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# Challenges in the Mexican Financial Sector

**Marcos Bonturi**

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**CHALLENGES IN THE MEXICAN FINANCIAL SECTOR**

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by  
**Marcos Bonturi**

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## ABSTRACT/ RÉSUMÉ

### CHALLENGES IN THE MEXICAN FINANCIAL SECTOR

The Mexican banking crisis of 1994/95 necessitated a major government rescue operation - estimated to have cost about 20 per cent of GDP. Since then, financial sector reforms have been implemented and the performance of the Mexican financial system has markedly improved, as shown by indicators of the solidity and profitability of the banking sector. This has also been helped by a large infusion of foreign capital, as international banks entered the Mexican market through mergers and/or acquisitions. Nevertheless, several challenges remain. The banking sector is still relatively inefficient and the level of non-performing loans, though fully provisioned, remains quite high by international standards. The state-owned financial intermediaries, either in the form of development banks or trust funds, still play a large role, overlapping with commercial banks in some parts of the market. And the regulatory framework is often complex and characterised by a high cost of compliance. All these factors imply that the financial system is not fully playing its role in stimulating growth through better allocation of capital.

*JEL Code:* E50, E63, E65, G18, G20, N26, O16

*Keywords:* Mexico, financial sector, banking, Peso crisis, monetary policy, capital markets, deposit insurance, development banks, supervision

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### ENJEUX POUR LE SECTEUR FINANCIER MEXICAIN

La crise du secteur bancaire mexicain de 1994/95 a nécessité la mise en œuvre par le gouvernement d'une opération de sauvetage de grande ampleur - d'un coût estimé à quelque 20 pour cent du PIB. Depuis, des réformes ont été mises en œuvre et les performances du système financier mexicain se sont remarquablement améliorées, comme le montrent les indicateurs de solidité et de rentabilité du secteur bancaire. Ce redressement a aussi été favorisé par une injection considérable de capitaux étrangers liée à l'entrée de banques internationales sur le marché mexicain au moyen de fusions ou d'acquisitions. Néanmoins, plusieurs défis demeurent. Le secteur bancaire reste relativement inefficace et le volume des prêts non productifs est toujours élevé par rapport aux normes internationales, encore que ces prêts soient intégralement provisionnés. Les intermédiaires financiers sous contrôle de l'État, qu'il s'agisse de banques de développement ou de fonds fiduciaires, continuent de jouer un rôle important, faisant double emploi avec les banques commerciales dans certains compartiments du marché. La réglementation est souvent complexe et son respect par les institutions financières est onéreux. Tous ces facteurs font que le système financier ne joue pas pleinement son rôle de stimulation de la croissance en assurant une meilleure répartition du capital.

*Classification JEL:* E50, E63, E65, G18, G20, N26, O16

*Mots-clés:* Mexique, secteur financier, banques, crise du Peso, politique monétaire, marché de capitaux, assurance des dépôts, banques de développement, supervision

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## TABLE OF CONTENTS

CHALLENGES IN THE MEXICAN FINANCIAL SECTOR.....	5
The financial sector in the mid-1980s and early 1990s.....	6
The peso crisis and its aftermath.....	7
The financial system today.....	9
Recent reform initiatives improving the framework .....	9
Size and structure of the banking system .....	11
Indicators of performance: emerging from the crisis .....	19
Solvency and profitability of the financial system .....	20
Efficiency of intermediation.....	21
Securitisation .....	26
The challenges ahead .....	31
The efficiency of the banking industry: challenges related to consolidation .....	32
Development banks and government trust funds: the need to rationalise .....	34
Reducing the weight and enhancing the efficiency of the regulatory framework .....	34
Creating conditions for an increase in credit to the private sector .....	36
Concluding remarks .....	41
BIBLIOGRAPHY.....	43
ANNEX 1. THE FINANCIAL SECTOR REFORMS OF 1998 AND 1999 .....	44
ANNEX 2. THE FINANCIAL SECTOR REFORMS OF 2001 .....	46

