

## **Mexico: Financial System Stability Assessment**

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## MEXICO

### Financial System Stability Assessment

Prepared by the Monetary and Capital Markets and Western Hemisphere Departments

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December 7, 2011

This Financial Sector Stability Assessment reflects the work undertaken in the context of joint IMF/World Bank FSAP Update missions to Mexico City in September and October 2011. The team comprised Fernando Montes-Negret (Mission Chief, IMF), Lily Chu (Mission Chief, World Bank), Francesco Columba, Karl Driessen, Joaquin Gutierrez-Garcia, Ivan Luis Oliveira, Ryan Scuzzarella, Rodolfo Wehrhahn (all IMF/MCM), Enrique Flores Curiel (WHD/IMF); Mariano Cortes, Pierre-Laurent Chatain, Clemente del Valle, Heinz Rudolph, Patricia Caraballo, Massimo Cirasino (all World Bank); Olivier Hassler, Paul Kupiec, Ignacio Mas, Tanis McLaren, and José Rutman (experts). The main findings were:

**The Mexican banking system is profitable, liquid, and well capitalized, and stress tests suggest that it is able to withstand severe shocks.** Indeed, authorities plan to introduce Basel III capital requirements in 2012. However, hidden vulnerabilities may surface and authorities should monitor emerging risks on a continuous basis. Many developmental challenges remain for the financial system to fully contribute to more rapid and equitable growth.

**Greater independence and budget autonomy are needed for financial sector supervision to consolidate recent gains.** Financial sector supervisory agencies lack the authority to amend their organizational structures, make key staffing decisions, or modify their budgets; there is no defined appointment period for, nor clear grounds for dismissal of, senior officers, or adequate legal protection for staff; below-market salaries led to high staff turnover; in addition, the regulatory perimeter is expanding.

**The high level of concentration and conglomeration in Mexico's financial system** create the potential for conflicts of interest in supervised entities and hidden risks. To address this, implementation of Basel II's Pillar 2 is urgently needed and would provide additional supervisory tools, including the ability to require buffers above regulatory minima. Also, consolidated supervision should be strengthened by giving CNBV powers to regulate financial groups.

**There are some areas for improvement in the financial sector safety net**, including: (i) disclosing the broad features of emergency liquidity assistance; (ii) adding liquidity indicators as triggers in the prompt corrective action regime; (iii) shortening delays in revoking a bank license; and (iv) strengthening the deposit guarantee fund by a gradual transfer of its legacy debt service to government, setting up contingency lines of credit with government guarantee, and lowering deposit coverage.

**Subsidiaries of large foreign banks play a major role in Mexico; thus, home-host cooperation is key.** Outcomes on pending G-20/FSB issues, such as capital requirements for counterparty and sovereign risk, globally systemically important financial institutions (G-SIFI) surcharges, and principles for cross-border coordination and bank resolution that protects the integrity of local subsidiaries, could have a significant effect on the financial system.

*FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAP assessments do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.*

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## GLOSSARY

|           |  |
|-----------|--|
| ACH       | Automated clearing house   |
| AFORES    | Private pension fund administrators  |
| AML/CFT   | Anti-Money Laundering and Combating the Financing of Terrorism   |
| ATM       | Automated teller machine   |
| BCBS      | Basel Committee on Banking Supervision   |
| BCP       | Basel Core Principles for Effective Banking Supervision  |
| BMV       | Mexico Stock Exchange  |
| BoM       | Bank of Mexico ( <i>Banco de Mexico</i> )  |
| Bondes LD | Five-year floating-rate bonds  |
| CAR       | Capital Adequacy Ratio   |
| CCP       | Central Clearing Counterparty  |
| CCV       | Central Counterparty for Securities  |
| CDD       | Customer due diligence   |
| CETES     | Treasury Bills   |
| CEF       | Financial Stability Committee  |
| CINIF     | Mexican Council for Financial Accounting Standards   |
| CLS       | Continuous Linked Settlement   |
| CNBV      | National Banking and Securities Commission   |
| CNSF      | National Insurance and Sureties Commission   |
| CONAC     | National College of Actuaries  |
| CONDUSEF  | Financial Consumer Protection Agency ( <i>Comision Nacional para la Proteccion y Defensa de los Usuarios Financieros</i> ) |
| CONSAR    | National Commission of Savings for Retirement  |
| CP        | Core Principle   |
| CPSS      | Core Principles for Systemically Important Payment Systems   |
| CSD       | Central Securities Depository  |
| DALI      | Mexican Securities Settlement System ( <i>Sistema de Depósito, Administración y Liquidación de Valores</i> )               |
| DAR       | Detailed Assessment Report   |
| DRM       | <i>Monetary Regulation Deposits (Depósitos de Regulación Monetaria)</i>  |
| DVP       | Delivery versus payment  |
| ELA       | Emergency Liquidity Assistance Facility  |
| ETF       | Exchange-traded funds  |
| FATF      | Financial Action Task Force  |
| FCL       | Flexible Credit Line   |
| FIU       | Financial Intelligence Unit  |
| FOVISSSTE | Housing Fund of the Social Security Institute of Public Sector Workers   |
| FSB       | Financial Stability Board  |

|           |   |
|-----------|---|
| FSSC      | Financial Sector Stability Council  |
| FX        | Foreign exchange  |
| GAFISUD   | Financial Action Task Force of South America  |
| G-SIFI    | Globally Systemically Important Financial Institutions  |
| IADI      | International Association of Deposit Insurers   |
| IAIS      | International Association of Insurance Supervisors  |
| ICAAP     | Internal Capital Adequacy Assessment Process  |
| IFRS      | International Financial Reporting Standards   |
| INDEVAL   | Central Securities Depository <i>Instituto para el Deposito de Valores</i> )                  |
| INFONAVIT | Institute of the National Housing Fund for the Workers  |
| IOSCO     | International Organization of Securities Commissions  |
| IPAB      | Institute for the Protection of Bank Savings  |
| IPO       | Initial Public Offering   |
| ISA       | International Standards of Audit  |
| LCNBV     | Law on the National Banking and Securities Commission   |
| LCR       | Liquidity coverage ratio  |
| LIC       | Law of Credit Institutions  |
| LISF      | Insurance Law   |
| LMV       | Securities Markets Law  |
| LPDUSF    | Financial Services Users Protection Law   |
| LSI       | Law on Investment Companies   |
| MexDer    | Mexico's Derivatives Market   |
| MOUs      | Memorandum of Understanding   |
| NPL       | Nonperforming loan  |
| NPS       | National Payments System  |
| OTC       | Over-the-counter  |
| P&A       | Purchase (of assets) and Assumption (of deposit liabilities)                                  |
| PCA       | Prompt Corrective Action  |
| POS       | Point of sale   |
| PROFECO   | Federal Consumer Protection Agency (Procuradurio Federal de Consumidor)                       |
| PSA       | Payment System Act  |
| RoA       | Return on Assets  |
| RoE       | Return on Equity  |
| ROSC      | Report on Compliance with Standards and Codes   |
| SHCP      | Secretary of Finance and Public Credit  |
| SI        | Investment companies  |
| SIC       | International Quotation System  |
| SIAC      | System for Accountholders' Service ( <i>Sistema de Administración de Cuentas Corrientes</i> ) |
| SIEFORES  | Private pension funds   |
| SLF       | Standing Liquidity Facility   |
| Sofoles   | Non-deposit-taking specialized credit institutions  |

|         |   |
|---------|---|
| Sofomes | Non-deposit-taking nonspecialized credit institutions   |
| SPEI    | Inter-bank Payment System ( <i>Sistema de Pagos Electrónicos Interbancarios</i> )               |
| SRO     | Self-regulatory organization  |
| SSLO    | Insurance By-laws and Internal Ordinances   |
| TIE     | Benchmark for the interbank money market ( <i>Tasa de Interés Interbancaria de Equilibrio</i> ) |
| TPFB    | Tasa ponderada de Fondos Bancarios (weighted interbank funding rate)                            |
| UBO     | Ultimate Beneficiary Owner  |
| WB      | The World Bank  |
| WEO     | World Economic Outlook  |
| WGBI    | World Government Bond Index   |

## EXECUTIVE SUMMARY

**Mexico was hit hard by the global financial crisis, but the financial system proved resilient.**

Economic activity fell sharply in 2009 and financial markets experienced severe stress.

Unregulated housing finance companies failed and banks experienced significant losses in their credit card portfolios as a result of a bursting consumer lending boom, but spillovers to the broader system were contained. The economy and financial system recovered in 2010 on the back of sound policy responses and fundamentals, and a rebound in external and domestic demand, and growth has remained robust in the first half of 2011.

**The Mexican banking system is profitable, liquid, well capitalized, and stress tests suggest that it is able to withstand severe shocks.** Indeed, the strength of capital buffers has persuaded the authorities to introduce Basel III capital requirements in 2012, well ahead of other countries.

**However, the authorities will need to remain vigilant, especially given the risk of spillovers from global shocks.** The institutional set-up for macro-financial oversight and systemic crisis management has been strengthened with the establishment of the Financial System Stability Council (FSSC). However, the Mexican financial system has suffered several episodes of distress in recent years and given its significant linkages to the global economy and Spanish banks, care will be needed to monitor closely and respond quickly to emerging risks.

**In order to meet these challenges effectively, and to meet international standards, financial supervision in Mexico would benefit from greater independence and budget autonomy.** The National Banking and Securities Commission (CNBV) and National Insurance and Sureties Commission (CNSF) lack the authority to make key staffing decisions, or modify their budgets; there is no defined appointment period for, nor clear grounds for dismissal of, senior officers, or adequate legal protection for staff; below-market salaries led to high staff turnover; in addition, the regulatory perimeter for CNBV is widening.

**At the same time, consideration could also be given to a new supervisory architecture.**

Reorganizing the roles and responsibilities of agencies, including by separating prudential and market-conduct roles, would help reduce existing overlaps of responsibilities and the ability of the system to cope with an ever more integrated financial sector. It would also achieve a better alignment of the responsibilities of the central bank and CNBV for emergency liquidity provision purposes (see Table 1).

**Moreover, the high level of concentration and conglomeration, as well as foreign ownership, in Mexico's financial system poses important challenges.** The seven largest financial groups hold or manage about three-quarters of total financial assets, creating the potential for conflicts of interest. Concentrated loan portfolios increase credit and contagion risk, which are insufficiently addressed by existing regulations and supervisory practices. To address these, full implementation of Pillar 2 (supervisory review) is urgently needed and would provide additional supervisory tools, including the ability to require buffers above regulatory minima.

Also, consolidated supervision should be strengthened by giving CNBV powers to regulate financial groups. Prudential regulation—especially risk limits—and risk governance and management standards should be extended to the holding company level, and mixed-activity groups must be regulated to address potential concentration and other risk. Since subsidiaries of large foreign banks play a major role in Mexico, effective home-host cooperation is essential.

**Mexico’s broadly adequate crisis management framework has been substantially upgraded since the last FSAP, but there are some areas for further improvement.** These include:

(i) disclosing the basic features of Bank of Mexico’s (BoM) emergency liquidity assistance (ELA) framework; (ii) consulting the Financial Stability Committee (CEF) on the systemic importance of institutions requesting ELA access; (iii) adding liquidity indicators as triggers in the prompt corrective action (PCA) regime; (iv) shortening delays in revoking a bank license; (v) strengthening the Institute for the Protection of Bank Savings (IPAB) by the gradual transfer of its legacy debt service to the Ministry of Finance (SHCP), operationalizing BoM contingency lines of credit (with SHCP guarantee), and lowering deposit coverage; (vi) channeling the entire bank liquidation through an administrative process to preserve banks’ residual value.

**Structural barriers, including legal and institutional weaknesses, limit scope for the financial system to engage in effective maturity transformation and risk taking.** A

comprehensive strategy would include: (i) reforming the mutual fund industry to foster competition; (ii) increasing controls on related party transactions; (iii) creating a hybrid regime within the public offering framework to increase the supply of securities and allow institutional investors to invest in specialized instruments; (iv) setting up a comprehensive program to encourage new issuers; (v) introducing a legal framework for derivatives; and (vi) increasing regional capital market integration. In addition, pension contributions should be raised to achieve reasonable replacement rates, and regulatory approaches adjusted to focus on long-term investment performance; competition in private annuities should be restored by relaxing restrictions on pricing and technical parameters; housing finance policy should ensure a more level playing field between government agencies and the private sector, and revive the private securitization market. BoM should review its policies on retail commissions to maximize access to finance and credit reporting should be streamlined by further standardization of information, increasing scope of data collected, and better oversight to eliminate possible conflicts of interest (banks owning and using credit bureaus) and enhance information sharing between credit bureaus.

**Table 1. Mexico: Key FSAP Recommendations**

| <b>Recommendations</b>  | <b>Paragraph</b> |
|---|------------------|
| <b>Short Term</b>   |                  |
| Increase budget autonomy for CNBV and CNSF; increase resources commensurate with new responsibilities (wider regulatory perimeter).                                 | 19               |
| Extend scope of CNBV regulatory and supervisory powers to financial and mixed-activity groups.  | 19               |
| Fully implement Pillar 2 supervisory processes, including ICAAP and criteria to require buffers above regulatory minima.  | 21               |
| Tighten concentration limits (including applicable standards) and introduce capital charge for concentration risk under Pillar 2.                                   | 21               |
| Establish emergency contingency funding mechanism for IPAB, guaranteed by SHCP; transfer IPAB's debt to the Federal Government.                                     | 38, 39           |
| Change pension fund investment guidelines and regulatory tools to encourage focus on long term returns, including using long-term benchmarks.                       | 50               |
| Improve legal framework for derivatives.  | 49               |
| Establish program to address weak and not yet regulated cooperatives.   | 53               |
| Revisit the structure of commissions and ensure bank account contestability to promote access to finance.   | 52               |
| <b>Medium Term</b>  |                  |
| Enhance independence and accountability of the CNBV and CNSF (including by revisiting supervisory architecture) and strengthen the legal protection of supervisors. | 19               |
| Strengthen powers and increase resources at CONDUSEF and study allocation of responsibilities with PROFECO.   | 6                |
| Increase replacement rates at retirement.   | 50               |
| Promote greater competition for mutual fund providers by facilitating entry by independent operators.   | 49               |
| Promote regional integration of capital markets; prepare a medium-term strategy for capital market development.   | 49               |

**Table 2. Mexico: Risk Assessment Matrix**

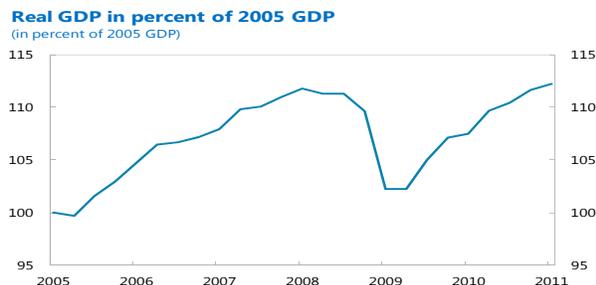
| Threat   | Likelihood  | Expected Impact  |
|--|---|--|
| Distress in foreign parent banks of the largest Mexican bank subsidiaries.   | <i>Medium</i><br>Ongoing financial pressures in Europe (and especially Spain) could affect the Mexican subsidiaries in terms of funding costs and liquidity pressures (deposit losses and loss of parent banks' and other credit lines).  | <i>Low</i><br>Mexican subsidiaries are well capitalized and liquid, with a large and low-cost core domestic deposit base. Related party lending restrictions have been tightened to limit subsidiaries' exposure to parent banks. BoM has well-developed liquidity facilities and banks have large pools of domestic government paper. |
| U.S. economy slow-down (either a double-dip recession or protracted slow GDP growth).  | <i>High</i><br>Likely to impact Mexico's exports, GDP growth and remittances, given its close commercial ties.  | <i>Medium</i><br>Could increase unemployment and BOP pressures in Mexico, with potential, but limited, secondary impact on banks' consumer and corporate loans. An important mitigating factor is the forward-looking provisioning regime and well-capitalized banks.  |
| Solvency problems in a number of smaller banks affecting confidence in the banking system.   | <i>Low-Medium</i><br>Stress in this segment could result in a run to safety of bank deposits to the larger banks.   | <i>Low-Medium</i><br>Smaller banks represent a modest part of the banking system (15 percent of banking assets). In the event of bank failures, IPAB might need support from the government if insured deposits exceed the insurance fund.   |
| Severe deterioration of banks' loan portfolios (consumer, corporate and sub-national; large borrowers) resulting in major increase in NPLs and capital impairment. | <i>Medium</i><br>Mexican banks experienced a deterioration of their personal and consumer loan portfolios following the 2007–2009 crisis. Some Mexican States had to renegotiate their banking debts in 2011, extending their maturities, leading to liquidity stress in specialized small banks. | <i>Low</i><br>Profitability would decline, and provisions and capital buffers would be drawn down. Consolidation or exit might occur if recapitalization would be difficult. Although small banks with highly concentrated portfolios might become insolvent if some of their largest clients default, these are not systemic in size. |

## I. INTRODUCTION

### A. Macroeconomic Outlook

#### 1. Mexico's strong economic policies underpinned the recovery following the global financial crisis.

Mexico was hit hard by the global crisis; growth fell sharply in 2009 and financial markets came under severe pressure. However, strong fundamentals (including substantially strengthened balance sheets) and a skillful policy response (Box 1) helped maintain stability and supported a strong rebound in economic activity. This was assisted by an effective macroeconomic policy framework—the inflation target regime ensured price stability, the flexible exchange rate worked as a key shock absorber limiting capital flow volatility, and fiscal policy was guided by a balanced budget rule (Table 3).



However, strong fundamentals (including substantially strengthened balance sheets) and a skillful policy response (Box 1) helped maintain stability and supported a strong rebound in economic activity. This was assisted by an effective macroeconomic policy framework—the inflation target regime ensured price stability, the flexible exchange rate worked as a key shock absorber limiting capital flow volatility, and fiscal policy was guided by a balanced budget rule (Table 3).

2. **Growth has remained resilient this year, and is expected to moderate.** Exports—especially of manufactured goods to the U.S.—have been an important contributor to Mexico's recovery after the crisis. Domestic demand has been aided by a growing payroll, recovering credit growth, and the strong balance sheets of banks, corporates, and households. The exchange rate depreciated as investors covered currency exposures in the context of the global financial turmoil (divestment from short-term sovereign paper was rather modest and investors have maintained their positions in long-term paper). The inflation outturn has been better than expected, and inflation expectations are well anchored.

#### Box 1. Policy Response to the Global Crisis

**The authorities pursued countercyclical policies to ameliorate the impact of the global financial crisis, including on capital inflows.** In 2009, the fiscal stimulus amounted to about 3 percent of GDP, while the central bank reduced its policy rate by 375 basis points. The flexible exchange rate regime buffered the impact of the crisis and helped a strong export resurgence, which spearheaded the recovery. With the recovery underway, the authorities started fiscal consolidation in 2010, while monetary policy remained accommodative.

**The authorities acted to ensure the proper functioning of key markets.** The central bank's main actions included: (i) selling dollars to support the orderly function of the foreign exchange market given an extraordinary demand for foreign exchange; (ii) establishing a new liquidity facility for short-term liquidity needs which accepts a broader set of instruments as collateral and at a lower cost; and (iii) providing foreign exchange credit as the market for dollar funding dried-up, supported by a swap line with the U.S. Federal Reserve. Moreover, the authorities opened a flexible credit line with the IMF, fostering confidence in the authorities' program, and the Ministry of Finance reduced domestic financing pressures through smaller debt issuances, purchases of less liquid public sector bonds, and interest rate swaps with financial institutions.

**Table 3. Mexico: Selected Economic and Social Indicators, 2007–2012**

| I. Social and Demographic Indicators                          |       |  |       |       |               |               |
|---|-------|--|-------|-------|---------------|---------------|
| GDP per capita (U.S. dollars, 2009) 1/                        | 7963  | Poverty headcount ratio (percent of population, 2008) 1/ |       |       |               | 44.2          |
| Population (millions, 2009) 1/                                | 110.8 | Income share of highest 20 percent / lowest 20 percent   |       |       |               | 10.3          |
| Life expectancy at birth (years, 2009)                        | 75.3  | Adult illiteracy rate (2009)                             |       |       |               | 6.6           |
| Under 5 mortality rate (per thousand, 2009)                   | 16.8  | Gross primary education enrollment rate (2008)           |       |       |               | 114.3         |
| II. Economic Indicators                                       |       |  |       |       |               |               |
|   | 2007  | 2008   | 2009  | 2010  | Proj.<br>2011 | Proj.<br>2012 |
| (Annual percentage change, unless otherwise indicated)        |       |  |       |       |               |               |
| <b>National accounts in constant prices</b>                   |       |  |       |       |               |               |
| Real GDP  | 3.4   | 1.2  | -6.3  | 5.8   | 3.7           | 3.4           |
| Net exports (contribution)                                    | -0.6  | -0.7   | 2.1   | 0.0   | 0.3           | 0.5           |
| Total domestic demand   | 3.7   | 1.9  | -8.0  | 5.1   | 3.3           | 3.0           |
| Total consumption   | 3.9   | 1.6  | -5.9  | 4.8   | 2.8           | 3.1           |
| Gross fixed investment  | 6.9   | 5.5  | -11.8 | 6.4   | 6.2           | 4.5           |
| Change in business inventories (contribution)                 | -0.6  | -0.6   | -0.9  | 0.5   | -0.5          | -0.2          |
| <b>External sector</b>  |       |  |       |       |               |               |
| Exports, f.o.b.   | 8.8   | 7.2  | -21.2 | 29.9  | 26.2          | 5.2           |
| Export volume   | 3.5   | -2.4   | -7.7  | 15.8  | 14.3          | 4.7           |
| Imports, f.o.b.   | 10.1  | 9.5  | -24.0 | 28.6  | 24.4          | 4.6           |
| Import volume   | 4.4   | 1.0  | -21.0 | 23.3  | 15.3          | 4.0           |
| Terms of trade (deterioration -)                              | -0.3  | 1.3  | -11.2 | 7.6   | 2.4           | -0.1          |
| <b>Exchange rates</b>   |       |  |       |       |               |               |
| Nominal exchange rate (average US\$/Mex\$, depreciation -)    | -0.3  | -1.8   | -21.4 | 6.5   | ...           | ...           |
| Real effective exchange rate (CPI based, average, depreciate) | -1.1  | -1.6   | -12.4 | 8.6   | ...           | ...           |
| <b>Employment and inflation</b>                               |       |  |       |       |               |               |
| Consumer prices (end of year)                                 | 3.8   | 6.5  | 3.6   | 4.4   | 3.3           | 3.0           |
| Unemployment rate (annual average)                            | 3.7   | 4.0  | 5.5   | 5.4   | 5.2           | 4.8           |
| <b>Money and credit</b>                                       |       |  |       |       |               |               |
| Broadmoney (M4a)  | 11.2  | 16.8   | 6.1   | 12.0  | ...           | ...           |
| Treasury bill rate (28-day cetes, in percent, annual average) | 7.2   | 7.7  | 5.4   | 4.4   | ...           | ...           |
| (In percent of GDP)   |       |  |       |       |               |               |
| <b>Nonfinancial public sector</b>                             |       |  |       |       |               |               |
| Government Revenue  | 21.3  | 23.0   | 22.3  | 22.0  | 21.6          | 21.9          |
| Government Expenditure  | 22.5  | 24.1   | 27.0  | 26.3  | 24.6          | 24.7          |
| Augmented balance 2/  | -1.2  | -1.1   | -4.7  | -4.3  | -3.0          | -2.8          |
| Augmented primary balance                                     | 1.5   | 1.4  | -1.9  | -1.7  | -0.3          | 0.0           |
| Traditional balance 3/  | 0.0   | -0.1   | -2.3  | -2.8  | -2.5          | -2.4          |
| Gross public sector debt                                      | 37.8  | 43.1   | 44.7  | 42.9  | 43.1          | 44.2          |
| <b>Savings and investment</b>                                 |       |  |       |       |               |               |
| Gross domestic investment                                     | 26.3  | 26.7   | 23.4  | 23.6  | 25.9          | 26.1          |
| Public investment   | 4.6   | 5.6  | 6.1   | 6.1   | 4.7           | 4.4           |
| Private investment  | 21.7  | 21.1   | 17.3  | 17.4  | 21.1          | 21.7          |
| Gross national saving   | 25.5  | 25.3   | 22.5  | 24.4  | 25.3          | 25.8          |
| Public saving 4/  | 2.8   | 3.6  | 0.6   | 1.1   | 1.3           | 1.1           |
| Private saving  | 22.7  | 21.7   | 21.9  | 23.3  | 24.0          | 24.7          |
| External current account balance                              | -0.9  | -1.5   | -0.7  | -0.5  | -0.6          | -0.3          |
| Non-oil external current account balance                      | -2.5  | -2.8   | -1.9  | -1.7  | -1.4          | -1.0          |
| Net international reserves (in billions of U.S. dollars)      | 78.0  | 85.4   | 90.8  | 113.6 | 145.6         | 155.6         |
| Gross external debt (in percent of GDP, end of period)        | 19.0  | 18.5   | 22.2  | 23.8  | 23.3          | 22.8          |
| Crude oil export price, Mexican mix (US\$/bbl)                | 61.6  | 84.4   | 57.4  | 72.3  | 94.5          | 91.5          |

Sources: World Bank Development Indicators, CONEVAL, National Institute of Statistics and Geography; Bank of Mexico; Secretariat of Finance and Public Credit; and IMF staff estimates.

1/ Estimated, the figures of population for 2001-2009 are under revision by INEGI and CONAPO.

2/ Federal Government plus Social Security and State-owned Companies, excl. nonrecurrent revenue and net lending of development banks.

3/ Authorities definition. The break in the series in 2009 is due to definitional and accounting changes of PIDIREGAS.

4/ Estimated as the difference between the augmented fiscal balance, as reported by SHCP, and public investment, as reported in the

5/ Debt service on gross external debt of the federal government, development banks and nonfinancial public enterprises (adjusted for Pidiregas).

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

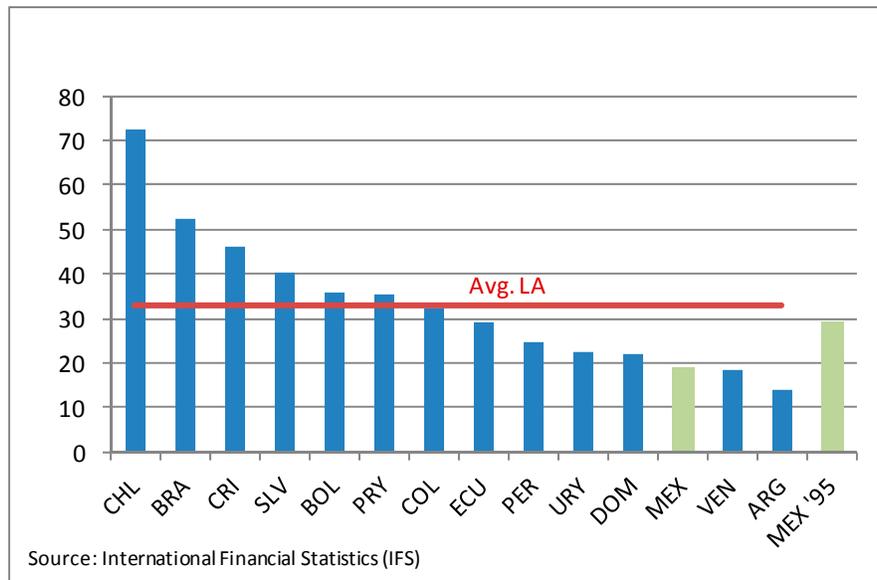
3. **The main macroeconomic risks for Mexico’s financial system are linked to U.S. and European developments.** The strong real sector linkages with the U.S. economy reflect the high integration in the manufacturing sector, as well as high remittances and tourism revenue. Although direct trade and investment linkages with Europe are modest, further turmoil in Europe could increase global investor risk aversion and emerging market risk premia. In addition, since Spanish bank subsidiaries account for about one-third of banking system assets, liquidity pressures faced by their parents could lead the subsidiaries to deleverage, impacting overall credit growth and economic activity in Mexico.

