to the BOM's liquidity, in particular through credit auctions. There are a number of problems related to the operation of development banks, which the authorities are addressing through legal reforms and tighter monitoring. The existing framework for housing finance requires a major overhaul. Financial sector supervision has improved during the last years, but further improvements are needed in certain areas. The regulatory framework is being amended toward best international practices. Substantive progress regarding transparency of monetary and financial policies was made in recent years, but further improvements are needed in certain areas such as the coordination of day-to-day supervisory activities, the regulatory playing field for financial services across institutions, and disclosure practices of some entities vis-à-vis the public at large, among others. The Mexico FSAP took place at an important juncture for the development of the financial sector, with major legal reforms under consideration.
- This report is divided into two sections. The first section provides an overall stability assessment of the Mexican financial system. The second section reports on the observance of standards, codes and good practices on transparency in monetary and financial policies, payment systems, and banking, securities and insurance supervision, as inputs into the overall assessment.
- The main authors of this FSSA are: Alfredo M. Leone, Mariano Cortés, and Antonio Pancorbo (all MAE).

Contents	Page
Glossary .....	4
Section I—Staff Report on Financial System Stability .....	6
I. Overall Stability Assessment .....	6
II. Financial System Overview .....	10
A. Institutions.....	10
B. Markets.....	15
C. Infrastructures.....	16
D. Supervision.....	17
III. Financial System Stability: Macroeconomic Factors .....	21
A. Macroeconomic Environment.....	21
B. Macrofinancial Risk and Exposures.....	25
IV. Financial System Stability: Sectoral and Infrastructure Factors.....	31
A. Commercial Banking .....	31
B. Development Banking.....	33
C. Securities .....	34
D. Insurance .....	35
E. Payment Systems.....	35
F. Deposit Insurance .....	36
Section II—Report on Observance of Standards and Codes .....	37
I. Observance of the Code of Good Practices on Transparency in Monetary and Financial Policies .....	38
II. Observance of CPSS Core Principles for Systematically Important Payment Systems .....	54
III. Observance of the Basel Core Principles for Effective Banking Supervision.....	62
IV. Observance of IOSCO Objectives and Principles of Securities Regulation.....	69
V. Observance of IAIS Insurance Supervisory Principles.....	73

## Text tables

1.	Performance Indicators of the Banking System, 1997-2000 .....	11
2.	Selected Economic and Financial Indicators, 1997-2000.....	23
3.	Indicators of Domestic and External Vulnerability .....	24
4.	Contagion Then and Now .....	28
5.	Estimates of Bank Losses under Extreme Events.....	30
6.	Credit Risk Estimates.....	30
7.	Summary of Main Findings of Assessment of Observance of MFP Transparency Code—Monetary Policy .....	41
8.	Summary of Main Findings of Assessment of Observance of MFP Transparency Code—Financial Policies.....	49
9.	Summary of Main Findings of the Assessment of Implementation of the BCP for Effective Banking Supervision .....	67
10.	Summary of Main Findings of the Assessment of Implementation of the IOSCO Objectives and Principles of Securities Regulation .....	71
11.	Summary of Main Findings of the Assessment of Observance of the IAIS Insurance Supervisory Principles .....	75
12.	Actions and Timeframe for Improved Observance of IAIS Insurance Supervisory Principles.....	78

## Figures

1.	Commercial Bank Credit to the Private Sector—Growth Rates in Real Terms .....	7
2.	Foreign Participation in the Banking System .....	14
3.	Mexican Versus U.S. Growth, 1981-1993 .....	26
4.	Mexican Versus U.S. Growth, 1994-2000.....	27
5.	Profitability Indicators in the Banking System, 1997-2000.....	32

## Boxes

1.	Financial Sector Legal Reforms.....	18
2.	Strengthening Banking Supervision .....	19



## GLOSSARY OF TERMS

---

Afores	Retirement fund managers (Administradora de Fondos para el Retiro)
Basel Core Principles, Core Principles CP, or CPs	Bank for International Settlements, 1997, "Core Principles for Effective Banking Supervision" (Basel).
BMV	Mexican Stock Exchange (Bolsa Mexicana de Valores).
BOM	Bank of Mexico (Banco de México).
Circulars	Rules that must be followed and that are not envisaged in law.
Core Principles Methodology	Bank for International Settlements, 1999, "Core Principles Methodology" (Basel).
CNBV	National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores).
CNSF	National Insurance and Sureties Commission (Comisión Nacional de Seguros y Fianzas).
CONSAR	National Pension Funds Commission (Comisión Nacional del Sistema de Ahorro para el Retiro).
CPSS	Committee on Payment and Settlement Systems of the Bank of International Settlements.
FAMEVAL	Stock Market Support Fund (Fondo de Apoyo al Mercado de Valores).
FIDELIQ	Trust Fund for the Liquidation of Auxiliary Credit Organizations and Institutions.
FOBAPROA	Banks' Savings Protection Fund (Fondo Bancario de Protección al Ahorro).
FOVISSSTE	Fund for Housing of the Government Employees' Social Security and Services Institute (Fondo para la Vivienda del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado).
FSAP	Financial Sector Assessment Program.
GPI	Gross Premium Income.
IAIS	International Association of Insurance Supervisors.
INDEVAL	Securities Depository Institute (Instituto para el Depósito de Valores).
INFONAVIT	National Fund for Workers' Housing Institute (Instituto del Fondo Nacional de la Vivienda para los Trabajadores).
IOSCO	International Organization of Securities Commissions.
IPAB	Institute for the Protection of Savings (Instituto para la Protección del Ahorro Bancario).
LCNBV	National Banking and Securities Commission Law (Ley de la Comisión Nacional Bancaria y de Valores).
LIC	Credit Institutions Law (Ley de Instituciones de Crédito).
LMV	Securities Market Law (Ley de Mercado de Valores).
LBM	Bank of Mexico Law (Ley del Banco de México).
LFIF	Federal Law of Sureties Institutions (Ley Federal de Instituciones de Fianzas).
LGF	Financial Groups Law (Ley de Grupos Financieros).
LGISMS	General Law of Institutions and Mutual Associations of Insurance (Ley General de Instituciones y Sociedades Mutualistas de Seguros).
LSI	Mutual Funds Law (Ley de Sociedades de Inversión).
LSM	Mexican Corporations Law (Ley de Sociedades Mercantiles).
MEXDER	Mexican Derivatives Market.
MOU	Memorandum of Understanding.
n.a.	Not applicable.
PDL	Past Due Loans.

---

**GLOSSARY OF TERMS (concl'd)**

---

REFIFE	Rules for the Establishment of Subsidiaries of Foreign Financial Institutions ( <i>Reglas para el Establecimiento de Filiales de Instituciones Financieras del Exterior</i> ).
ROAA	Return on Average Assets.
ROAE	Return on Average Equity.
SHCP	Secretariat of Finance and Public Credit ( <i>Secretaría de Hacienda y Crédito Público</i> ).
SECODAM	Secretariat of Control and Administrative Development ( <i>Secretaría de Contraloría y Desarrollo Administrativo</i> ).
SIAC	System for Accountholders' Service ( <i>Sistema de Atención a Cuentahabientes</i> ).
Siefores	Specialized Mutual Funds for Pensions.
SPEUA	Electronic Payment System of Wide Use ( <i>Sistema de Pagos Electrónico de Uso Ampliado</i> ).
SIDV	Interactive Securities System ( <i>Sistema Interactivo de Valores</i> ).
SRO	Self-regulatory Organization.
UDI	Investment Units ( <i>Unidades de Inversión</i> ).
...	Not available.

---

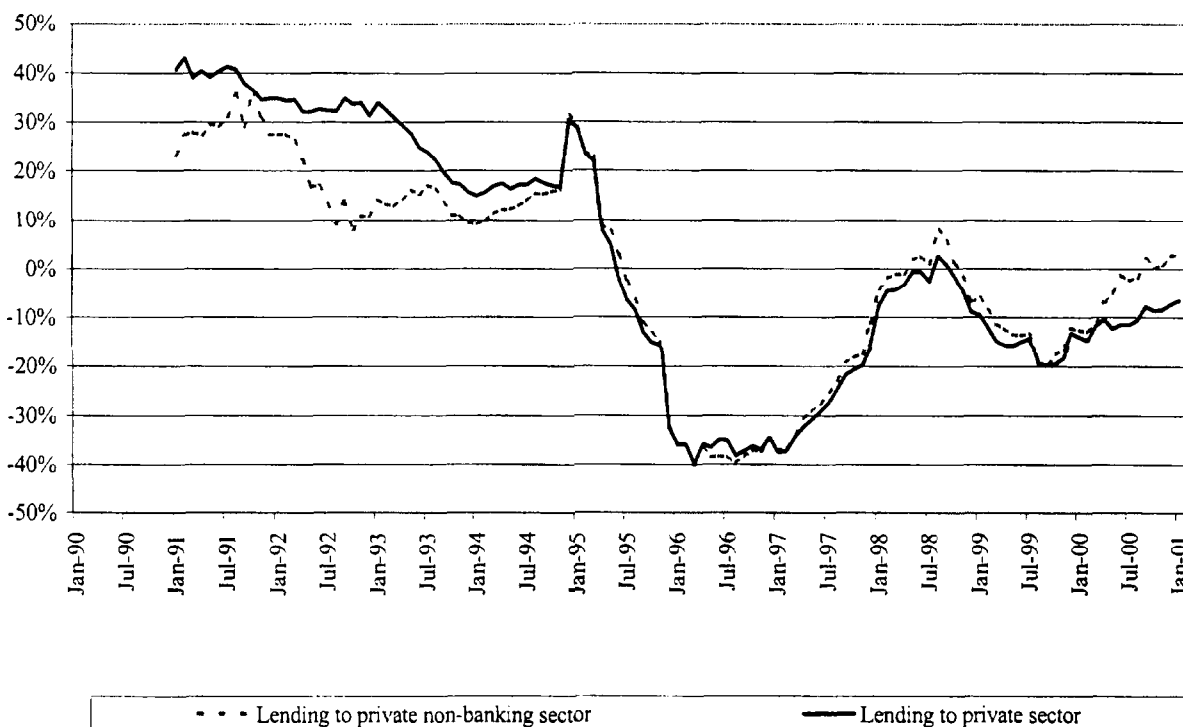
## SECTION I—STAFF REPORT ON FINANCIAL SYSTEM STABILITY

### I. OVERALL STABILITY ASSESSMENT

1. ***The sound implementation of macroeconomic policies, the process of bank restructuring and consolidation, and the strengthening of links to the U.S. economy following the 1994-95 crisis made the Mexican economy and its financial system more resilient to shocks, and provided a favorable background for its continued healthy development.*** In this context, economic growth resumed at a rapid pace, inflation declined significantly, and there was a sizable accumulation of net international reserves. The floating of the Mexican peso has provided a cushion to external shocks and removed the implicit guarantees of the pre-crisis regime. The subdued contagion from the recent difficulties in certain emerging markets provides evidence of Mexico's differentiation from other emerging market countries. Also, the banking system shows improving financial indicators. However, the U.S. slowdown and a possible decline in oil prices pose risks to the Mexican economy. Also, though Mexico's vulnerability indicators have generally improved, there are exceptions such as the appreciation of the real effective exchange rate and the deterioration of the non-oil external current account balance. Moreover, the increasing foreign borrowing by the private sector in recent years has made it more vulnerable to the risks of capital reversals.

2. ***The banking system does not pose a risk to the financial stability of the Mexican economy, but has still to resume broad-based and sound lending to the private sector.*** The banking sector dominates the financial system. In the last two years, it has strengthened its capital base, in part reflecting the process of bank/debt restructuring supported by the State following the 1994-95 banking crisis, along with the increased foreign participation. However, banking institutions were largely absent from the financial flows that contributed to the rapid economic expansion, with retained earnings as well as supplier/customer and inter-company credit playing a significant role. In this context, credit exposure to the private sector declined drastically (Figure 1) making their profitability more dependant on the returns on government paper. In a context of declining interest rates on government paper, banks would need to re-engage in the process of lending to the private sector, along with other activities, to preserve and improve their profitability. Reincorporating banks to the credit circuit could be delayed by macroeconomic shocks to which Mexico is potentially exposed, in particular any possible turnaround in the continued fiscal consolidation and in the trade and financial links to the United States. The results of stress tests indicate that a scenario that combines a significant and prolonged slowdown in the U.S. economy and a depreciation of the peso in Mexico would be detrimental to banking system capital and profitability. However, given the large participation of strong foreign banks, the still low participation of banks in financial intermediation, and the recent strengthening of capital, the banking system should not become a source of systemic problems. Legal reforms approved in May 2000 have significantly improved the framework for secured lending, but some shortcomings can hamper implementation and limit benefits. A new Commercial Insolvency Law, also approved in May 2000, revamped the framework for corporate reorganization and bankruptcy, but it remains to be tested. The debtor information registry—essential to reduce information asymmetries in financial markets—could be improved by enhancing consumer rights and information sharing, and broadening coverage to other forms of lending.

Figure 1. Mexico: Commercial Bank Credit to the Private Sector—  
Growth Rates in Real Terms



Source: BOM data deflated by the Consumer Price Index.

3. ***Other financial sectors are not expected to be a source of systemic risk in the near future.*** Private securities markets in Mexico are underdeveloped. Partly due to high domestic real interest rates, large firms finance themselves abroad while small- and medium-sized firms have relied on own resources, and inter-company and suppliers and trade credit. Equity markets are concentrated, fragmented, and illiquid. Private debt markets are shallow, there is no demand for any paper rated less than AA, the secondary market for nonfinancial private debt is illiquid, and the use of corporate debt as collateral in repurchase agreements is not permitted. Government debt markets are deeper and more liquid. The local institutional investor base is nascent (growing but small relative to other countries) and the retail investor base is miniscule. The insurance sector is relatively small, but it is financially sound, subject to modern management, well regulated and supervised, and well-advanced in technical regulation of specific risks.

4. ***There are no clear rules to prevent a troubled institution, without proper guarantees, from having continued access to the BOM's liquidity, in particular through credit auctions.*** This weakness is linked to the operation of the payments systems and the absence of clear procedures for bank closure. Vulnerabilities in the domestic payments system result from weaknesses in the legal framework and from certain deficiencies in the arrangements for the settlement of payments. Existing arrangements for the resolution of troubled banks are biased toward open bank resolution, which normally implies that the IPAB displaces shareholders and becomes owner of the open, troubled bank, rehabilitates it, and then reprivatizes it. Though keeping a troubled bank open while restructuring could be consistent with "a least cost resolution" strategy under unlimited guarantee of all bank's liabilities, it is not necessarily so under the explicit limited guarantee of deposit obligations which will go into full effect in 2005. The existing framework for bank exit failed to provide specific, non-discretionary "trigger points" for the authorities to act; was not geared specifically to banks; failed to ensure proper coordination between the CNBV, the IPAB, the SHCP, and the BOM; and lacked a mechanism for the actual closure of the bank to be liquidated. A system of prompt corrective action emphasizing rules over discretion had not existed until the legal reforms approved by Congress in April 2001. The BOM should consider implementing all its credit auctions collateralized with marketable government securities, so that these operations be similar to repos.

5. ***The authorities are addressing problems related to the operation of development banks, through legal reforms and tighter monitoring.*** Some development banks have unclear mandates or do not live up to their mandates with their activities overlapping among themselves or with the activities of commercial banks, they have been performing quasi-fiscal activities outside the scope of the budget process, and most of them are loss making even after several rounds of recapitalization. The existing public sector framework for housing finance requires a major overhaul. It is totally dependent on government funding and mandatory wage contributions to pension funds earmarked to housing, involves large contingent fiscal liabilities with respect to pensions, and blocks the development of private housing finance markets, not least because subsidies embedded in interest rates undercut private lending.

6. ***Financial sector supervision has improved during the last years and further improvements needed in certain areas are under way.*** Although Mexico has been successful in upgrading the quality of financial sector supervision under the stressful conditions imposed by the banking crisis of 1995, some remaining weaknesses need to be addressed to achieve full compliance with relevant financial sector core principles, standards and codes. The CNBV resorted on a regular basis to forbearance during the 1994-95 banking crisis and, as a consequence, its standing and credibility in the perception of market participants was undermined. Its autonomy needs to be strengthened as political interference in decision-making and politically imposed budgetary constraints are attendant problems that undermine its operational independence. There is a fragmentation of supervisory powers which weakens accountability and the enforcement of rules and regulations. A legal limitation for disclosing information has hitherto prevented foreign supervisors from gaining access to information deemed necessary to form examination conclusions, but legislative amendments approved in

April 2001 have addressed to some extent this concern. Notwithstanding recent progress, further actions are necessary to achieve consistency in the treatment of information, decision making, and enforcement within the CNBV. Greater contribution from the boards of directors and external auditors needs to be fostered, coupled with appropriate accountability. The legal reforms approved by Congress in April 2001 (including the minimum requirement of 25 percent of independent board members in the banks' boards of directors) would, once implemented, significantly correct existing deficiencies.

7. ***The regulatory framework is being amended toward best international practices.*** The legacy from the 1994/95 crisis of ad-hoc regulatory forbearance is a source of distortion of the Mexican banks' public disclosures. However, the room for ad-hoc forbearance has been restricted by a recent regulation that limits the cases where forbearance can be granted and forces its full disclosure in banks' audited financial statements from end-2000. The definition of capital currently in effect does not reflect the actual bank's economic capitalization to cover losses.<sup>1</sup> However, a timetable is in effect through end-2002 to bring the Mexican definition of regulatory capital gradually closer to international standards. At present, almost all banks already meet the requirements of regulatory capital that will be in effect at the beginning of 2003.

8. ***Substantive progress regarding transparency of monetary and financial policies was made in recent years, but further improvements are needed in certain areas.*** Transparency practices are particularly strong in the case of the BOM and the IPAB, but significantly weak in the case of the Trust Fund for the Liquidation of Auxiliary Credit Organizations and Institutions (FIDELIQ). Roles and institutional mandates of regulatory agencies are generally well defined, but coordination could be improved in day-to-day supervisory activities and the regulatory playing field for like financial services across financial institutions could be leveled. Practices are better in terms of transparency than in terms of accountability. Accountability and disclosure vis-à-vis the government and Congress are generally good, but there is room for improvement regarding disclosure vis-à-vis the public at large.

9. ***Mexico's participation in the FSAP took place at an important juncture for the development of the financial sector, with major legal reforms under consideration.*** The consequences of the 1994-95 banking crisis have been almost completely absorbed and the associated losses have been transparently allocated to the public sector, and have taken the form of IPAB debt. The disposal of distressed assets and resolution of troubled banks is well advanced, with the few pending cases moving ahead steadily under the control of the IPAB. Banking system stability has been restored and the banks' financial position has generally improved significantly, following a period of pronounced shrinkage, consolidation, and

---

<sup>1</sup>It should be noted that the regulatory definition of capital in Mexico is stricter than international standards regarding the requirement to deduct from capital all permanent investments in non-financial companies.

internationalization. The regulatory and supervisory environment has made a quantum leap forward. In these circumstances, the policy focus has understandably turned toward reincorporating banks to the lending circuit and enhancing the positive role the financial system can play in supporting sustainable economic growth and development. Reflecting these new policy priorities, in April 2001, the authorities submitted to Congress a number of draft bills directly relevant to the financial sector, many of which have been recently approved (see Box 1). To foster consensus for the reform program, a Committee for the Modernization of the Financial System, led by the Deputy Secretary of Finance, and composed of the relevant authorities, was established in May 2001.

## II. FINANCIAL SYSTEM OVERVIEW

### A. Institutions

10. *Mexico has most of the financial institutions found in the financial systems of industrial countries, but the degree of development across sectors varies significantly.* The banking sector dominates the financial system. Large financial conglomerates headed by banks normally provide private financial services. State-owned banks are involved in development related lending and house financing. Nonbanking institutions include finance and factoring companies, specialized investment funds, pension funds (Afores and Siefores), and insurance companies.

11. *The banking system shows improving financial indicators (Table 1).* The overall capital adequacy ratio, after adjustments to the book value of certain assets and liabilities by the FSAP mission,<sup>2</sup> was estimated to have risen from 2.7 percent of risk-weighted assets at end-1999 to 8.6 percent at end-2000. At present, almost all banks comply with the minimum requirement of 8 percent of risk-weighted assets. In addition, indicators of asset quality have improved in recent years—largely reflecting the conclusion of debtor relief programs.<sup>3</sup> The

---

<sup>2</sup>The main adjustment was the reduction of the deferred-tax assets counting as part of capital to no more than 20 percent of tier 1 capital (the maximum allowed as from January 2003). Other adjustments made by the mission included, the deduction of intangible assets, the increase of liabilities for unreserved FOBAPROA contingencies, adjustments of book value of investment held to maturity, and deduction of 50 percent of investments in related financial and non-financial companies. A pre-announced adjustment timetable, beginning in January 2000 and ending in December 2002, is in effect to gradually bring the Mexican definition of regulatory capital and its components closer to international standards.

<sup>3</sup>Under these programs, agricultural, commercial, and residential mortgage debtors received subsidies to pay back their (performing and non-performing) loans. About 70 percent of the decline in PDLs during 1999-2000 is attributed to the effect of the conclusion (*Punto Final*) of the program on residential mortgage loans, which were either paid off or reclassified as performing.