### Boxes

Box 1.	The financial rescue package.....	9
Box 2.	The Institute for the Protection of Bank Savings (IPAB).....	10
Box 3.	Mexican development banks, the recent performance of state-owned institutions .....	16
Box 4.	Non-bank financial intermediaries.....	17
Box 5.	Financial sector regulation and supervision.....	35
Box 6.	Increasing credit to SMEs.....	38
Box 7.	Main recommendations concerning the financial sector.....	42

### Tables

1.	State-owned financial intermediaries: performance indicators in comparison.....	17
2.	Commercial banks' income statement.....	20
3.	Interest rate differentials.....	24
4.	Capital market indicators.....	31
5.	Pension fund asset allocation.....	40

### Figures

1.	The size of the banking system.....	12
2.	Market share of foreign-controlled banks.....	13
3.	Indicators of financial intermediation.....	15

4.	Lending to the private sector.....	18
5.	Credit to the private sector.....	21
6.	Income statement of the financial system.....	22
7.	Operating costs and provisions.....	23
8.	Lending and deposit rates.....	25
9.	Productivity and efficiency indicators in the banking sector.....	25
10.	Productivity and efficiency indicators: international comparison.....	26
11.	Composition of financial assets.....	27
12.	Vehicles for savings.....	28
13.	Insurance penetration indicators.....	30
14.	Concentration ratios .....	32
15.	Recent trends in domestic credit to the private sector .....	37
16.	Money market instruments .....	40

## CHALLENGES IN THE MEXICAN FINANCIAL SECTOR<sup>1</sup>

Marcos Bonturi

1. The Mexican financial sector has been confronted with a series of challenges in the past decade. In the first half of the 1990s, liberalisation was followed by a boom and bust cycle culminating with the banking crisis of 1994/95 and necessitating a major government rescue operation — estimated to have cost about 20 per cent of GDP.<sup>2</sup> A systemic crisis was avoided and measures were taken to prevent the balance sheet problem of banks becoming an obstacle to near term recovery prospects. However, political uncertainties and other shortcomings slowed the adjustment of the banking system until the late 1990s, when the approval of reforms improved the regulatory framework and created a stronger basis for a sustainable recovery. Since 1998/99, further financial sector reforms have been implemented and the performance of the Mexican financial system has markedly improved, as shown by indicators of the solidity and profitability of the banking sector. This has also been helped by a large infusion of foreign capital, as international banks entered the Mexican market through mergers and/or acquisitions.<sup>3</sup>

2. Nevertheless, several challenges remain. The banking sector is still relatively inefficient and the level of non-performing loans, though fully provisioned, remains quite high by international standards. The state-owned financial intermediaries, either in the form of development banks or trust funds, still play a large role, overlapping with commercial banks in some parts of the market. The regulatory framework is often complex and characterised by a high cost of compliance. All these factors imply that the financial system is not fully playing its role in stimulating growth through better allocation of capital.<sup>4</sup> Indeed, commercial bank lending to the private sector has been slow to recover, and at about 18 per cent of GDP in 2000, it remained among the lowest in the OECD.

3. This paper starts with a description of the aftermath of the peso crisis in the second half of the 1990s, before discussing recent reform initiatives in the second section. The third section presents a series of indicators of performance, showing that the Mexican financial system has finally recovered from the peso crisis. The paper concludes with a discussion of the challenges ahead, arguing for further measures to create the conditions for an increase in commercial bank lending to the private sector within a sound and competitive system.

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1. A shorter version of this paper was originally written for the OECD *Economic Survey of Mexico*, published in 2001 under the authority of the OECD Economic and Development Review Committee. The author is a senior economist in the Economics Department of the OECD. The paper benefited from helpful discussion with Mexican officials and experts in the private sector, national research organisations and academic institutions. The author is grateful for helpful comments and suggestions made by Val Koromzay, Nick Vanston, Benedicte Larre and other OECD colleagues. Special thanks go to Sylvie Toly for her skilled research assistance and to Alexandra Woidtke-Athanasiadou and Susan Gascard for the technical preparation of the document.
  2. See Welch and Gruben (1993).
  3. For further details, see OECD (1998) and OECD (2000 a).
  4. See Leahy *et al.*, (2000).