### B. Financial Sector Structure

4. **Financial intermediation and credit to the private sector in Mexico are among the lowest in Latin America and well below other emerging markets of comparable income (Figure 1).** Consequently, a challenge for the Mexican authorities and for private sector stakeholders is to promote the growth of the financial system that supports financial stability as well as economic growth and national development.

Figure 1. Bank Claims on the Private Sector, 2010

(In percent of GDP)



5. **Mexico’s financial system is small and relatively concentrated, with the three largest banks accounting for 55 percent of bank assets.** As of June 2011, 42 commercial banks had more than half the assets of the financial system (Table 4). The second largest group of financial intermediaries (in terms of assets) is the 14 pension fund managers (AFORES), which manage

86 pension funds (SIEFORES).<sup>1</sup> The 43 mutual fund management companies manage 549 funds. The government has nine development banks and public sector funds, in addition to two large public mortgage entities—the Institute of the National Housing Fund for the Workers (INFONAVIT) and the Housing Fund of the Social Security Institute of Public Sector Workers (FOVISSTE). The rest of the system is dispersed and small.

**Table 4. Mexico: Financial Sector Structure**

(Authorized financial institutions as of October 2011)

|   | Number of Entities | Participation in Total Assets (%) (June 2011) | Growth Rate (%) (June 2011-June 2001) |
|---|--------------------|---|---------------------------------------|
| Commercial banks 1/   | 42                 | 51.3  | 10.4                                  |
| Pension funds (managers)  | 86 (14)            | 13.6  | 10                                    |
| Mutual funds (management companies)   | 572 (60)           | 11.5  | 9.8                                   |
| Development banks 2/  | 11                 | 9.2   | 7                                     |
| Insurance companies   | 101                | 6.1   | 6.1                                   |
| Surety bonding institutions   | 15                 | 0.2   | 2.8                                   |
| Brokerage firms   | 34                 | 3.9   | 6                                     |
| Special-purpose nonbank financial institutions (sofoles) and regulated multi-purpose financial institutions (sofomes) | 41                 | 1.1   | -2.3                                  |
| Nonregulated sofomes  | 3,400              | 1.9   | -15.4                                 |
| Auxiliary credit organizations  | 35                 | 0.1   | -7.1                                  |
| Social savings and loans institutions   | 235                | 1   | 7.3                                   |
| Memo: Infonavit, Fovissste, and SHF.  | 3                  | n.a.  | n.a                                   |

Source: Bank of Mexico, CNBV, SHCP, Condusef, and AMFE 1.

1/ Commercial bank total assets include those of regulated sofomes, which are consolidated with the respective bank.

2/ Includes development banks and developmental trusts (FIRA, Financiera Rural, and FOVI) and three public mortgage entities.

**6. Seven large financial groups anchored by a commercial bank include multiple nonbank financial intermediaries (Table 5).** These groups control or manage about 73 percent of all financial assets. These close interconnections pose systemic risk, undermine competition, and create conflicts of interest, depending on whether profit is maximized at the level of the group or of individual financial entities. In this environment, transparency of intra-group transactions and exposures, as well as strong consumer protection, are essential for stability and market development.<sup>2</sup>

<sup>1</sup> AFORES manage over 42 million accounts under a defined contribution pension system.

<sup>2</sup> Some market participants have expressed the view that funds may acquire assets and direct investments benefiting entities within the group at the expense of investors.

7. **The banking system is dominated by seven large banks, with 82 percent of bank assets; five of these are foreign-owned subsidiaries of major international banks.** The remaining 34 banks represent a very heterogeneous group focused on corporate and consumer lending as well as niche banking, creating a two-tiered industrial organization. Larger banks compete for “blue chip” companies that could fund themselves abroad, and in the credit card and mortgage markets.

**Table 5. Mexico: Conglomeration in Mexico’s Financial System**

| Market share (in percent)    | Banamex     | Bancomer    | Santander  | HSBC       | Scotia     | Banorte    | Ixe 2/     | Inbursa    | Rest        | Total        |
|------------------------------|-------------|-------------|------------|------------|------------|------------|------------|------------|-------------|--------------|
| Banks                        | 19.7        | 19.5        | 13.7       | 8.6        | 3.7        | 10.2       | 1.5        | 4.6        | 18.5        | 54.0         |
| Stock brokerage              | 8.2         | 0.3         | 10.9       | 1.5        | 10.3       | 3.2        | 5.1        | 13.6       | 46.9        | 4.1          |
| Other Credit institutions    | 13.3        | -           | -          | -          | -          | 2.5        | -          | -          | 84.2        | 0.1          |
| Sofomes                      | 0.4         | -           | -          | -          | -          | 37.3       | 18.0       | -          | 44.4        | 0.4          |
| Sofoles                      | -           | -           | -          | -          | -          | -          | -          | -          | -           | 0.6          |
| Mutual funds 1/              | 23.6        | 23.3        | 14.2       | 4.2        | 4.6        | 3.0        | 2.9        | 6.4        | 17.8        | 11.9         |
| Pension funds (AFORES) 1/    | 16.8        | 15.0        | -          | 6.8        | -          | 6.2        | -          | 7.4        | 47.9        | 14.0         |
| Insurance                    | 6.7         | 12.2        | 1.5        | 2.2        | -          | 6.4        | -          | 9.8        | 61.2        | 6.5          |
| Development banks            | -           | -           | -          | -          | -          | -          | -          | -          | 100.0       | 8.3          |
| <b>Total</b>                 | <b>16.6</b> | <b>16.2</b> | <b>9.7</b> | <b>6.3</b> | <b>2.9</b> | <b>7.5</b> | <b>1.5</b> | <b>5.5</b> | <b>33.3</b> | <b>100.0</b> |
| <b>Memorandum</b>            |             |             |            |            |            |            |            |            |             |              |
| Total exc. Development banks | 18.1        | 17.7        | 10.5       | 6.9        | 3.2        | 8.1        | 1.6        | 6.0        | 27.3        | ...          |

Sources: CNBV and CNSF.

1/ Assets under management.

2/ Ixe and Banorte merged in 2011.

## II. BANKING SYSTEM STABILITY ANALYSIS

### A. Commercial Banks

8. **The Mexican banking system appears to be sound, profitable, and well capitalized (Table 6).** The system-wide risk-weighted capital asset ratio stood at 16.5 percent as of June 2011, and capital is of high quality—14.3 percentage points is Tier 1. Profitability declined sharply in 2008–2009, but remained satisfactory as loan quality improved, provisions and write-offs fell, and credit growth picked up (Figure 2). Liquid assets represent more than 40 percent of total assets. Commercial bank loans to sub-national governments and public enterprises, and holdings of government securities represent about a quarter of total bank assets.

9. **Since the 2006 FSAP Update, Mexico has experienced four different episodes of financial system strain.** The first was the post-Lehman turmoil, which led to high volatility in the Mexican foreign exchange market, forcing BoM to intervene; the closing of the capital markets for some issuers; the drying up of liquidity in the secondary debt markets; and the major losses experienced by large nonfinancial corporations in the over-the-counter (OTC) derivatives market. The second was a bursting of the credit card and personal loans bubble—the result of lax underwriting standards in some banks. The rapid expansion of credit card loans in 2005–06

resulted in a steep increase in nonperforming loans and significant write-offs when unemployment increased in 2009. The third was the distress experienced by the non-deposit-taking, unregulated housing finance institutions (*Sofoles/Sofomes*), which led to illiquidity and insolvency. The latest was the rapid increase—from a low base—in bank lending to states and municipalities. Some smaller banks took on very high exposures previously viewed as virtually risk-free; these loans suffered major restructuring, impacting liquidity and capital.

**Table 6. Mexico: Financial Soundness Indicators**

(In percent)

|  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011 1/ |
|--|-------|-------|-------|-------|-------|-------|-------|---------|
| <b>Capital Adequacy</b>                                      |       |       |       |       |       |       |       |         |
| Regulatory capital to risk-weighted assets                   | 14.1  | 14.3  | 16.1  | 15.9  | 15.3  | 16.5  | 16.9  | 16.5    |
| Regulatory Tier 1 capital to risk-weighted assets            | 12.8  | 13.4  | 15.1  | 14.7  | 13.3  | 14.6  | 14.9  | 14.3    |
| Capital to assets  | 11.2  | 12.5  | 13.6  | 13.8  | 9.2   | 10.1  | 10.4  | 9.8     |
| Gross asset position in financial derivatives to capital     | 15.8  | 24.3  | 35.3  | 36.1  | 47.1  | 57.6  | 56.5  | 69.3    |
| Gross liability position in financial derivatives to capital | 14.1  | 21.5  | 33.8  | 35.0  | 47.7  | 59.5  | 55.6  | 68.0    |
| <b>Asset Quality</b>   |       |       |       |       |       |       |       |         |
| Nonperforming loans to total gross loans                     | 2.5   | 1.8   | 2.0   | 2.7   | 3.2   | 3.1   | 2.0   | 2.3     |
| Provisions to Nonperforming loans                            | 202.6 | 242.2 | 210.3 | 168.9 | 161.2 | 173.8 | 200.6 | 181.5   |
| <b>Earnings and Profitability</b>                            |       |       |       |       |       |       |       |         |
| Return on assets   | 2.1   | 3.2   | 3.5   | 2.7   | 1.1   | 1.5   | 1.8   | 1.6     |
| Return on equity   | 19.0  | 25.4  | 25.9  | 19.9  | 8.9   | 15.2  | 16.8  | 16.0    |
| <b>Liquidity</b>   |       |       |       |       |       |       |       |         |
| Liquid assets to short-term liabilities                      | 106.0 | 54.5  | 51.1  | 50.4  | 40.4  | 42.7  | 58.2  | 58.0    |
| Liquid assets to total assets                                | 35.2  | 68.1  | 64.2  | 64.2  | 56.1  | 57.7  | 43.3  | 43.6    |
| Customer deposits to total (noninterbank) loans              | 119.1 | 120.1 | 107.4 | 95.8  | 99.6  | 92.7  | 87.9  | 81.3    |
| <b>Sensitivity to market risk</b>                            |       |       |       |       |       |       |       |         |
| Net open position in equities to capital                     | 16.8  | 13.7  | 13.0  | 13.8  | 16.6  | ...   | ...   |         |

Source: FSI.

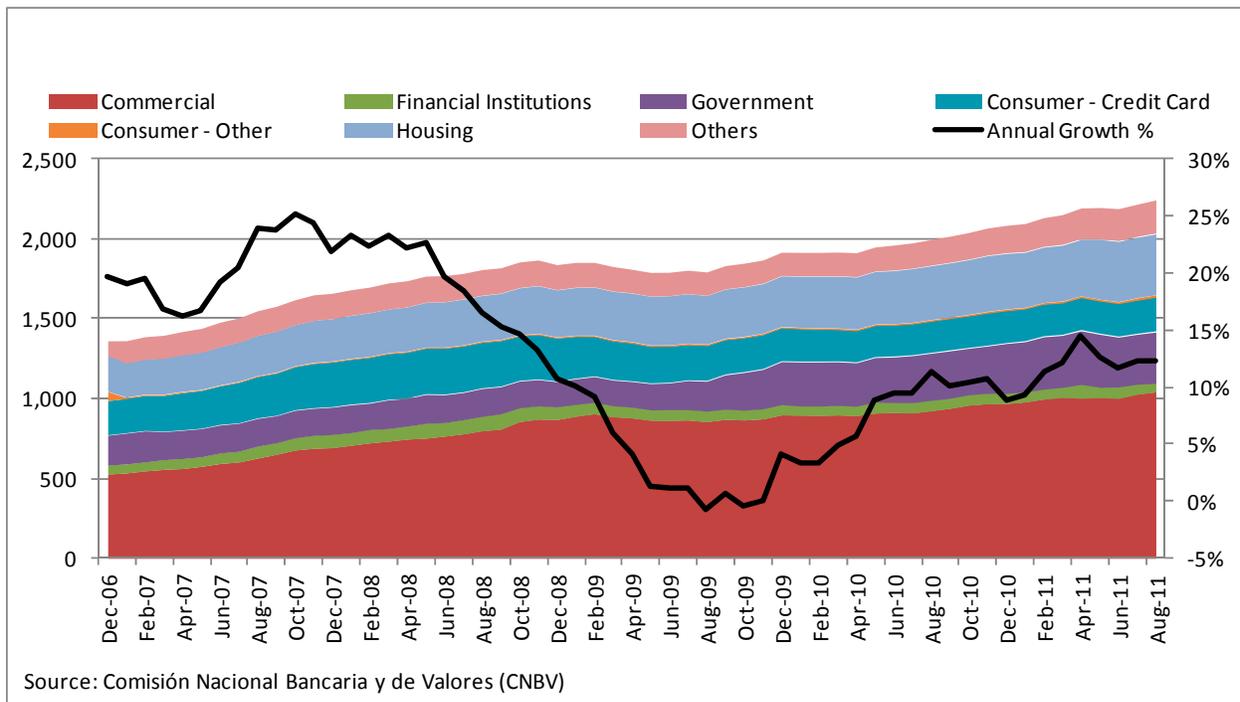
1/ As of June 2011.

10. **These episodes have encouraged better risk management and more disclosure.** The CNBV modified the methodology for calculating provisions on both the credit and mortgage portfolios, and bank loans to states and municipalities. For the latter, it moved from a system based on ratings by rating agencies to an expected-loss method based on borrowers' past repayment record and other creditworthiness indicators (debt level over eligible fiscal transfers, debt service to revenues, debt structure, and fiscal position).

11. **With the deterioration in the international economic outlook, external vulnerabilities have become more prominent.** In particular, potential distress in foreign parent banks, further EU-driven deterioration in international financial markets, and a U.S. growth

slowdown are emerging threats. Capital flow reversal is a more general concern, given the high dependence on non-resident investment, in the context of rising risk aversion. On the domestic front, credit risk is the most important vulnerability identified in the banking system. While there are significant differences across banks, most are heavily exposed to their largest borrowers—especially smaller banks (Figure 3). In part, this reflects the high concentration prevalent in the Mexican economy. Nevertheless, the expected impact of these threats is limited.<sup>3</sup> The use of derivatives for additional leverage and reducing return volatility poses risks for pension funds.

Figure 2. Mexico: Lending in Mexico by Borrower Type and Total Loan Growth 1/



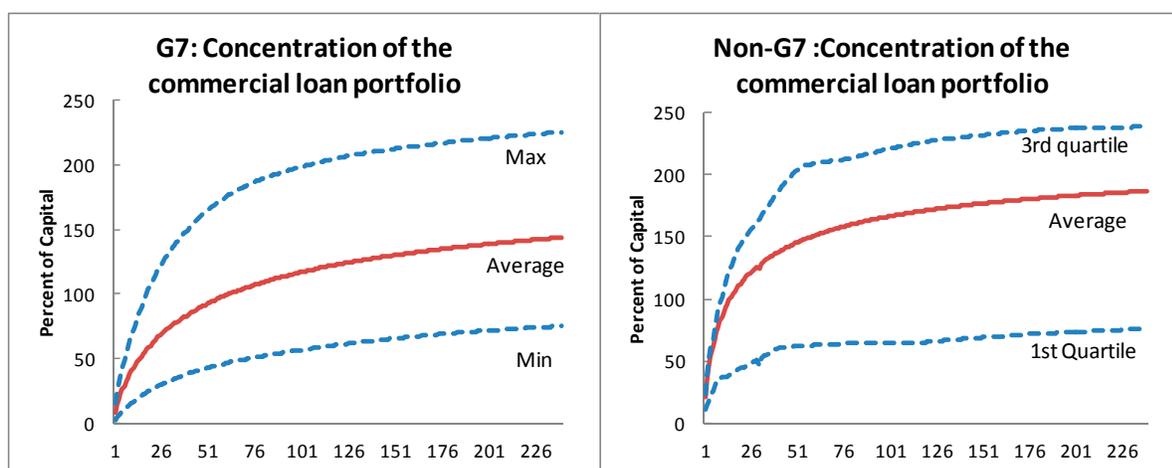
1/ Left-hand scale: lending in billions of Mexican pesos; right-hand scale: loan growth in percent.

12. **Interest rates have declined as a result of the 375 basis point cut in the policy rate implemented in response to the global crisis.** Lending rates have generally fallen more among the largest banks, which likely reflect competition for large corporates. Consumer loan rates declined less than rates for corporates and government, reflecting a higher risk assessment following the steep increase in nonperforming loans—particularly on credit cards—after the 2008–2009 crisis. The net effect has been that the risk-adjusted financial margin declined, contributing to lower bank profitability.

<sup>3</sup> Possible deleveraging of parent banks will have limited impact due to the subsidiaries' significant contributions of capital and profitability to the group, as well as their funding structure that relies heavily on a broad and diversified domestic deposit base.

Figure 3. Mexico: Loan Portfolio Concentration<sup>4</sup>

(Borrowers (in order of size) versus bank capital)



## B. Stress Testing

13. **Stress tests were undertaken by CNBV, BoM, and the FSAP team.** The approaches and stress scenarios differ, but the tests covered credit, market, liquidity, and contagion risks.<sup>5</sup> All three exercises found that the banking system has adequate capital to withstand severe shocks.

14. **The FSAP team performed stress tests to assess exposures under a pessimistic macroeconomic baseline and two adverse scenarios.**<sup>6</sup> The 10 largest banks' quarterly pre-tax profit sensitivities to macroeconomic factors are modeled using publicly available information (Box 2). The methodology also analyzes the importance of bank-specific shocks and dividend policy assumptions for sustaining capital adequacy through a prolonged stress period. The profitability and capital adequacy of the Mexican banking system appear adequate to maintain the system through a prolonged period of stress. Even when banks are subjected to large idiosyncratic shocks each quarter, banking system profitability still remains sufficiently high that only three banks would post declining CAR ratios in scenario 2 when they retain all earnings—consistent with the 2008-2009 crisis episode (encompassing the bursting of credit card bubble and the sharp decline in output) when system-wide RoE declined from about 24 percent in 2005-2007 to 14 percent in 2008–2010 (Table 6).

<sup>4</sup> G7 refers to the seven largest banks.

<sup>5</sup> The zero risk-weighting of banks' holdings of government securities was not modified (stress-tested).

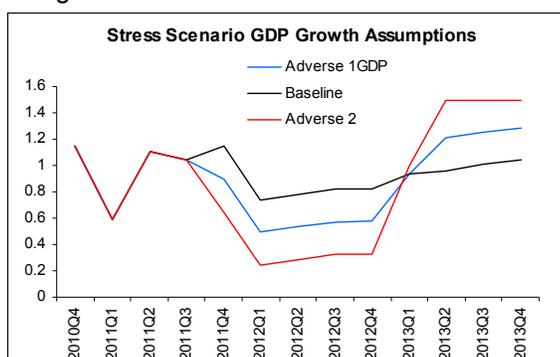
<sup>6</sup> Since the preparations for the bank-based stress testing exercise in July 2011 organized by CNBV and described below, the macroeconomic outlook deteriorated notably.

## Box 2. Stress Tests

**The FSAP mission estimated individual top-down stress test models for the 10 largest Mexican banks accounting for 84 percent of the Mexican banking system.** Bank profits are modeled using publicly available macroeconomic data from the IMF WEO and IFS, and bank-specific data provided by the CNBV. Individual bank quarterly profits are explained by macroeconomic variables. Bank models are estimated on a common set of factors, but each bank's sensitivities vary to accommodate individual bank exposure profiles. The model is estimated on pooled time series cross-section data in a regression with fixed effects and bank-specific factor interactions. The macroeconomic factors account for 23 percent of the overall sample variation in bank profit and loss rates. Bank-specific model residuals are used to parameterize bank-specific shocks in the stress test exercise.

**The stress test included a WEO baseline scenario and two adverse slow-growth scenarios for 2012–2013.** Given strong links to the United States, adverse Scenario 1 captures the effect of a slower but still positive growth path for the U.S. economy. Adverse Scenario 2 assumes a U.S. recession. Figure 1 plots GDP growth scenario assumptions and the paths for the remaining macroeconomic factors are summarized in Table 1.

Figure 1. Stress Test GDP Growth Scenario

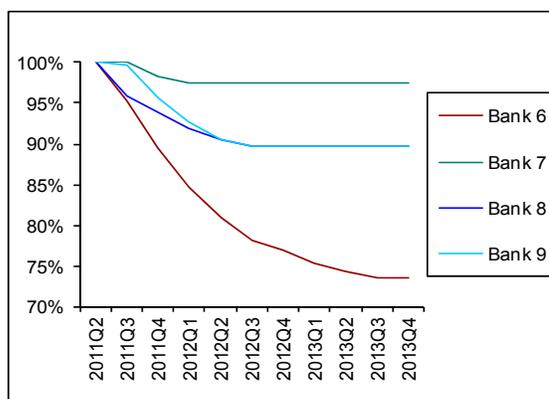


**Large capital buffers and high profit margins enable Mexican banks to weather severe stresses without violating their regulatory minimum capital level.** Even assuming normal profit distribution patterns, all banks maintained regulatory minimum capital levels under adverse Scenario 2, including the addition of a large bank-specific loss each quarter equal to one-half the ninetieth percentile loss of each bank's factor model residual distribution. Only four banks experience a deterioration in their CAR (Figure 2), implying stress-related losses greater than profit distribution. For most banks, the ability to increase capital by retaining profits provides an additional and significant level of protection beyond their initial capital buffers.

Table 1. Stress Scenario Assumptions

| <i>Baseline</i>                | 2011Q4 | 2012 | 2013 |
|--------------------------------|--------|------|------|
| Unemployment                   | 5      | 5    | 5    |
| 28-day interbank interest rate | 5      | 6    | 7    |
| Stock price index              | -3     | 10   | 10   |
| MXP/USD (% change)             | 4      | -2   | -2   |
| <i>Adverse 1</i>               |        |      |      |
| Unemployment                   | 5      | 5    | 5    |
| 28-day interbank interest rate | 5      | 5    | 5    |
| Stock price index              | 0      | -10  | 12   |
| MXP/USD (% change)             | 2      | -4   | 4    |
| <i>Adverse 2</i>               |        |      |      |
| Unemployment                   | 5      | 6    | 5    |
| 28-day interbank interest rate | 5      | 4    | 5    |
| Stock price index              | 0      | -25  | 15   |
| MXP/USD (% change)             | 2      | -8   | 8    |

Figure 2. CARs under Scenario 2 with Large Bank Specific Losses (2011Q2=100 percent)



15. **The CNBV stress test uses bank estimates of balance sheet and income statements under a two-year supervisory stress scenario.** The stress scenarios were designed jointly by the IMF, the CNBV, and the SHCP. The baseline scenario (Table 7) follows June 2011 WEO projections; the adverse scenario mimics the effects of near-recession in Europe and recession in the United States.<sup>7</sup> The CNBV provided banks with expected loss estimates for seven broad credit classes linking the probabilities of default of seven credit risk categories to macroeconomic factors. Banks made additional assumptions about credit growth, earnings retention, net interest margins and other important operational aspects and estimated the impact for their CAR over the stress period. These results were checked for consistency by CNBV, and then subjected to a CNBV model that estimates unexpected losses for each bank.<sup>8</sup> The CNBV also uses econometric methods to assess systemic risk and contagion.

**Table 7. Mexico: CNBV Macroeconomic Scenarios, 2011–2013**

| Variable                       | Baseline |          |          | Adverse  |          |          |
|--------------------------------|----------|----------|----------|----------|----------|----------|
|                                | Dec-11   | Dec-12   | Dec-13   | Dec-11   | Dec-12   | Dec-13   |
| Nominal GDP growth             | 6.6      | 7.1      | 6.7      | 3.7      | 3.3      | 3.5      |
| Inflation                      | 3.5      | 3.0      | 3.0      | 4.2      | 6.0      | 5.5      |
| Unemployment rate              | 2.4      | 3.9      | 3.5      | 5.2      | 5.1      | 4.3      |
| 28-day interbank interest rate | 4.9      | 5.9      | 6.5      | 5.5      | 7.1      | 6.6      |
| Domestic credit growth         | 12.9     | 15.3     | 16.5     | 9.9      | 8.4      | 16.1     |
| House price index (% change)   | 4.5      | 4.5      | 5.0      | 4.5      | 2.4      | 4.9      |
| Stock price index              | 39,903.0 | 41,095.0 | 42,326.0 | 32,075.0 | 22,260.0 | 27,272.0 |
| MXP/USD (% change)             | 11.8     | 12.0     | 12.2     | 12.3     | 13.8     | 13.3     |
| Stock price volatility index   | 22.2     | 36.9     | 31.0     | 26.1     | 50.4     | 36.9     |

16. **CNBV stress tests for the 10 largest banks suggest that the Mexican banking system would remain highly solvent with capital adequacy ratios well above 10 percent—consistent with the FSAP team’s stress test results (Table 8).** The CNBV adjusts banks’ capital and reported CARs for hypothetical unexpected stress scenario losses and finds that some bank CARs fall significantly, but still leaving the system adequately capitalized. The CNBV analyzed each bank’s market risk exposures using a value-at-risk and stressed value-at-risk measure.<sup>9, 10</sup> The CNBV assessed liquidity risk using the Basel III liquidity coverage ratio (LCR) and found most banks have more than adequate liquidity, but a few banks have LCRs below

<sup>7</sup> The cumulative output losses in the adverse scenarios are broadly in line with the output loss experienced during the recent crisis.

<sup>8</sup> The model used to calculate unexpected losses is described in, “Consistent Information Multivariate Density Optimizing Methodology (CIMDO),” Segoviano (2006), and Segoviano and Padilla (2006). Increasing reliance, both at the CNBV and banks, on models calls for thorough model validation exercises.

<sup>9</sup> Stress value at risk is calculated for the 2008 financial crisis period.

<sup>10</sup> All Mexican banks apply the Basel standardized approach for calculating regulatory capital for market risk.

100 percent. Liquidity risk concerns for the banking system as a whole are muted in view of the significant liquidity requirements in the form of monetary regulation deposits (DRM), exceeding 13 percent of customer deposits; also, foreign banks do not rely on parent bank or wholesale funding. The zero risk rating of government securities holdings was not stress tested.

**Table 8. Mexico: Stress Test Results, 2011–2013**

| CAR range(%):                       | Dec-11 |   |       |      | Dec-12 |   |       |      | Dec-13 |   |       |      |
|-------------------------------------|--------|---|-------|------|--------|---|-------|------|--------|---|-------|------|
|                                     | 4 - 6  | 7 | 8 - 9 | >=10 | 4 - 6  | 7 | 8 - 9 | >=10 | 4 - 6  | 7 | 8 - 9 | >=10 |
| (number of banks in each range)     |        |   |       |      |        |   |       |      |        |   |       |      |
| <b>CNBV</b>                         |        |   |       |      |        |   |       |      |        |   |       |      |
| Baseline                            | -      | - | -     | 10   | -      | - | -     | 10   | -      | - | -     | 10   |
| Adverse                             | -      | - | -     | 10   | -      | - | -     | 10   | -      | - | -     | 10   |
| Baseline incl. unexpected losses 1/ | -      | - | 2     | 9    | -      | 1 | 1     | 9    | -      | 2 | 1     | 8    |
| Adverse incl. unexpected losses 1/  | -      | 1 | 1     | 9    | 1      | - | 2     | 8    | 1      | 1 | 1     | 8    |
| <b>IMF</b>                          |        |   |       |      |        |   |       |      |        |   |       |      |
| Baseline                            | -      | - | -     | 10   | -      | - | -     | 10   | -      | - | -     | 10   |
| Adverse 1                           | -      | - | -     | 10   | -      | - | -     | 10   | -      | - | -     | 10   |
| Adverse 2                           | -      | - | -     | 10   | -      | - | -     | 10   | -      | - | -     | 10   |

Source: CNBV, staff estimates.

Note: Category I CAR $\geq$ 10; Category II 8 $\leq$ CAR $<$ 10; Category III 7 $\leq$ CAR $<$ 8; Category IV 4 $\leq$ CAR $<$ 7.

1/ 11 banks were considered here.