Table 1. Mexico: Indicators of Banking Soundness, 1997-2000 1/

	1997	1998	1999	2000
	(In percent)			
<b>Asset quality</b>				
Past due loans/total loans	11.1	11.3	8.9	5.8
Past due loans/total loans (excl. FOBAPROA)	17.6	17.5	14.5	8.5
(Past due loans + repossessed collateral)/total loans (excl. FOBAPROA)	19.1	19.3	16.4	10.2
Provisions for credit risk/past due loans	61.2	66.1	107.8	115.3
Loans to government and FOBAPROA/performing loans	51.0	50.0	52.7	50.6
<b>Profitability</b>				
ROAA	0.4	0.6	0.7	0.9
ROAE	5.8	6.9	5.8	10.4
Net interest margin/average assets	3.9	5.9	5.6	5.0
Net interest margin minus provisions/average assets	2.6	4.5	3.2	4.2
Interest bearing assets/interest bearing liabilities	90.0	87.0	87.0	90.0
Interest bearing assets (excl. Fobaproa)/interest bearing liabilities	61.0	58.0	56.0	63.0
Non-interest expense/performing loans	7.5	7.4	7.9	8.0
Non-interest expense/average assets	4.6	5.1	5.1	4.8
Performing loans in real terms/employees	19,413	21,730	23,388	26,209
<b>Capital adequacy</b>				
Net capital/credit risk assets 2/	16.9	17.5	20.4	18.2
Net capital/total risk assets 2/	13.6	14.4	16.2	14.2
Equity/assets	8.5	8.3	8.0	9.6
Net deferred taxes/equity	23.6	35.4	30.9	30.8
Net deferred taxes/net capital	...	...	26.8	28.9
<b>Liquidity</b>				
Loans/assets	62.8	62.4	60.0	59.9
Loans (excl. Fobaproa)/assets	36.7	37.4	34.5	39.7
Loans/deposits	90.4	89.2	85.6	90.6
Liquid assets/deposits	33.3	32.9	42.5	42.5

Source: CNBV.

1/ Excludes intervened banks.

2/ Unadjusted data.



ratio of past due loans (PDL) to total loans fell from 17.6 percent at end-1997 to 8.5 percent at end-2000. The coverage of past-due loans by loan-loss provisions rose from about 60 percent to 115 percent over the same period. Finally, bank profitability has been low, although subject to substantial variance across banks, and would be under some short-run downward pressure if interest rates decline further.<sup>4</sup> For the system, the low return on equity of under 7 percent for the 1997-2000 period mainly reflect a sustained and major post-crises provisioning effort.<sup>5</sup> The higher reported return on equity of 10 percent in 2000 may constitute an overestimation, since large banks were granted forbearance to create provisions charging them directly to the capital account. Nevertheless, profitability prospects reveal a rising trend that is likely to continue to the extent that the deficit of provisions vis-à-vis existing loans has been virtually eliminated.

12. ***Shrinkage, concentration, and internationalization have been major trends affecting the Mexican banking system since the 1994-95 crisis.***<sup>6</sup> After the Tequila crisis, banking system assets shrank from 55 percent of GDP at end-1994 to 37 percent of GDP at end-2000.<sup>7</sup> Even more spectacular was the contraction of bank credit to the private sector—it represented 78 percent of bank assets (43 percent of GDP) at end-1994 and shrank to the equivalent of 22 percent of bank assets (10 percent of GDP) at end-2000.<sup>8</sup> This contraction only subsided in the second half of 2000 and the beginning of a recovery has been observed in recent months. Concentration in the banking industry has marked another rising trend,

---

<sup>4</sup>It is worth noting that although a reduction in interest rates may reduce bank profitability, it raises incentives for banks to seek alternative sources of earnings, including increasing lending to the private sector.

<sup>5</sup>ROA and ROE before provisions averaged 2 and 24 percent, respectively, for 1997-2000.

<sup>6</sup>The cost of the crisis explicitly allocated to the public sector, as measured by the total amount of *net* IPAB debt *plus* related cash outlays by the IPAB or the Government, is equivalent to nearly 20 percent of GDP.

<sup>7</sup>There were methodological changes in banks' assets reported practices between 1994 and 2000. Bank holdings of public debt financed through the use of repos are registered off balance sheet, since the banks pledge the government securities as collateral for the funding. In addition, in 1994, loan loss provisions were registered on the liability side of the balance sheet, and in 2000, under new accounting rules introduced in 1997, total assets are presented *net* of loan loss provisions. Applying the new methodology, bank assets represented 25 percent of GDP in 2000.

<sup>8</sup>These figures overstate somewhat the extent of the shrinkage, as they do not include either the portfolio related to the scheme of restructuring of loans in UDIs or that associated to the scheme of loan portfolio sales to FOBAPROA/IPAB. Including these two components, credit to the private sector was equivalent to about 22 percent of GDP at end-2000.

with the share of assets of the 5 largest banks rising from 65 percent in 1994 to 76 percent in 2000,<sup>9</sup> and projected to increase to 82 percent once the acquisition of Banamex, the largest Mexican owned bank, by Citigroup, a U.S. large bank, announced in May 2001 is completed.<sup>10</sup> Even more striking has been the rise in foreign participation in the Mexican banking system, as the share in total assets of foreign-controlled banks rose from 24 percent in 1998 to nearly 50 percent at end-2000 (Figure 2)<sup>11</sup> and will reach over 70 percent once the noted purchase of Banamex by Citigroup is completed.

13. ***The local institutional investor base is growing, but small relative to other emerging countries, and the retail investor base remains very small.*** Funds held by private institutional investors (insurance companies, privately administered mandatory pension funds, voluntary occupational pension plans, and mutual funds) are estimated at the equivalent of about 11 percent of GDP, smaller than most of the larger countries in the Latin America Region.<sup>12</sup> In addition, investors in securities markets are less than 1 percent of the population, and this is small relative to countries around the world.<sup>13</sup> Finally, the local mutual fund industry—a crucial vehicle for developing the retail investor base—although growing, remains incipient.

14. ***Although penetration doubled in the last decade, with premiums amounting to about 2 percent of GDP in 2000, the insurance sector is relatively small but financially sound under high quality management.*** At the end of 2000, there were 70 companies licensed to issue direct insurance in the country. Concentration was high, in particular for life insurance where the five largest insurers accounted for 87 percent of the premiums with a strong state participation. Foreign owned subsidiaries held about 20 percent of the sector's assets. High quality of management is reflected in strong underwriting performance, rising productivity, and falling costs. Over the last decade, real gross premium income (GPI) over insurance sector employment increased by 100 percent, net commissions over retained

---

<sup>9</sup>For 2000, the figure considers the five largest banks as Bancomer-Banco Bilbao Viscaya; Banamex, Serfin-Santander, Bital and Banorte.

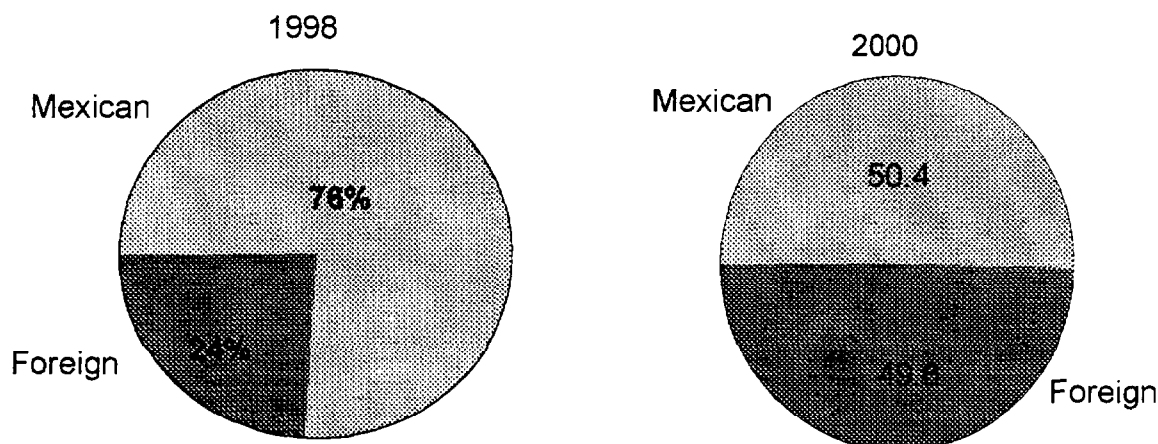
<sup>10</sup>For comparative purposes, concentration ratios in percentage of total assets held by the five largest banks in selected countries are as follows: Argentina, 38; Australia, 69; Brazil, 52; Chile, 47; Germany, 70; Korea, 50; and the United States, 35.

<sup>11</sup>The figure for the year 2000 reflects effective control rather than shareholder participation.

<sup>12</sup>In Argentina, this ratio is about 12 percent; in Brazil, 38 percent; and in Chile, 75 percent.

<sup>13</sup>In Canada, this ratio is 68 percent; 44 percent in the United States; and 23 percent in Spain.

Figure 2. Mexico: Foreign Participation in the Banking System  
(Percentage of bank assets under foreign control)



Source: BOM and CNBV.

premiums fell from 20 to 10 percent, and the average expense ratio—net of commissions—decreased from 16 to 11 percent. Until recently, life and non-life products were offered by multi-branch or composite companies, without a clear separation of assets or distribution of expenses. This has started to change for pension annuities and pre-paid health insurance as these products will have to be sold by specialized companies.

15. *Nonbank intermediaries in Mexico include a very wide array of so-called auxiliary credit institutions from credit unions to factoring and leasing companies.* The BOM reported that in 2000 nonbanking credit represented 53 percent of the total available credit to the private sector, up from 26 percent in 1994 as banking credit contracted as a source of credit over the same period. These nonbank sources mainly include suppliers/retailers,<sup>14</sup> credit unions, private placements, and leasing companies. In addition, there is a large number, some 700, of saving institutions (*cajas populares*), holding about 1 percent of total deposits in the financial system.

<sup>14</sup>These data correspond to retailers/suppliers whose shares are listed in the BMV.

## B. Markets

16. ***Securities markets in Mexico play a very limited role in mobilizing finance for the private sector, with high concentration and fragmentation of instruments exacerbating illiquidity, particularly for equity and corporate debt securities.*** Reflecting the country's wealth concentration, ownership of listed companies is also highly concentrated, with low proportion of shares actually traded. The effects of concentration on illiquidity are exacerbated by undue fragmentation. While the more relevant stocks have migrated and are now traded in New York, locally listed firms issue too many different types of non-fungible shares—mainly to avoid dilution of corporate control. Debt issues by banks dominate markets for private sector debt securities, characterized by high fragmentation and very short duration. By spreading liquidity too thinly, fragmentation amplifies price volatility and drastically reduces incentives for the development of securities lending activities, important to capital markets development. Partly due to high domestic real interest rates, large firms finance themselves abroad while small- and medium-sized firms have relied on own resources, and inter-company and suppliers and trade credit.

17. ***Certain micro-level factors have also been harmful.*** They include in particular: (i) weak corporate governance, mainly reflected in poor protection of minority shareholders; (ii) inconsistencies in the regulatory treatment of like transactions conducted by different entities (mainly stemming from insufficient coordination among multiple regulatory agencies); and (iii) perceptions that markets are inadequately policed and, hence, all too vulnerable to market manipulation, insider trading, and minority shareholder mistreatment. The latter problem appears to be mainly due to a lack of public awareness of enforcement actions taken by the CNBV.<sup>15</sup> Problems (i) and (iii), together with the lack of autonomy of the CNBV, emerged as key areas of under-compliance in the assessment of IOSCO Principles, with which Mexico was otherwise found to be substantially in compliance. The financial reforms enacted in April 2001 provide legal support to address these problems and therefore substantial improvements are expected to be observed once they are fully implemented (see Box 1 for more details).

18. ***By contrast, the interbank, government securities and foreign exchange markets have developed rapidly in the last few years, in the aftermath of the 1994/95 crisis.*** Policy initiatives and a more stable macroeconomic environment have fostered this development. On the domestic money markets, the government's decision to diversify the sources of funding and reduce exposure to foreign exchange risk, the adoption of a preannounced calendar for the auction of government securities, and the introduction of market makers have helped develop more liquid primary and secondary markets in government securities.

---

<sup>15</sup>Since 1998 the CNBV has imposed many heavy fines on individuals and intermediaries for such infractions as insider dealing and market manipulation. However, the names of the penalized individuals and intermediaries have not been disclosed, since authorities consider that there has been no sufficient legal ground to do so.

On the foreign exchange market, key measures included the authorization (issued in 1995) to liquidate in Mexican pesos futures contracts that started to trade in the Chicago Mercantile Exchange, and the elimination, in 1996, of all restrictions that prevented resident banks to trade foreign exchange forward contracts with non-residents.

19. ***The yield curve on government securities has been extended and the market liquidity enhanced, while providing the basis for the continued development of the foreign exchange forward market.*** In the year 2000, the government started to issue three- and five-year fixed coupon bonds, which were very well received, helping lengthen the duration and maturity of domestic debt. In the interbank money market, the bulk of the transactions are one-day repo operations. The average daily volume of transactions has risen by 12 percent in real terms in the last two years, and about 40 percent of the operations use government securities as collateral. Mexico has one of the most liquid foreign exchange markets in Latin America, with volumes of approximately US\$7 to US\$10 billion a day (Q4-2000 to Q1-2001) and about 90 percent traded in the spot market. Mexican banks are active participants on both sides of the forward market, where bid-ask spreads are about 0.01-0.02 for shorter maturities contracts.

### **C. Infrastructures**

20. ***There are three payment systems in Mexico that may be considered of systemic importance.*** The SIAC, managed by the BOM, settles only 9 percent of the value of the three payment systems combined, but is the core of the payment systems, as the other two systems settle their final balances in it. The SPEUA, which settles approximately 24 percent of the value, is also owned and managed by the BOM. The SIDV, which is owned and operated by INDEVAL, is the sole central depository of securities and is used to carry out the securities clearance and settlement processes. It is linked to SIAC and SPEUA for the final payment leg of the process, and accounts for the rest of value settled.

21. ***Currently there is a universal deposit guarantee, which will be gradually eliminated starting in 2003.*** It will become a limited guarantee of about US\$100,000 per depositor per bank starting in January 2005. The IPAB is in charge of managing the formal deposit insurance system that will begin in January 2003, replacing the current implicit blanket guarantee.

22. ***The bank exit framework is heavily biased in favor of open-bank resolution.*** It would become increasingly inconsistent with “a least cost resolution” strategy under the upcoming limited deposit guarantee. In part, this is because of a lack of a well-defined process for the closure, resolution, and liquidation of banks. The existing framework failed to provide specific “trigger points” to initiate action; was not geared specifically to banks; failed to ensure proper coordination between the CNBV, the IPAB, the SHCP, and the BOM; and lacked a mechanism for the actual closure of the bank to be liquidated. A system of prompt corrective action emphasizing rules over discretion did not exist before the legal reform approved by Congress in April 2001. Regulatory implementation of the new framework should ensure that increasingly tougher enforcement measures are triggered more

automatically as a troubled bank deteriorates or fails to comply with key prudential norms and supervisory instructions, within well defined deadlines and penalties, and with an *obligation* imposed on the supervisors to act under certain circumstances. Hitherto, the law empowered the CNBV to intervene (either administratively or managerially) a problem bank, without defining trigger points at which CNBV *must* intervene. The current framework still does not establish precisely the circumstances that would automatically move a troubled bank from intervention to resolution, or directly to resolution. The effective application of the recent legal amendments will require not only regulatory development but further legal changes to the framework for the exit and resolution of nonviable banks.

23. ***Weaknesses in the legal framework are being addressed by legislative reforms.*** In April 2001, shortly after the FSAP mission left the field, Congress passed a number of reforms directly relevant to the financial sector. Box 1 shows a summary of the most significant changes to the legal framework recently introduced and key issues pending. The authorities have also recently created a Committee for the Modernization of the Financial System chaired by the Deputy Secretary of Finance. It is envisaged as a vehicle to identify and follow up on issues related to the structure, operation, and regulation of the financial sector. The creation of a number of working groups will address financial sector issues, including financial system supervision and regulation, the structure of the financial system, implementation of recently approved legal reforms, and some other operational issues.

#### **D. Supervision**

24. ***Mexico counts with a developed framework for conducting financial sector supervision.*** The legal framework clearly establishes that the primary responsibility for financial sector supervision lies with the SHCP supported by three autonomous agencies functionally attached to it: the CNBV, the CNSF, and CONSAR. The BOM, besides its normal central bank operations, also regulates foreign exchange and derivatives markets. Other two public decentralized agencies involved with the operation of banks are the IPAB, which is in charge of concluding the recovery processes of assets and institutions after the 1994-95 banking crisis and of managing a formal deposit insurance system; and CONDUSEF, which was set up by grouping all the consumer protection functions in existing supervisory agencies (the CNBV, the CNSF, and CONSAR). However, current fragmentation of supervisory powers weakens accountability, effective supervision, and the enforcement of rules and regulations. Coordination among the different agencies needs to be improved to conduct effective supervision of financial conglomerates.

### Box 1. Financial Sector Legal Reforms

In April 2001, the Mexican Congress passed reforms to the Credit Institution Law, the Financial Groups Law, the National Savings and Public Bank Services Law, the Securities Market Law, the National Banking and Securities Commission Law, the Mutual Funds Law, and the General Law on Ancillary Activities and Organizations of Credit. Most of the reforms eliminate legal hurdles and inconsistencies, granting more faculties to the CNBV. These reforms aim at:

- **Enhancing supervisory practices by the CNBV.** In particular, the reforms lift bank secrecy provisions to allow cross-border supervision, increase financial supervisory responsibility on external auditors, and allow the CNBV to establish regulations for financial conglomerates. They also introduce a system of prompt corrective actions that will provide the authorities with adequate tools to deal with problem banks in a transparent and efficient way.
- **Increasing the catalogue of banking operations.** The reform includes as banking operation factoring and financial derivatives, and lifts the ban on back-to-back operations. It also eases *direct bill payments*, a step toward expanding banking services in the economy. In addition, the National Saving Trust Fund was transformed into a development bank, the National Savings and Financial Services Bank, to promote savings, financing, and investment among savings and loan institutions for low-income savers.
- **Restricting related lending.** The framework is rationalized and the limit is tightened in its base of computation, eligible credit operations, and percentage level. The reform would increase the efficiency of the banks' board control over these operations. Also, a board member's voting rights on related transactions will be suspended.
- **Covering gaps on corporate governance, which constitutes a major step to develop equity markets.** The reform changes the structure of boards of directors, including the presence of independent board members, creates auditing committees, introduces provisions to avoid conflict of interests of board members and senior management, prevents the abuse of minority shareholders, and introduces more transparency in the agenda for general assemblies.
- **Providing an appropriate structure for the development of mutual funds.** The reforms will permit a wide variety of collective investment vehicles, with different risk profiles to different classes of investors, also improving the operational environment.

**Next steps.** These reforms need to be developed by secondary CNBV regulations that establish, inter-alia, guidance for prompt corrective actions, regulation on a consolidated basis, regulation on the popular savings system, and rules on public disclosure. Over the medium term, the authorities should establish an adequate framework for closing, resolving, and liquidating nonviable banks, introduce structural reforms to modernize development banks, increase the efficiency of supervision of financial conglomerates, and strengthen banking supervision. Securities markets should benefit from future reforms that impose clearer and more enforceable fiduciary duties on directors and create more effective rights of action for minority shareholders. Stock market fragmentation should be reduced.

25. ***In general, Mexico has been successful in upgrading the quality of banking supervision under the stressful conditions imposed by the banking crisis of 1994-95.*** The CNBV has the technical capacity to identify and monitor the risks taken by banks. It has developed new supervisory tools and improved its information technology systems to conduct effective off-site examinations and monitor the sophisticated activities carried out by banks. However, it lacks sufficient autonomy and its standing and credibility in the

perception of market participants was eroded as a consequence of the management of the banking crisis. Political interference in decision-making and politically imposed budgetary constraints are attendant problems that undermine the CNBV's operational independence. Strengthening the supervisory framework requires greater autonomy and enhanced credibility for the CNBV. Also, the CNBV should implement an action plan to improve its own corporate governance (including, strategies, internal policies, and quality control systems). As discussed in the assessment of compliance with the Basel Core Principles in Section II, Box 2 presents the major measures needed to strengthen banking supervision.

**26. *The authorities are making efforts to address the shortcomings in enforcement and disclosure powers and in supervision and regulation vis-à-vis the securities markets.***

Strengthened enforcement powers, greater disclosure of actual infractions in insider dealing and manipulation cases, and a further shift toward risk-based supervision are all needed to enhance the CNBV's credibility. Legal reforms recently approved by Congress will strengthen the CNBV's enforcement powers by allowing it to publicize its enforcement and regulatory activities, broaden its subpoena power, and enhance its capacity to share information with foreign regulators—which is important considering the increasing migration of capital raising by Mexican companies offshore.

**Box 2. Strengthening Banking Supervision**

In general, Mexico has been successful in upgrading the quality of the supervision of banks under stressful conditions. Further steps to strengthen effective supervision should include the following actions:

- ***Moving toward greater CNBV autonomy, along with greater CNBV accountability and improved coordination.*** This should include budgetary autonomy of the CNBV, appointment of the CNBV's President for a fixed term, and strengthening legal protection for supervisory staff in the discharge of their duties.
- ***Clarifying the division of labor on supervision matters among the SHCP, the BOM, the IPAB, and the CNBV on banking.*** The designated supervisory authority, whether one agency or several closely coordinated agencies acting as one agency, should have the primary responsibility for proposing and drafting all prudential regulations, including having veto power in the enactment of regulations; enforcing prudential regulation, including corrective regimes; conducting on- and off-site supervision with coordination among different supervisors; and granting and revoking licenses and conducting fit and proper tests.
- ***Further restoring the CNBV's institutional credibility.*** Accomplished by ensuring strict enforcement of prudential requirements, moving toward a more risk-focus supervision, and providing transparency on policy and decisions.
- ***Strengthening corporate governance within the CNBV.*** The CNBV should design an action plan addressing issues such as ensuring a consistent application of policies, establishing quality control of output, and enhancing internal controls.



27. ***The regulatory framework is being amended toward sound practices.*** The CNBV establishes the accounting criteria banks must observe in reporting financial information, which is broadly consistent with international generally accepted accounting principles. It also makes use of on-site examinations to verify bank records and compliance with prudential requirements. However, past, ad-hoc regulatory forbearance has been a source of distortion of the Mexican banks' public disclosures. The room for ad-hoc forbearance has been restricted by a recent regulation that limits the cases where forbearance can be granted and forces its full disclosure in banks' audited financial statements as of end-2000. The definition of capital currently in effect does not fully reflect the actual bank's economic capitalization to cover losses. However, a timetable is in effect through end-2002 to bring the Mexican definition of regulatory capital gradually closer to international standards.<sup>16</sup> At present, several banks already meet the requirements of regulatory capital that will be in effect at the beginning of 2003. Finally, the ongoing review of the regulatory framework should be completed with a view to ensure a level playing field across different entities in the provision of like financial services.