### **The financial sector in the mid-1980s and early 1990s**

4. The Mexican financial system during the 1980s was largely shaped by the emergency measures introduced in the wake of the 1982 balance of payments crisis. The financial sector had been nationalised, so that financial intermediation was almost exclusively in public hands. The operation of the financial system was severely limited by high reserve requirements, capital controls and direct controls (including credit rationing and interest rate ceilings). Part of the rationale for these restrictions included the need to finance a large budget deficit, which peaked at 13 per cent of GDP in 1988. Affected by heavy regulation, high inflation (which reached close to 100 per cent in 1988) and little exposure to innovative foreign influence, the financial system remained undeveloped and characterised by thin secondary markets and a limited choice of financial instruments.

5. The reform process started in the mid-1980s with the reduction in reserve requirements. This was followed by the phasing out of mandatory investment on government securities in 1988 and the elimination of credit rationing and interest rate ceilings in 1989. Meanwhile, a state-led consolidation process brought the number of banks down from 58 to 18 in the six years following nationalisation. By then, private ownership was already widespread in the non-bank financial sector, which had started to be liberalised a few years earlier.<sup>5</sup> Some steps were also taken to open the capital account, modernise the regulatory framework and tighten supervision, although these were either timid or ineffective. Finally, in 1991-92 most banks were privatised and entry barriers for domestic investors were eliminated (those for foreign investors remained, however).

6. The lifting of the restrictions on the operation of financial markets helped correct the misallocation of credit, which had put a heavy burden on the economy. Also, as specialisation and segmentation rules were abrogated, the various activities associated with financial intermediation could be integrated, creating positive synergies and economies of scope, and thus enhancing the internal efficiency of the financial system. Also helping the reform process in its first stages was a benign macroeconomic scenario, not least because initial liberalisation steps were taken in the context of a fiscal adjustment programme that had significantly reduced public sector borrowing requirements. The process was also supported by an ambitious privatisation programme, receipts from which had led to a sharp drop in public debt. Given that the nationalised banking system was geared towards financing the public sector, fiscal consolidation was a *sine qua non* pre-condition for financial sector liberalisation. Authorities were also careful to consolidate the banking system before privatisation, with the effect that the system was composed of medium-sized banks, several of them with nation-wide operations, but with no institution holding a dominant position in the market. As a result, liberalisation initially had the desired effect of increasing competition in the banking sector and boosting financial depth indicators, including through a sharp increase in bank lending.

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5. Private ownership of non-bank intermediaries was allowed as of 1985. This together with the approval of new stock market regulations led to a rapid development of capital markets and increased lending to the private sector.

7. The success was short-lived, however. Financial sector liberalisation was followed by a boom-bust cycle characterised by a deterioration of credit quality and bank failures. This mirrors the experience of several other OECD countries, where inappropriate post-liberalisation policies led to banking crises.<sup>6</sup> In Mexico, this was caused by a combination of two factors. First, the explosive expansion of credit, which was associated with a sharp drop in saving ratios, was not counteracted by authorities. Second, supervision authorities were unable to prevent excessive risk-taking by banks. This second factor was of particular importance in Mexico, because ineffective prudential oversight and the poor regulatory/supervision framework were compounded by inadequate accounting standards and a lack of transparency, hiding the true financial situation of banks, as well as problems at the level of bank management.<sup>7</sup> Indeed, the sharp expansion of lending was undertaken with inappropriate levels of human expertise to evaluate risk and allocate credit, while problems also existed in managing credit collection and raising guarantees. The exclusion of foreign participants at the time of privatisation, by preventing the transfer of management expertise, was unfortunate in this regard.

### **The peso crisis and its aftermath**

8. As a result of these policy failures, the banking system became increasingly fragile, with a growing share of past-due loans putting pressure on profitability. These problems came to a head in the 1994-95 peso crisis, which hit the banking sector through four main channels: currency depreciation, a liquidity crunch in foreign currency, a sharp contraction in economic activity resulting from policy tightening, and a large jump in interest rates. These factors increased the cost of funds available to banks, increased banks' liabilities (banks had borrowed heavily in foreign currency), and reduced borrowers' capacity to repay loans. Meanwhile, weak bankruptcy laws made collection of bad loans more difficult. By 1995, the banking system was on the brink of collapse.