17. **BoM's stress test assumptions and results are published in its September 2011 *Financial System Report*.** These involved stress scenarios that considered both macro-market shocks, similar to those described above but including a contagion phase, and a credit stress scenario. BoM measures contagion based on the idiosyncratic failure of single financial institution among all banks, brokerage firms, mutual funds, pension funds, and selected foreign institutions.<sup>11</sup> BoM's estimates suggest that contagion risk represents only a minor risk, which reflects the relatively limited role of interbank markets and the likely importance of wholesale funding from intra-group institutional investors. A more involved exercise considered contagion using a common shock to underlying macroeconomic variables that creates the potential for multiple institution failures and greater contagion risk.<sup>12</sup> However, even in this case, the effect was modest, with losses rising from about 8.2 percent of system capital without contagion to around 13 percent.<sup>13</sup>

<sup>11</sup> Failure is defined as CAR below 8 percent. A detailed description of the methodology used for the contagion analysis can be found in the Bank of Mexico's Financial System Report 2006.

<sup>12</sup> The macro scenario construction is described in Bank of Mexico's Financial System Report 2010, Boxes 5 and 6. The newest model uses quarterly data rather than monthly.

<sup>13</sup> The market/liquidity effect of a macro shock implies that some banks may fail, but under these extreme conditions brokerage houses are also vulnerable through contagion.

18. **The BoM credit risk stress test triples bank portfolio default probabilities over 18 months, reduces bank interest income by 80 percent from pre-stress levels and shocks recovery rates to half of their historical averages.** This exercise causes the system average CAR to fall by nearly 7 percentage points but still remain above the regulatory minimum.

### III. ISSUES IN REGULATION, SUPERVISION, AND OVERSIGHT

19. **Assessments of financial sector standards and codes found that despite good progress since the 2006 FSAP Update, there remains scope for further improvements.**<sup>14</sup> Overall, assessors considered banking, insurance, and securities regulation and supervision, as well as payment systems oversight, to be of high quality, notwithstanding the opportunities for improvement identified. Table 9 provides an overview of main financial sector legal reforms undertaken since 2006. There are a number of overarching themes that affect several supervisory agencies:

- **The CNBV and the CNSF should have more independence and budget autonomy to allow them to pursue their objectives, while increasing their accountability.** There is neither a defined appointment period for, nor well-specified causes for dismissal of, senior management; make key staffing decisions, or set/modify the budget, even if fees collected from supervised institutions exceed its budget. High CNBV staff turnover related to below-market salaries has been a particular concern for maintaining the quality of supervision and institutional continuity.<sup>15</sup> A widening regulatory perimeter for CNBV—AML/CFT supervision over a large number of foreign exchange houses and prudential supervision over small deposit-taking institutions—adds urgency to establishing budget autonomy. Increased independence should go hand in hand with enhanced accountability, including by publishing annual reports. With 10 out of 13 CNBV Board members under its control, the SHCP influence over Board composition appears excessive.
- **Legal protection of supervisors needs to be strengthened.** Management, Board members, and staff are not accorded statutory legal immunity for the bona fide discharge of official functions that could hinder enforcement; former employees should also be covered. Legal protection is especially important in a civil code legal environment when implementing risk-based supervision, where the main challenge is to shift the responsibilities for identifying, measuring, controlling and monitoring risks to the Boards of supervised institutions, which requires prompt reaction by the supervisor to newly

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<sup>14</sup> Summary assessments for banking, insurance, securities, and payment system supervision and oversight are found in Annexes I – IV. FSB issued an interim peer review in 2010 to monitor progress on 2006 FSAP recommendations.

<sup>15</sup> Between 2007 and 2010, 255 senior staff and specialized personnel have left the CNBV. Its salaries have been frozen for the past seven years, resulting in a widening salary gap.

- emerging risk. Hence, the CNBV has to strike a delicate balance between rules and discretion: on the one hand it has an interest in codifying the circumstances in which discretion will be exercised to minimize challenges to its authority; on the other, it needs the flexibility to deal promptly with novel situations using qualitative judgments than carry greater legal risk—rather than quantitative, compliance-based indicators.
- **Concentration and conglomeration risk should be reflected more prominently in the regulatory and supervisory framework.** The presence of financial and mixed activity groups as well as concentrated loan portfolios create the potential for conflicts of interest in supervised entities and for hidden risks—including contagion—not fully addressed by existing regulations. Consolidated supervision should be strengthened by giving supervisors powers to regulate both financial and mixed-activity groups; prudential regulation—especially risk limits—and risk governance and management standards should be extended to the group level.
- **The sanctions regime should be strengthened; in particular, fines should be dissuasive and enforcement actions should be disclosed promptly.**<sup>16</sup> Other nonmonetary sanctions foreseen in the law could also be used more actively. Legal restrictions on disclosing enforcement proceedings before all rights of appeal have been exhausted and on reaching settlements interfere with the effectiveness of the sanctions regime, and should be removed.<sup>17</sup>

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<sup>16</sup> Recently, the CNBV has significantly increased the fines applied to brokers for violations of investment advisory and securities sales rules, as well as AML/CFT requirements.

<sup>17</sup> On AML/CFT, the Financial Task Force on Money Laundering in South America (GAFISUD), in its 2009 assessment report, found Mexico's efforts inadequate in the areas of sanctions, convictions and seizures. Some of these responsibilities fall under the Financial Intelligence Unit at the SHCP and the Attorney General's Office. Sanctions appear neither proportionate nor dissuasive, and few fines have been applied, mainly to the larger banks. Frequent use of judicial appeals introduces delays and further weakens enforcement.

**Table 9. Mexico: Main Financial Sector Legal Reforms 2006–2011**

| Date of Publication | Topic   |
|---------------------|---|
| July 6, 2006        | Bank resolution scheme is incorporated into the legal framework. Definition of the role of financial authorities in the case of bank resolution and the various processes to be followed.   |
| July 18, 2006       | Liberalization of the activities of financial leasing and factoring, so that any business or enterprise can carry out these operations without approval or supervision of financial authorities. Additionally, these entities are included in the General Law on Auxiliary Credit Institutions and Activities and subject to certain rules for anti-money laundering.   |
| June 15, 2007       | New Law of Management and Transparency of Financial Services, which seeks to regulate service fees and commissions of different financial or commercial entities, as well as other aspects of financial services and lending operations performed by these entities.<br><br>Empowerment of the CNBV to regulate: (i) adhesion contracts; (ii) advertising; and (iii) financial statements and proof of operations.  |
| June 28, 2007       | Amendment of the Credit Institutions Act to include norms related to counterfeit and to give authority to Bank of Mexico to regulate the collection of interest commissions.  |
| August 31, 2007     | Amendments to the Savings and Credit Act, including the expansion of the spectrum of entities to which this law applies and the establishment of the obligation to have independent advisors.<br><br>Establishment of new types of crime, including the crime of mismanagement, for the cases an official of an entity grants a loan to a single person (or group of individuals whose links are considered as one) with an amount that could jeopardize the stability and solvency of that entity's assets and to the detriment of savers.<br><br>Creation of the trust to administer the Fund for Strengthening Cooperatives. |
| February 1, 2008    | Comprehensive reform of the LIC to realign powers that were previously the responsibility of the Ministry of Finance to the CNBV, adjust the process of authorization of a banking institution, and make more flexible the activities and operations that banks can perform.  |
| January 2, 2008     | Amendments to the Act that regulates the credit bureaus, reducing the storage time of information and establishing the obligation to provide consolidated information to users.   |
| February 6, 2008    | Amendments to the Credit Institutions Act to establish a single procedure for the imposition of sanctions, as well as a catalog of sanctionable conduct. Also, amendments to strengthen the powers entrusted to the CNBV in relation to the imposition of administrative sanctions to financial institutions and other persons regulated by the Credit Institutions Act.  |
| June 26, 2008       | Amendment of the Credit Institutions Act to prosecute and punish individuals who engage in illicit activities to obtain information of credit card account holders, counterfeit cards, and other payment instruments, use cards or checks as a result of other crimes.  |

| Date of Publication | Topic   |
|---------------------|---|
| July 1, 2008        | Amendment of the Credit Institutions Act to establish the possibility that the technical body of the Federal Election Institute can request information, without the hindrance of bank secrecy and tax trust, in order to achieve mechanisms to enforce transparency, equitable distribution of public funding and the proper functioning of control bodies.  |
| August 20, 008      | Enactment of the Credit Unions Act, which promotes the improvement of corporate governance practices to establish modern systems of prudential regulation. It also establishes the products and services that credit unions can provide, mandates a transparent disclosure of operations, and the avoidance of concentration of risks.  |
| January 20, 2009    | Amendments to Credit Reporting Act to strengthen the legal security of individuals or entities who are customers of financial institutions, commercial enterprises, and Sofomes.  |
| March 23, 2009      | Amendments to the Credit Institutions Act, mandating the designation of a beneficiary in case of death.   |
| May 6, 2009         | <p>Amendment of the Credit Institutions Act to include the obligation of development banks and public trusts to provide information concerning its operations and indicators that measure their services. Additionally, this reform includes the obligation of the Ministry of Finance to annually publish evaluation studies of the development banks and public trusts.</p> <p>Amendment to the Securities Market Act to add as an additional obligation of the issuers, revealing the positions they hold in the derivatives market.</p>                                       |
| June 25, 2009       | Amendments to the Credit Institutions Act to grant powers to CONDUSEF on transparency norms of financial services, requirements and procedures for the termination of operations, financial services complaints, defining activities that deviate from healthy practices, oversight the Federal Competition Commission, supervise and monitor the level of competition of banking institutions, and investigate violations to the LIC.  |
|                     | Establishment of limits on operations that lending institutions can carry out through third-party brokers. Exemptions to the application of the limits are granted when the third party is an entity of the federal, state, or municipal government.  |
| August 13, 2009     | Amendment to incorporate cooperatives within the entities empowered to capture resources. Enactment of the law to regulate the activities of cooperatives, savings societies, and credit unions.  |
| May 25, 2010        | Decree that (i) grants more powers to the Bank of Mexico in the regulation of interest rates and commissions; (ii) authorizes Bank of Mexico to grant authorizations to organize and operate clearing houses; (iii) establishes that lending institutions have to mandatorily offer a basic credit card for eligible clients; (iv) includes rules to facilitate customer mobility between institutions; and (v) mandates that credit reports need to include information from both credit bureaus, in order to have a better control of the level of indebtedness of the clients. |
| August 3, 2011      | In the General Law on Auxiliary Credit Institutions and Activities, the foreign exchange trading companies are subject to the monitoring and supervision of the CNBV and are subject to implement measures to combat money laundering and financing terrorism.  |

## A. Banking Supervision

20. **The CNBV's organization, regulations, and prudential supervision have been significantly overhauled since the 2006 FSAP Update.** The CNBV's staff is professional and has outstanding information systems at its disposal with high quality and granularity of data that form the basis for building robust analytical tools and models. Its regulatory framework is comprehensive and relies on well-developed supervisory methodologies and processes. Home-host cooperation is well developed.<sup>18</sup> A new vice-presidency handles anti-money laundering and the combating financing of terrorism (AML/CFT) work; new departments have been created, new risk areas/functions have been added, and work is ongoing to develop analytical and statistical tools to fully implement Basel II and to deploy more sophisticated approaches to analyze risks in the banking system. Once in place, this should provide specific risk metrics and clearer criteria to differentiate each bank according to their risks.

21. **CNBV has been reasonably effective in delivering supervision; however, implementing Basel II's supervisory review (Pillar 2) would complement already strong capital buffers to reach a fully risk-based regulatory system.** Currently: (i) the responsibilities of the Boards of Directors are not explicitly linked to the levels of risk and capital; (ii) portfolio concentration risk limits are unclear—exemptions are widespread; and (iii) the overall rating assigned to a supervised institution is not used effectively to require remediation. Adopting Pillar 2 would introduce a supervisory review process and associated standards providing the authority, methodologies, and criteria to require banks to increase capital (including to offset loan concentration, liquidity, interest and operational risks); it would also explicitly relate the outcomes of the supervisory review process with banks' mandatory internal capital adequacy assessment process (ICAAP), to determine future capital needs and how these can be met. Additional measures to strengthen supervision are to: (i) create a quality assurance function to increase consistency and standardize supervision practices, documented in updated supervision manuals; (ii) introduce a formal supervisory cycle to cover all significant supervisory areas—this can also be used for resource planning; and (iii) standardize criteria and procedures, including metrics used internally for risk assessment and onsite inspections, to provide benchmarks against which business practices can be judged.

22. **Weaknesses in the licensing regime should be addressed.** The CNBV has taken over the licensing functions from the SHCP, but ultimate beneficial owners (UBO) are not necessarily clearly identified, parallel banks allowed to operate, and BoM holds veto power over granting licenses, even if it is represented on the CNBV's Board. To address these shortcomings, the FSAP team recommends that the authorities: (i) adopt additional criteria for approval of applicants and tracking their sources of funds, and use the licensing process on an ongoing basis to clarify the identity of the final UBO—this concept should also be explicitly defined in law;

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<sup>18</sup> External regulatory agencies approached confirmed the excellent level of cooperation, coordination, and exchange of information that exists between the parties.

(ii) introduce stringent operating criteria on parallel banking and mixed-activity groups (which bypass consolidated supervision), and use licensing powers to mandate changes in the by-laws of unregulated mixed-activity parent companies; and (iii) require banks, through regulation or by using licensing powers, to notify the CNBV of major changes planned in business activities, changes in structure, and adverse developments and breaches in regulations.

23. **Liquidity and operational risk monitoring need strengthening.** A new liquidity risk regulation should include the following elements: (i) banks must explicitly link credit risk and liquidity risk, monitor core liquidity risk indicators and limits, and must use forward looking liquidity risk metrics; and (ii) residual maturities and liquidity forecasts should be reported. Operational risk is currently monitored indirectly through supervision of banks' internal controls and risk management systems. However, there is a clear regulatory regime and progress in terms of methodologies; implementation is slated for 2012 and will include a database to be used for measuring operational risk and allowing additional capital charges under Pillar 2.

## B. Securities

24. **Priorities in strengthening securities supervision include clarifying the derivatives legal framework, and strengthening enforcement powers and reporting standards.** The CNBV's responsibilities, powers, and jurisdiction with respect to derivatives are unclear, owing to the lack of specific legislation in this area; this raises concerns about the potential for overlaps with other agencies and the possibility of conflict in supervisory approaches. This gap in legislative coverage and authority should be filled promptly, either by development and passage of dedicated derivatives legislation or by extensive additions to the capital markets law—a timely effort in light of the G-20's drive to boost supervision of derivatives markets.

25. **Additional powers and tightened reporting standards would make achievement of the CNBV's regulatory objectives more assured.** These include the power to be more transparent about enforcement matters, to settle disciplinary matters without a hearing, to order restatements of financial statements by public issuers, to order restitution to compensate defrauded investors, to inspect any regulated entity without giving prior notice—even when no breach of the law is suspected—and to intervene in the sales and redemption process at mutual funds in appropriate circumstances. Although the reporting requirements are comprehensive and timely, the delivery time for public companies' audited statements is long, the delay for capital adequacy reporting by market intermediaries should be shortened, and a notification requirement instated in case capital declines below required levels.

26. **Further steps that would improve securities supervision include the following:** (i) improve coordination with other authorities to ensure that similar investor protection rules apply to similar securities and insurance products; (ii) enhance CNBV transparency by making consolidated versions of rules more easily accessible on its website, and by expanding disclosure regarding its activities to enhance accountability and assist the industry in understanding the CNBV's expectations; (iii) enhance market transparency by ensuring routine disclosure of full

information on the risks posed by leverage to less sophisticated investors; (iv) increase transparency about issuers by ensuring shareholder meeting materials are posted online, with a longer notice period, and by reducing the threshold for reporting changes to insider ownership positions to no more than 2 percent from the current 5 percent; (v) complete the project to develop a comprehensive regulatory regime for conflicts of interest and conduct of business across all financial institutions regulated by the CNBV; (vi) invest more in examination programs in new areas, such as the new asset management program, and (vii) conduct periodic reviews of the continuous disclosure documents provided by public issuers to ensure appropriate standards continue to be met.

### C. Insurance

27. **A comprehensive legal and institutional framework supports the regulation and supervision of the insurance sector.** This legal framework is about to be overhauled once the new insurance law is approved by parliament. The long preparation process of this new insurance law allowed the authorities to gain consensus among the different stakeholders. Its promulgation will result in improved compliance with the IAIS core principles, as described in the detailed assessment. Issuing and implementing secondary regulations will further boost compliance. However, as noted above, lack of independence and budget autonomy of the CNSF are concerns.

28. **There is an important mismatch between the duration of the assets and the liabilities that need to be monitored.** The mismatch of 5 years and 12 years in domestic and foreign currency, respectively, as revealed by the reported data, could be explained by the investment strategy of the industry waiting for the right moment to invest in a low interest rate environment. However, a mismatch in the order of 15 years in the indexed currency, mainly reflecting the lack of long-term government indexed paper, appears to be a source of vulnerability that needs close attention and monitoring.

29. **The assessment of the IAIS principles gives rise to a number of recommendations:** (i) establish an implementation plan for the adoption of the Solvency II regime targeted to the Mexican circumstances; (ii) introduce, once the new solvency regime is in place, an enhanced and more intrusive inspection system that is adequately resourced; (iii) step up the requirements for maximizing the value of assets of companies under liquidation and enhance the efficiency of the process as proposed in the new insurance law to improve winding-up proceedings for insurers; (iv) provide guidance on the accounting for reinsurance recoveries, as well as on the assets backing up catastrophic reserves that could require investments abroad; and (v) revisit the arbitration mechanism to encourage its use.

### D. Payment Systems

30. **The legal and regulatory framework for payment systems is sound, complete, and underpinned by a comprehensive payment systems law, but there are still gaps.** The following recommendations apply: (i) for the payment system SPEI, BoM should integrate its

business continuity plans with that of participants to establish a comprehensive system-wide business continuity plan; (ii) for the CLS, access by more Mexican financial institutions for foreign exchange settlement would decrease systemic risk and increase system efficiency; (iii) BoM and the CNBV should consider establishing formal oversight arrangements on payment and settlement system at the technical level, building on existing cooperation; and (iv) to prepare for the approaching adoption of the CPSS-IOSCO Principles for Financial Market Infrastructures, authorities should consider reviewing the coverage of central counterparties (CCPs) and other systemically important payment systems, issues related to crisis management and their link to bank resolution issues, and the legal protection for formalized arrangements for over-the-counter (OTC) derivatives clearing.

### E. Supervisory Architecture

31. **The longstanding lack of independence and budget autonomy of supervisors could be addressed by rationalizing Mexico’s supervisory architecture.** The present structure could be improved by: (i) reducing overlapping functions between the BoM and the CNBV in areas such as derivatives, capital and liquidity norms, and licensing; (ii) separating prudential from market-conduct roles to provide more space for capital market development; (iii) keeping up with an ever more integrated financial sector to focus in on industry conflict of interest issues and improve coordination; (iv) achieving better alignment between BoM and the CNBV during emergency liquidity support situations; and (v) minimizing the risk of other coordination and information failures between central bank and prudential authorities that would delay crisis response. Moreover, maintaining the status quo would risk deterioration in institutional strength and the further loss of high-quality, experienced staff.

32. **Options—not necessarily mutually exclusive—could include:** (i) integrating the prudential functions of the CNBV with BoM, and keeping the conduct of business functions separate, in a “twin peaks” model; (ii) consolidating the CNBV, CNSF, and CONSAR into an integrated financial supervision agency, to keep pace with the integration of the supervised industry; (iii) changing the administrative status of the supervisory agencies within the government structure, converting them from de-concentrated entities under the SHCP to decentralized agencies, increasing their budgetary autonomy and independence. Greater independence should go hand-in-hand with greater accountability.

## IV. LIQUIDITY MANAGEMENT AND FINANCIAL SAFETY NET ARRANGEMENTS

### A. Liquidity Management

33. **The cost of monetary policy is borne entirely by the central bank, and its balance sheet dynamics must be monitored.** The central bank is responsible for the interest payments on the treasury securities issued for monetary policy purposes and on the short-term liquidity absorption deposits. With growing foreign reserves, financial results became increasingly dependent on the path of the exchange rate and on the differential between local and international interest rates. Moreover, there are no provisions in the central bank law regarding

government coverage of central bank losses. BoM should ensure that a forward-looking monitoring of its balance sheet is in place to identify potential problems and allow proactive remedial measures.

34. **A number of measures would help monetary policy transmission and banks' liquidity management.** Transferring IPAB's debt to the Federal Government, as recommended below, would reduce floating-rate instruments to almost a half of their current outstanding amount. Banks' liquidity management can be improved by: (i) changing the time of its first short-term daily intervention closer to the opening time of the interbank market, which would reduce uncertainty about the amount of liquidity available for the day; and (ii) settling the auctions of Bondes LD in T+1, instead of T+0, in order to prevent the results of the auction interfering with banks' individual liquidity positions for the day.

### B. Emergency Liquidity Facilities

35. **BoM should consider disclosing the broad conditions for emergency lending, and consulting the CEF.** BoM can provide liquidity to banks in two ways—a standing liquidity facility (SLF) introduced in 2008 and whose access requirements and conditions are public, and emergency liquidity assistance (ELA) for which BoM has developed policies, internal procedures, and standard contracts that have not made public on concerns of moral hazard. There is no formal consultation with the CNBV in assessing a bank's solvency in response to a request for liquidity support. Also, BoM does not consult with CEF on the potential systemic impact of rejecting an ELA request by a bank that does not comply with BoM's internal policy requirement.

### C. Bank Resolution

36. **The legal and institutional arrangements underpinning the financial safety net have undergone major changes since the Tequila crisis in 1995, and are broadly adequate.** They include: (i) the introduction of a deposit insurance scheme with explicit and limited coverage in 1999; (ii) the introduction of, an early warning system in 2004 that triggers prompt corrective actions by the CNBV; (iii) legal changes in the bank resolution framework in 2006 that clarified the causes for revoking a bank's license, set deadlines and specific responsibilities for each agency, added resolution options in line with international good practices, and introduced a distinction between systemic and nonsystemic banks (to be determined by the CEF); and (iv) transferred the authority for granting and revoking bank licenses (and issuing prudential regulations) in 2008 from the SHCP to the CNBV..

37. **Currently, the authorities are drafting a major overhaul of the bank resolution framework for which they could consider the following:**<sup>19</sup> (i) strengthen the PCA framework

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<sup>19</sup> The draft incorporates many of the suggestions made here.

by including liquidity indicators that are not considered PCA triggers, to enhance supervisors' ability to act earlier to prevent the further deterioration of the institution; (ii) reduce the time delays involved in intervening in a troubled bank to avoid putting its orderly and timely resolution at risk; (iii) prevent delays in bank resolution through the appeals process—although this is in the law, it has not yet been tested in court; (iv) adopt implementing procedures for the use of trust funds to fully operationalize the purchase of assets and liabilities (P&A) bank resolution method; (v) adopt a streamlined administrative process for the liquidation of the residual balance sheet of a failed bank, instead of the current administrative and judicial process to reduce the time and increase the recovery value of a bank's assets; and (vi) include the possibility of partial transfer of liabilities under a bank resolution process.

38. **A recently conducted crisis simulation exercise led by the World Bank identified areas for improvement.** The framework for injecting liquidity in systemic situations should be reviewed. It would also be desirable to establish an objective methodology for assessing the potential systemic consequences of bank liquidation, and to review the protocols to implement more oversight “in-situ” at the first signs of problems in banks. To overcome IPAB's limited financial resources to meet its obligations, the “automaticity” of IPAB's exceptional financing options should be reviewed, including the contingency lines of credit that BoM may provide at its discretion. To dispel concerns about the reliability of this arrangement, there is a need to establish a robust mechanism (e.g., explicit SCHP's guarantees) to effectively protect BoM's balance sheet for such operations. Finally, it would be appropriate to develop an external communications strategy for crisis situations identifying the entity that will be responsible for issuing public statements.

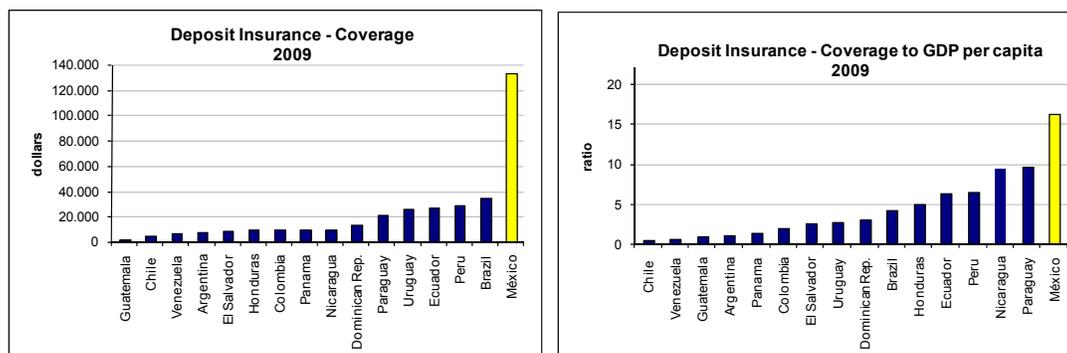
#### D. Deposit Insurance System

39. **IPAB's legacy debt service prevents a more rapid accumulation of funds; transferring this debt to SHCP would increase the credibility of the guarantee fund.** Only 25 percent of collected premiums, net of operating expenses, are accumulated in a guarantee fund, undermining IPAB's financial capacity to protect small depositors. The authorities are planning the transfer of IPAB's debt to the Federal Government with a gradual reduction of the percentage of the deposit insurance premiums (currently 75 percent) earmarked to service that debt.

40. **The deposit insurance system has a high coverage but few ex-ante resources and dependence on ex-post financing—reducing the coverage should be considered.** The coverage limit is about US\$137,000 per person and per institution, fully covering the obligations of 99.9 percent of all deposit accounts and 55 percent of total deposits; this coverage is the highest in Latin America both in nominal and per capita terms (Figure 4). At the same time, the ex-ante fund contains less than 1 percent of the amount of insured deposits, which would raise concerns about IPAB's financial capacity to meet its obligations if a number of medium-sized banks were to fail. The minimum annual insurance premium is relatively high at 0.4 percent on total liabilities (with a ceiling of 0.8 percent); additionally, IPAB can issue debt up to 6 percent

of the total liabilities of the system over three years; however, it is not clear how this would work in practice. The authorities should carefully consider the proper timing for the implementation of such a reduction in coverage.

Figure 4. Mexico: Deposit Insurance Coverage in Selected Countries, 2009



Source: Bolzico, J., Gozzi, E., and Rossini F., 2010. "Financial Safety Net in American Countries—A Comparative Analysis" based on data of Superintendencias de Bancos and Central Banks data of January 2010.

## V. MEXICO AND THE INTERNATIONAL REFORM AGENDA

### A. Basel III Implementation

41. **Mexican authorities are committed to adopting key Basel III capital requirements by 2012, and banks are ready.** According to the CNBV simulations, using June 2011 data, the impact of the adoption of the new requirements will be negligible for the banking system as a whole, with CARs decreasing from 16.5 percent to 16.1 percent (versus 8 percent in Basel III—10.5 percent, including the conservation buffer). At the time of the mission, not all elements had been simulated to estimate their effect—for example, the expected loss provisions for loans to corporates and small and medium enterprises have not been calculated. Simulations show that some banks—including a few large ones—appear close to the minimum requirements; it would be advisable to complete the simulation of the full impact of the new rules before their planned adoption.<sup>20</sup>

42. **However, there are no plans yet to introduce the Basel III macroprudential or liquidity requirements.** This applies to countercyclical capital buffers and capital surcharges for large banks, bail-in or contingent capital schemes, and internal models for counterparty credit risk. Consideration is being given to allow the recognition of subordinated debt as tier 1 capital,

<sup>20</sup> While transitioning to Basel III, the authorities also plan to implement the July 2009 Enhancements to the Basel II framework (Basel 2.5) by December 2012, including changes to Pillar 1 treatment of securitization exposures, additional Pillar 2 guidance and Pillar 3 requirements.

if it meets the criteria for loss absorption (through convertibility) and if the bank floats at least 15 percent of capital on the stock exchange (with the objective of increasing market discipline and to help develop the domestic equity market). Although an early introduction of Basel III liquidity requirements might be desirable from a prudential perspective, given existing maturity mismatches, the authorities plan to adopt Basel III liquidity requirements according to the agreed international timeframe, since some smaller banks might have difficulty complying with the net stable funding ratio. The new liquidity requirements would reduce threats to the stability of the banking system and allow banks easier access to capital markets. Therefore, the authorities may wish to create incentives to accelerate adoption of the new rules and conduct stress tests on banks' liquidity to detect potential vulnerabilities.