28. ***The insurance sector is generally well regulated and supervised, but there is room for improvement in respect of liquidity requirements, actuarial valuation of technical reserves, composite companies, sanctions, liquidation, and automobile insurance.*** The liquidity requirement is defined by an asset's short-term maturity rather than its marketability, and it is too high for life insurance accumulation contracts, exacerbating the tendency to invest short-term. The actuarial valuation of technical provisions should be forward looking (i.e., based on updated assumptions regarding future risks over premiums). To limit contagion risk and enhance risk management, either composite companies (life and non-life insurance) could be phased out or their assets of life and non-life businesses should be separately accounted and managed. The regulation on sanctions should be revised to allow for gradualism. The liquidation process allows too much time for the SHCP to revoke a license from the moment the CNSF recognizes insolvency, with the CNSF lacking the power to suspend the operation of all or some lines of business (this can only be implemented through revocation of license). The adoption of compulsory automobile insurance (third-party liability insurance) throughout all the Mexican states should be encouraged for social safety reasons.

---

<sup>16</sup>Also, it should be noted that the regulatory definition of capital in Mexico is stricter than international standards regarding the requirement to deduct from capital all permanent investment in non-financial companies.

### III. FINANCIAL SYSTEM STABILITY: MACROECONOMIC FACTORS

#### A. Macroeconomic Environment

29. ***Macroeconomic policy management in Mexico improved markedly since the crisis of 1994/95.*** Fiscal consolidation proceeded as reflected in the reduction of the augmented fiscal deficit (IMF definition) from 7.5 percent of GDP in 1997/98 to 4 percent of GDP in 2000.<sup>17</sup> The improved fiscal stance and the BOM's enhanced credibility in fighting inflation facilitated the implementation of monetary policy and led to the adoption of a formal inflation targeting framework in early 2001. Also, the floating of the Mexican peso has removed the implicit exchange rate guarantee of the pre-crisis regime, discouraging one-way bets against the peso and leading to a better currency risk management by commercial banks and corporations.

30. ***Macroeconomic indicators have strengthened as a result of the improved policy management, as well as the closer links to the fast-growing U.S. economy.*** Further, the risk of contagion to crisis in other emerging market economies appears to have lessened. Rapid economic growth has resumed (to an average of 5.6 percent per annum for 1997-2000), inflation has fallen (from 52 percent per year in 1995 to 6.6 percent in June 2001), real interest rate in government securities has also fallen and international reserves have been rebuilt (to US\$40.3 billion by end-March 2001, or about 107 percent of external short-term debt on a residual maturity basis). Steady progress in fiscal consolidation resulted in a reduction of gross public sector debt from 51.5 percent of GDP in 1997 to 47.5 percent of GDP in 2000 (considering a broad public sector concept).<sup>18</sup> The share of domestic debt in total government debt rose from 57 percent in 1997 to 69 percent in 2000 (for the broad public sector) (Tables 2 and 3). Aided by the stable macroeconomic environment, the average maturity of the government's domestic debt has been steadily increasing.<sup>19</sup> The

---

<sup>17</sup>The IMF definition of the augmented fiscal balance is explained in the Staff Report for the 2001 Article IV Consultation, Appendix Table I.

<sup>18</sup>Gross public sector debt includes debt of the federal government and public entities, and the external debt of development banks. The broad public sector debt is defined to include the gross public sector debt; and the gross bank restructuring and debtor support liabilities of IPAB, toll roads, other debtor support, and PIDIREGAS. Since 2000 it excludes loans from NAFIN and the BOM for Mex\$ 69 billion which will be written off. IPAB debt (about 20 percent of GDP) is legally not treated as government debt, but arrangements are in place, and renewed each fiscal year, for the BOM to automatically debit the central government account to honor IPAB's marketable securities on time, if the IPAB is unable to do so. At present, only about 30 percent of the total IPAB debt is in the form of fully negotiable instruments.

<sup>19</sup>For the government's domestic debt average maturity rose from 382 days in 1997 to 619 days in 2001.

marked change in the composition of government debt is the result of a deliberate policy aimed, on the one hand, at reducing the government's exposure to exchange rate risk and, on the other, at promoting the development of the local securities market through, inter alia, the provision of benchmark instruments. Gains have come at the expense of higher average funding costs. Roll-over risk may have been mitigated, given the growing and stable investment needs of the main local holders of government paper (i.e., pension funds required to invest mainly in low-risk domestic securities), but most of the public debt continues to be at floating rates.

31. ***After the 1994/95 crisis, the BOM implemented a cautious monetary policy, that resulted in a decline in inflation to single digits, and used a transparent mechanism to build-up its depleted foreign international reserves.*** Early on after the crisis, the BOM used the path of a monetary aggregate, mainly base money, as an important reference for the implementation of monetary policy. Subsequently, the BOM gradually shifted to an inflation targeting framework. The settlement balances held by banks represent the operational target (a mechanism known as the "corto"). By increasing the "corto" (tightening monetary policy), the BOM induces an increase in money markets interest rates. This may result in the short run in an appreciation of the currency, and also fosters a reduction in aggregate demand pressures and a correction of inflation expectations. The "corto" has proved to be a flexible instrument to cope with shocks, resulting from external and domestic events by allowing both interest rates and the exchange rate to absorb the effects of these shocks. The BOM was particularly vigilant though, to respond to disruptions on the foreign exchange market on concerns over the pass-through effects on inflation and inflation expectations. This resulted in a more stable exchange rate but a more volatile interest rate relative to countries with floating regimes. In the context of a floating exchange rate regime, the rules guiding the BOM automatic intervention mechanisms in the foreign exchange market have proven effective in building-up its net international reserve (NIR) position without disrupting markets. Until recently, these consisted of monthly auctions by the BOM of a fixed amount of put options and pre-announced daily auctions by the BOM to sell up to US\$200 million at an exchange rate at least 2 percent more depreciated than that of the previous day. In May 2001, the BOM announced that both the put options and the daily auctions to sell dollars will be discontinued starting in July 2001. Banks need to comply with liquidity BOM regulations on their foreign exchange denominated assets and liabilities (including off-balance sheet items) which significantly limit systemic liquidity risk and curbs dollar-denominated bank loans, thereby shifting to some extent the management of foreign exchange risk to debtor corporations.

Table 2. Mexico: Selected Economic and Financial Indicators, 1997-2000

	1997	1998	1999	Pre- 2000
(Annual percentage change, unless otherwise indicated)				
<b>National income and prices</b>				
Real GDP	6.8	5.0	3.7	6.9
Real GDP per capita	5.0	3.2	1.9	5.1
GDP deflator	17.7	15.3	15.1	10.7
Consumer prices (end of year)	15.7	18.6	12.3	9.0
Consumer prices (average)	20.6	15.9	16.6	9.5
<b>External sector</b>				
Exports, f.o.b.	13.1	1.1	14.8	21.8
Export volume	21.4	9.3	11.4	20.8
Imports, f.o.b.	24.6	12.7	10.6	23.1
Import volume	23.9	13.5	11.6	19.8
Terms of trade (deterioration -)	-1.6	-5.5	4.8	5.9
<b>Exchange rates</b>				
Nominal exchange rate (US\$/Mex\$)				
(average, depreciation -)	-4.0	-13.3	-4.4	1.1
Real effective exchange rate (CPI based)				
(average, depreciation -)	17.8	1.9	9.0	10.0
Real effective exchange rate (ULC based)				
(average, depreciation -)	12.2	1.3	10.7	13.6
<b>Nonfinancial public sector</b>				
Real budgetary revenue	5.9	-6.2	6.2	11.8
Real budgetary expenditure	10.9	-4.2	5.7	10.6
<b>Money and credit</b>				
Broad money (M2)	19.1	21.6	16.8	4.9
Monetary base	29.6	20.8	43.5	10.7
Monetary base end-period velocity	-3.1	0.2	-16.9	7.0
Treasury bill rate (28-day cetes, in percent, annual average)	19.8	24.8	21.4	15.2
Real interest rate (in percent, annual average)	6.3	7.7	9.6	6.8
(In percent of GDP)				
<b>Nonfinancial public sector</b>				
Overall balance 1/	-1.0	-1.2	-1.1	-0.9
Budgetary revenue 1/	22.8	20.4	20.9	21.8
Total expenditure 2/	23.7	21.6	22.0	22.8
Primary balance (authorities'/program definition) 3/	3.1	1.7	2.4	2.8
Augmented balance (IMF definition)	-5.9	-8.1	-7.1	-4.0
Non-oil augmented balance	-10.7	-10.4	-9.4	-8.0
<b>Savings and investment</b>				
Gross domestic investment	25.9	24.3	23.6	23.3
Public investment	3.1	2.6	2.9	4.0
Private investment	16.4	18.3	18.3	16.9
Change in inventories	6.3	3.3	2.4	2.4
Gross national savings	24.0	20.4	20.7	20.2
Public savings	-0.1	-1.9	0.1	2.2
Private savings	24.1	22.4	20.6	17.9
External current account balance	-1.9	-3.8	-2.9	-3.1
Non-oil external current account balance	-4.7	-5.5	-5.0	-6.0
<b>Gross public sector debt</b>	<b>51.5</b>	<b>56.2</b>	<b>52.2</b>	<b>47.5</b>
External 4/	22.0	21.9	19.2	14.7
Domestic	9.3	10.4	11.6	13.0
Bank restructuring and debtor support liabilities 5/	19.9	22.7	19.0	17.1
Pidiregas	0.3	1.1	2.4	2.8
(In percent of exports of goods, nonfactor services, and transfers)				
Public external debt service 6/	36.2	21.6	22.5	26.0
(In billions of U.S. dollars, unless otherwise indicated)				
Change in net international reserves (increase)	-13.5	-3.7	-3.9	-8.2
Gross official reserves in percent of short-term debt 7/	64.1	70.9	74.6	89.8
Gross external debt (in percent of GDP, end of period)	38.2	38.4	34.7	26.0
Oil export price (US\$/bbl)	16.5	10.2	15.7	24.8

Sources: National Institute of Statistics, Geography and Informatics, Bank of Mexico, Secretariat of Finance and Public Credit, and Fund staff estimates and projections.

1/ Includes privatization proceeds.

2/ Includes extrabudgetary balance.

3/ Treats bank restructuring transfers as interest expenditure.

4/ Includes the debt of the federal government, public entities, and external debt of development banks.

5/ Includes gross bank restructuring and debtor support liabilities of IPAB, toll roads, and other debtor support. Since 2000 it excludes loans from NAFIN and BOM for MP\$ 69 billion which will be written off.

6/ Includes the IMF and public development banks and trust funds.

7/ In percent of short-term debt by residual maturity. Historical data include all prepayments.

Table 3. Mexico: Indicators of Domestic and External Vulnerability  
(12-month percentage change, unless otherwise indicated)

	Dec. 1998	Dec. 1999	Dec. 2000
<b>Market indicators</b>			
Exchange rate (per U.S. dollar, end period)	9.87	9.50	9.61
(year-to-date percent change)	22.4	-3.7	1.0
28-day treasury auction rate (percent; period average)	31.2	16.3	17.6
Spread of benchmark Euro-liabilities (basis points; end of period)	741	370	392
Stock exchange index in U.S. dollar terms (year-to-date percent change)	-38.0	86.7	-21.2
<b>Financial system</b>			
Bank of Mexico net international reserves (US\$ billion)	23.5	27.4	35.6
Monetary base	20.8	43.5	10.7
Real M2a 1/	6.2	8.0	3.9
Real private sector credit 1/	-2.8	-10.7	-10.1
Real adjusted credit to the private sector 2/	-0.2	-9.2	-14.4
Commercial banks' nonperforming loans (percent of total loans) 3/	15.5	8.5	5.0
Commercial banks' loan-loss provision (percent of nonperforming loans) 3/	73.4	102.3	119.3
<b>Prices</b>			
Consumer prices	18.6	12.3	9.0
Terms of trade (percent change; 12-month basis)	-4.5	13.5	-5.3
Pemex crude export price (year-to-date average; US\$/barrel)	10.2	15.7	24.6
Real effective exchange rate (CPI based; year-to-date average) 4/	1.9	9.0	10.0
Real effective exchange rate (ULC based; year-to-date average) 4/	1.3	10.7	13.6
<b>Economic activity</b>			
Industrial production (real)	3.4	5.7	-0.5
Retail sales (real)	3.4	7.4	7.2
Manufacturing employment	3.4	1.6	-1.0
Real wage growth (year-to-date average)	3.4	1.5	5.8
<b>External sector 5/</b>			
Exports (year to date, annual percentage change) 6/	1.1	14.8	21.8
Of which			
Non-oil	3.3	10.3	8.9
Imports (year to date, annual percentage change) 6/	12.7	10.6	23.1
Of which			
Consumer goods	19.1	9.6	37.1
Capital goods	14.6	18.5	17.5
Trade balance (US\$ billion; year-to-date)	-7.9	-5.6	-8.0
Nonfinancial public sector external debt (percent of GDP) 7/	21.9	19.2	14.7
Nonfinancial public sector short-term external debt (percent of GDP) 7/ 8/	1.0	0.9	0.7
Private sector external debt (percent of GDP)	14.4	14.5	11.3
Commercial banks' foreign credit lines (roll-over rates in percent)	106.6	96.8	119.9
Of which			
Banks domiciled in the U.S. and Canada	132.6	67.5	178.8
Banks domiciled in the European Union	73.4	94.5	122.2
<b>Memorandum items:</b>			
Gross international reserves to short-term debt (by residual maturity, percent) 9/	70.9	74.6	89.8
Monetary base to gross international reserves (percent)	45.1	61.9	62.0

Sources: Bank of Mexico; National Banking and Securities Commission; National Institute of Statistics, Geography and Informatics; Infotel; Reuters; Secretariat of Finance and Public Credit; and Fund Staff estimates.

1/ From January 1997 onwards, monetary aggregates are based on resident financial institutions only. M2a equals currency in circulation, checking accounts, time deposits, securities issued by the public sector, securities issued by the private sector, and saving accounts outside SIEFORES.

2/ Includes assets sold to FOBAPROA/IPAB.

3/ From January 1997 stricter accounting rules were introduced. Through December 1998 includes Banamex, Bancomer, Bital, Banorte, BBV, Citibank, Confia, Inverlat, Santander, and Serfin. From January 1999 includes Banamex, Bancomer, Bital, Banorte, BBV, Santander, and Serfin.

4/ Increase = appreciation.

5/ Credit ratings: Standard's & Poor's downgraded Mexico from BB+ to BB on February 10, 1995, revised Mexico's outlook from stable to positive on September 15, 1999, and upgraded Mexico to BB+ on March 10, 2000. Moody's upgraded Mexico from Ba1 (August 10, 1999) to Baa3 (March 7, 2000).

6/ In U.S. dollar terms net of maquila.

7/ Includes development banks.

8/ Based on original maturity.

9/ The short-term debt by residual maturity includes pre-payment of debt. In particular, the 2000 figure includes the prepayment of US\$3.3 billion of Brady bonds: excluding the latter, this ratio would have been 101 percent.

## B. Macrofinancial Risk and Exposures

32. *Mexico's vulnerability indicators have improved, with the exceptions of the real effective exchange rate and the non-oil external current account (Tables 2 and 3).*<sup>20</sup> The risk of contagion from crisis in other emerging markets has diminished recently (Table 4) with the Mexican peso appreciating and domestic interest rates declining during the latest episodes.

33. *Notwithstanding these positive developments, the Mexican economy still confronts some macroeconomic risks linked to unfavorable development in the tax reform being considered by Congress and the sharp deceleration in the U.S. economy that would have a negative effect on the banking system.* Market participants have already priced in the passage of an ambitious revenue-enhancing tax reform and the subsequent granting of the second investment grade rating to Mexico.<sup>21</sup> The closer ties to the U.S. economy, while being a source of strength, have also resulted in a stronger synchronization of the business cycles in the two countries (Figures 3 and 4). Delays or reversals in the expected tax reform could, to some extent, reverse the process of differentiation between Mexico and other emerging market countries and thus there could be an increase in the level and volatility of Mexico risk, leading in turn to higher and more volatile domestic interest rates. A pronounced slowdown in the U.S. economy, which may also trigger lower world oil prices, is likely to induce an important deceleration of growth in Mexico and pressures on the peso. To the extent that a weakening of the peso may threaten the inflation target, monetary policy would be tightened and domestic interest rates would go up. Although the usual links between an economic slowdown and the health of the domestic banking system have weakened (as banks have reduced their exposure to private credit risk), the combined effects of a slowdown in the domestic economy, pressures on the peso, and higher domestic interest rates would delay the resumption of healthy bank lending to the private sector, and adversely affect the banking system capital.

---

<sup>20</sup>The CPI-based real effective exchange rate appreciated 10 percent in 2000. The non-oil external current account deficit increased to 6 percent of GDP in 2000, from 5 percent of GDP in 1999.

<sup>21</sup>Market participants and government officials in Mexico noted that the country's resilience to the recent difficulties in Argentina and Turkey is partially explained by this expectation.

Figure 3. Mexican Versus U.S. Growth, 1981—1993

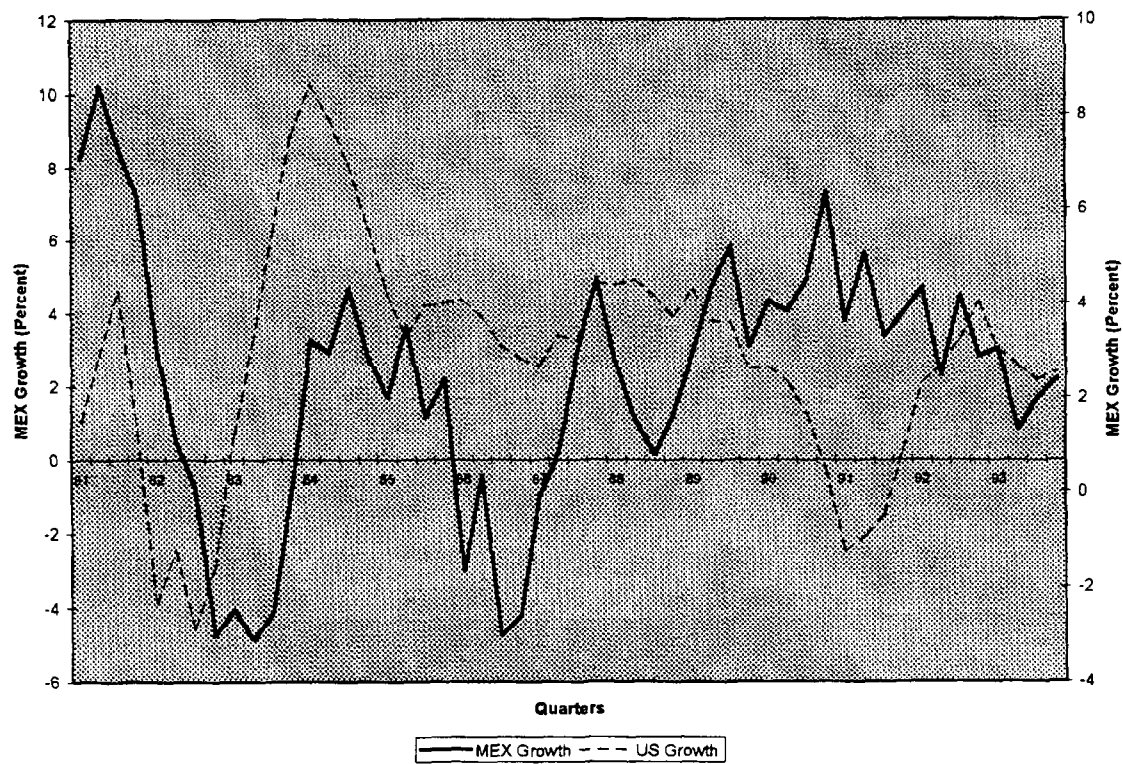


Figure 4. Mexican Versus U.S. Growth, 1994—2000

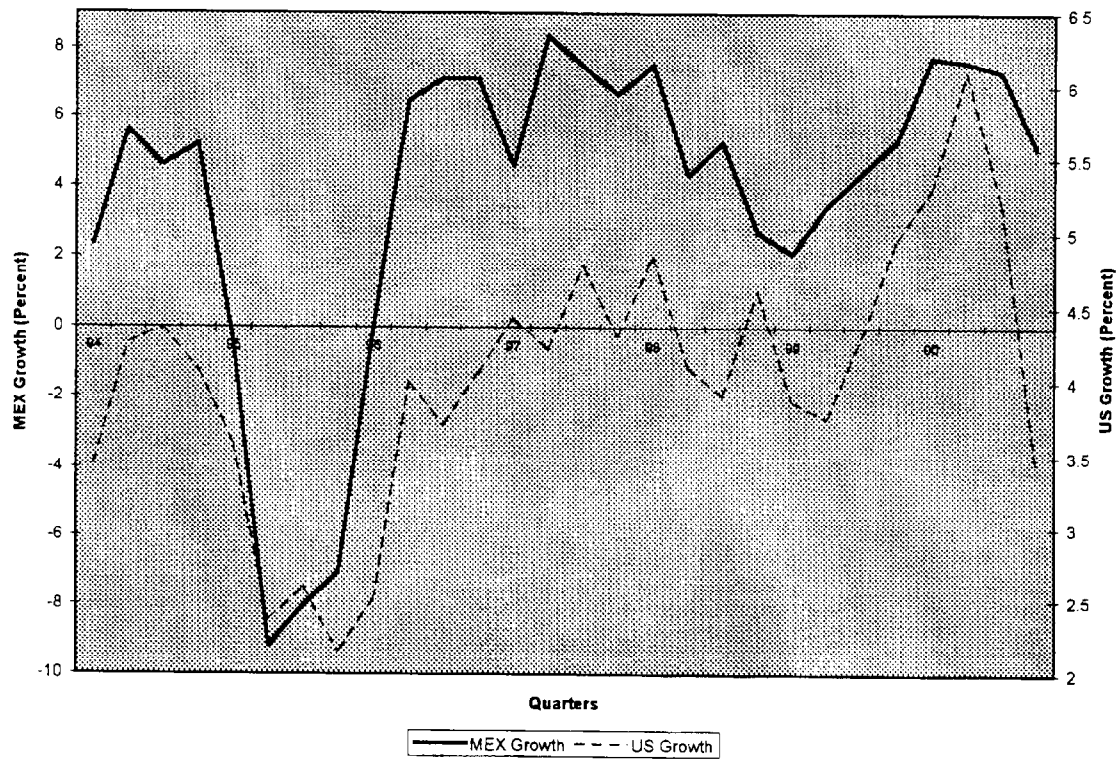




Table 4. Mexico: Contagion Then and Now

	All Period (1/2/98-5/31/01)	Russian Crisis (7/20/98-11/24/98)	Brazilian Crisis (1/6/99-5/7/99)	Argentine and Turkish Crises (10/4/00-5/31/01)
EMBI+ MEX and EMBI+				
Correlation	0.87	0.98	0.84	0.21
Standard deviation of Mex\$/US\$	0.46	0.51	0.32	0.21
Standard deviation of TIE	6.84	7.96	5.49	1.64

Sources: Bank of Mexico; JP Morgan; and FSAP team estimates.