9. The imminence of a systemic crisis led the then incoming administration to launch a series of programmes to support the banking system (Box 1). The financial authorities' response avoided a crisis of larger proportions. Several debtor support programmes were designed, mainly involving incentives for debt restructuring; loan maturities were lengthened and the real interest rate was fixed through an indexation mechanism based on CPI inflation. Also, several banks were taken over by the government and then either liquidated or sold. Finally, capitalisation programmes injected capital into the banking system either in the form of temporary loans or through the purchase of banks' loan portfolio. These different programmes succeeded in rescuing the banking sector, but at a significant cost to the public treasury. It is estimated that in the 1995-97 period alone, the various programmes involved nearly twice the banking system's pre-crisis equity and a quarter of its outstanding loans. The latest official estimate, published in June 1999, puts the net fiscal cost of these various support programmes at almost 20 per cent of GDP, half of which deriving from the take-over of banks.<sup>8</sup>

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6. Mexico is not alone in the OECD in having experienced a banking crisis in recent years. The transition from a heavily regulated to a liberalised banking regime was followed by substantial institutional failures in the financial sector; with significant costs to the economy as a whole and to the public treasury in particular. Notably, these have included the savings and loan crisis in the United States and banking failures in the Nordic countries, as well as some serious banking difficulties in Japan, Korea, France, and Spain, as well as Mexico.

7. See Gruben *et al.*, (1999).

8. This cost estimate includes the expected recovery value of taken-over assets.



10. Even though a systemic crisis was avoided, several factors delayed the adjustment of the financial sector until late in the 1990s. An important impediment was the remaining restrictions on foreign investment. With the entry into force of NAFTA in 1994, financial institutions established in Canada and the US were granted national treatment. This also applied to the NAFTA subsidiaries of non-NAFTA parent companies; hence, European and Japanese financial institutions for instance, could enter the Mexican market through their North American subsidiaries. However, strict limits on market share were maintained, both by institution and for foreign investment in aggregate. Substantial easing took place in February 1995, in the aftermath of the peso crisis and in view of the pressing re-capitalisation needs of the banking system. But in practice, some restrictions remained until January 1999.<sup>9</sup> Most important of those was the prohibition of controlling foreign stakes in banks whose capital exceeded 6 per cent of the total net capital of the banking system, which applied in practice to the three largest Mexican banks.

11. Political uncertainties concerning the support package also played a role in preventing the banking system from recovering faster. Bank intervention and re-capitalisation programmes involved the issuance of 10-year floating rate government notes. But interest on these notes was capitalised and Congress questioned future budgetary allocations for their payment. As a result, no secondary market for these notes existed.

12. These uncertainties and restrictions weighed heavily on the financial system until 1999. First, liabilities arising from the rescue package continued to grow, peaking at 20 per cent of commercial banks' total assets. Rescue-related government bonds were not traded, hindering liquidity management by banks. Second, asset recovery was hampered by legal challenges, increasing the cost of the package. Third, consolidation and re-capitalisation were slowed by restrictions on foreign ownership<sup>10</sup> Finally, past-due loans remained large, even as several debtor support programmes were launched in succession, with a total cost equivalent to 3.3 per cent of GDP. As a result of these problems, banks remained fragile for several years, with the third largest bank put under state administration as late as mid-1999.

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9. According to original NAFTA rules, no foreign bank could have more than 1.5 per cent market share, while in aggregate, foreign investors could not own more than 8 per cent of total assets in the banking system (rising gradually to 15 per cent by 2000). These rules were replaced in February 1995 by the restriction of foreign controlling stakes in banks whose capital exceeded 6 per cent of the total net capital of the banking system. Another significant restriction in the original NAFTA rules was the requirement that a foreign financial institution hold at least 99 per cent of the common share of the affiliate, severely limiting the scope for partnerships. In February 1995, the minimum stake requirement fell to 51 per cent and it disappeared altogether in January 1999.