43. **The application of G-SIFI surcharges and other elements of Basel III may pose additional challenges for Mexico.**<sup>21</sup> Basel III's higher risk weights for counterparty credit risk in trading books could lead to a reduction of liquidity in the debt and OTC derivative markets of emerging market economies, as banks will have less incentive to act as market makers. Staff and authorities agree that the calibration of sovereign risk charges are an additional challenge: banks can choose to apply a zero capital charge to domestic currency sovereign debt, or apply their own internal models and treat foreign subsidiaries' holdings of domestic debt as foreign debt; in the end, parent bank risk models and home-country regulations may influence portfolio allocation decisions of their Mexican subsidiaries impacting local government securities markets. Similarly, capital surcharges applied by home country supervisors on for G-SIFI parent banks will affect capital allocation in the group, including subsidiaries.

## **B. Macroprudential Policy Framework and Instruments**

44. **The authorities should build on the recently created Financial Sector Stability Council (FSSC) to further strengthen the macroprudential framework.** The Council strengthens coordination among agencies, analyzes emerging risks on a regular basis, and puts forward recommendations to address these risks (for example, on the how to address the growing risk of credit to states and municipalities); working groups focus on identification and measurement of systemic risk and the tools to offset this, data collection and availability of information to financial markets, financial system vulnerabilities, and bankruptcies. The following measures could be considered: (i) introduce a "comply or explain" approach to FSSC recommendations; (ii) improve mechanisms for sharing the analysis needed to assess risks; (iii) sharpen the differentiation between BoM and FSSC reports, with the latter focusing less on macroeconomic risks and more on identification of emerging financial system risks enhancing "market intelligence"; (iv) monitor systemically the regulatory perimeter (both domestically and abroad); (v) communicate emerging risks to the public and industry, including by publishing recommendations and decisions; and (vi) analyze the effectiveness of a wide range of

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<sup>21</sup> FSB and BCBS identified 29 G-SIFI's on November 4, 2011. Of the three largest Mexican banks, two were included (Citigroup and Santander); BBVA was not included.

macroprudential instruments to counter systemic risk (including caps on loan-to-value, debt-to-income, credit growth; limits on maturity mismatches, time-varying or dynamic provisioning, and restrictions on profit distributions).

### C. Cross-Border Coordination and Resolution

45. **Internationally agreed principles should guide potential conflicts of interest between home and Mexican supervisors with respect to locally systemically important subsidiaries of G-SIFIs—a common feature in other emerging economies as well.** Regulators are concerned first and foremost with domestic financial stability and depositor protection, and do not necessarily take into account the point of view of foreign jurisdictions. Foreign subsidiaries are incorporated under local laws, and the authorities see them technically and legally as stand-alone entities, even if they are supervised on a consolidated basis by a home supervisor. In extreme stress, conflicts of interest between host- and home-country authorities, as well as between local and foreign management, could arise. In case the resolution of a global bank were to be necessary, these tensions could be amplified by the lack of supranational laws and courts, as well as by the absence of effective cross-border resolution frameworks (including ex-ante agreed loss-absorption mechanisms).

46. **Resolution of a G-SIFI should be based on cooperation and information sharing between host and home supervisors.** Authorities and staff agree that coordination—in the form of a Memoranda of Understanding (MoU)—and the smooth functioning of supervisory and crisis management colleges are essential for ensuring a resolution process that balances the interest of host and home jurisdictions—assessors determined, including on the basis of contacts with selected home supervisors, that current cooperation arrangements with relevant foreign supervisors are excellent. However, access to supervisory colleges is not automatic and there is no agreed definition of systemic banks in host jurisdictions. Access to recovery and resolution plans (“living wills”) should be open to all stakeholders of a G-SIFI to converge on an optimal solution. Additionally, it is helpful to carry out cross-border crisis simulation exercises and have a reciprocal knowledge of legal and regulatory frameworks of parent and subsidiaries.

### D. OTC Derivatives

47. **As derivatives play an important role in Mexico’s financial system, it needs to closely monitor progress in international OTC derivatives reform and pursue agreements to establish robust CCP practices.** With respect to the G-20 2009 decision to clear standardized derivatives through central counterparties by end-2012, Mexican authorities are concerned about an uneven implementation of the international reform of OTC derivatives and discrimination among jurisdictions. Moreover, the cross-border legal aspects could result in concentration of operations in just a few markets, as participants could be forced to operate in central clearing counterparties directly regulated and approved by foreign authorities. Thus, the scope of mutual recognition regimes for trade repositories and clearing houses should be carefully assessed to produce fair reciprocal treatment.

## VI. DEVELOPMENTAL ISSUES

48. **Significant progress has been made in the area of public debt management; further improvements—particularly in information gathering and disclosure—are possible.**

Maturities have lengthened; the domestic/foreign and fixed/variable rate composition of government debt also improved markedly; the investor base has become more diversified; syndicated collocations of long-term fixed-rate and inflation-linked bonds are accelerating the establishment of market benchmarks and allow the inclusion of such bonds in the World Government Bond Index (WGBI). More information can be made available on ownership categories, and classification should also be based on risk positions (as opposed to legal ownership—this distinction is important for repos). The market for fixed-rate bonds could be further deepened by adjusting maturity dates. The persistent spread of around 40 basis points between the TPFB and the 28-day TIE—both interbank funding rates—should be reduced by standardizing the treatment of IPAB premiums.

49. **In contrast to the deep and liquid public debt market, corporate debt and equity markets are characterized by few issuers.** Institutional investors, such as pension funds and mutual funds, hold most of their assets in fixed-income securities, mostly government bonds. As a result, financial savings are not being channeled into long-term productive investments. The relative importance of the capital markets agenda as a development tool should be elevated with a comprehensive medium-term strategy. Specific steps include: (i) reforming the mutual fund industry to foster competition; (ii) increasing controls on related-party transactions; (iii) creating a hybrid regime within the public offering framework to increase supply of securities and allow institutional investors to invest in specialized instruments; (iv) setting up a comprehensive program to encourage new issuers, including bringing large economic sectors, such as energy and banking, to the public equity market;<sup>22</sup> (v) introducing a legal framework for derivatives; and (vi) increasing regional stock market integration.

50. **Pension contribution rates for private employees should be set to achieve reasonable replacement rates at retirement, and the regulatory approach should focus on long-term investment performance.** The latter would avoid excessive wasteful competition between funds driven by narrow focus on short-term returns. The use of derivative instruments for leverage rather than hedging should be carefully monitored. The private annuity system is overregulated and does not leave room for effective competition due to restrictions on pricing and technical parameters; its regulatory framework could be improved by a better selection of the reference interest rate and changes in investment regulation and contract policies.

51. **The fragile private-sector housing finance funding and origination model was dealt a devastating blow by the global crisis.** Many nonbank housing lenders and developers were

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<sup>22</sup> Banks will be required to float shares in the BMV to have their subordinated debt included as part of Tier 2 capital.

pushed out of the market, leaving housing finance almost exclusively in the hands of government agencies (84 percent of mortgage originations) and commercial banks. Although overall lending volume has returned to pre-crisis levels, the lack of long-term funding has become an obstacle to balanced growth in mortgage lending; securitization is no longer an option as a funding instrument for private lending, as institutional investors shy away from these securities, despite healthy risk premiums and strong credit enhancements. Policy interventions should place a priority on ensuring a more level playing field between agencies and the private sector, reviving the private securitization market by restoring investors' confidence and economic price formation, and developing a comprehensive strategy to support lending to the unaffiliated population.

**52. Financial inclusion has increased significantly, but large segments of the population still have no access to financial services.** The authorities have issued enabling regulations in a number of areas that permit a broad range of new business models for financial services. Most of these schemes are still in their infancy; it remains to be seen whether these new channels will become commercially viable. BoM should review its policies on retail commissions, as allowing free price setting for some services could increase provision of services.

**53. A large number of cooperatives that will be transferred to CNBV supervision do not meet the regulatory prerequisites, and would need to be closed.** However, there is no procedure in place yet to handle the closure of these institutions, and a process is needed for ensuring that customer accounts are protected or migrated to other institutions.

**54. Progress has been made in credit reporting, with two bureaus expanding their coverage.** However, the current credit information market is still incomplete and fragmented, resulting in behaviors that affect the competition in both the credit information market and the credit market itself. Improved standardization of information and the integration of players and products are needed, as well as strengthening oversight of credit reporting and reviewing governance structures of the credit bureaus, so as to eliminate possible conflicts of interest and ensure better sharing of information. The scope of data could also be expanded to include government programs, court judgments, fraud alerts, and property registries.

**55. Legal and institutional weaknesses continue to hamper financial development, despite progress in this area.** These include relatively weak property rights, a complex and unreliable insolvency and creditors' rights framework, an inefficient and corrupt judicial system, and insufficient transparency in financial information, among others. These factors increase bank risks and raise the loss-given default, increasing bank spreads and restricting access, especially to small and medium enterprises.

## ANNEX I. BASEL CORE PRINCIPLES—SUMMARY ASSESSMENT

### A. Introduction and Methodology

1. **An assessment of the Basel Core Principles for Effective Banking Supervision (BCP) was conducted as part of the FSAP in September 2011.** The assessment was performed by Joaquín Gutiérrez García from the IMF and Pierre-Laurent Chatain of the World Bank. It reflects the banking supervision practices of Mexico as of end-July 2011. Assessors conducted the evaluation in accordance with the guidelines set out in the Core Principles Methodology issued by the Basel Committee in October 2006 and assessed compliance against both essential and additional criteria.

### B. Macroeconomic Background

2. **Banking supervision is performed against the backdrop of a sound macroeconomic policy framework that has limited the fallout from the crisis.** After a steep fall in output in 2009, owing to its close trade and financial linkages with the United States, Mexico experienced a broad-based recovery, with a resurgence of manufacturing exports as well as renewed strength of consumption. The authorities employed a wide range of countercyclical policies, with the central bank loosening monetary policy while the government applied a careful fiscal stimulus (3 percent of GDP). Other policies included foreign-exchange interventions (the first since September 1998) to promote and orderly functioning of FX markets by reducing volatility and restoring liquidity to FX markets, the use of an FX swap agreement with the U.S. Federal Reserve, and an FCL from the IMF to backstop net international reserves, and an additional liquidity facility allowing a broader range of eligible collateral for emergency liquidity support. In response to the surge in capital flows to emerging markets, the exchange rate appreciated by about 10 percent, significantly less than some other emerging markets in light of the slow U.S. recovery. The record of sound macroeconomic policies is reflected in low inflation—below 4 percent per annum—and sound balance sheets: net public sector debt stands at around 32 percent of GDP in 2011, and household borrowing is about 20 percent of disposable income. As a result, Mexico is investment grade, bolstering its resilience to further shocks.

3. **The policy response also relied on macro- and micro-prudential instruments.** Related-party lending for banks was tightened (to 25 percent of Tier 1 capital), which—given the large presence of foreign banks in Mexico—sought to gradually reduce the risk that foreign-owned banks would drain liquidity from domestic subsidiaries and add to the credit contraction. Second, forward-looking loan-loss provisioning was introduced on the consumer, mortgage, and states and municipalities portfolios (it is pending for credit to non-financial firms). There was a tightening of corporate disclosure on derivative positions following large losses by the corporate sector. Additionally, the regulatory perimeter is being expanded to cover mortgage providers that faced significant liquidity problems and losses.

4. **Despite significant structural reforms, Mexico’s growth has remained low and the financial system shallow.** Between 1985 and 2008, the annual average growth in per capita GDP amounted to 1.1 percent. During the last decade, Mexico has faced much stronger competition in international markets of manufacturing products. In addition, low growth is partly attributed to poorly functioning credit markets, a high degree of informality in the economy, and significant market distortions related to lack of competition.<sup>23</sup> Mexico also scores high on corruption indices, mainly due to problems at the subnational level, and the legal system is not considered efficient. Measures of financial depth pinpoint to low financial intermediation, with credit to GDP well below peer emerging market economies, at about 20 percent of GDP at end-2010. Mexico’s dependence on oil exports has been in steady decline, although the share of oil revenues in the budget has not come down as rapidly as production due to the increase in international oil prices.

5. **Main risk factors for the Mexican financial system are linked to global developments.** A slowdown of the U.S. industrial production would have an adverse effect on domestic economic activity and, in turn, on the demand for credit and the quality of loan portfolios. Also, adverse developments in the oil market could result in a contraction of public expenditures due to lower international oil prices, although Mexico has actively hedged its oil exports. Progress has been made in extending the maturity and duration of government domestic debt; this should continue to reduce sensitivity to liquidity shocks in the current context of elevated volatility in global financial markets. Moreover, Mexico may also be affected by a global increase in risk aversion associated with financial distress, as well as spillovers from the European crisis, given the large presence of Spanish banks—operating as stand-alone subsidiaries, not branches—in the financial system.

### C. Institutional and Market Structure—Overview

6. **Mexican law assigns responsibility for the licensing and supervision of banks to the CNBV, which is also the securities regulator.** Assessors observed some overlapping mandates with other authorities such as the BoM, which also has roles in bank licensing, capital and liquidity prudential regulation, and derivatives. The SHCP authorizes financial groups and has dominant presence on the governing Boards of the other agencies, except BoM, which is independent.

7. **CNBV uses a mix of on-site and off-site supervision to evaluate the condition of banks.** Banks’ off-site and on-site supervision duties are split between two vice presidencies; each vice president has approximately the same number of departments (“Direcciones Generales de Supervision”) and more or less the same number of examiners (130). Since the 2006 FSAP, the CNBV carried out 143 on-site examinations in 43 banks. In the last three years (2008–2010),

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<sup>23</sup> See for example, Hanson, G. H., 2010, “Why Isn’t Mexico Rich?,” *Journal of Economic Literature*, Vol. 48:4 pp. 987-1004.

the CNBV carried out 87 on-site examinations. The CNBV has a coherent process in place for planning and executing on-site and off-site activities, and new manuals have been issued to ensure that these are conducted in a thorough and consistent basis. The CNBV also makes active use of information provided in prudential returns. In addition, the CNBV has established different channels of communication with all levels of bank management.

**8. Mexico's financial system is small and concentrated, with seven banks accounting for more than 80 percent of the system's assets.** Financial intermediation and credit to the private sector are among the lowest in Latin America and well below other emerging markets of comparable income. At end-September 2011, there were 41 banks (bancos multiples), commonly divided into the following sub-groups: (i) 7 large banks, of which 5 are subsidiaries of foreign banks; (ii) 10 banks focused on consumer lending; (iii) 13 corporate banks; and (iv) 11 other investment banks.

**9. There are 25 financial groups in which a holding manages several financial entities, usually including one bank.** The largest are involved in virtually all financial business (banking, insurance, asset and fund management, brokerage, and pension fund administration). This may raise conglomeration issues (i.e., large banks with insurance company, pension fund, brokerage house, etc.) that, in spite of existing regulations, might lead to product bundling with nontransparent cross-subsidies, deterring entry and competition.<sup>24</sup> More importantly, several banks are members of broader mixed-activity groups that conglomerate banking to commercial activities and still need to be regulated and supervised to mitigate association risks.

**10. The banking system appears to be sound and profitable, and it has been strengthened considerably in recent years.** The financial sector was not seriously affected by the crisis. Private banks appear to be well capitalized, with a system-wide risk-weighted capital asset ratio of 16.5 percent as of June 2011, with Tier I capital of 14.3 percent. Profitability declined sharply in 2008–2009, but has recovered more recently with the improvement in loan quality, a pickup in credit growth, and rapid declines in provisions and write-offs. Bank credit to the private sector has been pro-cyclical, but liquidity seems adequate. The loan-to-deposit ratio is moderate, and banks keep about one-third of their total assets invested in government securities.

**11. Legal and institutional weaknesses continue to hamper financial development, despite progress in this area.** These include relatively weak property rights, a complex and unreliable insolvency and creditors' rights framework, an inefficient and corrupt judicial system, and insufficient transparency in financial information, among others. These factors increase bank risks and raise the loss-given default, increasing bank spreads and restricting access, especially to small and medium enterprises. Mexico has passed key reforms, including a Unified Registry for Movable Collateral, and reforms of the Law on Bankruptcy and the Commercial Code. In addition, improvements in credit bureaus and risk modeling have allowed banks, vendors, and

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<sup>24</sup> There are regulations to prevent cross-subsidies.

other suppliers to better assess credit risks. However, costs of realizing collateral remain high and long.

#### D. Main Findings

12. **Banking supervision in Mexico has been effective and has contributed to reducing the impact on the financial sector of the global financial crisis.** The CNBV has achieved a fundamental step forward in implementing a complete Pillar I capital adequacy regime consistently with the Basel Committee standards. Capital ratios have been kept robust above regulatory minimum, supported in a rigorously applied forward-looking loan provisioning regime. The CNBV has successfully supervised adherence to the above two crucial regimes and developed robust means to quantify and monitor key risk measures.

13. **Since the last FSAP Update in 2006, the CNBV has made steady progress in advancing a profound internal reorganization.** Its supervisory culture is now much more risk-focused. Its internal organization visualizes supervision on institutional, group and by risk dimensions. Systemic supervision is being set up. Progress is also noticeable in the practices applied by the CNBV. The professionalism and quality of its management, and of the staff dedicated to supervision, are outstanding. It has put in place rich off-site systems for supervision and it is implementing changes toward a risk-based approach. However, crucial challenges remain ahead to preserve and to project forward what has already been achieved.

14. **Important institutional issues outside the control of senior management in the CNBV threaten the sustainability of the above achievements.** The autonomy and the resources of the CNBV remain limited. The CNBV is still an agent of the Executive. Most of its key decisions belong to its Board. The Board's activism to support the agency should provide more leadership required for a modern supervisory agency. The lack of autonomy in funding its activities and in providing reasonable competitive salaries is eroding the key element of supervision: its people. The turn-over of its staff is very high. Head-count seems excessive, but management cannot flexibly restructure it to its needs and use better its decreasing resources. There is also a proliferation of small institutions to supervise and an ever-increasing universe of compliance requirements that overload the CNBV.

15. **The legal protection of supervisors needs to be strengthened.** Management, Board members, and staff are not accorded statutory legal immunity for the bona fide discharge of official functions, hindering enforcement; former employees should also be covered. Legal protection takes on added importance in the context of implementing risk-based supervision in a civil code legal environment, where the main challenge is to shift the responsibilities for identifying, measuring, controlling and monitoring risks to the Boards of supervised institutions, which requires prompt reaction by the supervisor to new accumulations of risk. Hence, CNBV has to strike a delicate balance between rules and discretion: on the one hand it has an interest in codifying the circumstances in which discretion will be exercised to minimize challenges to its authority; on the other, it needs the flexibility to deal promptly with novel situations using

qualitative judgments than carry greater legal risk—rather than quantitative, compliance-based indicators. Amendments to the legal framework will be needed to add these provisions.

16. **Pillar 2 of the capital adequacy regime remains to be adopted, including publication of CNBV’s supervisory review process and associated standards.** The strategic decision to adopt Basel II and a more risk-based approach to supervision makes critical the resolution of the issues discussed on autonomy and resources. Until now, the CNBV has focused on implementing the quantification of Pillar 1 risks and has advanced several internal elements of its supervisory review process under Pillar 2. However, several supervisory practices and associated standards deserve attention to complete Pillar 2.

17. **Further actions are recommended to strengthen a robust regime for ‘downward’ consolidated supervision of banking groups.** There are 25 financial groups regulated by the SHCP being supervised by the CNBV. Asymmetries in the regulations across the financial sector have been evaluated and need now to be mitigated. The CNBV should be given powers to regulate all financial groups where banks are significant members. Prudential regulation, especially risk limits, and risk governance and management standards should be extended to the level of the holding company in regulated groups. More importantly, mixed-activity groups that perform banking and other financial activities together with commercial activities have to be regulated, providing effective powers to the CNBV to assess and resolve risks to banking and other financial activities from inter-group transactions. These actions will complete current consolidated supervision practices, reinforcing the CNBV’s authority to practice ‘upward group’ consolidated supervision.

18. **The assessment found other areas where the regulatory and supervisory framework should be further improved.** AML supervision has been substantially strengthened. However, challenges remain and key decisions need to be made to bring Mexico to higher levels of compliance with international standards. Enforcement should become more focused in responding to substantive issues rather than reacting solely to breaches of compliance. Moreover, whilst operational risk is well regulated, its supervision is yet not fully operational, and needs to be performed more systematically at both macro and solo level, including systematic development of risk indicators.

19. **Like for other risks, the assessors believe that there is a general need to provide further guidance to the industry regarding how the CNBV expects the institutions to implement in practice the mandated prudential standards.** This, a clear communication of the supervisory process and on how the CNBV intends to escalate its response to changing risk profiles will complete its journey to an approach that judiciously combines elements of compliance, safety and soundness, and risk-based consolidated supervision.

20. The following summarizes the main findings of the detailed assessment of compliance with the BCP.

### Objectives, independence, powers, transparency and cooperation

- **Objectives, Autonomy, Powers and Resources (CP1)**
  - **The legal framework clearly provides the objectives and powers for CNBV.** The legislation also provides the authority to cooperate with foreign supervisors. The legislation grants CNBV broad powers to perform its functions. Information exchange agreements have been signed with a number of countries and home-country supervisors are given access to their institutions.
  - **There are concerns, however, particularly with regards to autonomy and independence.** There is not an appropriate provision in the law to provide adequate legal protection to the CNBV and its staff for actions taken and/or omissions made in good faith while still in active service. With respect to CNBV's resources, assessors are not confident that there is a full understanding by CNBV's Board of the complexities, incremental development, and demanding work load and resources needed to adopt a fully fledged Basel II risk-based approach to regulation and supervision.
- **Licensing and structure (CPs 2–5)**
  - **The term 'bank' is defined in the law, as are the permissible activities.** In practice however, several non-authorized financial entities are operating in the country and are illegally collecting deposits. It is difficult to evaluate the magnitude of the problem. The CNBV published a list of 14 entities that were collecting deposits from the public without proper authorization and outside the supervisory umbrella of CNBV. Another 39 entities had been identified earlier. Some of these are clearly misleading their customers by improperly using the name "bank", e.g., *Instituto de Banca y Ahorro*, *Interbanc*, *Capitalbank*, *Inverban SA*. The authorities have issued warnings not to carry out transactions with these entities; according to CNBV, several initiatives are under review to sanction these entities and their owners and managers.
  - **The minimum requirements for establishing a financial institution in Mexico are clearly stated in the Banking Law (LIC).** The new licensing regime has been conceived to provide CNBV with a full range of licensing, regulating and supervisory powers. However, the fact that a license requires binding favorable opinion of BoM may hinder CNBV discretionary power. The mechanisms for fit-and-proper tests are well processed but additional criteria regarding the origin of capital or a clear definition of the Ultimate Beneficiary Owner (UBO) would be desirable.

- **There is a legislative requirement and a well-defined process for reviewing and approving transfer of “controlling” ownership of a bank.** Assessors could not find an obligation requiring banks to notify the supervisor as soon as they become aware of any material information which may negatively affect the suitability of a major shareholder.
- **CNBV has the power to review major acquisitions or investments by a bank, including the establishment of cross-border operations, and confirming that corporate affiliations or structures do not expose the bank to undue risks or hinder effective supervision.**
- **Prudential Regulations and Requirements (CP 6–18)**
  - **The capital adequacy regime for banking in Mexico is in transition toward full implementation of the regime endorsed by the BCBS under its Basel II framework.** The CNBV is also considering the adoption of some components of the Basel III framework, as well as to fully implement the Pillar 2 of the former Basel II regime. In addition, the CNBV has put in place mechanisms to entice institutions to operate with higher capital than the Basel minimum requirements. Authorities are advised to implement fully the Pillar 2 approach and the use of stress testing to set capital buffers. Inquiring institutions to operate an internal capital adequacy assessment process (ICAAP) would also be desirable.
  - **Regarding risk management processes, further actions were found necessary in several areas.** In particular, authorities are advised to communicate explicit standards for directors to implement the internal capital adequacy assessment process (ICAAP) governing forward looking capital planning. A change in the law to require consistent risk management standards at group level is also recommended.
  - **Credit risks (CP8) are correctly identified and supervised.** Some actions are suggested to enhance the effectiveness of implementation. Assessors are of the opinion that the regulatory framework for granting and administering credit activities and for classifying loan quality and provisioning for loan losses is sound and very complete.
  - **Limits on large exposures and on connected lending are in place and considered adequate.** They can be further reinforced, including mitigating concentration risks, by implementing several actions like, for example, amending the LIC to require observance of lending limits on a fully consolidated basis at holding company level and extend requirements to unregulated mixed-activity holdings.

- **On oversight of country risks, the CNBV believes that country and transfer risks are not significant risks to which the local institutions are exposed.** Accordingly, these risks have not been explicitly conceptualized yet in the general provisions of the regulation governing risks and risk management with the same depth as other financial risks. There are not specific requirements set by CNBV regulation regarding the manner in which information, risk management and control system are expected to capture and to report country and transfer risks.
- **Market risks' supervision is properly carried out.** The CNBV determines periodically the suitability of market risk management processes and applicable policies through annual onsite reviews of the institutions' activities and the examination of the annual reports of the risk management and internal audit units. With regards to liquidity risks, the country is preparing a major overhaul of the liquidity standards in order to implement the proposals of the BCBS under the Basel III regime. The CNBV has organized a quantitative impact study to evaluate the implications and details of the new liquidity regulations. Subject to the final phase-in period granted for implementation, the new liquidity regulations are expected to be adopted during the last quarter of 2011.
- **On operational risks (CP 15), despite a clear regulatory regime and progress made in terms of methodologies, supervision of these risks is still in a transitional phase.** As of today, operational risks are approached indirectly through the supervision of internal controls and risk management. CNBV's objective is to have operational risks' oversight fully integrated into its supervisory process by 2012.
- **Internal control and audit have been an important focus for CNBV.** The LIC provides a comprehensive regulatory framework for internal controls as well as for internal auditing. The CNBV has also spent a lot of energy and resources to formalize processes and methodologies to better oversee internal control functions in banks. Nevertheless, some improvements could be considered like, for example, the conduct of a full cycle of inspections across the industry on internal controls. The development of some metrics to better evaluate and monitor the intensity of banks' audit efforts would also be useful.
- **Many challenges are still ahead for supervising AML/CFT and key decisions will have to be made to bring Mexico to a higher level of compliance in terms of preventing abuse of financial services.** The legal and regulatory AML framework for banks is adequate and new regulations have recently been issued in relation to other financial institutions. The supervisory mandate of CNBV is clearly defined and CNBV enjoys full power to inspect banks' premises and access all confidential information. Excellent cooperation has also been developed with both national and international counterparts. Further, several initiatives are underway to reinforce off-site surveillance, in particular through new reporting and risk assessment and rating tools. Nevertheless, the CNBV authorities will

have to increase significantly human resources in the AML area and enforce AML regulations more effectively by using a broader range of sanctions in a more systematic way.