34. *In recent years, large Mexican firms tapped international capital markets to fund their operations, and in turn were providing financing to their network of domestic suppliers.*<sup>22</sup> These arrangements, along with retained earnings and debt refinancing operations with banks, allowed the rapid economic expansion to proceed at a time when the domestic banks were reducing their credit exposure to the nonfinancial private sector. An important part of the increased private sector reliance on foreign indebtedness has been related to foreign trade and, in the event of a slowdown in trade, would be self-liquidating. However, inter-company credit is vulnerable to a potential weakening of large companies' capacity to borrow abroad, which could have relatively more disruptive effects on small and medium enterprises, many of which have lost their traditional banking relationships.

35. *Mexican banks have improved their capital adequacy in the last few years,* with their estimated economic capital increasing from 2.7 percent at end-1999 to 8.6 percent at end-2000 on a risk weighted assets basis.<sup>23</sup> Against this capital base, it was estimated that the banking system as a whole would be able to withstand adverse developments in both credit and market risks. In particular, the adjusted capital was subject to very low probability, but drastic, macroeconomic shocks (changes to interest and exchange rates, and stock market

<sup>22</sup>In the (qualitative) 2000 BOM "Credit Market Survey," firms reported that supplier/customer and inter-company credits had been the predominant source of corporate financing (70 percent of response); and that they did not use bank credit because of high interest rates, banks' unwillingness to lend, and economic uncertainty (in that order).

<sup>23</sup>The FSAP mission estimated the net worth or economic capital of the banking system by adjusting the value of assets and liabilities to better approximate their economic value, notably the valuation of deferred taxes and intangible assets, and of provisions for contingent liabilities and past due loans.

index) to ascertain the system resiliency to market risks.<sup>24 25</sup> The worst outcome entailed a less than 20 percent reduction in the banking system capital if nominal interest rates were to increase threefold over current levels (Table 5). Shocks to other variables result in minimal estimated losses (a depreciation of the peso has a positive effect on the banks' net worth because some banks have a positive net asset position in foreign exchange). The resilience of the system to credit risk was tested based on the impact of unfavorable developments in various variables (like economic growth, exchange rate, and interest rates) on past due loans (PDL). Assuming that 100 percent of the deterioration in PDL were provisioned, a drastic contraction in GDP would result in increased provisioning requirements equivalent to about 17 percent of adjusted capital (Table 6).<sup>26</sup> More likely shocks to GDP entail effects in the order of less than 5 to around 8 percent of capital.

36. ***Market discipline is currently weak; however, it will benefit from current efforts in public disclosure and a limited deposit guarantee.*** The implicit blanket guarantee provided by the government and a long-standing non-transparency disclosure of banks' financial information weakened market discipline during the management of the banking crisis. Market discipline is expected to benefit from current efforts in public disclosure and transparency and a limited deposit guarantee. Yet, these gains may be impaired by the banking consolidation process, which is creating financial institutions that are likely to be perceived as too-big-to-fail, and in case the IPAB continues resorting to open-bank resolution to deal with failing banks, regardless of less costly alternatives.

37. ***In a context of lower volatility of foreign shocks, notably recent developments in country risk in the face of crises episodes in other emerging markets, the BOM should remain committed to keep on reviewing, as conditions permit, whether a short-term interest rate would be more efficient as an operating target.*** The BOM has assessed whether or not the adoption of alternative policy instruments, including an interest rate target, can lead to a more effective implementation of monetary policy. After carefully evaluating the merits and disadvantages of such a course of action, the conclusion of the BOM authorities was that, at this stage, those alternatives do not represent a clearly superior option to the

---

<sup>24</sup>For example, based on the historical distribution of changes in real interest rates, it was estimated that a 2 1/2 percentage point increase in real interest rates, could take place with a 1 percent probability.

<sup>25</sup>The FSAP team worked jointly with the Mexican authorities to analyze the resilience of the banking system to market and credit risk shocks.

<sup>26</sup>This is the impact that could be expected were the quarterly growth in GDP contract by 14 percent, an event that based on the past distribution of outcomes for the 1993-2000 period, could take place with a 1 percent probability. Note that this sample period, include the "tequila-crisis" years.

Table 5. Mexico: Estimates of Bank Losses under Extreme Events-  
Market Risk

Shock to:	Size of Shock (5% and 1% confidence levels)	Losses (In % of net worth)
Interest rate (percentage points)	10	10.5
	27	18.9
	30	-11.1
Exchange rate (percentage depreciation)	40	-14.6
	684	1.4
Stock market (points)	1012	2.0
	1.0	2.7
Surcharge (sobretasa) (percentage points)	1.6	4.3
	1.3	0.7
Real interest rate (percentage points)	2.4	1.3

Source: FSAP team estimates.

Table 6. Mexico: Credit Risk Estimates

Shock to:	Size of Shock (10%, 5%, and 1% Confidence levels)	Estimated Losses (In % of net worth)
Interest rates (percentage points)	8	5.8
	10	7.2
	27	19.4
Growth (in percent)	4	4.7
	6.8	8.1
	14	16.6
Exchange rate (percentage depreciation)	20	11.7
	30	17.5
	40	23.4
EMBI (basis points)	125	2.6
	250	5.2
	400	8.4

Source: FSAP team estimates.

“corto.” In particular, with a high pass through from the exchange rate depreciation to domestic prices and in light of the exposure of the economy to external shocks, and given the high volatility of domestic markets, an interest rate target could imply frequent and significant upward and downward movements of the target, and an excessive degree of volatility of the exchange rate, inflation expectations and medium-term interest rates, with the consequent adverse effects on the economy. However, in the FSAP team’s view, the authorities should remain open to review, as conditions permit, whether alternative instruments may more effectively and efficiently convey the intended policy signal while smoothing out short-term volatility. The timing and modalities of this switch need to be carefully assessed as a function of the BOM’s further gains in credibility, market perceptions of how policy works, and prevailing conditions in the local and international environments.<sup>27</sup> Although the “corto” mechanism has proven to be a useful tool to conduct policy in an uncertain environment, it has also been accompanied by higher interest rate volatility than in other countries with floating exchange regimes, which are also implementing monetary policy under an inflation targeting framework. Market participants have also gained experience in their pricing decisions under a floating exchange rate regime in operation since 1995, thus gradually lessening the risk of pass-through of exchange rate depreciation to inflation and inflation expectations. Also, the level of development of the foreign exchange derivative market provides good opportunities for hedging operations to manage the increased exchange rate volatility that could result from the shift in operating targets as the exchange rate plays an increased buffering role. Should nominal interest rate volatility decline from this change, it would result overtime in lower real interest rates. This would help investment, and support the continued extension of the yield curve on fixed-coupon instruments.

#### IV. FINANCIAL SYSTEM STABILITY: SECTORAL AND INFRASTRUCTURE FACTORS

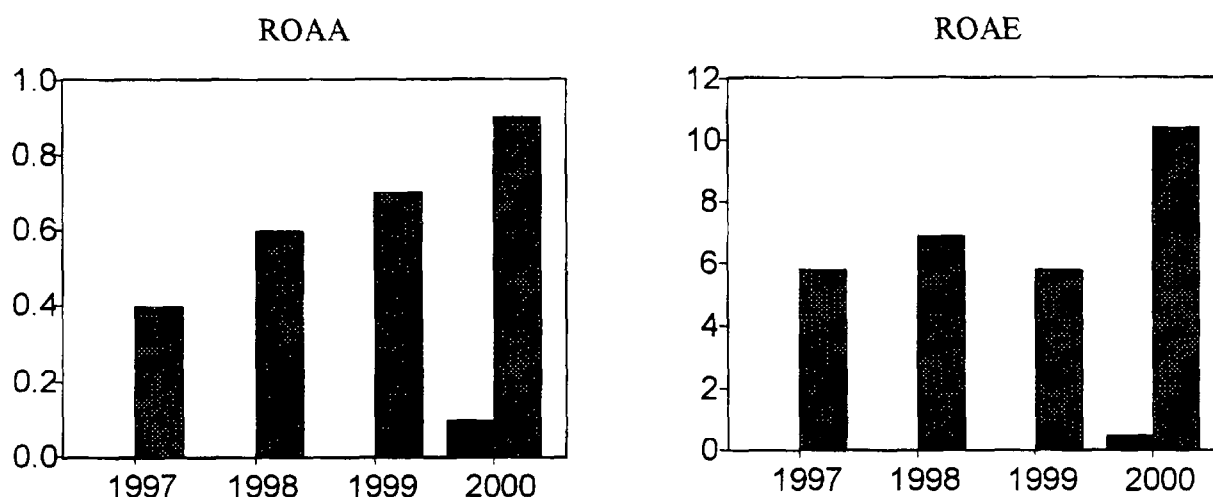
##### A. Commercial Banking

38. *Mexico’s commercial banking system has strengthened considerably since the 1995 crisis, becoming more resilient to shocks.* This assessment is supported by the recent strengthening of bank capital, improving trends in asset quality and profitability (Figure 5), the large participation of strong foreign banks, and the still low participation of banks in financial intermediation. However, the resumption of bank lending activity could be delayed until a reduction in public debt interest rate stimulates bank lending to the private sector, economic growth recovers from the recent deceleration, and structural reforms are

---

<sup>27</sup> A BOM move to directly target the short-term interest rate would be accompanied by some increase in exchange rate volatility which, under a low pass-through of the exchange rate to prices, need not result in a commensurate increase in domestic price level volatility.

Figure 5. Mexico: Profitability Indicators<sup>28</sup> in the Banking System, 1997-2000  
(In percent)



Source: CNBV

implemented and tested. In the long-term, there is potential for growth motivated by the low level of bank penetration in the economy (bank lending can increase with low marginal costs), and a stable and sustainable macroeconomic growth.

39. ***The system's capacity to absorb shocks improved substantially between 1999 and 2000.*** Following the economic expansion of 2000, the banking system improved its capital adequacy through retained earnings, capital injections, sales of assets, and improvement in asset quality. Although capital adequacy is not uniform across banks, those institutions showing a net worth below desirable levels are in the process of bridging the gap.

40. ***The main challenge remains in the insufficient financial intermediation by commercial banks.*** Almost half of banks' productive assets are government paper and the yield on some of these assets is falling rapidly. In addition, bank loan portfolios are small and concentrated in larger firms, and firms offering guarantees from large or foreign firms. High real interest rates and poorly enforced collateral laws discourage lending to small- and medium-sized enterprises. A resumption of broad-based and sound lending to the private sector will require, among other things, sustained economic growth, bank's interest to extend

---

<sup>28</sup>In 2000, the lower bar shows ratios where profits were adjusted for provisioning.

credit to small- and medium-sized firms, and improved credit infrastructures. Risks to a resumption of credit growth include slower-than-expected progress in fiscal reform and a less-rapid-than-projected recovery of economic growth in the U.S.

41. ***Concentration has not fostered inefficiency—as the simultaneous process of banking system internationalization has kept markets contestable.*** Standard econometric tests conducted by the FSAP mission support the hypothesis that observed interest rates and loan quantities have been statistically equivalent to those a competitive system would have produced. This suggests that the larger players have not been able to exercise significant market power. The lack of evidence on market power in spite of the increased concentration is likely explained by the rise in foreign bank entry, which has fostered market contestability. However, concentration raises policy issues to the extent that it intensifies the “too big to fail” phenomenon. The few but very large institutions can be perceived as “too big to fail,” offsetting the gains in market discipline expected from the planned reduction of the universal guarantee on bank liabilities to a limited coverage. To reduce the potential adverse effects, the authorities should continue efforts underway to strengthen supervision, ensure strict enforcement of regulations, and improve coordination with foreign supervisors.

42. ***Nevertheless, concentration and foreign participation process may raise issues of access to credit, especially for small and medium enterprises.*** Concentration may, at least in the short run, lead to *less* access than otherwise to bank credit by small- and medium-sized enterprises, as bigger banks tend to be “cherry pickers.” To mitigate this potential problem, instead of intensifying reliance on public banks (see below), the policy focus should be on improving debtor information systems, secured lending, the enforcement of creditor rights (e.g., in case of corporate reorganization and bankruptcy proceedings), and minority shareholders rights. Reforms should also focus on reducing unnecessary regulatory burdens for nonbank financial intermediation, particularly leasing and factoring.

## **B. Development Banking**

43. ***An efficient financial market is seriously undermined by the role currently played by state-owned development banks and public administered funds.*** Some development banks have unclear mandates or do not live up to their mandates with their activities overlapping among themselves or with the activities of commercial banks, they have been performing quasi-fiscal activities outside the scope of the budget process, and all of them (except one) are loss making even after several rounds of recapitalization. Their capital adequacy has markedly fallen last year after the implementation of a new prudential regulation on market risk. Their operation is often inefficient including high operational costs. Fiscal subsidies involved in their operations are not well targeted and are channeled in a non-transparent manner. The authorities are addressing these issues through legal reforms and tighter monitoring.

44. ***The existing framework for housing finance requires a major overhaul.*** It is totally dependent on government funding and mandatory wage contributions to pension funds earmarked to housing, involves large contingent fiscal liabilities with respect to pensions, and

blocks the development of private housing finance markets, not least because subsidies embedded in interest rates undercut private lending. Moreover, the operations of the housing funds for private and public sector workers (INFONAVIT and FOVISSSTE) have an inherent conflict between their fiduciary duties as pension funds, bank functions as lenders, and social policy function as providers of subsidies. This results in erosion of value of long-term compulsory savings for retirement, distortions that stifle the development of private mortgage markets, and poor performance and opaque subsidies that widen the government contingent liability related to private pensions.

### C. Securities

45. ***Private securities markets remain underdeveloped.*** The vast proportion of resources in the hands of private institutional investors is invested in government debt securities and bank liabilities, which reduces financial system vulnerability coming from the private security markets. However, caution is needed because over time this can harm proper capital allocation and economic growth. The large holding of government debt do provide an opportunity for the authorities to develop benchmark yields, which will be important in the eventual development of the local corporate debt market to complement that which already exists offshore for largest Mexican firms.

46. ***The current lack of a well developed local corporate debt market, coupled with lack of bank credit, suggests that the availability of financing will be sensitive to the performance of nonfinancial credit suppliers, such as large firms, and the appetite for Mexican debt.*** In addition, the fairly extensive arrangements for the largest Mexican firms to borrow in international debt and equity markets needs to be closely monitored as the counterpart to the increasing current account deficit. Although many of these companies have gone through a process of de-leveraging, it will be important to monitor both leverage and the triggers for acceleration in the bond covenants present in many of these international debt offerings.

47. ***Despite the very small size and fragmented nature of securities markets, the potential for growth is substantial.*** Expected growth of private securities market is very large. Over time this market could create a more varied sourcing of finance for Mexican companies and even provide a potential buffer during economic slowdowns and related contractions in supplier credit. Funds in the mandatory retirement system alone are projected to grow from 7 percent of GDP in 2000 to 17 percent in 2010. Also, a significant share of pension-related mandatory savings has been unavailable for investment in securities markets due to the mixing of housing finance objectives (e.g., INFONAVIT) with those associated with old-age security. Prudent liberalization of investment regimes of institutional investors in the local securities markets would help to foster the demand for corporate securities and in the medium term for structured securities such as mortgage and more broadly asset backed securities if appropriately rated and valued.

#### **D. Insurance**

48. *The insurance sector is in a relatively safe and solvent situation, and although on a declining trend in the last few years, it still holds excess capital over the regulatory requirements.* However, the decline of this excess over time could become a cause of concern if this trend does not stop in future years. The recent decline is explained by a change in regulations with an impact from 1997 (a one time effect), lower financial returns in line with the overall decline in real interest rates, a reduction in profitability due to stronger competition in the insurance sector (in particular in the annuity and health lines of business), and the growth of the insurance business. Companies hold about 40 percent of their assets in government securities, some of them earning a guaranteed real rate of return. However, against a background of continued fall in real interest rate on government securities, profitability will remain under pressure for some time.

#### **E. Payment Systems**

49. *There are some areas of concern regarding the operation of systematically important payment systems.* Legal weaknesses include: (i) the BOM is not given clear authority to oversee these systems; (ii) payments settled by a bankrupt institution through a payment system, done in fraud of its creditors, settled up to 270 days before the sentence declaring the bankruptcy could be unwound impairing the finality of payments; and (iii) the execution of collateral for overdrafts with the BOM could be slow. Under current credit lines arrangements, the BOM bears the credit risk associated with the settlement of the SPEUA (no collateral used in this system), and the risks associated with settlement by credit institutions incurring overdrafts in the SIDV and SIAC in excess of their collateral in the latter system. There is a loss sharing agreement to cover the loss in case an institution fails to settle, but it has never been tested, and it is likely that the BOM would face difficulties in recovering the loss in full if more than one institution fail at the same time. Furthermore, there are exemptions to the overdraft limit in SIDV and SIAC that could further weaken the system. The majority of the collateral used to access BOM liquidity under the SIAC is in the form of non-negotiable securities with long maturities.

50. *At present, the BOM may potentially grant unlimited and uncollateralized liquidity to banks facing financial problems, with adverse implications for monetary policy, the framework for bank closure, and the BOM's balance sheet.* The BOM's response to uncollateralized overdrafts is ambiguous, since the rules of the SIAC system only say that some 'additional measures' may be adopted for a bank that frequently incurs this sort of overdraft. There is no automatic trigger that would lead to the suspension of payments. Without clear end-game rules for access to BOM liquidity, the closure of a nonviable bank would be unduly delayed and interest rates could suffer severe distortions because a failing institution would have incentives to bid for liquidity at very high prices. At present, the exposure of the BOM through potentially uncollateralized overdrafts and credit auctions is to IPAB risk—since the IPAB guarantees virtually all the liabilities of banks. In the future, and in the absence of reforms, the exposure would be to commercial bank risk, since the IPAB



guarantee is reduced according to a transition timetable that ends on December 31, 2004. The BOM should consider implementing all its credit auctions collateralized with marketable government securities, so that these operations be similar to repos.

51. ***Mexico does not fully comply with the Core Principles for Systemically Important Payment Systems but reforms are underway.*** Areas of partial or total noncompliance include the completeness and adequacy of the legal framework, as well as the understanding and management of risks by the parties involved in the payment systems. Reforms are being designed to correct most of the identified weaknesses. The BOM plans to make SPEUA a net system with deferred settlement totally independent from BOM credit. It plans to eliminate credit lines in SIDV, concentrating all of them in the SIAC, and to gradually request more liquid collateral to substitute for the illiquid collateral that is mostly used now. It also intends to use repos for overdrafts, instead of 'caución bursátil,' since this would eliminate counterparty risk. A draft Finality Law is to be presented to Congress soon. This law will also include oversight powers for the BOM over the payment systems and ensure that payments effected in systemically important payment systems cannot be unwound within the system. Appropriate regulations should in addition lock-in the planned de-linking of SPEUA from access to BOM credit. Also, the authorities should change the rules to eliminate completely the possibility that a participant could incur in an uncollateralized overdraft. The proposed payment systems reform is well targeted and, with the suggested additions, should lead to full observance of the Core Principles.

#### **F. Deposit Insurance**

52. **The planned shift to limit deposit insurance stating in 2003 can help improving market discipline of banks.** To this end, two existent operational deficiencies should be corrected. IPAB's Board should be given sufficient flexibility to establish risk-based premiums, and bank information systems need further improvement to determine the guaranteed deposit base and, thus, the size of IPAB contingent liabilities.

## SECTION II—REPORT ON OBSERVANCE OF STANDARDS AND CODES

This section reviews the extent to which Mexico observes certain internationally recognized standards relevant for the financial sector. It contains summarized versions of detailed assessments prepared during the Financial Sector Assessment Program (FSAP) mission by assessor teams from the International Monetary Fund, the World Bank, and cooperating institutions, led by Messrs. Alfredo M. Leone (IMF) and Augusto de la Torre (World Bank).

Detailed assessments were prepared on the basis of information provided by the Mexican authorities and fieldwork during the March 2001 FSAP mission. The assessor teams comprised Bruno Carrasco (European Central Bank) for the IMF *Code of Good Practices on Transparency in Monetary and Financial Policies*; Carlos Conesa (Bank of Spain) and Íñigo de la Lastra (CNMV, Spain) for the *Core Principles for Systemically Important Payment Systems of the Committee on Payment and Settlement Systems (CPSS)*; Alain Laurin (World Bank), Antonio Pancorbo (IMF), and Rudolph Zepeda (U.S. Federal Reserve) for the *Basel Core Principles for Effective Banking Supervision*; Jonathan Katz (IOSCO, U.S. SEC) for the *IOSCO Objectives and Principles of Securities Regulation*; and Manuel Peraita and Gregorio Impavido (both World Bank) for the *IAIS Insurance Supervisory Principles*.

The assessments revealed that Observance of the Code of Good Practices on Transparency in Monetary and Financial Policies varies across institutions and also across principles with better observance on “transparency” than on “accountability” issues. Coordination is considered insufficient even within the securities and banking arms of the CNBV. However, the recently created Financial Institutions Coordination Committee (which involves all regulatory agencies) is streamlining and rationalizing the information requested from financial institutions. Mexico does not fully comply with the CPSS Core Principles, but reforms are underway. Areas of partial or total non-observance include the completeness and adequacy of the legal framework, and the understanding and management of risks by the parties involved in the payment systems. In general, Mexico is being successful in upgrading the quality of banking supervision. However, a number of weaknesses were identified that need to be addressed to achieve full observance with the Basel Core Principles for Effective Banking Supervision. Mexican authorities are committed to bridging the remaining gaps. Finally, Mexico is in broad observance with most of the IOSCO and IAIS Core Principles, with some shortcomings found mainly in the areas of corporate governance, the CNBV and the CNSF autonomy, and the legal protection of supervisory staff.