10. See Goldberg *et al.*, (2001).

### Box 1. The financial rescue package

To shore up the financial system in the aftermath of the 1994 peso crisis, the administration acted on three main fronts: *a)* debtor support programmes; *b)* take-over of some banks, by putting them under direct supervision; and *c)* the introduction of measures to strengthen remaining banks, including both a temporary capitalisation programme and a loan purchase mechanism to promote permanent capitalisation.

#### Debtor support programmes

Debtor support programmes mainly involved incentives for debt restructuring. Loan maturities were lengthened and the real interest rate was fixed through an indexation mechanism based on UDIs (a unit of account indexed to inflation). The government is bearing the risk of mismatch in interest rates, but the banks continue to carry the credit and funding risks. The UDI programme originally applied to mortgages, loans to state and local governments and commercial loans, but was later extended to foreign currency commercial loans. Another programme (ADE) was designed for small debtors to provide them with an incentive to continue to service their debt. It involved an immediate interest rate reduction and the possibility of restructuring in UDIs. The banks and the government are sharing the interest rate subsidy. More recent programmes targeted the agriculture and fishing industries (FINAPE), state and local governments, small and medium enterprises (FOPYME) and mortgage debtors. They also provided discounts on debt payments and in some cases, incentives for the granting of new loans, with the cost being shared between the government and banks.

#### Take-over of some banks

Since 1995, 13 banks (some of which were capital deficient, some management deficient) were taken over by the government, the last one in mid-1977. By late 1998, many of them had already been closed or re-sold after being re-capitalised and “cleaned-up” of their bad loan portfolio. These loans were purchased by the government agency responsible for dealing with bank insolvencies, FOBAPROA.

#### Strengthening remaining banks

One of the first measures implemented to cope with the emergency in 1995 was the temporary capitalisation programme (PROCAPTE), which injected capital into the banking system in the form of mandatory convertible subordinated debentures. These were temporary loans (5-year maximum term) convertible into equity (if not repaid). By June 1997, the five banks which had received support under PROCAPTE had settled their debts and the programme was discontinued. Another programme involved “permanent capitalisation” for viable banks and consisted mainly of net loan purchases by FOBAPROA. In effect, the loan purchase by FOBAPROA is a swap in which the flows on a 10-year government bond are exchanged for the flows on part of the banks' loan portfolio. Portfolios were evaluated to be worth between 70 and 99 per cent of book value, depending on the bank. Several incentives were created for banks to adequately recover and collect interest on these loans, including the possibility of “repurchasing” them and provisions for loss-sharing in case there would be a shortfall between loan recovery and the bonds' value.

### The financial system today

#### *Recent reform initiatives improving the framework*

13. In 1998/99, a far-reaching package of financial reforms was approved.<sup>11</sup> The package included the elimination of the blanket coverage on bank deposits and its replacement by a limited deposit guarantee scheme, whose cap started to be reduced. A new institute was created to manage the deposit insurance scheme, as well as the support programmes, including the sale of assets inherited from the rescue package (Box 2). The reform package also clarified the legal status of the liabilities arising from the rescue package, which received full government backing and started to be replaced by tradable securities. Finally, remaining barriers to foreign ownership in the financial sector were eased, to the effect that foreign investors gained the right to acquire equity holdings in the three largest commercial banks.

11. See Annex 1 for more details of the 1998-99 financial sector reforms.

### Box 2. The Institute for the Protection of Bank Savings (IPAB)

The Institute for the Protection of Bank Savings (*Instituto para la Protección al Ahorro Bancario*, IPAB) became operational in May 1999. Its original role was to manage the deposit insurance scheme, but its mandate was broadened to include the administration of the various financial support programmes and the assets and liabilities deriving from them. This involves servicing these liabilities and implementing programmes to maximise the recovery value of assets, by their disposal and/or by the collection of overdue loans. IPAB is also in charge of resolving bank failures.