- **Methods of Ongoing Supervision (CPs19–21)**

- **The quality of on-going supervision is good and CNBV has made great efforts to increase the effectiveness of its oversight.** However, the supervisory approach needs to be further improved, particularly in relation to consolidated supervision. Along the same lines, it is particularly recommended to design a supervisory cycle along which all significant activities and central control functions should be inspected in full scope. A legal provision requiring banks to notify the CNBV of major changes planned in business activities, changes in structure, adverse developments and breaches in regulations is needed. Also, there is no particular mechanism that allows CNBV to evaluate risk accumulation at system level. Indeed, due to the fact that CNBV has not fully implemented Basel II, supervisory techniques do not allow staff to have an overview of the risks. It would be useful to speed up the migration toward Basel II so that CNBV can gain a more horizontal view of problems across the industry.
- **The architecture for on-site and off-site supervision has changed significantly since the 2006 FSAP.** As part of this process, the distribution of portfolio of banks and other related FIs among the different units has been modified. Supervisory techniques have been improved through the creation of new tools for both on-site and off-site purposes. A dedicated Vice Presidency has been created to lead all AML/CFT functions, including training of other CNBV staff. Better coordination with other financial supervisors has also been developed. This reform, however, is in a transition phase. Several projects are still on-going. New manuals and methodologies have not been completely finalized (e.g., for operational risks) or are in a testing phase (e.g., for AML/CFT). Further progress is also needed to fully incorporate operational risks as well as reputational risks.
- **CNBV receives a fairly comprehensive set of information on banks and other nonbank financial institutions.** The CNBV has developed a sophisticated system for collecting, reviewing and analyzing prudential reports and statistical returns from banks. The technological platform designed for regulatory reporting allows proper management of information comparable across institutions and sectors, and facilitates the analysis and development of aggregated statistical information.

- **Accounting and Disclosure (CP 22)**

- **According to Mexico's regulations, banks have to maintain adequate records drawn up in accordance with accounting policies and practices.** As for external auditors, Mexico should strengthen enforcement mechanisms when CNBV believes that the external auditors do not have the requisite expertise,

independence, or fail to follow professional standards. It is also desirable to set stronger rule for rotation of auditors. Lastly, Mexico is advised to complete in a reasonable timeframe convergence with IFRS.

- **Corrective and Remedial Powers of Supervisors (CP 23)**

- **The corrective tools in Mexico are consonant with international best practices but its implementation is not as effective as it should be.** Since the last FSAP, major improvements have been made to equip the country with a framework that permits timely corrective actions against banks. Remedial measures range from informal instructions directing a particular response by management, to the severe action of intervention and, if needed, liquidation (through the suspension of the institution's license). Nevertheless, the CNBV has a long established tradition of forbearance. Fieldwork showed that the CNBV has been rather reluctant to resort to harsh penalties as a means to achieving better market discipline. Enforce decisions more effectively, define clear and well articulated criteria to support sanctions and improve the way sanctions are published are the most important reforms to be engaged.
- **Mexico's financial sector safety net has been substantially upgraded since the last FSAP, but there are some areas for further improvement—legal reforms are currently being prepared.** Improvements include a more streamlined bank resolution process, clarification of the causes for license revocation, and introduction of a distinction between systemic and nonsystemic banks.

- **Consolidated and Cross-Border Banking (CPs 24–25)**

- **In the area of consolidated supervision, improvements are needed to fully meet international standards.** In particular, authorities may wish to amend the law provide full powers to the CNBV for regulating financial groups, in addition to its current supervisory function. Moreover, CNBV should be equipped with the power to fully capture other forms of financial conglomeration, such as mixed-activity and horizontal groups. On the international cooperation front, Mexico has made considerable efforts to establish effective mechanisms for cross-Border supervision. An intensive policy has been pursued to consolidate home-host supervision through the signing of multiple MOUs and the participation in supervisor colleges, among others.

**Annex Table 10. Summary of Compliance with the Basel Core Principles**

| Principle | Comments  |
|-----------|---|
| CP 1      | There are no explicit tenors for the appointment of the President and Vice-Presidents of the CNBV. CNBV senior staff, such as Directors, can be removed at the discretion of the President of the CNBV<br>There is no appropriate provision in the law to provide adequate legal protection to the CNBV and its staff, including after termination of the period of service in the CNBV for actions taken and/or omissions made in good faith while still in active service |
| CP 2      | CNBV has the legal powers to regulate, supervise and enforce permissible activities. Several initiatives have been taken to address the issue of unlicensed entities that are still collecting funds from the public.   |
| CP 3      | The fact that a license requires binding favorable opinion of BoM hinders CNBV discretionary power. The mechanisms for fit and proper test are well processed within the CNBV; however, fit and proper mechanisms could be strengthened. A clear definition of the Ultimate Beneficial Ownership is also missing.   |
| CP 4      | CNBV does not enjoy full autonomy to approve transfer of significant ownership.   |
| CP 5      | CNBV has the power to review major acquisitions or investments by a bank,   |
| CP 6      | Authorities have advanced the regulatory and supervisory framework to conform to the requirements of the capital adequacy regime under the Basel II capital regime. Also, explicit and implicit mechanisms have been put in place to entice institutions to operate with higher capital than the Basel minimum requirements.  |
| CP 7      | There are not explicit regulatory requirements including guidance for banks to operate an internal capital adequacy assessment process (ICAAP) by which the Board determines its overall capital adequacy assessment and strategy. Current regulations and risk management standards are only applicable to the banking level group.  |
| CP 10     | There are no explicit obligations requiring observance of lending limits on a full consolidated basis at holding company level and extend requirements to unregulated mixed-activity holdings. Mexico does not have an explicit definition of large exposure, including a maximum aggregated lending limit for those exposures.   |
| CP 11     | There are no comparable standards for regulated holding companies similar to those required to banks acting as parents in a banking group.  |
| CP 12     | There is no dedicated prudential report to obtain information of country and transfer risks.  |
| CP 14     | Efforts are underway to revamp the liquidity regulations, which will be adopted during the last quarter of 2011.  |
| CP 15     | Supervision of operational risks has not been completely addressed. It is not yet operational.  |
| CP 16     | Efforts are underway to monitor interest rate risk management in selected large banking groups, including assessing the impact of alternative market scenarios through alternative financial simulation.  |
| CP 18     | Many challenges are still ahead and key decisions will have to be made to bring Mexico to a higher level of compliance in terms of preventing abuse of financial services.  |
| CP 19     | The quality of on-going supervision is good and CNBV has made great efforts to increase the effectiveness of its oversight apparatus. However, the supervisory approach needs to be further improved, particularly in relation to consolidated supervision.   |
| CP 23     | The corrective arsenal in Mexico is consonant with international best practices but its implementation is not as effective as it should be.   |
| CP 24     | The CNBV does not have full powers for regulating financial groups  |

**Annex Table 11. Recommended Action Plan to Improve Compliance of the Basel Core Principles**

| Reference Principle   | Recommended Action  |
|---|---|
| 1. Objectives, Independence, Powers, Transparency and Cooperation |   |
| 1.1. Responsibilities and Objectives                              | <ul style="list-style-type: none"> <li>• Carve in the LIC the fiduciary responsibilities of directors.</li> <li>• Mandate in the LIC the performance of the ICAAP.</li> <li>• Transfer from LIC to CNBV all regulations on risk limits.</li> </ul>  |
| 1.2. Independence and accountability                              | <ul style="list-style-type: none"> <li>• Provide terms of tenure and removal for senior management.</li> <li>• Review and transfer powers retained by the CNBV's Board.</li> <li>• Estimate current/anticipated work-load to adjust head-count.</li> <li>• Align budget/salaries to current needs to stop staff attrition.</li> </ul> |
| 1.3. Legal Framework  |   |
| 1.4. Legal Powers   |   |
| 1.5. Legal Protection   | <ul style="list-style-type: none"> <li>• Institute an effective regime for legal protection regime.</li> </ul>  |
| 1.6. Coordination   |   |
| 2. Permissible Activities   |   |
| 3. Licensing Criteria   | <ul style="list-style-type: none"> <li>• Provide more autonomy to CNBV for decision making.</li> <li>• Complement the Fit and Proper mechanisms.</li> <li>• Define more clearly the concept of UBO.</li> </ul>  |
| 4. Transfer of Significant Ownership                              | <ul style="list-style-type: none"> <li>• Complement the Fit and Proper mechanisms.</li> </ul>   |
| 5. Major Acquisitions   |   |
| 6. Capital Adequacy   |   |
| 7. Risk management process  | <ul style="list-style-type: none"> <li>• Formalize in the LIC the responsibilities of directors.</li> <li>• Mandate ICAAP to support the implementation of Pillar 2.</li> <li>• Make public more detailed risk management guidelines.</li> <li>• Require risk management at holding company level.</li> </ul>                         |
| 8. Credit risk  |   |
| 9. Problem assets, provisioning and reserves                      | <ul style="list-style-type: none"> <li>• Factor in an anti-cyclical component for loan provisioning.</li> </ul>   |
| 10. Large exposure limits   | <ul style="list-style-type: none"> <li>• Include 'economic interdependence' to connect borrowers.</li> <li>• Review and monitor exclusions from risk aggregation.</li> <li>• Adopt an aggregated risk limit for all large exposures.</li> <li>• Factor "concentration risk" in capital through Pillar 2.</li> </ul>                   |

| Reference Principle                        | Recommended Action  |
|--|---|
| 11. Exposure to Related Parties            | <ul style="list-style-type: none"> <li>• Amend LIC to reduce the 50% aggregated lending limit</li> <li>• Include all related party transactions as per IAS 14.2.</li> </ul>   |
| 12. Country and transfer risk              | <ul style="list-style-type: none"> <li>• Update reporting system for end-borrower/end-counterparty.</li> </ul>  |
| 13. Market risks                           |   |
| 14. Liquidity risk                         | <ul style="list-style-type: none"> <li>• Adopt the newly drafted regulations on liquidity risk.</li> <li>• Require reporting of residual gaps and forecasted funds flows.</li> </ul>  |
| 15. Operational risks                      | <ul style="list-style-type: none"> <li>• Achieve full implementation of operational risks supervision.</li> <li>• Increase on-site visits targeting operational risks for all banks.</li> <li>• Incorporate operational risk within the CNBV architecture.</li> </ul>   |
| 16. Interest rate risk in the banking book | <ul style="list-style-type: none"> <li>• Require reporting of roll-over gaps and sensitivity tests.</li> <li>• Bring formally this risk into Pillar 2 (when adopted).</li> </ul>  |
| 17. Internal control and audit             | <ul style="list-style-type: none"> <li>• Provide clearer criteria for risk classification.</li> <li>• Adopt benchmarks to evaluate the intensity of internal audit.</li> </ul>  |
| 18. Abuse of financial services            | <ul style="list-style-type: none"> <li>• Increase human resources in the AML area.</li> <li>• Enforce AML using a broader range of sanctions.</li> <li>• Pay more attention to terrorist financing in the industry.</li> <li>• Issue industry-specific guidelines on AML.</li> </ul>  |
| 19. Supervisory Approach                   | <ul style="list-style-type: none"> <li>• Complete Pillar 2, its supervisory review process and risks.</li> <li>• Adopt a supervisory cycle and a quality assurance process.</li> <li>• Reinforce the rating process: criteria, metrics and outcomes.</li> <li>• Pursue outcomes in terms of risk reduction strategies.</li> </ul> |
| 20. Supervisory Techniques                 | <ul style="list-style-type: none"> <li>• Develop a transversal approach of risks on a macro level.</li> <li>• Reinforce off-site techniques for consolidated supervision.</li> <li>• Adopt workload costing and paperwork administration systems.</li> <li>• Promote a better internal Quality Control system.</li> </ul>         |
| 21. Supervisory Reporting                  |   |
| 22. Accounting and disclosure              | <ul style="list-style-type: none"> <li>• Strengthen enforcement mechanisms over audit companies.</li> <li>• Set stronger rules for rotation of auditors.</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• Meet more frequently with external auditors.</li> </ul>  |

| Reference Principle                | Recommended Action  |
|------------------------------------|---|
|                                    | <ul style="list-style-type: none"> <li>• Harmonize of accounting norms to converge toward IFRS.</li> </ul>  |
| 23. Corrective and remedial powers | <ul style="list-style-type: none"> <li>• Enforce decisions more effectively.</li> <li>• Define clear and well articulated criteria to support sanctions.</li> <li>• Improve the way sanctions are published.</li> <li>• Make more effective the processing of sanctions.</li> </ul> |
| 24. Consolidated supervision       | <ul style="list-style-type: none"> <li>• Amend LAF to transfer to CNBV group regulatory powers.</li> <li>• Regulate mixed-activity and horizontal groups and their HCOs.</li> <li>• Require prudential regulations to regulated and mixed HCOs.</li> </ul>                          |
| 25. Home-host relationships        |   |

### E. Authorities' Response

21. **Mexican financial authorities agreed, in general, with the conclusions, observations and recommendations of the assessment regarding the implementation of Basel Core Principles in the Mexican financial sector.** Financial authorities do not consider that their respective mandates overlap under an appropriate understanding of the Mexican legal system that clearly defines the respective powers granted to such authorities, and the close coordination maintained in practice by such authorities. Most of the written comments provided by the authorities on the preliminary draft were included in the final report. Authorities consider that the exercise represented a good opportunity to discuss both strengths and weaknesses on the banking system, as well as to draw attention to main issues that should be addressed in the future.

22. **The authorities found the assessment both comprehensive and useful.** Also, they believe that assessors' advice and proposals will become part of their agenda for the upcoming years, and that the assessment rightly identifies opportunities for improvement. The report identifies the main concerns that the authorities currently have. Regarding the comments on CNBV independence, authorities acknowledge that improvements to corporate governance, in particular achieving a more balanced Board composition are desirable, but would like to note that the current arrangement has so far worked adequately since the Ministry of Finance has relied on technical considerations when deciding on matters of regulation and supervision. Also, they want to mention that there is not enough evidence to affirm that the current salary levels at CNBV are inadequate to attract high-caliber staff; what is a cause for concern is that they have been frozen in the last several years. If this trend is not reversed soon, the human capital of the

institution will be severely impaired. Authorities are concerned that there is a risk that when implementing legal changes to grant CNBV more autonomy, an adverse outcome can occur that results in the institution being subject to political interference by Congress. However, authorities agree that providing a fixed term for the President of CNBV (with well-specified reasons for removal), and to allow CNBV to keep the fees collected is desirable.

23. **In addition, they agree that it is necessary to review, improve, standardize, fully document and formalize supervisory procedures at the CNBV and will move forward to address these issues, although they consider that lack of standardization and formalization does not reflect in any way the quality of ongoing supervision of banks.** Also, the authorities agree that high concentration of loan portfolios might raise concerns, although they consider that this should not be seen as a problem unique to the banking institutions and credit markets, but that should be considered as a reflection of a feature of the Mexican economy as a whole. Authorities share the assessors' point of view regarding that some enhancements should be made to CNBV's powers in some matters like the ability to take some discretionary decisions, to impose fines and to publish information on legal proceedings, but it should be noted that some of these powers might not be easily included in CNBV's regulation due to the characteristics of the Mexican legal framework, considering the civil code and the law of judicial appeals and injunctions (amparos). On the other hand, they acknowledge that there are several opportunities to enhance consolidated supervision in Mexico, but will stress that to do so it is necessary to issue a Law to regulate and supervise financial conglomerates as well as economic conglomerates that contain a banking institution.

24. **Regarding the adoption of Basel III in Mexico, they agree that one main challenge faced by CNBV is the full and thorough implementation of Pillar II.** Nevertheless, it should be noted that significant progress has been made on current regulation on Pillar I –Mexico will be one of the early adopters-- and that important steps have been taken to complete implementation of all three pillars, although there are still several issues to address that are already part of the authorities' agenda for the upcoming year.

25. **With respect to the possible overlap between different authorities, while the law sets forth similar goals for the BoM and the CNBV (inter alia, to maintain and promote the sound development of the financial system) it grants each of such authorities different and distinctive powers to achieve such objectives.** As an example, the CNBV is in charge of issuing prudential regulations and the BoM is responsible for defining the characteristics of transactions that banks can carry out. Furthermore, in respect of derivatives negotiated by banks, the BoM has the legal power to issue technical and operational regulations applicable to such transactions. In any case, both authorities have observed a coordination agreement between them to avoid any duplication in the regulations or in requesting information from financial institutions. The authorities hold frequent consultations and discussions with respect to regulations applicable to issues that may be covered by both authorities within their respective areas of competence. Moreover, with respect to the supervision carried out by each authority, coordination agreements ensure that any actions taken in connection therewith by one authority

supplements the work carried out by the other. Concerning the participation of the central bank in the licensing of banks, authorities do not consider that the favorable opinion from such authority that is needed to grant a bank license could impinge on the process carried out by the CNBV. This is because the analysis carried out by the BoM for the opinion it needs to provide to the CNBV reinforces the analysis that the CNBV conducts. Such participation by the central bank also contributes to an appropriate and deeper fit and proper analysis that needs to be conducted with respect of any new financial institution. In any case, the role that the central bank may perform as lender of last resort lays down an appropriate basis for the intervention of the BoM in the bank licensing process.

## ANNEX II. IOSCO CORE PRINCIPLES—SUMMARY ASSESSMENT

### A. Introduction and Methodology

1. **The assessment was conducted during the IMF/World Bank Financial Sector Assessment Program (FSAP) mission to Mexico during the period September 7–21, 2011, by Tanis MacLaren, an external technical expert employed for this purpose by the IMF.** The assessment was carried out using the 2003 IOSCO Methodology for Assessing Implementation of the IOSCO Principles (the Assessment Methodology). The assessment was based on information available as of September 2011.

### B. Institutional and Market Structure—Overview

2. **The *Comisión Nacional Bancaria y de Valores* (CNBV or the Commission) is a supervisory authority with broad authority to regulate certain aspects of the capital markets in operation in Mexico.** The CNBV has regulatory authority over a broad range of securities market participants, including securities firms, self-regulatory organizations, securities exchanges, market infrastructure providers (central counterparties and securities depositories), external auditors, public issuers, rating agencies, price vendors, and collective investment schemes. The CNBV also is responsible for the supervision of banks, development banks and agencies, cooperatives, credit unions and other deposit-taking institutions. The CNBV reports to the SHCP.

3. **The *Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros* (CONDUSEF) is the consumer protection agency in the jurisdiction.** Its responsibilities include promoting financial education, setting certain consumer protection requirements, and receiving and responding consumer complaints about financial services firms. CONDUSEF lacks the resources and powers to function effectively as a consumer protection authority. It has no power to order a financial services provider to compensate an investor for losses or to arbitrate a dispute. The weakness of this agency is of concern as gaps in the consumer protection regime may negatively affect investors and undermine confidence in the system as a whole.

4. **The regulator's responsibilities, powers, and authority with respect to the securities market are established by statute.** The CNBV was created as a regulator under the *Ley de la Comisión Nacional Bancaria y de Valores* (LCNBV). The LCNBV gives the Commission the authority to administer, enforce, and give effect to the provisions of the laws related to financial services in the jurisdiction. In the securities markets, the two key laws are *the Ley del Mercado de Valores* (Securities Market Law—LMV), which was effective as of the end of 2005, and *Ley de Sociedades de Inversión* (Investment Companies Law—LSI), which dates from 2001. These laws are supplemented with detailed secondary legislation in specific areas, including the Securities Firms Rules, Issuers Rules and *Sociedade de Inversión* (SI) Rules.

5. **The Commission’s responsibilities, powers, and authority with respect to the derivatives market rely on a combination of the general authority granted to SHCP, the central bank and the Commission to regulate financial markets and their participants in Mexico.** These provisions do not refer to derivatives specifically. The responsibilities and authority for regulation is split in practice among the CNBV, the SHCP, and BoM. All three entities have the authority to issue secondary legislation/rules for this market, which creates opportunities for duplication, overlap, and conflict in the provisions that govern.

6. **There is one stock exchange (Bolsa Mexicana de Valores—BMV) and one derivatives exchange (MexDer) operating in Mexico under permissions granted by the Federal Government.** Public offerings of securities in the jurisdiction must be listed on the BMV. Trading in equities or listed derivatives is required to take place on the exchanges. Trading in some fixed-income instruments and most derivatives takes place over the counter, often through electronic facilities operated by authorized inter-dealer brokers. The BMV, MexDer, the central securities depository (INDEVAL), and the central counterparties (CCV and Asigna) are all part of the BMV Group, a public company self-listed on the BMV. The BMV is a member of the World Federation of Exchanges.

7. **The BMV has a very low number of listings and the liquidity of these is limited for all but the very largest companies in the domestic market.** There are only 154 listed domestic companies and ETFs. There has been virtually no growth in the number of listings over the past five years, while market capitalization has increased 30 percent and trading volumes were up 131 percent (to US\$453 million and US\$79,986 million, respectively). Trading is concentrated in the largest issuers, with the five most active issues making up 68 percent of total traded value in 2011.<sup>25</sup> Only about 30–40 domestic stocks are considered liquid.<sup>26</sup>

8. **The growth in the BMV for listings has been in foreign equities (and some ETFs) that may be listed on the BMV for trading.** These instruments are listed on the *Sistema Internacional de Cotizaciones* (SIC). These securities have not been publicly offered in Mexico; are not listed in the *Registro Nacional de Valores* (National registry of securities–RNV); and are listed on foreign securities markets recognized by the CNBV or whose issuers have otherwise been approved for listing by the CNBV. The CNBV has recognized several foreign stock markets viewed as having comparable standards, such as disclosure rules. These exchanges include NASDAQ, the New York Stock Exchange, the London Stock Exchange, the TSX Group, Inc., and the Deutsche Börse AG. Only qualified investors (institutions and high net worth individuals) may purchase securities listed on the SIC. Trades executed through the SIC settle through INDEVAL and are subject to the same operational rules and regulations as other trades executed on the Exchange. The number of listings has increased by more than 200 percent over the last five years (from 205 to 649), with the largest growth in exchange traded funds (ETFs),

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<sup>25</sup> Information from BMV.

<sup>26</sup> Estimates of the number of liquid issues varied. Some industry members said as few as 10, while the BMV estimate was 70–80.

up 471 percent (from 55 to 314). As for the domestic market, the trading on the SIC is highly concentrated in the five most active listings, with these ETFs making up 58 percent of the total traded value in 2011.<sup>27</sup>

9. **Much of the activity on the BMV comes from program trading orders that are placed to take advantage of price asymmetries between markets.** According to the BMV, up to 90 percent of total orders in the cash market represent program trading orders. Most are cancelled before the trade is completed. The ratio of orders to trades is about 20 to one. The BMV has added significant systems capacity in recent years to handle the volume of orders. Its trading rules and the related CNBV Securities Firms Rules have recently undergone significant changes to modernize the rules regarding trading, to permit direct market access to institutional through member brokers, and to facilitate cross trading.

10. **Growth of listings and trading on MexDer has been mixed.** The market has experienced growth in the number of listed options (up 450 percent—from 980 to 5,468) and options trading volumes (up 36 percent) over the past five years, while the number of listed futures and trading volume has declined (11 percent and 85 percent, respectively). The values of exchange-traded instruments show a similar pattern: options trading values are up 83 percent and futures are down 85 percent. The overall decline on the futures side is largely because of a decline in listing and trading interest rate related instruments. MexDer officials indicated virtually all trading on the exchange represents trades by institutional investors or proprietary trading by the members.

11. **As with the stock and derivatives markets, the growth in the collective investment scheme (SI) market has been slow.** The number of SIs has grown only marginally over the past five years (9 percent). Assets under management have grown much faster to US\$102 billion—up almost 60 percent over the same period. Most of the growth, both in the number of funds and in assets under management, is in equity funds, chiefly owing to their greater flexibility. Debt funds may only invest in debt instruments, while equity funds only have to have 20 percent invested in equities. In fact, most equity funds are operated as balanced funds, with a varying percentage of the funds invested in both types of securities. In the two years since the crisis, SIs have seen increased flows of funds that various market participants said reflected the fact that investors in SIs lost less money during the crisis than those who invested directly into the markets.

12. **The Mexican system makes limited use of self-regulatory organizations (SROs) in carrying out the oversight of market participants.** The exchanges and central counterparties are SROs automatically under the LMV. There are two other SROs—the *Asociacion Mexicana de Asesores Independientes de Inversiones* (AMAI), a voluntary association of independent investment advisors and the *Asociacion Mexicana de Intermediarios Bursatiles* (AMIB), an association to which securities brokers and SI operators and distributors must belong. These two

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<sup>27</sup> Information from BMV.

associations operate more as trade associations than SROs. The regulatory functions the SROs carry out vary by SRO and run from virtually none for AMAII and AMIB to MexDer that conducts regular examinations of its members.

13. **There are a relatively small number of authorized market intermediaries operating in Mexico and the numbers are static.** There are 41 commercial banks, 6 development banks, 35 securities firms, 41 mutual fund operators, and 5 mutual fund distributors<sup>28</sup> as of the end of 2010.

14. **The number of staff at the CNBV has declined and turnover at the senior level is high.** Staff salaries have been frozen for almost a decade, resulting in a decline in compensation of about 40 percent on a real basis, while at the same time demands on Commission staff have increased. Salary levels are now well below comparable positions in the private sector. This has had a predictably negative effect on attracting and retaining experienced and skilled staff. As a result, many experienced staff, particularly at senior levels, has left the CNBV for the private sector. This loss in expertise and institutional memory is an important problem that needs to be addressed before it hampers the CNBV's effectiveness in carrying out its mandate.

### C. Preconditions for Effective Securities Regulation

15. **The preconditions for effective supervision (a stable macroeconomic environment, sound legal and accounting framework, and effectiveness of procedures for the efficient resolution of problems in the securities market) appear to be in place in the jurisdiction.** As in many jurisdictions, the bankruptcy of market intermediaries is governed by the same legislation that governs any other corporate bankruptcy and it operates very slowly. While client assets held at the central depository are protected, it is not clear how the default procedures of the central counterparties would work in the event of a brokerage firm or large financial conglomerate bankruptcy.

### D. Main Findings

16. **Principles 1–5, principles relating to the regulator:** The CNBV has clear statutory authority over and responsibility for the securities markets. Its authority with respect to derivatives markets is less clear-cut and needs to be rectified by the passage of express legislation. The operational independence of the agency is compromised by a lack of resources, the fact that 75 percent of the Board of Governors are appointed by the SHCP and may be dismissed without cause at any time, and the lack of statutory immunity for the Commission, its Board and staff members. Persons affected by decisions of the Commission are afforded a full range of protections, including the right to be heard, to written reasons and to rights of appeal. The laws should be amended to permit the conduct of surprise inspections of any regulated entity

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<sup>28</sup> Not including banks or securities firms authorized to distribute SIs.

and to provide additional powers for the Commission with respect to enforcement matters, including enhanced transparency and the ability to settle matters. The staff is very professional and is subject to detailed conduct rules. Market participants uniformly praised the quality and openness of the CNBV staff.

17. **Principles 6–7, principles relating to self-regulation:** The Mexican system makes limited use of self-regulatory organizations (SROs) in carrying out the oversight of market participants. The regulatory functions the SROs carry out vary by SRO and run from virtually none to full rule-making and conducting regular examinations of its members. In all cases, the CNBV retains full authority to oversee SRO members. There is an appropriate SRO supervision program in place that varies by the nature of the SRO in question. The exchanges and central counterparties are subject to regular on-site inspections and their rules are subject to prior review and approval. MexDer has a compliance officer who is in charge of the surveillance of its members.

18. **Principles 8–10, Principles relating to enforcement of securities regulation:** The Commission has broad inspection, investigation and surveillance powers, but lacks the power to conduct inspections of regulated entities without notice. It has powers to investigate and take action against anyone who breaches the laws it administers. If there is evidence of possible illegal conduct, investigation inspections may be conducted with same day notice. The Commission carries on active inspection and enforcement programs. Both on-site and off-site reviews are performed of regulated entities. Market surveillance is performed at the exchanges and at the CNBV in parallel. There are some gaps in enforcement powers that should be filled and the sanctions available across the laws administered by the Commission should be brought into alignment. Fine levels should be reviewed to ensure they are consistent and high enough to be effective deterrents. The provision restricting disclosure of investigations and enforcement actions should be revised to permit fuller and earlier transparency.