Mexican authorities indicated agreement with these assessments. Related technical discussions held during and after the FSAP mission have provided useful inputs for their ongoing efforts to reform the financial sector.

## **I. OBSERVANCE OF THE CODE OF GOOD PRACTICES ON TRANSPARENCY IN MONETARY AND FINANCIAL POLICIES**

### **A. General**

53. This assessment is based on: (i) discussions with various departments of the BOM, as well as the CNBV, the CNSF, CONDUSEF, CONSAR, FIDELIQ and the IPAB; (ii) a review of questionnaires on the Code of Good Practices on Transparency in Monetary and Financial Policies submitted by the BOM and financial agencies;<sup>29</sup> (iii) a review of the main laws and regulations governing the Mexican financial system; and (iv) a review of the BOM and the financial agencies' internet web-sites and their regular publications. In addition, discussions were held with other financial sector participants including officials and staff of the SHCP and representatives of commercial, investment and development banks.

### **B. Transparency of Monetary Policy**

#### **Legal framework, institutions, and market structure—Overview**

54. *The legal and regulatory framework underpinning the financial sector is relatively recent.* It has benefited from best practices in other countries, as far as clarity of objectives of monetary policies, the designation of well defined institutional responsibilities, and the operational framework to support monetary policy. At the apex, the Constitution recognizes the operational independence of the BOM, which is reinforced by the BOM Law.

55. *The BOM is a well-run institution with highly qualified management and staff.* It is effectively carrying out its institutional mandate in accordance with the BOM Law. However, as described below, certain institutional arrangements as established in the law may potentially undermine the Bank's capital. Also, certain responsibilities in the law (particularly those related to regulation and supervision of the payment systems) are not being fully met creating a divide between *de jure* and *de facto* responsibilities.

56. *The BOM's operational framework for monetary policy is clearly established based on an inflation targeting framework.* Under this framework, the BOM sets a medium-term (three-year) inflation objective with well-defined annual targets consistent with the objective. To complement its annual inflation target (and only as a reference starting in 2001), the BOM publishes a daily path for the monetary base balances with due consideration of the projected macroeconomic framework. Until the year 2000, it also published quarterly targets for the minimum accumulation of net foreign assets and maximum growth of net domestic credit, but this practice was discontinued starting in 2001. In order to signal its monetary policy stance, the BOM announces the daily target for net settlement balances in the current

---

<sup>29</sup>The BOM, the CNBV, the CNSF, CONSAR and the IPAB submitted questionnaire responses to the mission.

accounts of credit institutions (borrowed reserves), a mechanism known as the “corto.” Whenever the BOM seeks to tighten monetary conditions it announces a lower (more strict) total target for borrowed reserves, with an upward pressure on short-term interest rates. The “corto” has served as an effective means to successfully lower inflation. However, the BOM should remain open to review, as conditions permit, whether alternative policy instruments may more effectively and efficiently convey the intended price signal while smoothing out short-term interest rate volatility. The timing and modalities of this switch need to be carefully assessed as a function of the BOM’s perceived strength, market perceptions of how policy works, the economic environment (local and international) and the local political environment. In addition, alternative ways to facilitate a gradual transition from quantity to price targets (for example, introducing a reference interest rate set by the BOM) would need to be assessed.

57. ***The BOM has made substantive progress in recent years regarding transparency and public accountability, but there is room for improvement regarding its financial accounts and income statements.*** Also, the practice of reporting on the operations of the “fideicomisos” (public trust funds), which the BOM administers on behalf of the SHCP should be established. While “fideicomisos” are Government owned, the BOM ends up absorbing, in its income statement, the implicit subsidies involved in their below market lending interest rates. It is convenient to have an adequate measurement of these subsidies, which should be accounted as part of the Government’s borrowing requirements. Given that the BOM is subject to the “fiduciary secret,” information on the terms of its credits to “fideicomisos” should be disclosed by the Government.

### **Main findings—Summary**

58. ***Observance of practices relating to: (i) clarity of roles, responsibilities and objectives for the BOM for monetary policy, and (ii) open process for formulating and reporting monetary policy decisions is well entrenched, both in the legal and regulatory framework and in practice.*** Observance of practices relating to: (i) public availability of some information and, in particular, (ii) accountability by the BOM could be strengthened further. In particular, the legal and regulatory framework has a presumption in favor of accountability to the government—through the SHCP—and to Congress. Substantive progress has been made by the BOM in reporting to the public on monetary policy through the quarterly inflation reports. However, there is room for improvement regarding accountability to the public at large. In particular, the disclosure of the BOM financial statements could be improved by providing more details on income and expenses, and expanding explanatory notes to provide greater information on accounting practices.

59. ***Roles and institutional mandates are generally well defined, but certain institutional features may have an adverse impact on the capital of the BOM.*** In particular, there is an asymmetric treatment of the BOM profit and losses as profits remit to the Government, while losses are assumed by the BOM thereby potentially eroding the BOM’s capital. Though by law the BOM cannot distribute profits to the government if this distribution reduces its capital relative to nominal GDP, there is no explicit protection in the

law for the capital of the BOM in case it incurs operational losses. Also, while “fideicomisos” are Government owned trusts, the BOM ends up absorbing in its income statement the implicit subsidies involved in their operation. However, this is a temporary problem since transitory Article 10 of the BOM Law states that credits it granted to “fideicomisos,” prior to this Law going into effect, may continue under their terms until maturity, and may be renewed in one or more instances for a total term of no longer than 20 years.

60. ***Accountability and disclosure are generally good, but there is room for improvement.*** Substantive progress has been made by the BOM in reporting to the public on monetary policy through the inflation reports. However, the BOM does not report on developments in the payment systems nor on its oversight activities regarding the payment systems. Also, systematic public reporting by the BOM on issues of domestic or international financial stability and systemic risk could be considered, as it is the practice in several central banks. In view of the increasing openness of the Mexican economy, the history of distress of the Mexican financial system and the importance of contagion, regular reporting on these issues would provide valuable information to the markets.<sup>30</sup> Financial reporting is another area where accountability to the public can be improved. The BOM discloses to the public its Annual Report which includes the end-of-year general balance sheet of its financial accounts as well as monthly and weekly consolidated balance sheets. However, this information is not detailed. In particular, the information provided does not include: (i) detailed information on income and expenses;<sup>31</sup> and (ii) detailed accounting policies.

61. ***The legal and regulatory frameworks across a range of areas need improvement to avoid undermining effectiveness in the discharge of institutional responsibilities.*** The BOM Law states (Articles 2, 3, and 24) that the BOM is in charge of the promotion and smooth functioning of the payment systems, and their regulation. Legal opinions, however, consider that these articles do not explicitly provide the BOM with the power of oversight of the payment systems it does not operate. Indeed, INDEVAL, the operator of the SIDV, does not recognize the legal authority of the BOM to oversee its system. The BOM has access to information related to the operations of the SIDV as a result of a bilateral agreement signed by INDEVAL and the BOM. The agreement gives also the BOM the right to approve or reject any change in the internal rules of the SIDV system, and thus the BOM can indirectly review the design of the system. In this way, the BOM has on-line information about the

---

<sup>30</sup>Examples of central banks’ reporting on financial stability and systemic risk issues include the Bank of England’s semi-annual Financial Stability Review which addresses risks to global and U.K. financial stability and outlook, and the Sveriges Riksbank’s semi-annual Financial Stability Report which addresses the stability of the payments system by assessing strategic, credit, counterparty, and settlement risks in the financial sector.

<sup>31</sup>The BOM is compelled by law to provide detailed information on income and expenses to Congress, but not to the public.

daily functioning of the SIDV and it also has some powers to influence the internal rules of this system, but these oversight tools are not supported by specific formal powers. It is doubtful then that the BOM could carry formal oversight of new private systems that could be established in Mexico.

62. Table 7 presents a summary of the findings on the assessment of Observance of the monetary policy section of the Code of Good Practices on Transparency in Monetary and Financial Policies.

Table 7. Summary of Main Findings of the Assessment of Observance of the Code of Good Practices on Transparency in Monetary and Financial Policies—Monetary Policy

Subject	Main Findings
I. Clarity of roles, responsibilities and objectives of central banks for monetary policy	The BOM has a high degree of compliance with regard to this principle. In general the BOM Law and regulations are well formulated, providing clear institutional objectives and an appropriate operational framework to support their implementation. There is room for improvement in certain areas. Under the law, profits are remitted to the Federal Budget while losses are absorbed by the BOM, thereby potentially undermining its capital. By law, the BOM cannot distribute profits to the government if that reduces its capital relative to nominal GDP, but there is no explicit protection in the law for the capital of the BOM in case it incurs operational losses. Also, the BOM publicly disclose the amounts of its credits, advances, guarantees or overdrafts to the government, but information on the terms of these operations cannot be disclosed due to "banking secrecy" provisions. Moreover, the practice of reporting on the operations of the "fideicomisos" (public trust funds), which the BOM administers on behalf of the SHCP should be established. While "fideicomisos" are Government owned, the BOM ends up absorbing, in its income statement, the implicit subsidies involved in their below-market lending interest rates. It is convenient to have an adequate measurement of these subsidies, which should be accounted as part of the Government's borrowing requirements. Given that the BOM is subject to the "fiduciary secret," information on the terms of its credits to "fideicomisos" should be disclosed by the Government.
II. Open process for formulating and reporting monetary policy decisions	The recent adoption of an inflation targeting framework has enhanced transparency and provided an effective anchor to guide inflationary expectations. To complement this framework (and only as a reference starting in 2001) the BOM continues to publish the daily balances of the monetary base a year ahead. The BOM does not report on developments and the BOM's oversight activities regarding the payments systems.

Subject	Main Findings
	Also, reporting by the BOM on financial stability and systemic risks issues could be considered. In view of the increasing openness of the Mexican economy, the history of distress of the Mexican financial system and the importance of contagion, regular reporting on these issues would provide valuable information to the markets.
III. Public availability of information on monetary policy	There is a strong disposition toward disclosure. Substantial efforts have been made recently to increase the information available to the public on the implementation of monetary policy, including through the release of quarterly inflation reports. The most important outstanding issue refers to public disclosure of the BOM balance sheet. The BOM publishes versions of its balance sheet on a weekly, monthly and annual basis on its web site. However, and in particular its annual balance sheet, does not include: (i) a detailed income and expense statement, <sup>32</sup> (ii) information on off-balance sheet items, and (iii) reporting on provisioning requirements.
IV. Accountability and assurance of integrity by the central bank	Compliance with accountability and assurances of integrity is appropriate. According to its law, the BOM shall send to the Executive and to the Congress of the Union, and during the recesses of the latter to the Permanent Commission of the Congress, the following: (i) in January of each year, a presentation of the monetary policy to be followed by the BOM during the respective year, as well as a report on its current expenditure and physical investment budget for the year; (ii) in September of each year, a report on the implementation of monetary policy during the first half of the respective year; and (iii) in April of each year, a report on the implementation of monetary policy during the second half of the previous year and, in general, on the activities of the BOM throughout said year, within the context of the domestic and international economic situation. Legal protection for the BOM's officials and staff in carrying out their duties needs to be enhanced.

<sup>32</sup>The BOM is compelled by law to provide detailed information on income and expenses to Congress, but not to the public.

**RECOMMENDED PLAN OF ACTION AND  
MONETARY AUTHORITY RESPONSE TO THE ASSESSMENT**

**Monetary authority response**

63. The authorities broadly agreed with this assessment.

**Recommended actions**

64. The following actions are proposed to address the weaknesses identified above.

65. **Recommendation 1 (BOM's capital)**—Strengthen preservation of the BOM's capital by (i) introducing symmetric treatment of profits and losses of the BOM vis-à-vis the Government or establishing a general reserve fund, and (ii) registering all subsidies involved in the operations of the “fideicomisos” in the federal budget and not have them charged to the BOM's income statement.<sup>33</sup> More explicit rules could be established regarding a general reserve fund. Many central bank laws determine the fixed proportion of net profits that can be transferred to reserve. For instance, the Law of the Central Bank of Canada allows for different percentages of profits to be transferred annually to reserves depending on the level of the central bank's paid in capital. The BOM may wish to consider establishing a general reserve fund, which can serve to smoothen inter-temporal operating surpluses/shortfalls. The current legislation does not specify the funding mechanism should the BOM incur in losses.

66. **Recommendation 2 (Public Disclosure)**—Make available to the general public the BOM's (i) more detailed externally audited financial statements with detailed information on income and expenses, and the accounting policies; and (ii) summary internal audit reports.

67. **Recommendation 3 (Clarity of Responsibilities)**—The BOM law does not grant it explicit powers to oversee the payment systems. As a result, although the BOM has to ensure the smooth functioning of the payment systems and it may issue regulation in this respect, its oversight powers regarding the payment systems are weak. The BOM should finalize and present to Congress the new law that it is preparing which, among other aspects, is expected to give ample powers to the BOM to adequately oversee the payment systems.

---

<sup>33</sup>The relations of the BOM with the “fideicomisos” are temporary as transitory Article 10 of the BOM's Law states that credits it granted, prior to this law going into effect, to the public economic development trusts administered by the BOM may continue under their terms until maturity, and may be renewed in one or more instances for a total duration of no longer than 20 years.



68. **Recommendation 4 (Clarity of Responsibilities)**—Modify the corresponding law to promote (and disclose) greater protection of BOM officials in the discharge of their duties.

69. **Recommendation 5 (Disclosure and Accountability)**—The SHCP should consider the introduction of a permanent framework and procedures to systematically identify, measure and consolidate all contingent liabilities of the Government through the operations of the “fideicomisos” which are administered by the BOM. Given that the BOM is subject to the “fiduciary secret,” information on the “fideicomisos,” including on the terms of its credits to “fideicomisos” should be disclosed by the Government.

70. **Recommendation 6 (Inflation Targeting Operational Framework)**—The authorities should remain open to review, as conditions permit, whether alternative instruments to the “corto” may more effectively and efficiently convey the intended policy signal while smoothing out short term volatility. The timing and modalities of this switch need to be carefully assessed as a function of the BOM’s further gains in credibility, market perceptions of how policy works, and prevailing conditions in the local and international markets.<sup>34</sup>

71. **Recommendation 7 (Open process for formulating and reporting monetary policy decisions)**—The BOM should also consider disclosing the minutes of the BOM Governing Board’s meetings. For proposed substantive technical changes to the structure of monetary regulations, there is room for improvement regarding public consultations, within an appropriate period.

## **D. Transparency of Financial Policies**

### **Institutional and market structure—Overview**

72. ***The institutional arrangement governing the regulation and supervision of the financial sector is centered on the SHCP, which oversees the various commissions across the different sub-sectors of the financial system.*** The commissions have their own internal governance structure with a Governing Board including the Secretary of Finance and, in many cases, the Governor of the BOM. The commissions are headed by a President—appointed by the Secretary of Finance—who is responsible for the operations of the commission and who regularly reports to the Board on average about six times a year. The commissions are wholly dependent on the federal budget for their financing and revert all revenues to the federal budget. The commissions are not perceived as being operationally autonomous and in most cases, even the granting and revoking of licenses for the operation of financial institutions are the responsibility of the SHCP.

---

<sup>34</sup>A BOM move to directly target the short-term interest rate would be accompanied by some increase in exchange rate volatility which, under a low pass-through of the exchange rate to prices, need not result in a commensurate increase in domestic price level volatility.

73. ***The supervisory framework of the financial system, in addition to the SHCP includes:*** (i) the CNBV, responsible for supervising the banking system and the securities markets; (ii) the BOM, responsible for monetary policy and stability of the financial system including supervision of the payment systems;<sup>35</sup> (iii) the CNSF, responsible for supervising insurance companies and sureties; (iv) CONSAR, responsible for supervising the pension system; (v) the IPAB, responsible for deposit insurance, banking resolution and asset management of intervened banks; (vi) FIDELIQ, responsible for resolution and asset management of public financial institutions (including development banks and public trusts) and other former private institutions which the state has repossessed, and (vii) CONDUSEF, responsible for the protection of financial services users.

74. ***The commissions are generally transparent in their operations and conduct, however their accountability is generally narrowly defined with the President reporting to the Governing Board and to the SHCP.*** The commissions have a controller's department headed by a controller appointed by the Secretariat of Control and Administrative Development (SECODAM) who is responsible for internal audit and who reports to the commissions' Governing Board and to his Secretary. In addition to the SECODAM, the Congress also has a Controller's Office, which can audit the work of the commissions.

75. ***A major issue that undermines the effectiveness of the commissions in supervising the financial system is that all the coordination of supervision activities across commissions falls under the SHCP.*** In particular, coordination takes place through exchanges at the Governing Board level where in many instances only the SHCP representative is informed of developments across the financial sector. This undermines surveillance of the financial system and in particular of systemic risk. Also, until a few years ago, aside from this formal process, there were no other means of information sharing at the operational level. The lack of effective and operational information sharing arrangements further imposed a high regulatory burden on market participants given the implications on costly financial reporting by financial market participants across financial agencies. An information sharing committee was recently created to reduce the high regulatory burden.

76. ***Other deficiency that besets the commissions is the lack of systematic enforcement capabilities.*** Examples include: (i) the BOM's lack of effective oversight with regard to the payment systems; (ii) the CNBV's inability to actively oversee the activities of so-called self-regulatory organizations (SROs); (iii) the CNSF's lack of powers with regard to issuing and revoking licenses; (iv) the CNBV's reluctance to publish the names of those institutions/individuals having committed major legal/regulatory infractions; and (v) the CNBV/IPAB's scope for discretionary and non-systematic enforcement of bank resolution

---

<sup>35</sup>See the assessment of observance of the Code of Good Practices on Transparency in Monetary and Financial Policies—Monetary Policy.

actions. As will be discussed below, these examples are generally traced to different causes including legal ambiguities and lack of effective protection of officials in discharging their responsibilities and tends to foster moral hazard in the financial sector.

### **Main findings—Summary**

77. ***The assessment of observance of the Code of Good Practices on Transparency in Monetary and Financial Policies suggests that the level of compliance across financial agencies and principles varies significantly.*** The BOM and the IPAB have the highest levels of compliance followed by CONSAR, the CNSF, the CNBV, CONDUSEF and lastly FIDELIQ. Principles relating to clarity of roles and open reporting process are much better complied with than principles relating to public availability of information and accountability and assurances of integrity. Across the financial agencies, FIDELIQ is most in need of strengthening transparency practices, a problem that is recognized by the Government and market participants. In general, the subsidies and contingent liabilities involved in the operation of development banks and “fideicomisos” are not fully transparent. In particular, the operations of the “fideicomisos” affect the operational results of the BOM. The financial statements of these “fideicomisos” are not published.

78. ***The roles and institutional mandates of supervisory agencies are generally well defined but problems remain regarding coordination across regulatory/supervisory bodies.*** Although there are regular exchange of views through partially interlocking membership across governing boards, problems remain in the day-to-day operational practices. The lack of effective and operational coordination places a burden on financial institutions as it multiplies the reporting requirements and increases the regulatory costs. As a result, institutionalized agreements or procedures regarding cooperation and information sharing appears to be the exception rather than the rule in Mexico. Areas which need closer cooperation include banking and securities markets, despite being part of the same commission, and banking and insurance given the growth potential of the latter through the development of *bancassurance* and other inter-linkages through financial groups.

79. ***Accountability and disclosure are generally good, but there is room for improvement***. An area of critical importance that needs to be opened to greater public scrutiny and accordingly improved market discipline is reporting on banking supervision activities. The CNBV does not (i) report the broad modalities of banking supervision activities; (ii) disclose its examination procedures; or (iii) disclose names of individuals who have committed serious infractions. On this last point, weak enforcement capability by the CNBV is arguably the one area that needs to be most urgently addressed. It is understood that a possible reason underlying weak enforcement by the CNBV is the lack of protection of officials acting in good faith in the discharge of their official duties. This problem is also evidenced throughout other commissions.

80. ***Financial reporting is another area where accountability to the public can be improved.*** The Law on Public Debt makes no reference to (implicit or explicit) guarantees.<sup>36</sup> This lack of disclosure of associate contingent liabilities of the Government is most significant in the financial system and in particular regarding the operations of the “fideicomisos.” These contingent liabilities need to be adequately identified and measured. Weak accountability is also evidenced in the financial agencies. With the exception of IPAB and the BOM, no agency publicly discloses its end-of-year audited financial statements with information on (i) profit and loss accounts; (ii) detailed accounting policies; or (iii) observations by the external auditor. In the case of the BOM, there is room for improvement regarding the disclosure of its financial statements as no details are provided regarding income and expenses, and the explanatory notes could be expanded to provide greater information on accounting practices.

81. ***The lack of disclosure on the funding of the “fideicomisos” masks a much greater problem which is that “fideicomisos” do not disclose any information.*** The clearest example is FIDELIQ, which is not accountable and lacks appropriate financial reporting.

82. ***The legal and regulatory frameworks need improvement to avoid undermining effectiveness in the discharge of institutional responsibilities.*** First, the BOM Law states (Articles 2 and 3) that the BOM is in charge of the promotion and smooth functioning of the payment systems, and their regulation. Legal opinions, however, consider that these articles do not explicitly provide the BOM with the power to oversee the payment systems it does not operate. INDEVAL, the operator of the SIDV, does not recognize the legal authority of the BOM to oversee its system. The BOM has access to information related to the operations of the SIDV as a result of a bilateral agreement signed by INDEVAL and the BOM. The agreement also gives the BOM the right to approve or reject any change in the internal rules of the SIDV system, and thus the BOM can indirectly review the design of the system. In this way, the BOM has on-line information about the daily functioning of the SIDV and it also has some powers to influence the internal rules of this system, but these oversight tools are not supported by specific formal powers. It is doubtful then that the BOM could carry formal oversight of new private systems that could be established in Mexico.