19. **Principles 11–13, Principles for cooperation in regulation:** The Commission has the ability and capacity to share information and cooperate with regulators, both domestically and internationally, subject to the general requirement that there be an MOU in place. It can share confidential information with any other country through an MOU. It is a signatory to the IOSCO Multilateral MOU and to many bilateral MOUs with its counterparts in key jurisdictions, such as the United States, Brazil, Canada, United Kingdom, Argentina, Peru, El Salvador, Venezuela, Panama, as well as Spain, Germany, the Netherlands, and various other European countries.

20. **Principles 14–16, Principles for issuers:** Extensive requirements are in place for offering and disclosure documents. Public offering of securities (debt, equity or collective investment schemes) are required to be listed on the BMV and are subject to the exchange's listing standards, in addition to the requirements set out in the LMV and the Issuers Rules. Both the BMV and the CNBV conduct reviews of the prospectus of the issuer. Continuous disclosure documents are made public through the facilities of the exchange and the Commission. Investors are treated equitably with respect to voting, access to information and the ability to participate in

any takeover bid. Full information must be provided for any takeover bid. Information is publicly available regarding shareholdings of directors, officers and other insiders of the corporation. Accounting and auditing standards are in place and auditors are subject to oversight by the CNBV and detailed independence standards apply. By the beginning of 2012, public issuers will have to prepare their financial statements using International Financial Reporting Standards (IFRS) and be audited using International Standards of Audit (ISA). The publication of annual audited financial statements could be more timely and the access to information about shareholder meetings should be enhanced by requiring electronic publication of the materials.

21. **Principles 17–20, Principles for collective investment schemes:** The framework for regulation of SIs is largely compliant with the Principles. All SIs and their operators and distributors are subject to authorization and reporting requirements. All funds offered to the public must be registered with the CNBV, which process includes the review of a detailed prospectus. Funds must be established as corporations, with assets segregated from those of the operator and distributor. All SIs and their operators and distributors are subject to both off-site and on-site supervision. Any asset of an SI that may be held at a central depository must be so held. The central depository for securities is independent. The fund's securities and its assets are subject to valuation by third party service providers (valuation companies and price vendors) that are required to be independent of the fund and its operator. Continuous disclosure of information and prices is provided through the fund or its distributor's website. In addition, prices must be reported daily through the BMV's system. The CNBV has the authority to suspend new placements, but no authority to order a fund to suspend or resume redemptions.

22. **Principles 21–24, Principles for market intermediaries:** A framework is in place for licensing and to apply on-going requirements for market intermediaries. Applicants are subject to detailed reviews before being authorized. There are initial and ongoing risk-based capital requirements that are based on a simplified version of Basel II and that address market, credit and operational risk. Liquidity is subject to separate testing but no specific capital requirements apply. Requirements regarding capital calculations and prompt (early) reporting of deficiencies by market intermediaries should be more rigorous. Market intermediaries are required to have extensive systems of risk management and internal controls in place. Client assets must be held in segregated accounts at central depositories. Intermediaries are required to know their clients and make suitable recommendations for those clients. The rules regarding conflicts of interest need improvement. There is no plan in place to address the failure of a broker; however, the law gives the CNBV broad powers to take action against a failing firm and require it to reduce its business, raise capital and give notice to its clients.

23. **Principles 25–30, Principles for the secondary markets:** Exchanges are subject to authorization by the SHCP with the advice of the CNBV (and BoM with respect to derivatives). Alternative trading systems for listed instruments are not permitted. The MexDer and central counterparties are subject to minimum capital requirements set by the authorities via MexDer's Mandatory Rules. The SHCP may set capital requirements for the stock exchange, but has not done so. Market surveillance is performed at the exchanges and the CNBV in parallel. The

CNBV has a comprehensive oversight system for exchange supervision that includes on-site examinations and off-site reviews of rules and other matters. The Commission may suspend a stock exchange and the SHCP has the authority to revoke the authorization of any exchange. There is both pre-trade and post-trade transparency of prices of shares in real time, but not for fixed income securities. The rules against market abusive transactions are extensive and there are mechanisms in place to detect improper conduct. Trades on both BMV and MexDer are cleared and settled through central counterparties that have detailed and transparent provisions designed to protect the markets against a default by any participant.

**Annex Table 12. Summary Implementation of the IOSCO Principles**

| Principle  | Findings   |
|--|--|
| Principle 1. The responsibilities of the regulator should be clearly and objectively stated  | The CNBV has clear statutory authority over and responsibility for the securities markets. Its authority with respect to derivatives markets is less clear-cut and needs to be rectified by the passage of express legislation. CONDUSEF is the consumer protection agency in the jurisdiction. There are some overlaps in authority and activities between the central bank and the Commission, particularly with respect to derivatives but there are MOUs in place and good working relationships in practice. Insurance products that are functionally equivalent to securities are subject to different rules by the insurance supervisor and no MOU or practical working relationship exists between the two regulators. There is no MOU in place with CONDUSEF. These gaps should be rectified. |
| Principle 2. The regulator should be operationally independent and accountable in the exercise of its functions and powers                 | The operational independence of the agency is compromised by a lack of resources, the fact that 75 percent of the Board of Governors are appointed by the SHCP and may be dismissed without cause at any time, and the lack of statutory immunity for the Commission, its Board and staff members. The transparency of Commission activities is acceptable but could be enhanced. Persons affected by decisions of the Commission are afforded a full range of protections, including the right to be heard, to written reasons and to rights of appeal.   |
| Principle 3. The regulator should have adequate powers, proper resources and the capacity to perform its functions and exercise its powers | As noted under Principle 1, the powers of the Commission with respect to derivatives need to be settled in law. The Commission lacks sufficient expert resources necessary to carry out its critical functions appropriately and the regulator has no funding autonomy. Staff training budgets are sufficient, but salaries have been frozen for nearly a decade and are well below that of the private sector. Despite these challenges, the industry participants with whom the assessor met spoke extremely highly of the quality of the staff at the CNBV and this assessor shares those views. The law should be amended to permit the conduct of surprise inspections and to   |

| Principle  | Findings   |
|--|--|
|  | <p>provide additional powers for the Commission with respect to enforcement matters including enhanced transparency and the ability to settle matters.</p> <p>CONDUSEF is the consumer protection agency in the jurisdiction. It lacks the resources and powers to function effectively as a consumer protection authority.</p>  |
| <p>Principle 4. The regulator should adopt clear and consistent regulatory processes</p>   | <p>The CNBV operates within clear and consistent processes. The consultation process for rule making is transparent and operated by an independent agency of the government. Laws and rules are available on the CNBV website. Persons affected by decisions of the Commission are afforded a full range of protections, including the right to be heard, to written reasons and to rights of appeal. If anything, the protections afforded defendants in the enforcement process may well impede the effectiveness of that process. The Commission should have the power to publish full details of enforcement proceedings once the sanction has been imposed.</p> |
| <p>Principle 5. The staff of the regulator should observe the highest professional standards</p>   | <p>Staff observes high standards of professional conduct and subject to detailed ethical rules both as federal employees and under the conduct rules of the Commission.</p>  |
| <p>Principle 6 The regulatory regime should make appropriate use of self-regulatory organizations (SROs) that exercise some direct oversight responsibility for their respective areas of competence and to the extent appropriate to the size and complexity of the markets</p> | <p>The Mexican system makes limited use of self-regulatory organizations (SROs) in carrying out the oversight of market participants. The regulatory functions the SROs carry out vary by SRO and run from virtually none to full rule-making for members and conducting regular member examinations.</p>  |
| <p>Principle 7. SROs should be subject to the oversight of the regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities</p>  | <p>The CNBV has not delegated any functions to any SRO, retains full authority to oversee SRO members and in practice performs the same regulatory reviews performed by the SRO – such as market surveillance. There is an appropriate SRO supervision program in place. The exchanges, central counterparties and central depository are subject to regular on-site inspections and their rules are subject to review and approval.</p>   |
| <p>Principle 8. The regulator should have comprehensive inspection, investigation and surveillance powers</p>  | <p>The Commission has broad inspection, investigation and surveillance powers. While it may conduct an investigation visit (where a breach of the law is suspected) with same day notice, the CMBV lacks the power to conduct routine inspections of regulated entities without notice.</p>  |
| <p>Principle 9. The regulator should have comprehensive enforcement powers</p>   | <p>It has powers to investigate and take action against anyone who breaches the laws it administers. There are some gaps in enforcement powers that should be filled, such as the power to order restatement of financial statements and to disclose details of the results of enforcement proceedings.</p>  |

| Principle  | Findings   |
|--|--|
| Principle 10. The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers and implementation of an effective compliance program. | The Commission carries on active inspection and enforcement programs. Both on-site and off-site reviews are performed of regulated entities. Market surveillance is performed at the exchanges and the CNBV in parallel. Firms must have effective compliance systems. There are some gaps in the Commission's enforcement powers that should be filled. The sanctions available across the laws administered by the Commission should be brought into alignment. Fine levels should be reviewed to ensure they are consistent and high enough to be effective deterrents. |
| Principle 11. The regulator should have the authority to share both public and nonpublic information with domestic and foreign counterparts  | The Commission has the ability and capacity to share information and cooperate with regulators, both domestically and internationally, subject to the general requirement that there be an MOU in place. It can share confidential information with any other country through an MOU.  |
| Principle 12. Regulators should establish information sharing mechanisms that set out when and how they will share both public and nonpublic information with their domestic and foreign counterparts    | The CNBV is a signatory to the IOSCO Multilateral MOU and to many bilateral MOUs with key jurisdictions, such as the United States, Brazil, Argentina and various European countries.  |
| Principle 13. The regulatory system should allow for assistance to be provided to foreign regulators who need to make inquiries in the discharge of their functions and exercise of their powers         | The Commission may provide extensive assistance to foreign supervisors in carrying out their responsibilities, including by obtaining and sharing information and cooperating on inspections. The Commission does not require the permission of any outside authority to share information and no precondition for an independent interest or dual illegality.   |
| Principle 14. There should be full, timely and accurate disclosure of financial results and other information that is material to investors' decisions   | Extensive requirements are in place for offering and disclosure documents. Public offering of securities (debt, equity or collective investment schemes) are required to be listed on the BMV and are subject to the exchange's listing standards, in addition to the requirements set out in the LMV and the Issuers Rules. Both the BMV and the CNBV conduct reviews of the prospectus of the issuer. Continuous disclosure documents are made public through the facilities of the exchange.  |
| Principle 15. Holders of securities in a company should be treated in a fair and equitable manner  | Investors are treated equitably with respect to voting, access to information and the ability to participate in any takeover bid. Full information must be provided for any takeover bid. Information is publicly available regarding shareholdings of directors, officers and other insiders of the corporation. Access to information about shareholder meetings should be enhanced by requiring electronic publication of the materials.  |
| Principle 16. Accounting and auditing standards should be of a high and internationally acceptable   | Accounting and auditing standards are in place and auditors are subject to oversight by the CNBV and detailed independence standards apply. By the beginning of 2012,  |

| Principle  | Findings   |
|--|--|
| quality  | public issuers will have to prepare their financial statements using International Financial Reporting Standards (IFRS) and be audited using International Standards of Audit (ISA). The publication of annual audited financial statements could be more timely.  |
| Principle 17. The regulatory system should set standards for the eligibility and the regulation of those who wish to market or operate a collective investment scheme  | All SIs and their operators and distributors are subject to authorization and reporting requirements. All SIs and their operators and distributors are subject to both off-site and on-site supervision. There is a regime governing conflicts of interest. Delegation is not a particular issue in this jurisdiction, as SIs are required to appoint service providers to carry out specified tasks for the SI, such as valuation companies and prices vendors. All of these service providers are also authorized and supervised by the CNBV.  |
| Principle 18. The regulatory system should provide for rules governing the legal form and structure of collective investment schemes and the segregation and protection of client assets   | Funds must be established as corporations, with assets segregated from those of the operator and distributor. Any asset of an SI that may be held at a central depository must be so held. The central depository for securities is independent.   |
| Principle 19. Regulation should require disclosure, as set forth under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme | All funds offered to the public must register the securities with the CNBV, which process includes the review of a prospectus that must contain full information about the SI and its service providers. The SI must also prepare a short form document containing key information that investors should know before they invest. Material changes in the prospectus and key disclosure document are subject to prior approval of the Commission and often trigger a right of investors to redeem their investments prior to the change going into effect.   |
| Principle 20. Regulation should ensure that there is a proper and disclosed basis for assets valuation and the pricing and the redemption of units in a collective investment scheme   | The fund's securities and its assets are subject to valuation by third party service providers (valuation companies and price vendors) that are authorized and supervised by the Commission. These service providers must be independent of the fund and its distributor. Continuous disclosure of information and prices is provided through fund or operator websites. In addition, prices must be reported daily through the BMV's system. The CNBV has the authority to suspend new placements. The CMBV has no authority to order a fund to suspend or resume redemptions. This gap should be filled. |
| Principle 21. Regulation should provide for minimum entry standards for market intermediaries  | A framework for licensing and on-going requirements for market intermediaries is in place. Applicants are subject to detailed reviews before being authorized. Brokers must undergo comprehensive on-site inspections of all systems before they are permitted to begin business. The regime for investment advisors may leave supervisory gaps. The CNBV should be given express authority to supervise this activity.  |

| Principle   | Findings  |
|---|---|
| Principle 22. There should be initial and ongoing capital and other prudential requirements for market intermediaries that reflect the risks that the intermediaries undertake  | There are initial and ongoing risk-based capital requirements in place that are based on a simplified version of Basel II that address market, credit and operational risk. Liquidity is subject to separate testing but no specific capital requirements. There are no specific provisions for legal or reputational risk. Market intermediaries are subject to active oversight by the regulator and the CNBV's powers to act where there are problems are extensive. Requirements regarding capital calculations and prompt reporting of deficiencies by market intermediaries authorized to trade in derivatives on MexDer are extensive but those for securities brokerage houses should be more rigorous.   |
| Principle 23. Market intermediaries should be required to comply with standards for internal organization and operational conduct that aim to protect the interests of clients, ensure proper management of risk, and under which management of the intermediary accepts primary responsibility for these matters | Market intermediaries are required to have extensive systems of risk management and internal controls in place. The firm's internal audit function must review these systems annually and the results of that review reported to the Board of Directors of the firm and the CNBV. Client assets must be held in segregated accounts at central depositories. Intermediaries are required to know their clients and make suitable recommendations for those clients. The rules regarding conflicts of interest need improvement.   |
| Principle 24. There should be a procedure for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk  | There is no plan in place to address the failure of a broker; however, the law gives the CNBV broad powers to take action against a failing firm and require it to reduce its business, raise capital and give notice to its clients. No early warning systems are in place for securities brokers. Where a failure has cross border implications, MOUs are in place to facilitate information sharing.   |
| Principle 25. The establishment of trading systems including securities exchanges should be subject to regulatory authorization and oversight   | Establishment of stock and derivatives exchanges requires authorization from the SHCP with input from the CNBV (and from BoM for derivatives exchanges). There are specified criteria that any applicant must meet, including requirements regarding systems and other infrastructure capacity, technical competence etc. Alternative trading systems for listed instruments are not permitted.<br><br>Oversight of the exchanges includes both on-site examinations and off-site reviews. All new rules and proposed rule changes for securities require CNBV approval. All new rules and proposed rule changes for securities require CNBV approval. New rules changes and proposed rule changes at MexDer require SHCP approval and are also subject to review by BoM and the CNBV. On-site reviews are comprehensive and are preformed regularly. |

| Principle  | Findings   |
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| Principle 26. There should be ongoing regulatory supervision of exchanges and trading systems, which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants | The CNBV has a comprehensive system for supervision of the exchanges that includes both on-site examinations and off-site reviews of rules and trading reports to ensure the markets operate fairly. Surveillance of the markets is carried on by the exchanges and CNBV in parallel. The CNBV has the power to suspend the operations of an exchange and the SHCP retains the right to revoke an authorization. |
| Principle 27. Regulation should promote transparency of trading  | There is both pre-trade and post-trade transparency of prices in real time. The trading rules at BMV were recently modernized to facilitate high frequency trading, faster crossing of large trades and direct market access. The implementation and operation of these new rules should be monitored closely to ensure the current level of transparency is not negatively affected.                            |
| Principle 28. Regulation should be designed to detect and deter manipulation and other unfair trading practices  | The rules against abusive transactions in the markets are extensive and there are mechanisms in place to detect improper conduct. The Commission collects and analyses extensive trading data – down to receiving daily reports from each broker on each trade executed that day. Sanctions may be too low, given market values and should be examined (See Principle 10)  |
| Principle 29. Regulation should aim to ensure the proper management of large exposures, default risk and market disruption   | Trades on both BMV and MexDer are cleared and settled through central counterparties that have detailed and transparent provisions designed to protect the markets against a default by any participant.   |
| Principle 30. Systems for clearing and settlement of securities transactions should be subject to regulatory oversight, and designed to ensure that they are fair, effective and efficient and that they reduce systemic risk  | A separate CPSS-IOSCO assessment will be conducted   |

*Authorities' response to the assessment (CNBV)*

24. **Mexican financial authorities agreed, in general, with the conclusions, observations and recommendations of the assessment regarding the implementation of IOSCO Principles in the Mexican financial sector.** Most of the written comments provided by these authorities on the preliminary draft were included in the final report. Authorities consider that the exercise represented a good opportunity to discuss both strengths and weaknesses on securities markets, as well as to draw attention to main issues that should be addressed in the future. Authorities believe that the evaluation of the principles is fair and objective.

25. **The authorities found the IOSCO report both comprehensive and useful.** Also, they believe that assessors' advice and proposals will become part of their agenda for the upcoming years, and that the assessment identifies improvements that should be implemented in order to enhance the performance and development of securities markets. The report properly addresses main concerns, which are shared by authorities. On this behalf, they agree that two relevant weakness of Mexican securities market are its reduced number of listings and its low level of liquidity and, as a consequence, they welcome advice on how to move forward. Also, they agree that high concentration of portfolios might raise concerns, although they consider that this should not be seen as a problem unique to the securities market, but that should be considered as a characteristic of Mexican economy as a whole. Authorities also share the assessors' point of view regarding that some enhancement should be made to CNBV's powers to publish information regarding investigations and sanctions, in order to improve transparency and strengthen market discipline.

While they acknowledge that Mexico lacks a Law to regulate the domestic derivatives market, they believe that most of the recommendations suggested in the report might be implemented through secondary regulation, due to the fact that the SHCP, Banxico, and CNBV have broad powers to do so.

26. **Regarding the assessment on Principle 14 (There should be full, timely and accurate disclosure of financial results and other information that is material to investors' decisions) they believe that Mexico complies with most of the standards of this principle.** In fact, compliance with this particular principle is similar to that observed in the most developed markets. Therefore, authorities are of the opinion that this principle should be assessed as Broadly Implemented (BI).

## ANNEX III. IAIS CORE PRINCIPLES—SUMMARY ASSESSMENT

### A. Introduction and Methodology

1. **This is a full assessment of the insurance regulatory and supervisory system in Mexico.** It was produced in the course of a joint IMF, World Bank mission in Mexico during September 8–21, 2011 under the Financial Sector Assessment Program (FSAP), and carried out by Rodolfo Wehrhahn (MCM). This assessment update was conducted with regard to the circumstances in place and the practices employed on September 21, 2011. A new insurance law is expected to be submitted to congress in September 2011. The long process in preparing this new Insurance Law (LISF) gaining consensus of the different stakeholders will certainly result in an improvement in compliance with the core principles, and those improvements have been referenced in the assessment. However, these improvements are referenced when appropriate, the lack of the corresponding secondary regulation and implementation prevented the assessor to take LISF in full consideration for this assessment.

2. **The update assessment was carried out using the International Association of Insurance Supervisors (IAIS) core principles.** The industry analysis focuses on both life and nonlife insurance companies and excludes the surety business that is also supervised by the CNSF. When relevant for the insurance sector, the pension fund industry is mentioned, but a formal assessment of the sector is outside the scope of this work. Sources of information included meetings with senior officials and staff from SHCP, CNSF, the consumer protection agency (*Comisión Nacional para la protección y defensa de los usuarios de servicios financieros*, CONDUSEF), as well as with market participants, trade associations and professional bodies. The assessor had access to a complete self assessment on the Insurance Core Principles (ICPs) and a detailed response produced by the SHCP and CNSF to a questionnaire. Official versions of the General Law of Insurance Institutions and Mutual Insurance Societies (LGISMS) and the insurance contract law (LSCS), as well as the relevant Articles in the CNSF bylaws and Internal Ordinances (*Circular Única de Seguros*, SSLO) were also available to the assessor.

### B. Main Findings

3. **A comprehensive legal and institutional framework supports the regulation and supervision of the insurance sector.** Insurance business regulation and supervision are carried out by several entities. The SHCP is in charge of setting the insurance policy and introducing primary regulation, always with strong input from the CNSF that issues the secondary legislation and supervision. CONDUSEF is entrusted with consumer protection in the financial sector.

4. **The authorities constantly update the legal and supervisory framework to align it with international best practice.** A major overhaul of the insurance law is in the final stage to be presented to congress. The new proposed law will incorporate the recent international developments toward a risk sensitive solvency regime and an intrusive and continuous

supervision. Further, a single Rules Book has been developed to harmonize and allow a comprehensive overview of the supervision in one source.

5. **The level of compliance with the IAIS principles and the CNSF reputation and credibility are high.** With only 2 partially observed and 9 largely observed principles out of the 28, Mexico shows a high level of compliance in a post-crisis environment. Transparent processes and an open dialogue with the industry have created the positive reputation of the agency. The powers allocated to the CNSF have been used according to the procedures with very low level of forbearance. Regular on-site inspections are strongly supported by a detailed off-site analysis. Data is collected at sufficient granularity and used continuously and effectively for supervisory and market analysis work. The group supervision needs to further develop, but the low complexity and limited number of groups in the insurance sector does not appear to make this a priority.

6. **Significant steps have been taken in preparation for achieving further increased observance of the IAIS principles.** The promulgation of the proposed LISF is strongly recommended to significantly increase compliance with the IAIS core principles. Principles 6, 9, 10, 15, 16, and 27 will be observed, should LISF be passed in its proposed form and properly implemented. The full allocation of the currently collected supervisory fees would allow continued well functioning of supervision, including the planned regulatory changes to the solvency regime.

7. **The fiscal budgetary constraints are putting pressure on the functioning of the supervisory authority.** As a result of the last years' wage freeze, it has created a level of salaries in the CNSF that, when compared with the industry, is resulting in a drain of talent and hindering the ability to acquire needed expertise. The future performance of the CNSF is compromised.

8. **Continuity of the CNSF needs to be strengthened.** The lack of a procedure to appoint the Chairman of the agency creates uncertainty, which could impact on the operational independence of the CNSF. The appointment mechanisms of the Chairman and key members need to be established and the reasons for removal need to be publicly disclosed when exercised.

9. **Consumer protection and financial literacy need to be further developed.** The efforts initiated by CONDUSEF are all in the right direction and create a better understanding of insurance products and consumer rights. However, the impact has been limited as indicated by the broadly similar number of reconciliations over the last years and a lack of arbitration activity. The fines and preventive actions observed in the market have limited dissuasive power and need to be enhanced.

## Conditions for Effective Insurance Supervision (ICP 1)

10. **The conditions for effective supervision are largely met, considering current development of the insurance sector.** The legal and judicial system is still struggling to gain full acceptance by the market and public in general. CONDUSEF's conciliation/ arbitration to deal with disputed claims is a step in the right direction, creating a greater acceptance of the insurance contracts by consumers. The accounting, actuarial, and auditing standards are publicly available on the relevant professional organization's website and they are in line with international standards. Mexican accounting standards are partly more conservative than the IFRS would like, allowing the catastrophic reserve to be a liability and recognizing the valuation of real estate. After several years of macroeconomic and financial stability, the amount of financial instruments has increased dramatically. However, further development is required to cover the demand for investment products. In particular, the inflation index and U.S. dollar-nominated instrument lag in duration with respect to the market demand. The laws and regulations are permanently updated to cope with relevant changes in the financial sector. The SSLO is a welcome document that brings all secondary legislation into one single document.

## The Supervisory System (ICP 2 to ICP 5)

11. **The CNSF has a broad range of powers to discharge its responsibility, but more are needed to increase its effectiveness.** The powers include the ability to issue secondary legislation aimed to preserve the solvency, liquidity, and financial stability of the insurance institutions and mutual societies. To perform on-site inspections, impose administrative sanctions to enforce regulation to the institutions and persons under its inspection and surveillance. Additional powers to increase the effectiveness of supervision are required and will be incorporated in the new insurance law. Some of these functions are: issue prudential regulations that aim at preserving the solvency, liquidity, and financial stability of insurance companies and mutual insurance societies; and intervene in liquidation procedures of the insurance companies and mutual societies. The current lack of powers to effectively intervene in liquidation procedures could create a weakness in the protection of policyholders' rights; in particular in the absence of a guarantee fund.

12. **The appointment and removal of the CNSF President or Board members is not dictated by law, and, together with the absence of a term of office, it limit the independence of the CNSF.** Further, the absence of a mandate to disclose the dismissal reasons of the president or a member of the CNSF Board adds to the vulnerability of the independence of the CNSF. The CNSF has demonstrated technical autonomy, but from legal and budgetary perspectives it is dependent on the executive power. The CNSF is subject to the expenditure restrictions that are applied to all entities of the Federal Government. Therefore, the supervisory authority does not have full discretion on resource allocation in accordance with its mandate, objectives, and the perceived risks.

### **The Supervised Entities (ICP 6 to ICP 10)**

13. **The requirements to be licensed are numerous, detailed, and transparent, and operating without a license is considered a criminal offense.** Cases of enforcement have been reported in the past. Entities that could create complex supervisory structures or increase the risk of conflicts of interest, like mutual insurers, security brokers, credit organizations, pension administrators, etc., are ruled out as stockholders.

14. **Since 2002, insurance legislation does not allow companies to offer both life and nonlife insurance; however, due to grandfathering rules, currently 33 insurers accounting for 58 percent of the market still operate as composite insurers.** There are no appropriate measures to guarantee a segregated treatment of the risks, in particular in a winding-up situation. This could create a source of additional risk for consumers.

15. **The Board is required to appoint the mandatory compliance officer for the supervised entity.** The compliance officer has the responsibility to supervise the compliance with all internal and external applicable regulatory frameworks. While the law requires that the compliance officer is provided with sufficient resources to fulfill the responsibility, practice shown that a stronger entity is required for this internal surveillance position. This weakness is addressed in the new law and it replaces the Compliance Officer with an Audit Committee in Article 72 of the LISF project. The LISF states that institutions must have an Audit Committee that will be responsible for monitoring the adherence to the internal regulations set by the Board of Directors and the compliance with the applicable laws and administrative provisions.

### **Ongoing Supervision (ICP 11 to ICP17)**

16. **Current insurance and surety legislation does not grant powers to the authorities to force portfolio transfers.** Thus, the supervisory and regulatory agencies do not have the power to arrange for a compulsory transfer of the obligations under the policies from a failing insurer to another willing insurer. However, it can facilitate the transfer where appropriate and where there is a willing transferee.

17. **Current regulation does not explicitly protect an insurer from the effects of the financial difficulties affecting the financial group to which it belongs.** However, the regulation has various preventive provisions that can be used to protect insurance and surety companies that belong to a group from the financial difficulties in other parts of the group, such as the prohibition to participate, directly or through a third person, in the authorized stockholders equity of insurance of surety companies, credit institutions, insurance mutual societies, brokerage firms, auxiliary credit organizations, mutual fund managers, savings and credit institutions, managing companies of pension funds, and savings and credit institutions. These provisions are helpful, but cannot cover all the different group structures.

18. **There are clear provisions for the exit and winding up of insurers in Mexico.** Policyholders have preference in a wind-up over other creditors. A protection fund exists only for pensions. The Resolution is initiated by either the license revocation followed by the corresponding administrative winding up of the entity or the filing of commercial bankruptcy. However, there are no requirements with respect to the maximization of the value of the liquidated assets or on the efficiency of the process. This could create the perception that the proceedings of the assets under liquidation were not optimized, or at least that there was no process for that.

19. **Financial groups are subject to supervision and regulation.** The supervision of financial institutions belonging to the same group is carried out by the corresponding agency: the CNBV, CNSF or CONSAR; the SHCF is required to nominate the leading supervisory agency for the financial group. The assigned leading supervisory agency is then granted with oversight powers that, under current legislation, are limited to the requirement of information. There are however few requirements on the group-wide governance and comprehensive risk management, and there is no group capital concept. Further, the CNSF has no direct jurisdiction to supervise unregulated holding companies and needs to operate indirectly through the regulated entities, thus, adding complexity to their supervision and monitoring activities of groups.

#### **Prudential Requirements (ICP 18 to ICP 23)**

20. **Current Mexican solvency regime is sound and has a sufficient level of risk sensitivity to properly assess the level of capital required.** In addition, the new law will introduce a new solvency regime that incorporates stochastic models and a calibration very close to Solvency II regime.

#### **Markets and Consumers (ICP 24 to ICP 27)**

21. **Insufficiently detailed guidelines that pertain to the offering, sales operations, and financial services of the insurance and surety institutions seeking to protect the public have been issued.** Given the low insurance penetration and insurance culture in Mexico, requirements for more clarity and transparency in the contracts aiming to protect insurance consumers is needed. The CNSF, together with CONDUSEF, should continue and increase their efforts in this area.

#### **AML/CFT (ICP 28)**

22. **The AML-CFT requirements applicable to insurers are broadly in line with the FATF recommendations.** In December 2008, GAFISUD issued Mexico's levels of compliance with the international standard with the FATF 40 Recommendations plus nine Special Recommendations and a follow up document was published in December 2009. While the level of compliance is high, there are specific areas that need improvement.

With respect to Recommendation 5 on customer due diligence (CDD), some aspects remain to be implemented:

- No distinction is made in all cases between CDD requirements for business relationships and all types of occasional transactions, including a direct requirement for aggregating linked occasional transactions.
- There are inadequate provisions in the regulations with respect to CDD requirements when there are indications and/or certainty of false, erased, or altered identification documents.
- There is no direct explicit requirement for financial institutions (FIs) to ascertain/request that applicants for business state whether they are acting on behalf of others.
- There is no general requirement for obtaining information on the purpose and nature of business relationships.

With respect to Recommendation 13 on reporting of suspicious transactions, the obligation to report attempted transactions is not explicitly established in regulations and is not consistently implemented by financial institutions.

### **Annex Table 13. Mexico: Summary of Observance of the Insurance Core Principles**

| Insurance Core Principle                              | Comments  |
|---|---|
| ICP1 - Conditions for effective insurance supervision | <p>The conditions for effective supervision are largely met, considering current development of the insurance sector.</p> <p>The legal and judicial system is still struggling to gain full acceptance by the market and the public in general.</p> <p>CONDUSEF's conciliation/arbitration to deal with disputed claims is a step in the right direction, creating a greater acceptance of the insurance contracts by consumers. Over the last five years, both the number of claims reported and the conciliations have been stable at around 0.5 percent. It appears that more dissemination work on the benefits of conciliations needs to be done to increase its usage.</p> <p>The accounting, actuarial, and auditing standards are publicly available on the relevant professional organization's website and they are commensurate with international standards. Mexican accounting standards are partly more conservative than the IFRS would like, allowing the catastrophic reserve to be a liability, and recognizing the valuation of real estate.</p> <p>The actuarial profession is well established. With strong professional associations that issue codes and standards that are enforced. Close collaboration with the CNSF exists and is effective, like the introduction</p> |

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|                               | <p>of actuaries' certification and continue education programs.</p> <p>After several years of macroeconomic financial stability, the amount of financial instruments has increased dramatically. However, further development is required to cover the demand for investment products. In particular, inflation index and U.S. dollar-nominated instrument lag in duration with respect to the market demand.</p> <p>The laws and regulations are permanently updated to cope with relevant changes in the financial sector:</p> <p>The SSLO is a welcome document that brings all secondary legislation into one single document.</p> <p>A new Insurance and Surety Law (Ley de Seguros y de Fianzas, LISF) has been submitted to Congress in September 2011.</p>  |
| ICP2 - Supervisory objectives | <p>The interests of policyholders are central to the supervisory objectives with a strong focus on preserving the financial stability and solvency of the institutions. There is also an element of development in the objectives that states the requirement to promote a sound development of the surety and insurance sectors with the goal to increase its service's coverage to an increasingly share of the population.</p>   |
| ICP3 - Supervisory authority  | <p>The CNSF has ample powers for a largely effective discharge of its responsibility. The powers include the ability to issue secondary legislation aimed to preserve the solvency, liquidity and financial stability of the insurance institutions and mutual societies. To perform on-site inspections, impose administrative sanctions to enforce regulation to the institutions and persons under its inspection and surveillance.</p> <p>The relationship with the SHCP is that of a consultant and important voice with respect to matters related to the LGISMS and to elaborate general rules and regulations referred by such law.</p> <p>Additional powers to increase the effectiveness of supervision are required and will be incorporated in the new insurance law. Some of these functions are:</p> <ul style="list-style-type: none"> <li>• Issue prudential regulation that aims at preserving the solvency, liquidity, and financial stability of insurance companies and mutual insurance societies.</li> <li>• Grant, modify, or revoke the licenses to operate as an insurance company or mutual insurance society.</li> <li>• Determine the minimum paid in capital that insurance companies and mutual societies have to cover.</li> <li>• Carry out the registration at the General Registry of Foreign Reinsurers.</li> <li>• Carry out the registration of insurance adjusters.</li> <li>• Issue authorizations when insurance companies or mutual insurance societies apply to: (i) transfer their portfolios or liabilities and rights corresponding to the granting of sureties; and (ii) merge or split.</li> </ul> |

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|  | <ul style="list-style-type: none"> <li>• Intervene in liquidation procedures of the insurance companies and mutual societies.</li> </ul> <p>The current lack of power to effectively intervene in liquidation procedures could create a weakness in the protection of policyholders' rights. In particular in the absence of a guarantee fund.</p> <p>The internal governance procedures are sound.</p> <p>A complete Code of Conduct applies to all CNSF's officers, and there is a clear framework for the accountability of the CNSF's staff. Violations are sanctioned.</p> <p>The CNSF is subject to regular internal and external audits. Any discrepancies are corrected without delays.</p> <p>The quality of the internal governance procedures are attested by the ISO 9001-2000 Quality Certificate maintained since 2004.</p> <p>The appointment and removal of the CNSF President or Board members is not dictated by the law and together with the absence of a term of office limits the independence of the CNSF.</p> <p>Further, the absence of a mandate to disclose the dismissal reasons of the President or a member of the CNSF Board adds to the vulnerability of the independence of the CNSF.</p> <p>The CNSF has demonstrated technical autonomy, but is from a legal and budgetary perspectives dependent from the executive power.</p> <p>The CNSF is subject to the expenditure restrictions that are applied to the all entities of the Federal Government. Therefore, the supervisory authority does not have full discretion on resource allocation in accordance to its mandate, objectives and the perceived risks.</p> |
| ICP4 - Supervisory process                             | Transparency and accountability in the supervisory process are at international levels.   |
| ICP5 – Supervisory cooperation and information sharing | <p>The CNSF has entered a large number of MoU including the IAIS Multilateral Memorandum of Understanding (MMoU) as one of the 15 currently signatory countries.</p> <p>The CNSF active participation in Colleges of supervisors and multinational organizations.</p>   |
| ICP6 – Licensing                                       | <p>The requirements to be licensed are numerous, detailed, transparent, and operating without a license is considered a criminal offense. Cases of enforcement have been reported in the past.</p> <p>Entities that could create complex supervisory structures or increase the risk of conflict of interests, like mutual insurers, security brokers, credit organizations, pension administrators, etc. are ruled out as stockholders.</p> <p>There is a six months return period for the license applications. The LISF project in Article 366 aims to expedite the process by transferring the licensing powers from the SHCP to the CNSF.</p>  |

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|   | <p>No insurance and surety activity is out of the supervisory scope of the CNSF this includes the micro-insurance operations that in some countries are exempt from supervision.</p> <p>Since 2002, insurance legislation does not allow operating in both life and nonlife business; however, due to grandfathering rules, currently 33 insurers accounting for 58 percent of the market still operate as composite insurers. There are no appropriate measures to warrant a segregated treatment of the risks in particular on a winding-up situation. This could create a source of additional risk for consumers.</p>   |
| ICP7 – Suitability of persons                     | <p>The range and requirements on individuals to whom fit and proper conditions are appropriate, according to international standards. The analysis on compliance is done off-site and monitored on a continued basis.</p> <p>The CNSF has a track record of acting determined on the removal of high rank officers of insurers and surety entities, with disregard of the size and importance of the enterprise, in occasions where the CNSF deemed that the person did not possess enough technical quality, honorable or creditworthiness for the performance of the duties.</p>  |
| ICP8 – Changes in control and portfolio transfers | <p>The insurance law defines quantitatively (30 percent or more of shares) and qualitatively (dismissal and appointment of the Board) the control of an institution. To acquire the control of an insurer, authorization from the SHCP is required. In the LISF project, the authorization function is transferred to the CNSF and the percentage of the shares defining control is lower to 20 percent.</p> <p>The requirements for those pretending to acquire control over an institution are the same as those issued for constituting an insurance company and there is no distinction on the ownership requirements between foreign and national stockholders.</p> <p>Individuals or persons associated with others, who pretend to acquire more than 5 percent of the shares of an insurer, must get approval from the SHCP, with a favorable opinion from the CNSF. Those acquiring between 2 percent and 5 percent of the shares must notify the SHCP within three business days following the acquisition or transmission. Detailed disclosure of the persons that acquired or have the intension to acquire the shares, is required.</p> <p>The supervisory authority has been involved in several portfolio transfers requests. The outcome of the approvals has depended on the assessment of the equitable treatment of both policyholders and beneficiaries.</p> |
| ICP9 – Corporate governance                       | <p>The insurance law entrusts the management of the company to a Board of Directors and a CEO.</p> <p>The Board is required to appoint the mandatory compliance officer for the entity. The compliance officer has the responsibility to supervise the compliance with all internal and external applicable regulatory frameworks. Annually, it reports to the CNSF and has direct access to the Board. The CNSF has to rely on the compliance officer and underperformance has been sanctioned in the past.</p>  |

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|                           | <p>While the law requires that the compliance officer is provided with sufficient resources to fulfill the responsibility, practice shown at a stronger entity is required for this internal surveillance position. This weakness is addressed in the new law and it replaces the Compliance Officer, with an Audit Committee in Article 72 of the LISF project. The LISF states that institutions must have an Audit Committee that will be responsible for monitoring the adherence to the internal regulations set by the Board of Directors and the compliance with the applicable laws and administrative provisions.</p> <p>The CNSF Corporate Surveillance System is used to supervise compliance with corporate governance requirements. This system allows having information related to the compliance with applicable regulations</p> <p>The CEO's responsibilities are clearly defined so as to elaborate and submit for the approval of the Board of Directors the policies for an efficient management of the company's human and material resources; as well as to provide precise data and information to the Board of Directors for its adequate decision making. Professional experience of at least five years in high decision-taking positions is required by law for the CEO position.</p>   |
| ICP10 – Internal controls | <p>The requirements set on the internal controls are broad and cover the main areas like conflict of interests, delegating authority, responsibilities and assignments, and segregation of duties. The CNSF reviews the internal controls and checks their adequacy to support the operation at the licensing stage. The adequacy and proper functioning of the internal controls is then supervised during on-site inspections. Any kind of irregularities are required to be corrected through a written notification.</p> <p>The Board of Directors is obliged to define and approve policies and norms on integral risk management and the mechanisms to evaluate and monitor its compliance.</p> <p>In the current regulatory framework, the Board is implicitly the ultimate responsible party for the internal controls and risk management of the company. The explicit responsibility with respect to the internal controls is stated in Article 69 of the LISF project that assigns the responsibility to the Board of Directors.</p> <p>While there are indirect incentives for the Board to assume responsibility on market behavior through its overall risk management role, current legislation does not allocate explicitly the market behavior responsibility to the Board. The new law addresses this in Article 69, where it establishes the obligation of the Board of Directors to define and approve the underwriting policies, marketing and product design, among others, and to establish general policies concerning the provision of services and attention to their users, as well as policies regarding information disclosure.</p> <p>The services that could be contracted with third parties, the minimum requirements that the contracts must have, the minimum aspects that the institutions have to check when hiring such services and the</p> |

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|  | <p>establishment of contingency plans are all regulated. Additionally, these rules establish that when insurance companies hire services and operations with third parties, they are not considered as substitutes of the obligations of the institution.</p>  |
| ICP11 – Market analysis                                  | <p>The CNSF webpage is a comprehensive source of information with sufficient time series and granularity to allow running detailed analyses of the market, including top down stress tests on the asset side of the insurers.</p>  |
| ICP12 – Reporting to supervisors and off-site monitoring | <p>Off-site supervision is strong in Mexico and is at the core of its supervisory strategy with sufficient resources allocated to this task.</p>   |
| ICP13 - On-site inspection                               | <p>The law supports the on-site inspection framework of the CNSF and the authority makes full use of the powers.</p> <p>Inspections are carried out on a regular basis with a biannual cycle and focus both, on general and specific issues.</p> <p>The follow-up on the implementation of the corrections or recommendations given by the CNSF is strong and is done either through off-site monitoring or by considering them on the next on-site inspection. The follow-up work is supported by the compliance officer, who is required to report on a monthly basis monthly to the CNSF on certain occasions.</p>  |
| ICP14 - Preventive and corrective measures               | <p>The CNSF has a wide range of preventive and corrective measures granted by regulation that is actively used and can lead to the revocation of the operating license.</p>  |
| ICP15 - Enforcement or sanctions                         | <p>The CNSF enforcement ability and powers are large. A company's lack of compliance with legal and administrative provisions, as well as with the CNSF's requirements is penalized with administrative sanctions, which may consist of an admonition, a suspension, and a restrictive modification of the operating license, or even its revocation. The use of admonition is a regular tool used frequently by the CNSF. In the last six years, 422 admonitions were imposed to insurers and 3,148 to intermediaries.</p> <p>The CNSF's powers allow for more severe enforcement measures; they include suspension of dividends' payment, deferment of payments of principal, interests of subordinated liabilities and other issued credit titles, suspension of operations, and winding up. Certain individual behavior, like intentionally concealing financial information or faking financial statements are considered crimes; managers, directors, or employees of the company acting in that manner have been reported by the CNSF to the corresponding authority for prosecution.</p> <p>Current insurance and surety legislation does not grant the powers to the authorities to force portfolio transfers. Thus, the supervisory and regulatory agencies do not have the power to arrange for a compulsory transfer of the obligations under the policies from a failing insurer to another willing insurer. However, it can facilitate the transfer where appropriate and where there is a willing transferee.</p> |

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|  | <p>The CNSF is legally entitled, and has used this power in the past with disregard of the size and importance of the company or individual, to order the suspension or removal of Board members, the compliance officer, the CEO, commissaries, directors and managers, fiduciary delegates, and functionaries with signing power, if the CNSF considers that they do not have enough technical capacities, are not honorable, and do not possess creditworthiness.</p> <p>Current regulation does not explicitly protect an insurer from the effects of the financial difficulties affecting the financial group to which it belongs. However, the regulation has diverse preventive provisions that can be used to protection insurance and surety companies that belong to a group from the financial difficulties in other parts of the group, such as the prohibition to participate, directly or through a third person, in the authorized stockholders equity of insurance o surety companies, credit institutions, insurance mutual societies, brokerage firms, auxiliary credit organizations, mutual fund managers, savings and credit institutions, managing companies of pension funds, and savings and credit institutions.</p> <p>These provisions are helpful, but cannot cover all different group structures.</p> <p>The CNSF acts forcefully on any accusation of insurance or surety activity within the country without the required license.</p> |
| ICP16 - Winding-up or exit from the market | <p>There are clear provisions for the exit and winding up of insurers in Mexico. Policyholders have preference in a windup over other creditors. A protection fund exists only for pensions.</p> <p>Partial exiting of the market is also foreseen in the law by the possibility of revoking the license on a given line of business. The reasons are similar to the complete revocation of license adapted accordingly.</p> <p>The failing entities are addressed by either the license revocation followed by the corresponding administrative winding up of the entity, or the filing of commercial bankruptcy.</p> <p>There are no requirements with respect to the maximization of the value of the liquidated assets or on the efficiency of the process. This could create the perception that the proceedings of the assets under liquidation were not optimized, or at least that there was no process for that.</p>  |
| ICP17 - Group-wide supervision             | <p>Financial groups are subject to supervision and regulation. The supervision of financial institutions belonging to the same group is carried out by the corresponding agency: the CNBV, CNSF or CONSAR; the SHCF is required to nominate the leading supervisory agency for the financial group. The assigned leading supervisory agency is then granted with oversight powers that under current legislation are limited to the requirement of information.</p> <p>Currently, the CNBV supervises most of the Mexican domiciled financial groups, and the CNSF and CONSAR supervises the remaining. The CNBV, according to its faculties, has the power to establish agreements</p>  |

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|  | <p>for information exchanges with other supervisors, therefore allowing the information sharing. The CNSF, on the contrary, does not have the same power, thus, creating some difficulties in information sharing with the other authorities.</p> <p>An important element of coordination and information exchanged is given by the structure of the Boards of the supervisory agencies.</p> <p>Every financial regulatory framework (banking, sureties, insurance, pensions, etc.) establishes the mechanisms for the supervisory oversight of the key issues like group structure and interrelationships, risk concentration, intra-group transactions, and exposures. There are however few requirements on the group-wide governance and comprehensive risk management, and there is no group capital concept.</p> <p>Countries with signed commercial agreements are allowed to carry out an on-site inspection per previous official request to the CNSF. The CNSF may also be asked to perform on-site inspections in companies established in foreign jurisdictions of Mexican host insurers. As of today, no inspection has been carried out by foreign authorities in Mexico.</p> <p>The leading national commission designated to supervise the group's financial organization is the source of information on a consolidated basis. Main difficulties remain and are based on the different accounting principles and information gathering formats and media.</p> <p>For insurance groups, the consolidated and financial information of each one of their subsidiaries is currently required and available through the CNSF website.</p> <p>The control structure needs to be clear before the license can be issued or the change in control approved. In the past, the CNSF has required changes to the ownership structure before granting the license; however, there has been no experience in applying restrictions to the ownership.</p> <p>The CNSF has no direct jurisdiction to supervise unregulated holding companies and needs to operate indirectly through the regulated entities, thus, adding complexity to their supervision and monitoring activities of groups.</p> |
| ICP18 - Risk assessment and management | <p>Current regulation has strong requirements on the risk management of individual risks affecting the company, but little, if nothing, is required at the integrated level. The new law highlights the need to integrate strategy, operations, and risk management. This vulnerability has been addressed already under principle 10.</p> <p>Current regulation does not require insurers to adapt their risk management and internal controls as the business becomes more complex.</p>   |
| ICP19 - Insurance activity             | <p>According to current regulation, the Board of Directors has nontransferable obligations regarding the definition and approval of policies and norms for risk underwriting, investments, integral risk management, reinsurance, financial reinsurance, marketing, institutional development, and operations financing; as well as the strategic</p>   |

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|   | objectives in these matters and the mechanisms to monitor and evaluate their fulfillment.   |
| ICP20 - Liabilities                         | <p>The law requires the financial reporting and the establishment of adequate technical provisions to follow sound accounting and actuarial practices, as produced by the CONAC and the CINIF, and complemented by the CNSF.</p> <p>The insurers are required to carry out stress tests to gain a prospective view on the solvency and liquidity needs.</p>   |
| ICP21 - Investments                         | <p>The regulatory regime addresses the valuation of technical provisions, capital requirements, suitable forms of capital, quality and liquidity of assets, and asset liability matching.</p> <p>Insurance and surety companies cannot invest directly outside the country. However, they can invest in foreign securities that are traded through the SIC (International Quotation System of the Mexican Stock Exchange, BMV).</p> <p>The Board of Directors defines and approves investments rules and policies, as well as the strategic objectives and procedures to monitor and evaluate its fulfillment.</p>  |
| ICP22 - Derivatives and similar commitments | International best practice.  |
| ICP23 - Capital adequacy and solvency       | <p>Current Mexican solvency regime is sound and has a sufficient level of risk sensitivity to properly assess the level of capital required, as demonstrated by the reduced number of insolvencies over the last 10 years (18, most of them voluntary due to changes in structure or strategy). Currently companies have a solvency margin of less than 110 percent (eight insurers with a market share of 4.3 percent), and only one requiring capital.</p> <p>The new law will introduce a new solvency regime that incorporates stochastic models and a calibration very close to Solvency II regime.</p>  |
| ICP24 - Intermediaries                      | Insurance intermediation is a regulated activity that requires CNSF authorization. The number of intermediaries passing the examination is around 30 percent, indicating an important level of expertise required for the activity.   |
| ICP25 - Consumer protection                 | <p>The LPDUSF empowers CONDUSEF to promote, advise, protect, and defend the rights and interests of such users; to arbitrate their differences in an impartial way, and to provide to the fairness in the relations between the users and the financial institutions, granting to the first elements to fortify the legal security in the operations they perform, and in the relationships they establish with the financial institutions.</p> <p>As of 2009, CONDUSEF has the powers to impose monetary sanctions for violations of the LPDUSF. Since 2011, CONDUSEF can initiate class actions.</p> <p>CONDUSEF webpage contains educational and informative information with respect to financial sector products, including the different types of insurance. Also, surveys are carried out as well as presentations and publications.</p> |

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|   | <p>CONDUSEF has a dedicated line to attend the public questions and complaints. Also, physical presence in all States of the Federation allows for face-to-face service.</p> <p>The adhesion contracts are scrutinized by CONDUSEF with regard to simplicity, fairness, and clarity. A price comparison is also provided.</p> <p>The CNSF has issued provisions that regulate the advertising and publicity of the insurance and surety companies, and agents. It appears, however, that the monitoring of misleading advertising has no dedicated resources at CNSF or CONDUSEF, and only on sporadic occasions a wrongful advertisement has led to its modification or suspension.</p> <p>CONDUSEF has established a conciliation procedure free of charge; as well as arbitration procedures to solve the differences between the users of financial services and institutions. Free legal advice is provided to needed persons. However, there is limited success in the usage of these alternative mechanisms. While the conciliation service has gained some acceptance, there has been no arbitration. In the last five years, a constant number of around 8,000 conciliations services has been given, but no insurer has agreed to arbitration.</p> <p>There are minimum requirements on the disclosure of information that intermediaries need to comply with, which include the working relationship of the intermediary and disclosure of the commission at request. However, given the level of insurance literacy, not sufficient detailed guidelines pertaining to the offering, sale operations, and financial services of the insurance and surety institutions seeking to protect the public has been issued.</p> <p>Given the low insurance penetration and insurance culture in Mexico, requirements for more clarity and transparency in the contracts aiming to protect insurance consumers is needed. The CNSF together with CONDUSEF should continue and increase their efforts in this area.</p> <p>The Federal Law on the Protection of Personal Data in the Possession of Private Parties establishes a regime that guarantees the individuals' privacy and intermediaries are required to treat personal data with due regard to confidentiality. According to applicable civil legislation, breaches of confidentiality can motivate a demand for moral damage.</p> |
| ICP26 – Information, disclosure and transparency toward markets | International best practice.   |
| ICP27 – Fraud   | <p>Mexican legislation considers insurance fraud as generic fraud; and the LGISMS identifies several actions that are considered fraud and can lead to imprisonment for up to 15 years, and fines that can reach the amount of 100,000 minimum day salaries.</p> <p>There are indirect requirements that encourage the detection and combat of fraud, like the appropriate employment and proper use of the institution's human and material resources, as well as the mechanisms to monitor and control the achievement of its aims, among other things. Companies use data bases in the case of life and health to exchange</p>  |

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|   | <p>information on possible fraudulent applicants. However, there is not explicit power in the law to allow the CNSF to require that the intermediaries or institutions have specific measures to prevent or detect the frauds in their operations, including providing counter-fraud training to management and staff.</p> <p>The CNSF is enabled to work with other supervisory agencies effectively to exchange information and, more specifically, to ask for assistance in order to establish the appropriate contact with the jurisdiction's relevant fraud-combat authorities.</p>   |
| ICP28 - Anti-money-laundering, combating the financing of terrorism | <p>The AML-CFT requirements applicable to insurers are broadly in line with the FATF recommendations.</p> <p>In December 2008, GAFUSUD issued Mexico's levels of compliance with the international standard with the FATF 40 Recommendations plus 9 Special Recommendations and a follow-up document was published in December 2009. While the level of compliance is high, there are specific areas that need improvement.</p> <p>With respect to Recommendation 5 on customer due diligence, some aspects remain to be implemented:</p> <p>No distinction in all cases between CDD requirements for business relationships and all types of occasional transactions, including a direct requirement for aggregating linked occasional transactions.</p> <p>Inadequate provisions in all the regulations with respect to CDD requirements when there are indications and/or certainty of false, erased, or altered identification documents.</p> <p>No direct explicit requirement for FIs to ascertain/request that applicants for business state whether they are acting on behalf of others.</p> <p>No general requirement for obtaining information on the purpose and nature of business relationships.</p> <p>Recommendation 13 on reporting of suspicious transactions.</p> <p>The obligation to report attempted transactions is not explicitly established in regulations, and not consistently implemented by financial institutions.</p> |

**Annex Table 14. Mexico: Recommended Action Plan to Improve Observance of the Insurance Core Principles**

| Principle | Recommended Action  |
|-----------|---|
| ICP 2     | <p>The objective is to promote a sound development of the surety and insurance sectors, with the goal to increase its service's coverage to an increasingly share of the population, needs special attention attested by the low insurance penetration in Mexico. This could be achieved, for instance, by implementing mandatory motor third-party liability and promoting new types of micro-insurance.</p>   |
| ICP 3     | <p>Approve the LISF to grant required powers to the CNSF for a more efficient supervision.</p> <p>The introduction of an explicit mechanism for the appointment or withdrawal of the CNSF's president or the members of the CNSF's Board is recommended together with a mandate to publish the removal reasons whenever the president or a Board member is dismissed from duty. Consideration on the introduction of a term of office should be made.</p> <p>The supervisory authority should have full discretion on resource allocation in accordance with its mandate, objectives, and the perceived risks. The supervisory agency needs to be able to hire key senior technical staff, in particular, when the new solvency regime enters in force. This could include consulting arrangements or direct salary supplements for high-level professional qualifications.</p> |
| ICP 6     | <p>Appropriate measures should be introduced to warrant a segregated treatment of the risks on both a going-concern and a winding-up situation.</p>   |
| ICP 9 &10 | <p>Pass the new law strengthening corporate governance and internal controls of the supervised entities.</p> <p>A more intrusive supervisory approach should accompany the new law to permit proper monitoring and enforcement of the new governance and internal controls requirements. This will require additional resources.</p>  |
| ICP 13    | <p>Current level of inspection intensity is sufficient to reach the required level of compliance. However, as the second pillar of the new proposed solvency regime is implemented, a significant change in intrusiveness of the inspection will be required. This will include the allocation of inspectors dedicated to a given company to reach the level of understanding of the company's activities necessary to assess compliance with the new proposed requirements in the areas of investments, governance, risk management, and internal models. This will require additional resources.</p>  |
| ICP 14    | <p>The extensive list of circumstances that lead to preventive and corrective measures could be complemented by the introduction in the new law of a general principle stating, as ground for preventive and corrective measures, any circumstance affecting the solvency of the company or undermining the policyholders' rights. This will prevent any possible legal gaps in the law when applying the supervisory measures. The current proposed LISF includes this recommendation.</p>   |

| Principle | Recommended Action   |
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| ICP 15    | <p>Consider providing the CNSF with the power to arrange for a compulsory transfer of the obligations under the policies from a failing insurer to another willing insurer. This is explicitly addressed in Article 485 of the new proposed law.</p> <p>Current regulation does not explicitly protect an insurer from the effects of the financial difficulties affecting the financial group to which it belongs. This should be addressed in the LARF.</p>  |
| ICP 16    | <p>Requirements with respect to the maximization of the value of the liquidated assets and on the efficiency of the process should be included in the law to improve the procedure in winding up insurers. Article 393 of the LISF covers this recommendation.</p> <p>We further recommend that the law be amended at some point so as to merely authorize the supervisor to prescribe a time within which the matter of noncompliance must be rectified. In this way the time period would be customized to the nature of the problem</p> |
| ICP 17    | <p>Requirements on the group-wide governance and comprehensive risk management and on group capital should be incorporated in the LARF.</p> <p>Consider including in the LARF the regulation of holding companies of insurance groups in the regulatory framework to provide requested financial and business information.</p>   |
| ICP 18    | <p>It is recommended to formalize the requirement to have a Risk Committee when a defined complexity and/or size of the institution are reached, as recommended in the LISF.</p>   |
| ICP 19    | <p>The thorough revision and correction of technical errors of the large amount of technical notes registered should become more efficient by strictly acting on unqualified actuaries providing the technical notes.</p> <p>The setting of retention limits is a technical matter and should be transferred to the CNSF. This will help expedite the implementation and possibly reduce the time between updates to a higher frequency. Article 258 of the LISF addressed this point.</p>   |
| ICP 20    | <p>Prudential guidance on the accounting for reinsurance recoverable should be provided by the CNSF, as well as on the assets backing up the catastrophic reserves that could require investments outside the country. Further consideration should be made on the concentration risk in the case of affiliated parties.</p>   |
| ICP 21    | <p>The new law will allow more flexibility, but the analysis of the compliance with the prudent person requirements will demand higher expertise from the companies and the CNSF. Training and the hiring of experienced professionals at the CNSF is recommended to avoid unnoticed increments in the investment risk exposure of the insurers. Additional resources will be required.</p>  |

| Principle | Recommended Action   |
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| ICP 23    | <p>As the regulation moves into the Solvency II type of regime, it is recommended not to underestimate the amount of preparation and expertise required in the implementation from both the industry and the CNSF to avoid a black box regime.</p> <p>The level of complexity inherent in the standard model could create a false confidence on the level of required capital. Simplicity and applicability of the standard model should have high priority.</p> <p>Further, as the internal model approval starts, additional care in proper understanding of the models will be necessary.</p>   |
| ICP 24    | <p>The certification of brokers could be authorized to other respectful entities like the brokers association. This would free resources for the CNSF without adding risk to the system.</p>   |
| ICP 25    | <p>Assessment of the appropriateness of resources in CONDUSEF should be made.</p> <p>The arbitration mechanism should be revisited to encourage its use.</p> <p>Given the existing level of insurance literacy, more detailed guidelines pertaining to the offering, sales operations, and financial services of the insurance and surety institutions, seeking to protect the public should be issued.</p> <p>Given the low insurance penetration and insurance culture in Mexico, requirements for more clarity and transparency in the contracts aiming to protect insurance consumers is needed. The CNSF, together with CONDUSEF, should continue to increase their efforts in this area.</p> |
| ICP 27    | <p>The new law should grant explicit power to the CNSF to require that the intermediaries or institutions have specific measures to prevent or detect the frauds in their operations, including providing counter-fraud training to management and staff. This is included in the current proposed law.</p>  |
| ICP 28    | <p>Implement the missing AML-CFT requirements of the FATF recommendations.</p>   |

### C. Authorities' Response to the Assessment

23. **The Mexican financial authorities welcome the detailed assessment on the observance of the IAIS Insurance Core Principles (ICPs) conducted by the FSAP mission.**

The Mexican authorities appreciate the evaluation and the recommendations for improvements and, overall, share the views expressed by the mission. The set of recommendations provides useful insights and guidance to further enhance the Mexican insurance regulatory and supervisory regime.