83. ***Second, there is a lack of clarity and excessive discretion regarding bank intervention and resolution.*** This presents a problem of an unclear delegation of responsibilities between the IPAB and the CNBV. The law identifies grounds for bank intervention by the IPAB on the basis of precautionary administration but also gives powers to the CNBV to appoint a bank liquidator. The recently passed financial sector reforms approved by Congress in April 2001 contemplate the adoption of a prompt corrective action

---

<sup>36</sup>Since 1998, information on these guarantees is included in the SHCP’s Quarterly Reports on Public Finance and Public Debt.

program for banks which, once properly developed by secondary regulation, will clearly define grounds for corrective actions based on clearly identifiable criteria thereby removing scope for discretion.

84. ***Third, FIDELIQ has no framework for efficient asset sales having to operate on the basis of a myriad of laws (36 in total) which imposes a significant constraint to an orderly and expeditious disposal of assets.*** Some of the more serious constraints include the requirement in the Law of State Assets which prevents FIDELIQ from taking any discounts in its asset management operations and the ability to out-source debt collection.

85. ***Fourth, the concept of self-regulatory organizations (SROs) is not recognized in the law.*** Despite the CNBV's oversight capabilities of such organizations as the Mexican Stock Exchange (Bolsa Mexicana de Valores—BMV) and MEXDER (the derivatives market), there are potential conflicts of interests between ownership and market development at these two institutions.

86. ***Finally, procedures for appointing/removing of Board members of commissions are inconsistent with desirable autonomy (except in the case of the BOM).*** The most significant deficiencies in this regard include (i) no reference to duration of the president's mandate; (ii) unclear procedures for appointments of governing board presidents and members; and (iii) no criteria established for dismissal of the president or board members.

87. ***The medium-term challenge for the financial agencies is to further improve compliance with the transparency and accountability principles,*** including regarding (i) sharing of information across commissions; (ii) introducing systematic adoption of public consultation when proposing substantial technical changes to the legal/regulatory framework; (iii) disclosing externally audited and detailed financial statements to the public at large; and (iv) establishing clear criteria formalizing the designation, duration and the removal of commission presidents and board members.

88. ***Table 8 presents a summary of the full findings on the assessment of Observance of the financial policy section of the Code of Good Practices on Transparency in Monetary and Financial Policies.***

Table 8. Summary of Main Findings of the Assessment of Observance of the Code of Good Practices on Transparency in Monetary and Financial Policies—Financial Policies

**Bank of Mexico**

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	The BOM should enforce its legal mandate with respect to regulatory and supervisory powers over the payment systems.
VI. Open process for formulating and reporting of financial policies	The BOM could strengthen reporting of performance, developments and changes to the payment systems, possibly in the Annual Report and eventually on a more frequent basis.

**CNBV**

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	The relationship between the CNBV and other financial agencies needs to be strengthened at the operational level (and disclosed) in order to enhance supervision of the financial system in a more effective and efficient manner. There is a need to strengthen corporate governance in the CNBV as regards requisites for duration of the term in office and criteria for removal of the President and other members of the Governing Board. The CNBV may wish to propose to define the concept of self-regulatory organizations (SROs) in the law since there are potential conflicts of interest between market development on the part of the regulator/supervisor and the profit-seeking motive on the part of the shareholders of the BMV and MEXDER.
VI. Open process for formulating and reporting of financial policies	While the CNBV has in place a transparent supervisory framework, there is a need to reassess the bank resolution framework in order to reduce ambiguities with respect to treatment and institutional responsibilities regarding problem banks. The current framework is subject to excessive discretion and is biased toward open bank resolution which exacerbates moral hazard in the banking sector.
VII. Public availability of information on financial policies	The CNBV does not report on its overall performance with regard to banking supervision activities, and does not disclose its examination procedures or publishes names of individuals/institutions that have committed serious legal/regulatory infractions. The absence of public disclosure in effect nullifies the deterrence factor, undermining market discipline. Greater public disclosure is required in consolidated supervision of financial groups, margin lending activities and performance and developments in the securities

Subject	Main Findings
VIII. Accountability and assurance of integrity by financial supervisory agencies	markets. There are three areas where accountability needs further strengthening. First, disclosure to the public of externally audited financial statements together with income statements, qualifications by the auditors and information on accounting policies. Second, the CNBV needs to provide and disclose the necessary legal protection to its staff acting in good faith in the discharge of their official duties (and beyond their assignment) at the CNBV. Third, internal governance procedures including internal audit arrangements together with summary briefings on operating expenses and revenues should be disclosed to the public.

## CNSF

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	Clarity of roles and institutional mandate of the CNSF is generally well defined. The SHCP continues to oversee the CNSF responsibilities and in fact the SHCP is responsible for licensing new insurance/sureties companies. Governance issues at the CNSF including duration, term in office and criteria for removal of the President of the Governing Board and Board members should be defined in the law/regulations and disclosed to the public. Coordination across financial agencies will have to assume a greater role with the growth potential of the insurance industry and development prospects through bancassurance. At present, coordination is done exclusively through the Governing Board with the SHCP which has the widest membership across financial agency boards.
VI. Open process for formulating and reporting of financial policies	The CNSF regulatory framework is transparent and accordingly compliance is strong. Areas that could be strengthened include providing operational mechanisms of information sharing across financial agencies (and not limited to the SHCP), formalizing/standardizing the use of public consultation procedures for proposed substantive technical changes, and providing a more extended circulation of public reports.
VII. Public availability of information on financial policies	The CNSF, like other financial agencies, has well defined reporting requirements to the SHCP and to a lesser extent to the public. The CNSF is in the process of improving its publications program. Areas that need improvement include (i) the CNSF quarterly reports should include a section on developments and analysis to support the data/statistical information and (ii) the CNSF should publish annual and externally audited balance sheets including in a more widely circulated

Subject	Main Findings
VIII. Accountability and assurance of integrity by financial supervisory agencies	<p>Annual Report.</p> <p>While accountability to the SHCP is clearly established in the law, public accountability needs further improvement. As is common throughout the financial agencies in Mexico, improvements in this area include making financial statements and summary internal audit reports widely available to the public. In addition, standards and code of conducts for directors and staff at the CNSF and legal protection should be tailor-made (and disclosed) in recognition of the importance of carrying out adequate enforcement activities.</p>

## CONDUSEF

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	<p>CONDUSEF has been operating less than a year as an industry "watch-dog" inheriting the previously decentralized functions under a common "roof." A new law was approved that clearly defines the role and responsibilities of the agency. Regulations need to be established to support fluid reporting channels at the operational level between the financial agencies and CONDUSEF. Governance of CONDUSEF would be enhanced by defining in the law/regulations and disclosing to the public duration, term in office and criteria for removal of the President of the Governing Board and Board members.</p>
VI. Open process for formulating and reporting of financial policies	<p>While many aspects of financial reporting do not apply, there is a presumption in favor of openness as evidenced in the drafting of the law as well as public reporting of fees/sanctions and other matters. Following the first year of operations, CONDUSEF will need to provide an assessment through the publication of an Annual Report detailing industry developments and institutional performance.</p>
VII. Public availability of information on financial policies	<p>As part of its public advocacy role, the success of CONDUSEF will critically depend on effectiveness in disseminating information and sensitizing financial services users of their rights and responsibilities. Accordingly, in addition to the distribution of pamphlets, a systematic approach to disseminating information should be established which cannot disregard the need for disclosing individuals/institutions that have been found guilty of committing serious infractions to serve as an effective disciplining and deterrent factor.</p>
VIII. Accountability and assurance of integrity by financial supervisory agencies	<p>As with other financial agencies, although compliance with principles of accountability are observed vis-à-vis the Boards and SECODAM, the onus of accountability should be toward the public at large. Actions needed to improve public accountability</p>



Subject	Main Findings
	include publishing financial statements, internal audit reports, internal regulations governing behavior of staff, and formulating and disclosing legal protection accorded to staff.

## CONSAR

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	The fundamental objectives and responsibilities of CONSAR are clearly established in the law. While the law clearly refers to cooperation modalities between CONSAR and the CNBV and the CNSF, these need to be operationally defined to ensure effective and comprehensive supervision.
VI. Open process for formulating and reporting of financial policies	There is a well-structured process for formulating and reporting financial policies taking into account the comprehensive structure supporting the pension system. CONSAR should provide more frequent comparative reporting on internal rates of return of SIEFORES so that contributors can better assess performance of their funds and assert their rights based on improved access to information. Increased transparency in the existing operational framework of the pension system is key to enhancing competition and the notion of "voting with one's feet." Greater presumption in favor of public consultations would provide CONSAR with valuable information to foster a more efficient pension system.
VII. Public availability of information on financial policies	CONSAR should strive toward a more systematic approach to disseminating information including providing more information on CONSAR balance sheets, the institution's performance benchmarks and increasing the periodicity (from semi-annual to quarterly) and timeliness of its bulletins.
VIII. Accountability and assurance of integrity by financial supervisory agencies	As with other financial agencies, although compliance with principles of accountability is observed vis-à-vis the public authority and SECODAM, the onus of accountability should also be toward the public at large. Actions needed to improve public accountability include publishing: financial statements, internal audit reports, internal regulations governing behavior of staff, and formulating and disclosing legal protection accorded to senior management and staff.

## FIDELIQ

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	FIDELIQ should increase transparency across the board. There are over 30 laws under which FIDELIQ is governed by, hindering the institutional mandate and in particular the operations of FIDELIQ. Accordingly, consideration should be given to vesting FIDELIQ with its own law and establishing a clear and simple operational framework that ensures prompt and effective action.
VI. Open process for formulating and reporting of financial policies	There is no evidence of public consultation with respect to formulation of policies. The lack of transparency in this regard results in an institution that inspires little confidence among market participants and the public at large. A major initiative that deserves consideration is for FIDELIQ to publish and post on its web site all guarantees and contingent liabilities assumed directly or indirectly by FIDELIQ.
VII. Public availability of information on financial policies	FIDELIQ is aware of the deficiencies with regard to transparency and has started to strengthen information disclosed to the public. This initiative will have to be further strengthened if FIDELIQ is to reach the standards of other financial agencies in Mexico. FIDELIQ should begin by presenting semi-annual reports informing the public about its performance, perhaps using as a reference the IPAB's Annual Report.
VIII. Accountability and assurance of integrity by financial supervisory agencies	FIDELIQ, together with the CNBV and the IPAB, are most in need of appropriate legal protection in the discharge of their duties especially with regard to the disposal of state assets. Reporting of summary internal audits would also serve to strengthen accountability to the public.

## IPAB

Subject	Main Findings
V. Clarity of roles, responsibilities and objectives of financial supervisory agencies	The IPAB was created based on sound principles of transparency, and has its own law, which clearly defines the institution's role and responsibilities. The powers of the Governing Board are clearly defined in the law, as well as the information sharing arrangements across financial agencies. Improved coordination especially between the IPAB and the CNBV would be welcomed, including possible invitation of the IPAB Executive Secretary to the CNBV's Governing Board meetings when issues of common interest are to be discussed.
VI. Open process for formulating and reporting of financial policies	One area where the regulatory framework could be strengthened is in the area of bank resolution. The

Subject	Main Findings
	powers of the IPAB and the CNBV with regard to the determination and appointment of a bank administrator need to be clarified. In addition, the regulatory framework for bank resolution/liquidation needs to be strengthened by establishing clear rules that remove any scope for discretionary treatment by the regulator. While the CNBV is preparing regulations to develop a prompt corrective action program for problem banks, there is a need to go beyond this exercise and consider establishing a clear legal framework for bank bankruptcy.
VII. Public availability of information on financial policies	There is generally effective compliance on public availability of information by the IPAB. As part of the financing of the clean up operation of the 1994-95 crisis, the current deposit insurance fund is partly being allocated to settle outstanding FOBAPROA and FAMEVAL claims. Increased public consultation by the IPAB on this issue may have led to greater consensus on modalities of retroactive financing.
VIII. Accountability and assurance of integrity by financial supervisory agencies	As with other financial agencies, although compliance with principles of accountability is observed vis-à-vis the Governing Board and SECODAM, the onus of accountability should be toward the public at large. Actions needed to improve public accountability include publishing summary internal audit reports, internal regulations governing behavior of staff, and formulating and disclosing legal protection accorded to staff.

## II. OBSERVANCE OF CPSS CORE PRINCIPLES FOR SYSTEMATICALLY IMPORTANT PAYMENT SYSTEMS

### General

89. *The assessment has been based on the CPSS Core Principles for Systemically Important Payment Systems (Parts I and II), as well as on the draft FSAP guidance note for compliance with the core principles and a self-assessment prepared by the BOM's Payment System Department.* Many other internal documents (laws, regulations, operator's manuals) have also been used.

### Overview of the payment systems

90. *In the Mexican payment systems, the BOM plays a key role.* According to the BOM Law, the BOM is in charge of promoting the smooth functioning of the financial system in general, and of the payment systems in particular. It has also the right to issue regulation regarding the payment systems. However, it is not clear in the law whether the BOM has the

right to carry oversight activities over all the existing payment systems in Mexico. As a result, its oversight function over the payment system that it does not operate (the SIDV) is only performed in an indirect manner.

91. ***The BOM owns and operates two large-value payment systems: the SIAC and the SPEUA.*** The SIAC settles a limited number of payments, but it provides for final settlement in BOM accounts for the other systems. Many institutions hold accounts with the BOM, but only banks make intensive use of the SIAC and have access to the credit lines that characterize the system. Notably, the SIAC does not permit the processing of customer payments. The SPEUA settles also large-value payments, including customer payments, being the second settlement system in terms of value settled. The net balances of the SPEUA are transferred to the SIAC at the end of day, and participation is restricted to banks. The SIDV, a system owned and operated by INDEVAL, the central security depository, is the main payment system in terms of value settled. This system settles, mainly, the transfers of liquidity associated to securities transactions. An important feature of the Mexican payment systems is that the three main systems (the SIAC, the SPEUA and the SIDV) are interconnected, as transfers between the systems are allowed, within certain limits. CECOBAN is a retail payment system owned by the banking community whose function is the settlement of retail payments. It mainly carries out the settlement of checks, but it also offers customer credit transfers. The system is in the midst of a centralization process that is gradually reducing the number of clearing houses.

92. ***All the payment systems mentioned above are based on the use of computer technology, and there remain very few manual procedures, mainly in CECOBAN, the retail payment system.*** The three large-value systems operate on a real time basis, and the settlement cycle of the retail payment system is very short because of the extent of mechanization.

93. ***Until 1995, a large amount of interbank payments were settled through the clearing houses, and the BOM, by guaranteeing the settlement of the systems, was assuming a great amount of risk.*** A reform was then initiated in order to improve the systems, introducing the use of new technologies and aimed also at reducing the risks assumed by the BOM. Through the reform a new system was created, the SPEUA, and the clearing houses were changed so that the large-value payment activity would move away from them. To a large degree, the reform was successful, but there is still room for improvement, mainly regarding the risks borne by the BOM. The BOM is well aware of the deficiencies and, currently, additional reforms are being prepared which would change the functioning rules of the systems and reduce the risks borne by the BOM. These changes will also enhance the legal framework and, if successful, would improve observance of the core principles. The deficiencies and the changes that are being prepared are discussed in more detail below.

### **The environment for an effective payment system**

94. *Overall, the Mexican legal and regulatory environment permits the development of the payment systems, especially regarding the introduction of new technologies.* There is no specific law aimed at regulating the payment systems, although such a law is in preparation. Currently, the payments systems are governed by the Commerce Code (1889), the Credit Institution's Law (1990), the General Law on Operation and Credit Instruments, the BOM Law, and the recently approved Bankruptcy Law (Ley de Concursos Mercantiles). This latter law simplifies the bankruptcy proceedings, but has not been tested as yet in the case of bankruptcy of a credit institution.

95. *The use of modern technologies is widespread in the field of payment systems, both in the large-value systems, where all procedures are automated, and in the retail payment systems, where only a residual number of operations are manual.* Although cash is still an important means of payment, there is a widespread use of the check, credit and debit cards, and also credit transfers for low-value payments. Other improvements in the field of payment systems that are being discussed and could be implemented in the short term are check truncation and direct debits.

96. *All institutions involved in the development of payment systems cooperate in the running and development of the services offered.* In the large-value payment systems, the BOM has informal contacts with the banking community in order to disclose its policies and also to receive inputs from the participants. In the retail sector, standardization efforts that have been applied to low-value payments have permitted electronic check clearing.

### **Summary of main findings**

97. *In the recent past, the Mexican payment systems were characterized by the unlimited and uncollateralized provision of credit by the BOM.* A great number of interbank transactions were processed through the check clearing houses, that were settled the day after the checks were presented, but with back valuation of settlement. Another source of risk were the securities transactions, in which the funds transfer and the securities transfer were dealt with separately in different systems.

98. *The identification of these risks stimulated a deep reform of the payment systems that has taken place in the last years, and that is envisaged to continue in the near future.* The main aim of the reform has been the reduction of the risks assumed by the BOM and the overall reduction of risks through the implementation of more efficient systems. The reform has adopted a gradual approach, so that the payment systems could run smoothly at the same time that the credit institutions start to assume some of the costs and risks derived from the participation in the systems.

99. *Even though the reform has reduced the risk exposure of the BOM, this exposure has not yet been eliminated; the lines of credit provided to the banks in the different payment systems are still large; and the allocation and management of risks is still the*

*main weakness of the systems.* Also, the legal framework has to be improved in order to assure a higher degree of certainty regarding, mainly, payment finality. The reform that is currently being prepared is aimed at addressing outstanding legal issues and further reducing risks for the participants. Moreover, the introduction of new technologies has permitted the operation on a real-time basis of the different payment systems, offering on line information to participants and allowing for swift and low-cost services.

100. *The main systems, in terms of systemic importance, are the SIAC, the SIDV, and the SPEUA.* The SIAC is not the main system in terms of volume or value of transactions, but it is the system in which all the others finally settle and where the institutions have the main settlement account in the BOM. It represents only 9 percent of the value of the payments settled by the three systemically important payment systems.

101. *The SIDV is the settlement system operated by the central custodian of securities, INDEVAL.* It is clearly of systemic importance because it is the largest payment system, accounting for 67 percent of the value settle in the systemically important payment systems.

102. *The SPEUA is a large-value system both for interbank and customer transactions, that has also been considered of systemic importance due to the high value of the payments settled.* The SPEUA represents 24 percent of the total value settled by the large-value payment systems. The main small value payment system, CECOBAN, has not been considered as being of systemic importance. There are also other private payment systems arrangements of even less systemic importance that have not been considered either.

## **Assessment of Core Principles**

### **Core Principle I: The system should have a well-founded legal basis under all relevant jurisdictions**

103. *In Mexico, the legal framework governing the payment systems is comprehensive, but further improvements are needed in certain areas.* The most important of those improvements should aim at eliminating the possibility of reversal by a judicial authority of payments already settled in systemically important payment systems, in case of a bankruptcy. This sort of reversals could only affect payments done by a bankrupt institution committing fraud on its creditors, when the reversals could be effected with payments settled up to 270 days before the sentence declaring the bankruptcy. An additional element that introduces some uncertainty in this connection is the fact that the bankruptcy law is very recent and has not yet been tested. Moreover, the legal figure used in Mexico in order to pledge collateral to the BOM to obtain credit lines in order to effect payments, called “caución bursátil,” implies a slow process in case of collateral execution. There has not yet been a case of collateral execution in the context of a bankruptcy. Finally, it can be mentioned that the BOM Law does not grant it explicit powers to oversee the payment systems. As a result, although the BOM has to ensure the smooth functioning of the payment systems and it may issue regulation in this respect, its oversight powers regarding the payment systems are weak.

104. *All of the issues described above will be addressed by a new law that the Mexican authorities are preparing and that is expected to be presented to Congress for approval within the next few months.* This new law, called the Finality Law, will ensure that the payments settled in systemically important payment systems cannot be unwound by the judicial authority. It will also improve the certainty and speed up the process of collateral execution for the most important payment systems. Finally, it will also give ample powers to the BOM to adequately oversee the payment systems. The BOM is also preparing additional reforms which will imply the legal recognition of new instruments and processes (direct debit, electronic transfers regulation, electronic signature, or check truncation) that will improve the security and efficiency of the payment systems as a whole.

**Core Principles II and III: Clear understanding of the system's risk and procedures for the management of credit and liquidity risks**

105. *The existing rules governing the payment systems define the roles of all the parties involved, and they set a limit to the credit lines granted by the BOM in the SIAC and the SIDV.* Overdrafts in the SIDV and the SIAC are guaranteed by collateral, but there are exceptions to this rule. Usually, the credit lines that the banks use in the SIAC and the SIDV systems are guaranteed by collateral, but there are certain payments that are excepted. In the SIDV, it may not be necessary to have collateral in order to effect payments for the purchase of government debt as part of monetary policy operations. Also, in primary market auctions as well as in the exercise of the right to buy securities in the case of market makers, the limits on credit lines can be breached, although they are collateralized.

106. *The BOM guarantees the settlement of the SPEUA.* The BOM guarantees the settlement of this system, even if the transfer of the final SPEUA accounts to SIAC causes an uncollateralized overdraft for one or more banks in the latter system. The BOM mitigates the risk resulting from this explicit guarantee by a loss sharing agreement that would be applied if a credit institution fails in the settlement three days in a row. It seems, however, that the participants do not have sufficient incentives to contain the risk involved given the long time that elapses between the time of default and the time the loss sharing agreement would be triggered and also due to the BOM settlement guarantee. Moreover, the BOM faces a risk of incurring losses in case of a multiple default.

107. *As noted above (see Principe I), the legal framework establishes a possibility of reversal of those payments done in fraud of creditors of a bankrupt institution and provides a method of collateral execution which has not been tested and could make difficult the contention, management and measurement of risks in the payment systems.* Moreover, most of the collateral used by the banks to cover their authorized overdrafts is in the form of illiquid securities with long maturities. In case of default by a participant and the execution of the collateral pledged, the BOM would bear liquidity risk. The banks hold plenty of securities to use as collateral which are non-negotiable, and the opportunity cost of using them as collateral is thus very low. It is clear that the possibility of using this kind of collateral does not give incentives to the participants for risk contention.

108. *The risk management and the understanding by the participants of the risks involved in the operations of the payment systems are not adequate.* In this connection, the BOM plans to implement reforms aimed at reducing risks it currently borne and improving the risk awareness by the participants, so that the risks involved in the systemically important payment systems are correctly understood and properly managed.