24. **Various suggestions and opportunities for improving the Mexican insurance regulatory and supervisory frameworks, as well as the compliance with the ICPs, have already been under the consideration of the Mexican authorities and, therefore, they were taken into account when developing the project for the new insurance and surety law (LISF Project).** Therefore, the implementation of the LISF Project will result in a higher level of observance of most of the ICPs, as assessed in the FSAP. In this sense, recommendations regarding ICPs 6, 9, 10, 15, 16, and 27, which were assessed as largely observed, have already been addressed, totally or partially, in the LISF Project.

25. **Finally, the dialogue that the FSAP mission had with the Mexican financial authorities will facilitate to move forward with the recommended actions related to ICP 3.** Additionally, the SHCP, the CNSF, and the CONDUSEF are aware of the recommendations to improve the observance of ICP 25, which will imply not only elements already included in the LISF Project, but some additional measures.

**ANNEX IV. ASSESSMENT OF OBSERVANCE OF CORE PRINCIPLES FOR SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS AND CPSS—IOSCO RECOMMENDATIONS FOR SECURITIES SETTLEMENT SYSTEMS**

**A. Information and Methodology Used for Assessment**

1. **The information used for the assessment included all relevant laws, rules, and procedures governing payment and securities settlement systems, and other related documents provided by the authorities and the other relevant institutions.** In addition, extensive discussions were held with different departments of regulators and overseers: Bank of Mexico (BoM) and Comision Nacional Bancaria y de Valores (CNBV, the banking and securities regulator); several stakeholders in the Mexican payments system, including commercial banks (Bancomer, Santander, HSBC, Inbursa, and Banamex), the BMV group and the securities broker, Enlace. The mission team also benefitted from the detailed descriptions and statistics of the Mexican National Payments System (NPS) in the “Red Book – 2011” published by the CPSS, BIS. The responses of the authorities to the questionnaire of the World Bank Global Payment System Survey 2010 were also used.
  
2. **In addition to the 2001 CPSS-CPSIPS Report, the methodology used follows the Guidance Note for Assessing Observance of CPSIPS prepared by the IMF and the WB in collaboration with the CPSS in August 2001.** For SSS, the 2001 CPSS-IOSCO Report on Recommendations for Securities Settlement Systems (RSSS), the 2002 CPSS-IOSCO Assessment Methodology for the RSSS, and the 2004 CPSS-IOSCO Report on Recommendations for Central Counterparties (RCCP) were the references used.
  
3. **The assessment was conducted in the context of the field mission of the Financial Sector Assessment Program (FSAP) Update to Mexico (October 2011).** The assessor was Massimo Cirasino.<sup>29</sup>

**B. Payment and Securities Settlement Systems Overview**

4. **Over the last decade, BoM has taken the lead in developing a comprehensive, resilient, and efficient NPS. BoM has championed an extremely efficient and sophisticated plan in the area of payment systems, developing or fostering a safe and reliable NPS for wholesale, retail payments, and securities settlement.** BoM operates a number of the NPS components—the large value payments system—SPEI,<sup>30</sup> a system for managing the current accounts of banks—SIAC; an anonymous inter-bank platform that facilitates settlement of

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<sup>29</sup> Massimo Cirasino is Manager of the Financial Infrastructure Service Line and the Payment Systems Development Group of the Financial and Private Sector Development Vice Presidency (FPD) at the World Bank. He was supported by Carlo Corazza and Harish Natarajan, Payment Systems Specialists from the same group.

<sup>30</sup> SPEI also processes a large number of low-value transactions.

checks, EFTs, and direct debit operations—SICAM; and the depository for government securities. The BMV group owns and operates all the components of the corporate securities market, including the stock exchange, CCP, CSD, and the securities settlement system. The retail payment systems include an automatic clearing house (ACH) operated by a banking consortium, CECOBAN, and two inter-connected card payment switches operated by two different banking consortiums. The list of the main NPS components is listed below:

- **BoM** is the regulator and overseer of the NPS and also an operator of SPEI, SIAC, and SICAM system.
- The **SPEI** is a near real-time hybrid settlement system operated by BoM, which processes a wide range of high- and low-value payments and provides settlement facilities for DALI and CLS.
- The **SIAC** is a system of BoM used by commercial banks to operate their current accounts held with BoM.
- **SICAM** is a system operated by BoM, which settles CCEN results in the banks' current accounts in SIAC. It also allows maintenance and drawing of inter-bank credit lines between participant banks to be used for CCEN settlement. Both, CCEN results settlement and credit lines execution are conditioned to banks' liquidity on their SIAC's current accounts.
- The **CNBV** is the regulator of banks and financial entities.
- The **CCEN** is an ACH operated by a banking consortium, CECOBAN, for clearing and settlement of inter-bank credit transfers, debit transfers, and checks.
- **PROSA and EGlobal** are two inter-connected payment card switches operated by two different banking consortiums for interchange of payment card transactions.
- The **BMV** is the main stock exchange for corporate securities. CCV functions as the central counter party (CCP) for the trades on this exchange. It is part of the BMV group, which owns all the key components of securities settlement systems INDEVAL, DALI, CCV, MexDer, and ASIGNA.
- **INDEVAL** functions as a central securities depository (CSD). BoM is also a shareholder in this company and has one Board seat.
- **MexDer** is the stock exchange for derivatives. ASIGNA functions as the central counter party (CCP) for the trades on this exchange.
- **DALI** is the securities settlement system operated by INDEVAL.

5. **BoM is the regulator and overseer of the payments and securities settlement systems.** The CNBV is the regulator of banks, financial entities, and the securities market. The CNBV also supervises banks, and the stock exchanges—BMV and MexDer; the CCPs—ASSIGNA and CCV; and the INDEVAL CSD.

6. **Critical aspects relating to the payment and securities settlement systems are covered in the legal framework, addressing all the key concepts related to payments, remittances, and securities settlement systems.** The legal and regulatory framework covers the following: (i) clarity of timing and finality of settlements;<sup>31</sup> (ii) recognition of electronic processing of transactions; (iii) legal recognition of bilateral and multilateral netting arrangements; (iv) non-existence of zero hour and similar rules in case of insolvency; (v) protection from third-party claims for the collateral pledged in a payment system; (vi) ensuring fair and competitive practices in the provision of payment services; and (vi) consumer protection for retail payment services. The following specific issues related to securities settlement systems are also covered: (i) immobilization of securities; (ii) securities ownership transfers and finality of securities and funds transfers; (iii) novation; (iv) protection of custody arrangements; (v) securities lending arrangements; and (vi) protection of SSS from insolvency of system participants.

7. **The credit institutions act provides for finality of settlements through foreign payment systems.** This act provides that orders and transactions settled through foreign payment systems, such as CLS, which are considered final and irrevocable under the laws governing that system, will also have the same treatment under the Mexican legal framework.

#### **Large-value payment systems: SPEI and SIAC**

8. **The SPEI is owned and operated by BoM.** The SPEI uses a multi-lateral offsetting algorithm running in quick succession to clear and settle transactions in a topology chosen by the initiating participant. The participants in SPEI operate cash accounts in the SPEI. The SPEI participants place credit transfer transactions for settlement in their respective queues. The SPEI operates a multi-lateral offsetting algorithm roughly every 20 seconds and selects those transactions that can be settled based on available balances, and clears and settles those transactions as a batch. The cash accounts of the participants are used to effect the settlement. The transactions are reflected on a gross basis in the respective accounts, and, hence, an account of a participant can be in an over-draft position after a particular transaction is posted; however, the algorithm ensures that at the end of the particular settlement cycle there is no over-draft. The transactions that cannot be settled remain in the queue. At the end of a particular settlement cycle, the SPEI system sends transaction-wise settlement advice to the sending and receiving participants. There are no penalties for transactions remaining in queue; this encourages

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<sup>31</sup> This is explicitly mentioned in the payment systems law for systems designated as systemically important.

participants to not delay introducing transactions into the system. Unsettled transactions at the end-of-day are cancelled. The SPEI system transaction statistics are provided in Table 15.

**Annex Table 15. Mexico: SPEI and DALI System Statistics**

| System  | 2009                 |                                | 2010                 |                                | 2011 (Jan-Aug 2011)  |                                |
|---------|----------------------|--------------------------------|----------------------|--------------------------------|----------------------|--------------------------------|
|         | Volume<br>(millions) | Value<br>(in trillions<br>MXN) | Volume<br>(millions) | Value<br>(in trillions<br>MXN) | Volume<br>(millions) | Value<br>(in trillions<br>MXN) |
| DALI 1/ | 2.1                  | 499.8                          | 2.3                  | 499.6                          | 1.78                 | 391.6                          |
| SPEI    | 62.2                 | 128.5                          | 85.8                 | 153.1                          | 69.8                 | 115.7                          |

1/ Statistics does not include repos and intra-system transfers and funds transfers to other systems.

9. **The SPEI, DALI, and SIAC systems are closely integrated.** During the day, the participants can transfer balances online between their respective SPEI, SIAC, or DALI cash accounts. The DALI system operates cash settlement accounts for each of the participants and the DALI system itself is a participant in the SPEI system. All the participants in the DALI system move funds into and out of their respective accounts in the DALI system through the account of DALI in the SPEI system. So, effectively, the consolidated position of all balances in DALI accounts is reflected in its account with SPEI.

10. **The SPEI operates as per a well-defined schedule.** The SPEI opens at 7:00 p.m.<sup>32</sup> on a previous banking business day for the next value date until 5.30 p.m. of the value date.

11. **The SPEI participants send transactions to SPEI in a proprietary format over a BoM-operated private network using TCP/IP protocol.** As a back-up, participants can use the internet to send transactions. All messages are digitally signed based on a public key infrastructure operated by BoM. The messages are also encrypted during transmission to SPEI. The CLS uses SWIFT message format to send transactions to BoM, which then presents the transaction into SPEI.

12. **Other relevant aspects of the SPEI are:** 1) It has a well-defined business continuity plan and targets a recovery within 120 minutes. 2) It has a fully functional secondary site where all transactions are backed up online and in real time. The pricing aims at full-cost recovery and incentivizes early introduction of transactions. The rules require prompt processing of customer instructions and payments to beneficiaries.

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<sup>32</sup> Mexico City time.

13. **The high volumes traded on the Mex\$-US\$ market (Table 16) have led to the decision from the authorities to participate in the CLS Settlement system.** So far about 40 percent of the overall volume of the Mex\$-US\$ market is cleared and settled through CLS, while the remaining part is managed through correspondent banking arrangements without an effective Payment vs. Payment (PvP) arrangement. At the moment, major banks that are subsidiaries of CLS participants settle operations through CLS, while no locally owned banks are currently participating in the system.

#### **Retail payment systems and instruments**

14. **CECOBAN operates CCEN, an ACH for clearing and settling checks, credit transfers, and debit transfers.** The CCEN clears and settles Mex\$- and US\$-denominated checks on a T+1 basis and uses check truncation. The CCEN clears and settles Mex\$-denominated direct debits and credit transfers also on a T+1 basis. The CCEN does a combined net settlement for checks, credit transfers, and direct debits using SICAM, and uses partial unwinding to handle settlement failures. Banks have enough time to stop payments when instructions are unwound.

15. **BoM has established limits for the credit lines that can be extended in SICAM.** BoM has set maximum limits based on the participants' net capital on both the value of individual credit lines and total value of credit lines that a participant can extend to other participants.

16. **The CCEN charges a consolidated fee for all three services.** The CCEN charges a monthly fee that covers the first 10,000 transactions; for transactions above this number, a volume-based progressive decreasing fee is applied starting from Mex\$0.55 to Mex\$0.10 per transaction.

#### **POS and ATM switch**

17. **The Mexican cards market is dominated by international brands; however, processing of domestic transactions is done by two inter-operable switches operated by domestic banking consortiums.** The card payments infrastructure is fully inter-operable. BoM has been actively overseeing the card payments markets and has applied a number of moral suasion interventions in the last few years. PROSA and EGlobal settle the card transactions on a T+1 basis in commercial bank money and notionally guarantee settlement; however, the only formal settlement guarantee is provided by the international card brands.

**Annex Table 16. Foreign Exchange Market**

|  | 2009      | 2008      | 2007      | 2006      | 2005      | 2004      |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Total traded amounts ( <i>millions of U.S. dollars</i> )             | 3,205,829 | 5,266,901 | 6,579,809 | 5,780,176 | 4,875,522 | 4,718,237 |
| Over The Counter (OTC) market 1/ ( <i>millions of U.S. dollars</i> ) | 2,286,113 | 3,550,803 | 5,100,888 | 4,488,130 | 3,685,674 | 3,532,702 |
| Exchange-traded CME 2/ ( <i>million of USD dollars</i> )             | 160,276   | 250,405   | 236,934   | 174,473   | 171,978   | 148,496   |
| Exchange-traded MexDer 3/ ( <i>millions of U.S. dollars</i> )        | 15,463    | 33,640    | 31,620    | 59,946    | 29,727    | 19,764    |
| Spot 4/ ( <i>millions of U.S. dollars</i> )                          | 743,977   | 1,432,053 | 1,210,367 | 1,057,627 | 988,143   | 1,017,275 |

Source: Bank of Mexico answer to the Global Payment Systems Survey 2010.

1/ Total traded amounts in the local FX derivatives market. They account approximately for one-half of the total amounts traded globally.

2/ Amounts traded in the Chicago Mercantile Exchange (CME). Although CME is not a Mexican exchange, those are the most representative amounts of the global volume of peso exchange-traded derivatives.

3/ Amounts traded in MexDer, which is the only Mexican centralized foreign currency derivatives exchange.

4/ Total traded amounts in the local market. They account approximately for one-third of the total amounts traded globally.

### Securities settlement systems

18. **The BMV is the single stock exchange used for trading of a range of equity instruments and settles on a rolling T+3 basis for stocks.** The equity instruments traded on the BMV comprise of domestic equities, foreign equities registered in the registry Sistema Internacional de Cotizaciones (SIC), convertible bonds, domestic mutual funds, and Exchange Traded Funds (ETF). At the end of 2009, the Mexican equity markets had a total market capitalization of Mex\$4.6 trillion, around 40 percent of the Mexican GDP. The daily average trading volume in the BMV exchange was over Mex\$7 billion.

19. **The government securities transactions are traded over the counter.** BoM, as the agent of the SHCP, manages all the debt issuance of the government. The secondary market transactions are conducted wholly over the counter. The counterparties report the trade to the DALI system, whereupon matching it placed in a queue for settlement.

20. **DALI settles operations in DVP model 3 frequently.** DALI runs its clearing and settlement process at least every 2 minutes, or sooner if it receives a number of operations or an amount to be settled greater than pre-established levels. This process runs an optimal clearing algorithm that determines which of the pending operations represent the highest amount that can be cleared and settled with the available participants' balances. DALI retains the transactions that cannot be settled in a given cycle and tries to settle them in subsequent cycles.

21. **MexDer is the single stock exchange for fixed-income, equity, and currency derivatives.** The derivatives traded on the MexDer include futures on government bonds, interest rate futures based on the inter-bank interest rate, U.S. dollar and Euro futures, futures on stocks, Mexican stock exchange index, and options on stocks and U.S. dollars.

22. **All equity and debt securities are immobilized in INDEVAL.** INDEVAL functions as the CSD for all securities in Mexico. Mexican law requires physical issuance of securities, which can then be immobilized. The safekeeping of the physical securities for government securities is managed by BoM and Registro Nacional de Valores (RNV) for other securities.

23. **The securities and derivatives market have different CCPs and both have defined risk-management procedures.** All accepted trades are novated at the respective CCPs and settled through DALI.

#### **Payment and securities settlement systems oversight**

24. **BoM's powers to oversee and regulate payment systems have a very sound legal basis.** BoM has designated the SPEI, SIAC, and the DALI system as systemically important and requires them to comply with the relevant international standards. The SPEI and SIAC systems are required to be compliant with the CPSS Core Principles for Systemically Important Payment Systems (CPSIPS), and the DALI system with the CPSS IOSCO Recommendations for Securities Settlement Systems (RSSS).

25. **BoM has very limited oversight powers over the ASSIGNA system, which functions as the CCP for the derivatives market.**

26. **BoM has focused its oversight activities in the retail payments to promote competitiveness along with safety and efficiency.** As described in the section on ATM and POS switch, BoM has taken a number of steps to promote development of the cards payment market and, recently, it has focused its attention on promoting competition in the cards payments processing arrangements.

#### **C. Main Findings**

27. **The SPEI, SIAC, and DALI systems have been classified as systemically important by BoM.** The SPEI and SIAC were assessed against the CPSS CPSIPS and the DALI against the CPSS-IOSCO RSSS.

28. **The assessment of systemically important payment systems is conducted over existing arrangements, although relevant projects and reforms are taken into account.** Each Core Principle (CP) and central bank responsibility was assessed on a qualitative basis based on a five-fold assessment categorization: observed, broadly observed, partly observed, non-observed, and not applicable. A CP is considered observed whenever all assessment criteria are generally met without any materially significant deficiencies. A CP is considered broadly observed when only minor shortcomings are found, which do not raise major concerns and when corrective actions to achieve full observance with the CP are scheduled and realistically achievable within a prescribed period of time. A CP is considered partly observed whenever the shortcomings are sufficient to raise doubts about the ability to achieve observance within a reasonable time frame. A CP is considered non-observed whenever major shortcomings are found in adhering with the assessment criteria. Whenever a system is assessed to be broadly, partly, or non-observed with a CP, recommendations are proposed for achieving full observance. A CP is considered not applicable whenever it does not apply, given the structural, legal, and institutional conditions. The recommended actions are presented in Tables 17 and 18.

29. **The assessment of the SIPS against the CPSS CPSIPS shows that: a) the SPEI fully observes 9 of the 10 principles, with one being not applicable; and b) the SIAC fully observes 8 of the 10 principles, with one being not applicable and CP8 broadly observed.** The central bank responsibilities A, B, and C are fully observed, whereas responsibility D is broadly observed. BoM and the CNBV have no formal MOU or similar mechanism to collaborate in the oversight of all payments and securities settlement systems. Establishment of this mechanism would make central bank responsibility D also fully observed.

30. **Participants have to manage their liquidity spread across the SPEI, DALI, and SIAC systems; better integration or perhaps moving all funds settlement to SPEI could make the NPS more efficient.** The three systems are integrated and the participants can move funds across these systems; however, this requires active intervention of the participants. Moving all funds settlement functionality to the SPEI system could make it more efficient; alternatively, automatic sweep-in of funds from SIAC based on certain thresholds could also suffice. Also, longer operating hours for the DALI system would meet important market needs.

31. **Regarding central bank responsibilities in applying the Core Principles—the SPEI and SIAC system, the assessors recommend BoM to consider formalizing its collaboration with the SHCP and the CNBV.** One mechanism could be to use the framework of the Financial Stability Committee and establish a separate dedicated sub-committee to discuss payment and securities settlement systems related aspects.

**Annex Table 17. Recommended Actions to Improve Observance of the CPSS  
CPSIPS and Central Bank Responsibilities—SPEI and SIAC**

| Reference Principle  | Recommended Actions   |
|--|---|
| <p><b>Legal foundation</b></p> <p><i>Core principle 1</i></p>  | <p>It is recommended that BoM consider listing SPEI permanently as SIPS, instead of having to do so annually. In this regard, using a value based criteria for designating a system as SIPS could be re-visited.</p>  |
| <p><b>Security and operational reliability, and contingency arrangements</b></p> <p><i>Core principle 7</i></p>        | <p>BoM can strengthen the BCP arrangements for SPEI by requiring all the participant institutions to also certify their BCP arrangements.</p>   |
| <p><b>Efficiency and practicality of the system</b></p> <p><i>Core principle 8</i></p>                                 | <p>BoM can consider integrating the cash settlement accounts currently maintained in both SIAC and DALI separately to be more closely integrated with the cash settlement account in the SPEI system. Perhaps even completely doing away with the need to maintain a separate cash settlement account in the DALI system and moving all payment functionality in the SIAC system into the SPEI system.</p>  |
| <p><b>Central Bank responsibilities in applying the CPs</b></p> <p><i>Central Bank responsibility A B, C and D</i></p> | <p>BoM should consider making the criteria for classifying a system as SIPS more general and not based on specific hard numbers for the value of the transactions processed by the system.</p> <p>To fully comply with responsibility D, BoM should consider formalizing its collaboration with the MOF and the CNBV; one mechanism could be to use the framework of the Financial Stability Board and establish a separate dedicated sub-committee to discuss payment and securities settlement systems related aspects.</p> |

**Annex Table 18. Recommended Actions to Improve Observance of CPSS-IOSCO  
RSSS—DALI and INDEVAL**

| Reference Recommendation | Recommended Action  |
|--------------------------|---|
| RSSS 3                   | To comply with this recommendation, BoM should conduct a detailed assessment of the costs-benefits of moving to a shorter cycle for corporate securities settlement and if the benefits outweigh the costs consider moving to the shorter settlement cycle.   |
| RSSS 4                   | To comply with this recommendation, a detailed cost-benefit assessment on using CCP arrangements for government securities should be done, and if the assessment determines the benefits outweigh the costs, CCP arrangements should be instituted.<br><br>Though there are CCP arrangements for corporate securities and derivatives, they need to be fully compliant with the RCCP. |
| RSSS 11                  | The data replication between the systems in the primary site and secondary site are not online. There is hence a risk that transactions processed in the primary site between two consecutive replications could be lost in the event of a disruption. INDEVAL should consider developing detailed procedures to handle this, if online replication is not feasible.                  |
| RSSS 15                  | See recommendation for RSSS 11.   |

*Authorities' response to the assessment*

26. **In general, the Mexican financial authorities share the views and main findings reported by FSAP mission on the assessment of compliance of CPSIPS and RSSS.** Mexican financial authorities also find the recommended actions provided by the mission very useful and they will take some of them as guidance for future plans to improve NPS. Specifically, in the next paragraphs BoM provides some comments for each recommendation provided by the FSAP mission.

27. **Regarding recommendations for Core Principle 1, BoM does not agree entirely with the point of view of the FSAP.** Even though they believe that SPEI will remain as a systemically important payment system, to perform the suggested change it would be necessary to modify the Payment System Act, which would imply a much higher effort than the one required to publish that SPEI is a SIPS every year, which is costless.

28. **Related to the Core Principle 7, the BoM agrees mostly with the action recommended.** Nevertheless, instead of establishing a BCP arrangement certification requirement for all SPEI participants, BoM considers that that requirement should apply only to the most relevant participants of the system. The BoM could determine the pertinent SPEI participants based not only on the amount and number of payments through SPEI in which they participate, but also on other metrics (i.e., interconnectedness, critically of their payments, etc).
29. **In reference with Core Principle 8, BoM agrees with the recommendation, and is already working on changes that will make SIAC comply with the FSAP suggestion, but regarding the modification to eliminate the cash accounts of DALI, the BoM has assessed that the gains in efficiency of doing so does not justify the costs of implementation of required changes in SPEI and DALI.**
30. **Regarding the Central Bank responsibilities in applying the CPs, BoM strongly believes that the criteria and procedures that the PSA set up to define a payment system as systemically important is very clear and useful to identify a PS that can disrupt financial system stability.** In addition, as it was mentioned before, to implement such change the PSA would need to amend, and the benefits of these changes surely will not offset its costs. Regarding the recommendation about formalizing a cooperation agreement between BoM and other authorities, it should be pointed out that by Law (PSA and BoM Act), BoM is responsible for overseeing the NPS and promoting its smooth functioning. BoM recognizes that there are other financial authorities with interests in the NPS. However, BoM strongly believes that efficiency is increased when each authority performs its mandate, particularly since there are no major overlaps.
31. **In relation to RSSS 3, the settlement cycle length for the equities market used to be t+2 two years ago.** However, a joint request from the BMV, the CCV and market participants, led financial authorities to modify the settlement cycle from t+2 to t+3. The change eliminated the one-day difference in the settlement cycle between the United States and Mexico. BoM considers counterproductive to promote a reduction in the settlement cycle.
32. **Regarding RSSS 4, it is important to mention that cost-benefit assessments on using CCP arrangements for debt markets have been performed in the past by BOM.** BoM will analyze the benefits of incorporating a CCP for this market as it continues to evolve. Regarding the recommendations for equity market CCP (CCV), BoM is currently working with the CCV to make it fully compliant with the IOSCO-CPSS RCCP.
33. **Finally, in reference to RSSS 11 and 15, BoM completely agrees that DALI must never lose relevant information in case of a disruption, and BoM has been working with Indeval for a long time to strengthen DALI's BCP arrangements.**