**Core Principles IV to VI: Prompt final settlement; inability to settle by the participant with the largest single obligation and settlement asset**

109. *As the three systems being assessed settle payments on a gross, real-time basis, final settlement is promptly effected.* There is also a clear definition of payment acceptance and finality in the rules of each system. However, there are still uncertainties remaining that arise from the legal system, in case of insolvency or bankruptcy of a participant (see Principle I). As noted, reforms are under way to address this problem. Also, there are plans to modify the rules of the SPEUA, in order to make it a net system with deferred settlement. In case these modifications are implemented the system would comply with Core Principle IV, because it would settle payments on the day of value, before the SIAC closing.

110. *Principle V, which deals with the inability to settle by the participant with the largest single obligation, is clearly non-applicable, since the payment systems being assessed are all RTGS systems.* The modifications being contemplated for the SPEUA system would make it compliant with Core Principle V, because a pool of collateral large enough to withstand the default of the participant with the largest obligation will be constituted among the participants in the system. In this pool of collateral, the amount contributed by the participants that gave credit lines to the defaulting participant will be enough to cover the default, in a manner that ensures that the scheme does not breach Core Principle III.

111. *Regarding the settlement asset, it is in all cases a claim on the BOM.* The SPEUA and the SIDV settle on “virtual” accounts, but the balances are transferred at the end of day to the current accounts that the participants have with the BOM (the SIAC accounts). However, for participants in the SIDV other than banks, the end-of-day balance in this system has to be transferred, within the system, to the account of a bank that transfers the funds to the SIAC. Thus, for nonbanks that participate in the SIDV, the end-of-day balance in the system is a claim on other participant. These participants can choose the bank where they leave their funds, so this arrangement does not seem to pose a problem. Also, the amounts involved are not large and the banks are supervised institutions.

**Core Principle VII: Operational security, reliability, efficiency**

112. *All of the systems assessed guarantee a good level of security and operational reliability.* The systems have back up sites in a different location and redundant connections between computers. The back up computers are continuously updated throughout the day, so that the loss of information in case of a failure of the main computer would be minimal. The operational reliability is high and there are contingency arrangements in all systems. The



users also have the possibility to use alternative communication means to effect payments in case the communication lines with the system fall down. All changes in the systems are properly tested, first internally and then with the participants, before being implemented in the production environment. Whenever it is possible, the replaced software is kept ready for a short period of time after the changes are done, so that it would still be possible to resort to the old software in case the new programs fail. The security of access to the systems still relies, mainly, on the use of login passwords, but the BOM is trying to improve the security by broadening the use of electronic encryption that will be implemented in all messages, and electronic signature as needed.

### **Core Principle VIII: Efficiency, practicability**

113. *When reforming the payment systems, the BOM has tried to identify user needs through meetings with the banking community.* These contacts, however, have not been held on a regular basis.

114. *The large-value payment systems run by the BOM have a cost recovery policy, and the cost of processing payments is very limited for the participants.* The systems work on a real-time basis, and the processing time is usually a few seconds. The percentage of rejections is low and the liquidity costs for the participants is very small due to the large credit lines the BOM authorizes (although this creates problems for compliance with other principles).

115. *There are, however, areas that could be further improved.* The BOM is working on a new technological platform that would improve the performance of the system it runs, increasing the processing capacity. This new platform would make it easier for the participants to connect directly to the BOM network instead of working through an application that emulates a terminal having to buy software that runs only on some platforms. The new platform would also help to eliminate some restrictions that limit the usefulness of the systems, such as the limits on the minimum amounts of payments processed through the SPEUA.

116. *The SIDV, run by INDEVAL, permits the connection of the participants through a dedicated terminal or else host to host with limitations similar to the ones found in the other systems.* It processes payments at a moderate cost, although higher than in the other systems. The liquidity cost for the participants is low, for the same reasons that apply to the systems run by the BOM.

### **Core Principle IX: Fair and open access**

117. *Participation in the systems is determined by objective rules.* The SPEUA is open only for banks, and any bank legally recognized in Mexico can participate in the system. Many institutions have accounts with the BOM, but the SIAC payment system is only open to banks and brokerage houses, although brokerage houses do not have access to the collateralized credit lines that the BOM grants.

118. *In the SIDV the main participants are banks and brokerage houses, but there is also participation of insurance and bonding companies as well as pension and mutual funds.* Only banks have direct access to the collateralized BOM credit lines, and the brokerage houses have indirect access through the banks.

119. *It is not clear whether these rules grant fair and open access to all institutions.* The main participants, the banks, are given access without restrictions in all systems, whereas the restrictions for other participants can be justified taking into account the risks the BOM bears as a result of the credit lines it grants. If the risks assumed by the BOM diminish as a result of the reform of the payment systems that the BOM intends to implement, the rules of access could be softened so that access could be given to all participants in the same conditions.

#### **Core Principle X: Accountable governance**

120. *The BOM is the owner of the systems it operates, and although the systems' managers and operators respond to its directives, they do so only in general terms.* The decision process has not been formally established.

121. *The BOM tries to consider the opinions of the participants when introducing changes or reforms in the payment systems, but the meetings with the participants are not held regularly, just when there are issues to be discussed.* The information available regarding the systems is scarce, and not published regularly. The BOM, however, is increasingly concerned about these matters, and it is making efforts to improve transparency in relation to accountability, governance and available information.

122. *The SIDV belongs to INDEVAL shareholders, who are the main users of the system.* Thus, the managers are responsible to the main users. The decision process mechanism and the availability of information regarding the system follow the same rules of other private companies.

#### **Central bank responsibilities**

123. *The BOM intends to carry out a complete reform of the payment systems in order to enhance the legal framework, reduce the risks assumed by the BOM, and improve their efficiency.* Although these objectives are clear, the exact way in which they will be achieved has not yet been determined, and the plan has only a tentative schedule for implementation. The information regarding this reform and its objectives has recently been officially announced to the systems' participants, and the BOM and the banks have begun to schedule meetings to ensure good communication.

124. *The systems run by the BOM do not fully comply with the core principles, although it has adopted full observance of the core principles as an objective, and the planned reform is seen to improve significantly the degree of compliance.* Currently, however, Principles I, II, and III are the main areas that require further improvement.

125. *The powers of the BOM regarding regulation and oversight are not legally clear regarding those systems it does not operate, although the BOM indirectly oversees the SIDV system and has to approve its internal rules.* This will change shortly if the planned Finality Law is implemented (see Principle I).

126. *The BOM actively cooperates with other authorities.* It is willing to continue this cooperation in the future, in order to promote payment systems safety and efficiency and compliance with the core principles.

### **Monetary authority response to the assessment**

The monetary authorities broadly agree with the assessment. The BOM has initiated a profound reform of the payments system, where all the relevant weaknesses and potential uncertainties are tackled. This reform will lead to full compliance with the Core Principles for Systemically Important Payment Systems and will include means to eliminate exceptions in the present risk controls.

## **III. OBSERVANCE OF THE BASEL CORE PRINCIPLES FOR EFFECTIVE BANKING SUPERVISION**

### **General**

127. *This section summarizes the assessment of the implementation of the Basel Core Principles as of March 2001, which was conducted as part of the joint World Bank/IMF mission that visited Mexico City in March 2001.* Legal reforms passed by the Congress in April 2001, were also considered. This assessment follows the Basel Committee's methodology, and has been made on a qualitative basis using the assessors' opinion as one of the main inputs.

128. *The assessment is based on an examination of key documents and discussions with senior officials of the CNBV, BOM, IPAB, and the SHCP.* In addition, discussions were held with bankers, the bankers' association, external auditors, and other financial sector participants. Through these interviews and the review of documents, it has been possible to form an opinion on the supervisory tools available to the Mexican authorities, to identify shortcomings, and to recommend changes where necessary. The assessment team enjoyed the full cooperation of its counterparts and received all the necessary information.

### **Institutional setting, market structure, and banking system trends**

129. *Mexico has most of the financial institutions that comprise the financial systems of industrial countries, although with different degrees of development among institutions.* Private financial services are normally provided by large financial conglomerates headed by banks, which dominates the financial system with holdings of almost 90 percent of total assets. Public banks are involved in development related lending. There are also some

600 *cajas populares*, for which official data are not available. Unofficial estimates indicate that the volume of banking deposits in *cajas populares* could be close to 1 percent of the total financial system.

130. ***Primary responsibility for financial sector supervision rests with the SHCP, supported by three autonomous agencies functionally attached to it: the CNBV, the CNSF, and CONSAR.*** These agencies have the responsibility to supervise the different financial institutions and are the only agencies empowered to carry out on-site inspections: the CNBV for banking and securities, the CNSF for the insurance industry, and CONSAR for the pension fund system. The BOM, besides its normal central bank operations, also regulates foreign exchange and derivatives markets. Other two public decentralized agencies involved with the operation of banks are the IPAB, which is in charge of concluding the recovery processes of assets and institutions after the 1994-95 banking crisis and of managing a formal deposit insurance system; and the CONDUSEF, which was set up by grouping all the consumer protection units of existing supervisory agencies (CNBV, CNSF, and CONSAR). The Mexican Stock Exchange has several self-regulatory functions although the market, the exchange and its members are overseen by the CNBV.

131. ***Shrinkage, consolidation, concentration, and internationalization have been major trends affecting the Mexican banking system since the 1994-95 crisis.*** There was a process of private mergers and acquisitions, interventions by the CNBV, and restructuring of banks under the control of the IPAB. Credit to the private sector fell from the equivalent of 43 percent of GDP at end-1994 to 10 percent at end-2000.<sup>37</sup> The consolidation process has not fostered inefficiency and can bring benefits from economies of scale and risk diversification. However, high concentration raises policy issues to the extent that it may intensify the “too big to fail” phenomenon and may not lead to a broadening of access to credit for small- and medium-sized enterprises.

132. ***Indicators of capital adequacy and asset quality have improved in recent years and almost all banks already comply with capitalization rules in accordance with international standards.*** However, bank profitability has been low and would be under downward pressure if interest rates decline further. The ratio of past due loans to total loans—excluding loans exchanged with public debt in the context of the crisis resolution—fell from 17.6 percent at end-1997 to 8.5 percent at end-2000—largely reflecting the conclusion of debtor relief programs. The coverage of past due loans by loan-loss provisions rose from 60 percent to 115 percent over the same period. To estimate the capital available at present to absorb unexpected losses, the FSAP mission made adjustments to the book value of certain assets and liabilities. The adjusted net worth for the eight largest privately owned banks was thus estimated to have risen from 2.7 percent of risk-weighted assets at end-1999 to 8.6 percent at

---

<sup>37</sup>See footnote 7 for some qualifications on the size of this shrinkage.

end-2000, with differences in the level of capitalization across banks. Finally, profitability has been low—with return on assets under 0.7 percent and return on equity under 7 percent during 1997-2000—also subject to substantial variance across banks.

### **General preconditions for effective banking supervision**

133. *Macroeconomic policy management has improved markedly since the crisis of 1994/95.* Yet, bank financial intermediation in Mexico dramatically decreased during this period of economic expansion. The resumption of bank credit could be further delayed by macroeconomic shocks to which Mexico is potentially exposed. They relate to the possible turnaround in the fiscal consolidation and trade/financial links to the United States. If the ambitious revenue-enhancing tax reform does not pass or falls significantly short of expectations, or the slowdown in the United States is worse than expected, there could be an increase in the level and volatility of Mexican risk. To the extent that a weakening of the peso may threaten the inflation target, monetary policy would be tightened and domestic interest rates would go up.

134. *Mexican authorities are intensifying financial sector reform efforts to improve public infrastructures.* However, some deficiencies still need to be addressed. For example, the new secured lending and bankruptcy laws aimed at enhancing creditor rights and the efficiency of loan collections need to be tested. There are some potential vulnerabilities and sources of systemic risks in the domestic payments system resulting mainly from weaknesses in the legal framework and the arrangements for the settlement of payments. Mexican corporate governance practices in the areas of shareholder rights, conflicts of interest, and director responsibilities have significantly improved with the approval by the legislature of amendments to the LMV, LIC, LGF, and LSI. There is also a need to reduce stock market fragmentation by limiting the number of shares classes and increasing free float, including attracting foreign portfolio investors.

135. *Market discipline is currently weak due to the implicit blanket guarantee provided by the government and a long-standing, non-transparent disclosure of banks' financial condition.* Market discipline, however, is expected to benefit from current efforts in public disclosure and transparency and a limited deposit guarantee.

136. *Currently there is a universal deposit guarantee whose gradual elimination will begin in 2003 and end by 2005 to a limited guarantee of about US\$100,000 per depositor per bank.* In this context, the existing bank exit framework is heavily biased in favor of open-bank resolution, which would become increasingly inconsistent with “a least-cost resolution” strategy under limited guarantee. In part, this is because of a lack of well-defined process for the closure, resolution, and liquidation of banks. The existing framework failed to provide specific “trigger points” to act; was not geared specifically to banks; failed to ensure proper coordination between the CNBV, the IPAB, the SHCP, and the BOM; and lacked a mechanism for the actual closure of the bank to be liquidated. A system of prompt corrective action emphasizing rules over discretion did not exist before the legal reform approved by Congress in April 2001.

## Main findings—Summary

137. *In general, Mexico has been successful in upgrading the quality of the banking supervision under the stressful conditions imposed by the banking crisis of 1994-95.* The CNBV has overall capacity and willingness to carry out the supervisory mandate, and is fully committed to bridging the gaps toward achieving full compliance with the Basel Core Principles.

138. *The main findings of the detailed assessment of the implementation of the Basel Core Principles are grouped under seven main categories of Core Principles, in which the main strengths and weaknesses regarding the Mexican banking supervisory system are highlighted.* Table 9 presents a brief summary of the main findings under each category.

- ***Objectives, Autonomy, Powers, and Resources:*** Even though the legal framework clearly establishes that the CNBV is the agency primarily responsible for banking supervision and regulation, there is a fragmentation of powers since the SHCP and the BOM are also entrusted with regulatory responsibilities. Moreover, the current institutional arrangements for dealing with problem banks involve the CNBV and the IPAB with overlapping responsibilities. This fragmentation of powers weakens accountability and enforcement of rules and regulations. In addition, political interference in decision making and budgetary constraints undermine the operational independence of the CNBV. Finally, as the CNBV resorted to forbearance during the 1995-banking crisis, its standing and credibility was eroded to some extent among market participants.
- ***Licensing and Structure:*** The SHCP is responsible for granting and revoking licenses. In accordance with the law, the CNBV is restricted to providing technical input to the SHCP and to assessing the condition of the institution on an ongoing basis as part of the supervisory process. The CNBV is responsible for conducting the fit and proper test for a bank's senior management and board members.
- ***Prudential Regulations and Requirements:*** The power to issue prudential regulations is shared among the SHCP, the CNBV and the BOM. For example, the issuance of regulations on capital and concentration of risks rests with the SHCP; nevertheless, in light of its expertise and ongoing responsibilities, the CNBV plays a pivotal role in drafting prudential regulations. The regulatory framework is being amended to adopt best international practices, which has contributed to strengthening the CNBV's supervision. However, the strict enforcement of prudential norms is still considered insufficient. The definition of capital currently in effect does not fully reflect the actual bank's economic capitalization to cover losses. A timetable is in effect through end-2002 to bring the Mexican definition of regulatory capital closer to international standards.

- ***Methods of Ongoing Supervision:*** The CNBV, as the main authority responsible for banking supervision, has the technical capacity, and has developed new supervisory tools to identify and monitor the risks taken by banks. Indeed, the CNBV has improved its information technology systems, which allows it to conduct effective off-site surveillance and monitoring of the sophisticated activities carried out by banks. However, some actions necessary to achieve consistent use of information, and ensure consistent decision-making and enforcement within the CNBV may need to be considered. The improvement of the supervisory process requires a more risk-focused supervision, especially on-site, by looking into the major risks taken by banks and understanding the reasons for this risk taking through a closer dialogue with the bank's board and management. Lastly, it is of the utmost importance to foster greater contribution from the external auditors coupled with the appropriate accountability, which is addressed in the upcoming legal reform.
- ***Information Requirements:*** The CNBV establishes the accounting criteria banks must observe in reporting financial information, which is consistent with national and international generally accepted accounting principles. In this regard it is worth mentioning that the CNBV had the ability to allow regulatory forbearance, which was the main source of distortion in the Mexican bank's public disclosures. Nevertheless, this ability was restricted by a recent regulation that limits the cases where regulatory forbearance can be granted and forces full disclosure of these measures by banks. The CNBV makes use of on-site examinations to verify bank records and compliance with prudential requirements. Currently, there are no internal guidelines that ensure open communications with the external auditors. The role of external auditors and their relationship with the CNBV are currently under revision with the participation of the association that represents the external auditor profession.
- ***Formal Powers of Supervisors:*** Although the current legal framework seems to provide supervisors with adequate powers, recent approved amendments to the legal framework envisage the adoption of a Prompt Corrective Action system. These amendments will facilitate the handling of distressed banks, allow the CNBV to take remedial action in a timely fashion, and restrict political interference. Irrespective of the legal improvements, the CNBV will have to continue working on restoring its credibility by achieving consistency in actions taken toward banks breaching laws and regulations or undertaking unsafe and unsound banking practices.
- ***Cross-border Banking:*** The CNBV has signed Memoranda of Understandings (MOUs) with Argentina and Spain, and is about to sign an MOU with the U.S. Federal Reserve System, to ensure proper supervision of cross-border activities. The recently approved amendments to the legal framework allow to CNBV to share information on a very broad basis (including information protected by secrecy provisions) with foreign financial supervisory agencies.

## Authorities' response and next steps

139. The authorities broadly agree with the recommendations for enhancing observance of the Basel Core Principles for Effective Banking Supervision. There is a clear understanding that a stronger banking supervisory agency is needed. In fact, this is a subject currently discussed among financial authorities under the SHCP's coordination. One of the authorities' main concerns is how to enact higher autonomy to the regulator while at the same time enhancing a more effective coordination among financial regulators.

140. *Further steps for achieving full compliance should include the following actions:*

- Strengthening the supervisory framework requires that autonomy be granted to the CNBV. This should include budgetary autonomy, the appointment of its president for a minimum term and removal from office during such term only for reasons specified by law, the implementation of a civil service scheme and adequate protection of staff from discretionary dismissals and against lawsuits for actions taken while discharging their duties. Since the SHCP is represented on the boards of all regulatory agencies, it is capable of monitoring the overall financial stability of the country without interfering in the supervisor's mandate. In addition, the CNBV should implement and design an action plan that would improve its corporate governance (including strategies, internal policies, and quality control systems).

Table 9. Summary of Main Findings of the Assessment of Implementation of the Basel Core Principles for Effective Banking Supervision

CPs Main Categories	Main Findings
Objectives, Autonomy, Powers, and Resources (CP 1)	There is an inefficient fragmentation of powers that weakens accountability and the enforcement of rules and regulations. The CNBV's lack of independence weakens its institutional credibility.
Licensing and Structure (CPs 2-5)	There is an improper division of labor between the CNBV and the SHCP for the licensing process.
Prudential Regulations and Requirements (CPs 6-15)	The regulatory framework is being amended to adopt best international practices; however, enforcement is still considered insufficient. A timetable is in effect through end-2002 to bring the Mexican definition of regulatory capital closer to international standards. <sup>38</sup>
Methods of Ongoing Supervision (CPs 16-20)	The CNBV has the ability to supervise the risks taken by banks. However, actions toward ensuring consistent decision making and enforcement within the CNBV are not yet implemented. The supervisory process requires a

<sup>38</sup>The regulatory definition of capital in Mexico is stricter than international standards regarding the requirement to deduct from capital all investments in non-financial companies.



	more risk focused supervision. Greater contribution from and accountability of external auditors is needed.
<b>Information Requirements (CP 21)</b>	The CNBV establishes bank accounting standards consistent with national and international generally accounting principles. The CNBV's ability to allow regulatory forbearance was used in the past and has been effectively restricted by regulatory provisions in order to avoid distortion in banks' public disclosures.
<b>Formal Powers of Supervisors (CP 22)</b>	Current legal framework provides adequate powers and recently contemplates the use of a prompt corrective action system, allowing the CNBV to ensure consistency in actions toward banks undertaking unsafe and unsound practices.
<b>Cross-border Banking (CPs 23-25)</b>	The CNBV has signed MOUs to ensure proper supervision of cross-border activities. Bank secrecy provisions have been lifted, allowing the CNBV to share information with foreign supervisory agencies.

- The responsibilities and objectives of the different agencies involved in banking supervision (the BOM, the CNBV, the IPAB, and the SHCP) should be clarified in order to have a more rational division of labor, and in turn more accountability among each agency. The designated supervisory authority whether one agency or several closely coordinated agencies acting as one agency should be primarily responsible for technical decisions; such as, enacting and enforcing prudential regulations, conducting on- and off-site supervision, and granting and revoking banking licenses. Finally, a better coordination among the different supervisors of the financial system the CNBV, the CNSF, and CONSAR is needed to achieve a more effective supervision of the financial conglomerates.
- The nature and depth of the banking crisis entailed the adoption of certain decisions and supervisory actions by the authorities that were not fully transparent to market participants. This hampered the institutional credibility for the CNBV. Notwithstanding the efforts already undertaken by the CNBV, restoring this credibility is a matter of utmost priority. To achieve this the CNBV must, among other things, better communicate with the Mexican banks boards of directors and senior management and enhance its knowledge of their strategic plans and risks undertaken in the course of business. As the CNBV moves to a more risk focused supervision, the strict enforcement of new regulations is also crucial to ensure credibility. Likewise, more disclosure with respect to its decisions and sanctions will contribute to increasing the public's awareness of the CNBV's role in supervisory activities, which in turn will enhance its credibility.

#### **IV. OBSERVANCE OF IOSCO OBJECTIVES AND PRINCIPLES OF SECURITIES REGULATION**

##### **General**

141. This assessment is based upon a review of the self-assessment prepared by the CNBV in March 2000, discussions with senior CNBV staff held during the week of March 4, 2001, interviews with individuals representing brokerage firms, mutual funds, corporate issuers and the Mexican Stock Exchange (the Bolsa) and a review of briefing material prepared by IFC/World Bank staff, as well as publicly available reference material. Because of the time constraints of this FSAP, it was not possible to meet and interview as many members of the industry as desired or to spend enough time with the staff of the CNBV to fully appreciate the scope of their activities. In spite of the time constraints, there was general consistency in the discussions held and the documentary material reviewed.

##### **Institutional and macroprudential setting, market structure—Overview**

##### ***Supervisory framework***

142. ***The CNBV was created in 1995 by the National Banking and Securities Commission Law (LCNBV), which merged the previously independent National Banking Commission and National Securities Commission.*** The CNBV is headed by a ten-member Governing Board. Five members, including the President of the Commission are appointed by the SHCP, three members are appointed by the BOM, and CONSAR and the CNSF each appoint one member. The SHCP has broad supervisory responsibility over the CNBV and final authority over certain key functions. For example, the SHCP has final responsibility for approval of brokerage and securities exchange licenses, with substantial advice from the CNBV and the BOM.

143. ***The 1934 Mexican Corporation Law (LSM) and 1975 Securities Market Law (LMV) establish the framework for securities regulation.*** With the enactment of statutory reforms in April 2001, the CNBV now has statutory authority to perform all key regulatory responsibilities. The CNBV has broad authority to adopt regulations and procedures to implement the requirements of the law. Separate divisions of the CNBV regulate bank and brokerage activities. In some instances this separation resulted in different regulation for the same functional activities. However, the CNBV states that the recent statutory reforms have provided the necessary authority to address and reconcile these differences.

### **Market structure**

144. ***The Mexican securities market is dominated by daily trading in short-term government debt securities.*** This trading, which occurs in the over-the-counter market, represents over 97 percent of the daily trading volume. The SIF, an inter-dealer broker partially owned by the Mexican Stock Exchange, processes a substantial amount of the government debt trading.

145. ***The Bolsa, has seen a steady decline in activity.*** The number of listed companies<sup>39</sup> has decreased from 215 in 1993 to 178 in 2001. Furthermore, it has been suggested that at least one-third of the currently listed companies should be de-listed due to limited market activity and limited economic viability.<sup>40</sup> Daily trading volume on the Bolsa has declined from US\$300 million in 1993 to US\$150 million in 2001. The total market capitalization of listed companies has dropped from US\$230 billion in 1994 to US\$150 billion today. This daily trading volume is highly concentrated in a very small number of issuers.

146. ***The Bolsa is a member-owned for profit institution.*** It is nominally a self-regulatory organization. However, for a variety of legal, historical and organizational issues, it performs only two of the regulatory functions traditionally performed by a securities market SRO, review of new listings and market trading surveillance. Although it has an organizational structure that includes an independent committee to determine and take disciplinary action, it has deferred to the CNBV in this area. It lacks the resources and the authority to conduct its own investigations and impose sanctions.

### **General preconditions for effective securities regulation**

147. ***IOSCO has identified three core objectives of securities regulation: 1) the protection of investors; 2) ensuring that markets are fair, efficient and transparent; and 3) the reduction of systemic risk.*** The Mexican regulatory system is designed to address each of these objectives. However, as described more fully below, certain legal limitations impeded the ability of the regulators in these areas. In March 2001, when this assessment was conducted, five such limitations were discussed with the CNBV:

---

<sup>39</sup>By law, all publicly traded companies must be listed. There is no OTC market for equity.

<sup>40</sup>It was suggested that many of these companies would have already delisted but for the expense to the company of buying in public shares, as required by the Bolsa. The CNBV believes that minority shareholders may only be protected by requiring continued listing unless the issuer undertakes a self-tender for these minority shares as a condition of delisting. The CNBV also is of the opinion that the cost of annual listing fees is actually greater than the cost of delisting.

- i) The scope of the CNBV's enforcement authority, its ability to publicize its actions and thereby promote investor confidence in the securities markets and deter misconduct by others ;
- ii) Promoting market efficiency and reduced regulatory overhead by introducing greater flexibility in the regulatory structure;
- iii) Enhancing public confidence in regulation by adopting procedures to ensure public input into the regulatory process and to enhance procedural due process in the disciplinary process;
- iv) Enhancing minority shareholder rights through improved corporate governance standards and easier access to the courts to protect these rights; and
- v) Difficulty obtaining assistance from oversea regulators when pursuing investigations of possible Mexican securities law violations due to an inability to provide reciprocal assistance to foreign regulators because of Mexican bank secrecy laws.

148. ***CNBV and SHCP officials were in agreement with the need for greater legal authority in these areas and with the full support of the Fox administration, proposed legal reforms to the Mexican Congress.*** In April 2001, Congress enacted a series of legal reforms designed to address each of these core areas. These changes are summarized below and are referenced in the comments to the applicable principles. With vigorous application of this new authority by the CNBV, a future assessment may find greater implementation of substantially all of the IOSCO principles.

### **Main findings—Summary**

Table 10. Summary of Main Findings of the Assessment of Implementation of the IOSCO Objectives and Principles of Securities Regulation

Subject	Main Findings
Principles relating to the regulator, (CPs 1-5)	Recent amendments to Mexican laws have eliminated certain significant limitations on disciplinary authority and the authority to publicly disclose its actions. The CNBV has necessary statutory authority and appropriate budgetary and staff resources.
Principles of self-regulation (CPs 6-7)	While there are several self-regulatory organizations, the Bolsa, the Mexder and recently the AMIB, the Mexican market historically has not relied upon active self-regulation.
Principles for the enforcement of securities regulation (CPs 8-10)	The CNBV has general disciplinary authority, which it uses. However, there were significant gaps in this authority and in the ability of the CNBV to investigate and address misconduct by persons not subject to its direct jurisdiction. Recent legal reforms should

Subject	Main Findings
	substantially eliminate these gaps.
Principles for cooperation in regulation (CPs 11-13)	Historically, Mexican secrecy rules and other legal restrictions on information sharing between domestic and foreign counterparts prevented the CNBV from effectively working with foreign regulators to share non-public information necessary to regulate the Mexican markets and to support foreign regulators' efforts to regulate foreign markets. The new reforms will permit greater cooperation by allowing the CNBV to share with foreign regulators all information it is authorized to obtain. This includes all information concerning possible violations of the Mexican securities laws. It also includes any information it may obtain from financial institutions under its supervision, even if it does not concern a possible violation of Mexican securities laws.
Principles for issuers (CPs 14-16)	There is a well-established system for the registration of securities and to ensure periodic disclosure of material information to the secondary market. Substantial issues have existed pertaining to corporate governance, minority shareholder rights and private enforcement actions. The recent legal reforms specifically expand minority shareholder rights and mandate changes in corporate governance practices, as noted in the detailed assessment below.
Principles for collective investment schemes (CPs 17-20)	The Mexican mutual fund law establishes a clear legal framework and it is being implemented by the CNBV. Recently enacted legislation is designed to achieve a uniform system of regulation and resolve issues concerning functional regulation of comparable investment vehicles offered by different sectors of the financial system.
Principles for market intermediaries (CPs 21-24)	There is a well-established system of regulation of market intermediaries entailing registration, passage of qualification exams, periodic reporting of operations and application of initial and on-going capital adequacy standards. The new legislation now provides necessary authority for the supervision and regulation of investment advisors.
Principles for the secondary market (CPs 25-30)	There is a single automated equities market that is dwarfed by the OTC market in government debt. There is also a very small derivatives market. All markets are subject to regulation and oversight, with some limitations. Continuing attention should be given to the recently developed electronic trading systems for government debt, to ensure that existing approaches to regulation and surveillance are appropriate and sufficient. Similar attention should be given to the systems for on-line trading in equities to ensure that existing rules on order, exposure and disclosure of market data are sufficient and that surveillance systems are capable of tracking activity

Subject	Main Findings
	simultaneously on the equity and derivative markets. In the area of clearance and settlement, consideration should be given to adopting forward looking value at risk models to assess member firm risk. Legislation to fully dematerialize securities should also be sought.

### Authorities' response

149. Authorities recognize that their ability to address their core objectives of securities regulation was hampered by several limitations in the regulatory system. To attend these limitations, the CNBV, together with the SHCP, proposed legal reforms to the Mexican Congress to modify the Securities Market Act. These reforms were enacted by Congress in April 2001 and went into effect in June. With the recently enacted reforms to the Securities Market Act, new minority shareholders rights were introduced and several corporate governance issues were included to regulate the integration and operation of companies' board of directors. Additionally, secondary regulation was modified so that all public companies have to disclose once a year their observance to a code of best practices of corporate governance designed by major market and industry participants. Finally, the CNBV was granted the power to investigate actions that violate Mexican securities regulation, including visits and obtaining personal statements, as well as exchanging information with foreign financial authorities.

## V. OBSERVANCE OF IAIS INSURANCE SUPERVISORY PRINCIPLES

### General preconditions for effective insurance supervision

150. *This is an assessment of the observance of the Core Principles of the International Association of Insurance Supervisors (IAIS) in the United Mexican States.* Insurance is supervised in Mexico by the CNSF an agency of the SHCP. This assessment was undertaken as part of the Financial Sector Assessment Program (FSAP) mission.

151. *A successful insurance market requires strong enforceable legal rights, low inflation (unless indexed assets are available), and wide and liquid investment markets.* This latter aspect needs improvement in Mexico.

152. *The principal responsibility of the supervisory authority is to ensure the financial solvency of the companies operating within the jurisdiction.* The process of supervision should include a heavy emphasis on disclosure of information. In all countries, the consumer of insurance is at a considerable disadvantage vis-à-vis the insurance company, since the company can and does request a considerable amount of information from the applicant for insurance, while the consumer often has a difficult time in gathering useful information about the financial condition and claims-handling practices of the insurance companies. It is also the work of the supervisor to remove, or at least minimize, this information gap. Additional

responsibilities of the supervisory authority is to promote public and international confidence in the quality and soundness of financial institutions and enable insurers to fulfill their role in the spreading of risk, thereby protecting invested capital and facilitating the growth of businesses, as well as providing the public with high quality investment vehicles and life insurance for estate planning and other purposes.

153. ***Several preconditions are needed for effective supervision and growth of the private sector insurance market.*** In order to play its economic and financial role, the insurance sector requires a framework of stable and liberal regulation that provides adequate incentives for efficiency and allows individual companies to innovate. Insurance regulation must aim at creating a contestable market that is open to new entry by qualified companies and facilitates the exit of insolvent firms. It must also aim at safeguarding the stability of the sector and the solvency of individual companies and at protecting the interests of policyholders. A strong and consistent legal framework is needed for effective supervision, a stable macroeconomic environment and the existence of strong governance mechanisms promote the development of the industry and the confidence of business. Ultimately, the growth in per-capita income and an improvement in a more even distribution are major determinants of the growth of insurance demand in all countries.

#### **Main findings: Summary**

154. ***The insurance law (LGISMS) provides with substantial powers to the CNSF, either directly or through the SHCP.*** The style of supervision is swiftly evolving from a traditional tight control “a priori” on all operations and activities of the insurers into a style of partnership/consulting. In this second style of supervision, the supervisor should be able to rely to some extent on the internal controls and self governance rules of the insurers and to focus mainly on guaranteeing fairness of the services offered in the market and adequate solvency levels of the players. In order to succeed in this evolution, it will be absolutely necessary to introduce strong controls and self governance rules in the insurers internal organizations. Changes in the insurance legislation will also be required to give the Supervisor the authority to request the effective implementation of such rules and of the corresponding controls by insurers.

155. ***Specific strengths were identified in the Mexican supervision and regulation.*** Among these, the CNSF employs highly skilled staff, it collects and analyzes a considerable volume of information, it implements a well thought out supervisory process, it exercises strong controls on changes in control and reinsurance activity, and it carries out inspections are carries out an active program of on-site supervision. The following table summarizes the main findings, from which both strengths and weaknesses can be inferred, of this evaluation. Each finding was discussed with the CNSF.

Table 11. Summary of Main Findings of the Assessment of Observance of the IAIS Insurance Supervisory Principles

Subject	Main Findings
Organization of the Insurance Supervisor (CP 1)	<ul style="list-style-type: none"> <li>• The overall budget of the CNSF is low relatively to other National Commissions such as, for instance, the CNBV, in particular the CNSF is not allowed to exceed its budget limits.</li> <li>• The commission budget is held by the treasury so that interest on outstanding balances are not credited to the CNSF and outstanding balances cannot be carried over.</li> <li>• With such budgetary constraints, the introduction of changes in the structure of the CNSF, needed to improve its performance in a growing market (in volume and breadth of new coverage), cannot be readily implemented.</li> <li>• Staff salaries are lower than in the private sector, and this negatively affects the ability to retain highly qualified staff.</li> <li>• There is no formal scheme of legal protection of staff whilst exercising their capacity.</li> <li>• Independence of the CNSF could be strengthened by giving the Commission veto power on regulation that affects its operations and on regulation on prudential issues.</li> </ul>
Licensing and Changes in Control (CPs 2-3)	<ul style="list-style-type: none"> <li>• The documentation required to support a demand for a license may vary substantially according to the type of license being requested.</li> <li>• The process of approval of directors and senior managers for general insurance companies takes place after the license is granted.</li> <li>• Composite life and non-life insurance licenses can be granted. Although the CNSF is in the process of proposing amendment of legislation to request separation: it is not clear from the supervisory response received (see next table) whether the new regulation will be applied to future companies or existing companies as well. We recommend that a transition period be given to existing composite companies to separate life and non-life businesses and minimize regulatory arbitrage.</li> </ul>
Corporate Governance (CP 4)	<ul style="list-style-type: none"> <li>• The law does not establish sufficient powers in the area of corporate governance for the CNSF. However, several measures have been taken by the CNSF to address this issue. For instance, it will soon be required that Board of Directors hire independent advisors to be approved by the CNSF. It is now under consideration to provide a clearer definition of the responsibilities which lie on the Board of Directors and introduce the obligation to designate a Compliance Officer who would have to report to the CNSF misconduct in this area.</li> </ul>
Internal Controls (CP 5)	<ul style="list-style-type: none"> <li>• The lack of regulation on corporate governance has an</li> </ul>



Subject	Main Findings
	<p>impact on the degree with which the internal control principle is, or can be, observed. In particular, the CNSF does not have the power to require the establishment of internal controls to address organizational issues, the division of critical functions such as new business and claims, compensation of senior officers, establishment of an audit committee, control of compliance, and cross checks and balances. However, it does have the power to monitor and review internal controls when established.</p> <ul style="list-style-type: none"> <li>• Also, the existence of some regulation ensures the “establishment” of internal controls in the areas of investment management risk, valuation of provisions, fair treatment of customers, information disclosure, accounting procedures, and the use of external auditors, certifying actuaries, and asset custodians.</li> </ul>
Prudential Rules (CPs 6-10)	<ul style="list-style-type: none"> <li>• A significant portion of the investments lies in government bonds. Bonds from private issuers and shares are well below the maximum limits permitted by the regulations. To a certain extent, the existing investment mix is a consequence of the scarcity in the capital markets of available alternative investments that attract insurers as a prudent investors.</li> <li>• The liquidity requirement could be considered too high for some type of life assurance accumulation contracts, preventing in these cases to enter a clearer long-term investment policy which could increase the investment return.</li> <li>• The degree of liquidity of some assets should be determined by their marketability rather than their maturity.</li> <li>• Presently the actuarial valuation of the technical provisions is performed using the premium basis. It should be verified that the technical provisions determined in such way, are not lower than the actuarial valuation, with updated basis, of future risks over future premiums.</li> </ul>
Market Conduct (CPs 11)	<ul style="list-style-type: none"> <li>• Market conduct is largely observed with the major limitation stemming from the lack of corporate governance rules. Companies are required to establish standards and monitoring controls on fair treatment of customers; proper disclosure to customers of policy benefits, and risks and responsibilities. The CNSF can suspend the marketing of product if these principles are not followed.</li> <li>• Complaints for all financial sector consumers are monitored and addressed by CONDUSEF.</li> </ul>
Monitoring, Inspection and Sanctions (CPs 12-14)	<ul style="list-style-type: none"> <li>• Companies are required to use external actuarial auditors approved by the CNSF via examination and listed in a special registry.</li> <li>• Companies are required to use external financial auditors which are member of the association of</li> </ul>

Subject	Main Findings
	<p>financial auditors, approved by the CNSF on the basis of experience, and listed in a special registry.</p> <ul style="list-style-type: none"> <li>• The CNSF establishes the minimum standards for audit reports.</li> <li>• The CNSF operates as unique window for the collection of all relevant information to different national agencies and the BOM.</li> <li>• Automatic triggers for specific sanctions are defined in the law. However, the law does not allow for the gradual application of sanctions. This issue is recognized by the CNSF which foresees a reorganization of the regulation in this area.</li> <li>• The regulation of the liquidation processes provides an interesting tool that accelerates the timeframe compared to general business tools. However, it allows too much time to the SHCP to revoke license from the moment the CNSF recognizes insolvency and recommends the revocation of license. Also, the CNSF lacks the executive power to suspend operation for all or some line of business. At present suspension of operations can only be implemented through revocation of license. Under current rules, it is estimated that actual liquidation of remaining assets can occur after six months from the declaration of insolvency.</li> </ul>
Cross-border Business Operations (CP 15)	<ul style="list-style-type: none"> <li>• For the time being, cross border operations are restricted to some type of coverages in marine insurance. The present situation is the result of difficulties of further harmonization with Mexico's main partner countries and is also based on reciprocal treatment. However residents in Mexico could buy coverages out of the country as long as the sale does not take place inside its territory.</li> </ul>
Supervisory Coordination and Cooperation, and Confidentiality (CPs 16-17)	<ul style="list-style-type: none"> <li>• Written memoranda of understanding with foreign supervisors are thought not to be necessary for the CNSF to observe the principle on cooperation, coordination.</li> <li>• The CNSF has signed within the IAIS a protocol for the diffusion of information.</li> <li>• The international standards on confidentiality are observed.</li> </ul>

## Authorities' response and recommended next steps

156. The assessment has identified some weaknesses of the local supervisory system that are preventing the full observance of the Insurance Supervisory Principles. Those findings had been taken into account by the CNSF to design an action plan to deal with those weaknesses. The main component of the action plan consists of a legal reform. The Mexican insurance law is currently under an amendment process that will provide the supervisor with the authority to request the effective implementation of rules that will conduct to a better observance of the IAIS' Insurance Supervisory Principles, specifically in the area of corporate governance. The new legal framework will be oriented to a style of partnership/consulting supervision that will rely more on the internal controls and self-governance rules of the insurers. The CNSF has developed a detailed action plan with a timeframe to improve the already high compliance with the IAIS principles, which it is summarized in the following table.

Table 12. Actions and Timeframe for Improved Observance of IAIS Insurance Supervisory Principles

Principles	Actions	Timeframe
Organization of the Insurance Supervisor (CP 1)	Amend the LGISMS and the LFIF to give the CNSF more autonomy in the areas of training and career development of its staff.	15 months with 6 months implementation and subject to Congress approval in December 2001.
	The CNSF will request the SHCP to start rationalize the salary structure of CONSAR, the CNBV and the CNSF.	n.a.
	In order to strengthen legal protection, the CNSF staff will be provided with insurance on civil liabilities.	3 months.
	In order to improve the flexibility of the CNSF budget the LGISMS and the LFIF will be amended.	15 months with 6 months implementation and subject to Congress approval in December 2001.
Licensing and Changes in Control (CPs 2 - 3)	Licensing rules will be harmonized by requesting the SHCP to issue the corresponding rules. Also, Art. 16 of the LGISMS and Art. 7 of the LFIF will be amended.	15 months with 6 months implementation and subject to Congress approval in December 2001.
	Requirements for fit and proper evaluation of directors and senior management will be introduced by amending Art. 29 of the LGISMS and Art. 15 of the LFIF.	16 months with 6 months implementation and subject to Congress approval in December 2001.
	Separation of life and non-life insurance business will be achieved by amending Art. 7 and of the LGISMS. Composite insurance companies will be allowed to retain their juridical status.	15 months with 6 months implementation and subject to Congress approval in December 2001.

Principles	Actions	Timeframe
	Changes in control rules will be modified following the harmonization of licensing rules above mentioned.	15 months with 6 months implementation and subject to Congress approval in December 2001.
Corporate Governance (CP 4)	The LGISMS and LFIF will be amended to introduce internationally accepted corporate governance principles; and give the CNSF the powers to implement them.	15 months with 6 months implementation and subject to Congress approval in December 2001.
Internal Controls (CP 5)	The LGISMS and LFIF will be amended to grant the CNSF adequate powers to require boards of directors the implementation of internal controls (different from the already established investment risk management). In particular, the introduction of the figure of compliance officer will be considered.	15 months with 6 months implementation and subject to Congress approval in December 2001.
Prudential Rules (CPs 6 - 10)	A methodology for improved asset liability management for life insurance companies will be developed. The SHCP will issue implementing rules.	24 months.
	Complete the design and implementation of dynamic solvency margin. The SHCP will issue implementing rules at the conclusion of the study and the relevant articles of the LGISMS will be amended.	21 months with 6 months implementation and subject to Congress approval in December 2001.
	The LGISMS will be amended, the SHCP will be issuing corresponding rules, and the circular S-19.2 will be modified to adapt the regulation on reserving requirements, specifically for non-life operations, in order to shift from the original premium calculation basis to actuarial evaluation of outstanding risks.	15 months with 6 months implementation and subject to Congress approval in December 2001.
	The circular S-19.2 will be adapted to establish accounting rules for the balances due by reinsurers that will take into account the seniority of the debt and the actual recovery that can be expected.	9 months.
Market Conduct (CP 11)	No actions contemplated.	
Monitoring, Inspection and Sanctions (CPs 12 - 14)	Rationalize the regulation on sanctions by amending the LGISMS and LFIF to make these consistent and more in line with the gravity of infringements.	15 months with 6 months implementation and subject to Congress approval in December 2001.
	Amend the LGISMS and LFIF to increase the rapidity of the liquidation process to limit the financial viability of troubled insurance companies.	15 months with 6 months implementation and subject to Congress approval in December 2001.

Principles	Actions	Timeframe
	Grant the CNSF the executive power by amending the LGISMS and LFIF to require the suspension, partial or complete, of activities of troubled companies.	15 months with 6 months implementation and subject to Congress approval in December 2001.
Cross-border Business Operations (CP 15)	No actions contemplated.	
Coordination and Cooperation, and Confidentiality (CPs 16 - 17)	No actions contemplated.	