Until the creation of IPAB, direct asset sales had been slow and interest on rescue-related debt was often capitalised.<sup>1</sup> Since mid-1999, IPAB has succeeded in selling the collection rights to several loan packages through public bidding processes, and asset sales have been speeded-up, including through the re-privatisation of several banks that had been under intervention. IPAB has also started to refinance rescue-related liabilities, mostly through the issuance of 3 and 5-year tradable bonds indexed to the 28-day Cetes.<sup>2</sup> Refinancing has also been achieved by borrowing from financial institutions, restructuring the liabilities of re-privatised banks, and re-financing higher-yielding obligations. This strategy has been successful, to the extent that IPAB debt has fallen from 13.7 per cent of GDP in mid-1999 to an estimated 12.6 per cent of GDP at the end of 2001. At the same time, its maturity profile has improved considerably, with expected outflows in the peak years of 2005/06 falling by a third.

Although much progress has been made and IPAB has been fulfilling its role remarkably well, some challenges remain. In 2001, direct budget transfers are expected to provide only 19 per cent of IPAB's funding, compared with 62 per cent from bond issuance, 15 per cent from asset sales and 4 per cent from deposit-insurance fees. But proceeds from asset sales are likely to decline gradually and deposit-insurance fees are already among the highest in the OECD. Moreover, the pace of new bond issuance is in large part determined by market conditions and cannot be easily speeded-up. This is especially the case if IPAB issuance is seen in the aggregate context of the amount of domestic debt issued by the public sector, including the Treasury and the Central Bank. These factors imply that direct budget transfers will need to be stepped-up significantly in the next few years, even if IPAB is to follow the minimalist strategy of keeping its debt constant in real terms.

1. Until the creation of IPAB, direct asset sales had been slow, in part because transactions focused on selling banks as a whole. Also, until 1997/98, several legal obstacles, including tax-related issues, hampered asset sales.
2. The 3-year *Bonos de la Protección al Ahorro* (BPA) started to be auctioned in March 2000 and their 5-year equivalent in August. In mid-2001, these bonds were trading at around 60 basis points above Cetes, down from 150 basis points at the peak.

14. These measures were followed by the approval of new bankruptcy and secured lending legislation in April 2000. Previously, ineffective legislation had encouraged a culture of non-payment and had been one of the main obstacles for the resumption of lending to the private sector, especially SMEs and households. The new "foreclosure and guarantees law" clarified the legal procedures for the recovery of bad loans and provided lenders with tighter loan guarantees. The new law was complemented by a "last chance" programme for debtors to regularise their loan payments. Through the "Punto Final" programme, available to the agricultural and fisheries sectors, small and medium enterprises and housing mortgage holders, 1.1 million debtors have restructured their loans, with over 800 000 pre-paying their outstanding debt.<sup>12</sup>

12. The programme, implemented from January 1999 to March 2000, provided discounts ranging from 45 to 60 per cent of outstanding principal, with special incentives for the pre-payment of outstanding debt. Of the 1.3 million eligible debtors, about 85 per cent participated in the programme, representing more than 70 per cent of loans outstanding. The Ministry of Finance estimated the cost of the programme at about 3.3 per cent of GDP.

15. Another important recent measure was the gradual strengthening of the supervision and regulatory framework. Accounting standards have been updated and disclosure rules broadened, bringing Mexican rules closer to international norms. For instance, the whole amount of past-due loans are now recorded as such — previously only the unpaid portion of the loan had to be declared as non-performing. New capital adequacy requirements also started to be phased in, leading to a gradual upgrade in the required capitalisation of credit institutions including stricter rules concerning the treatment of deferred taxes. Full implementation is pencilled in for 2003. At present, the majority of banks already comply with the new requirements. Finally, new portfolio rating and provisioning requirements have been introduced.

16. Complementary measures were introduced in 2001, as part of an effort to modernise certain practices in the financial system. This included an upgrade of the corporate governance regime applying to the sector, with the goal of making practices more transparent. In that context, progress has been achieved in tightening codes of conduct and improving the protection of minority shareholders.<sup>13</sup> The role of the National Banking and Security Commission (*Comisión Nacional Bancaria y de Valores, CNBV*) was also reinforced, both in terms of its powers to prosecute the abuse of privileged information and market manipulation, and in relation to prudential regulation practices, including controls on related credits and internal controls. Finally, regulations concerning investment and mutual funds have been modernised, to allow managers greater flexibility and to widen the asset classes in which they may invest.

### *Size and structure of the banking system*

#### *Private banks*

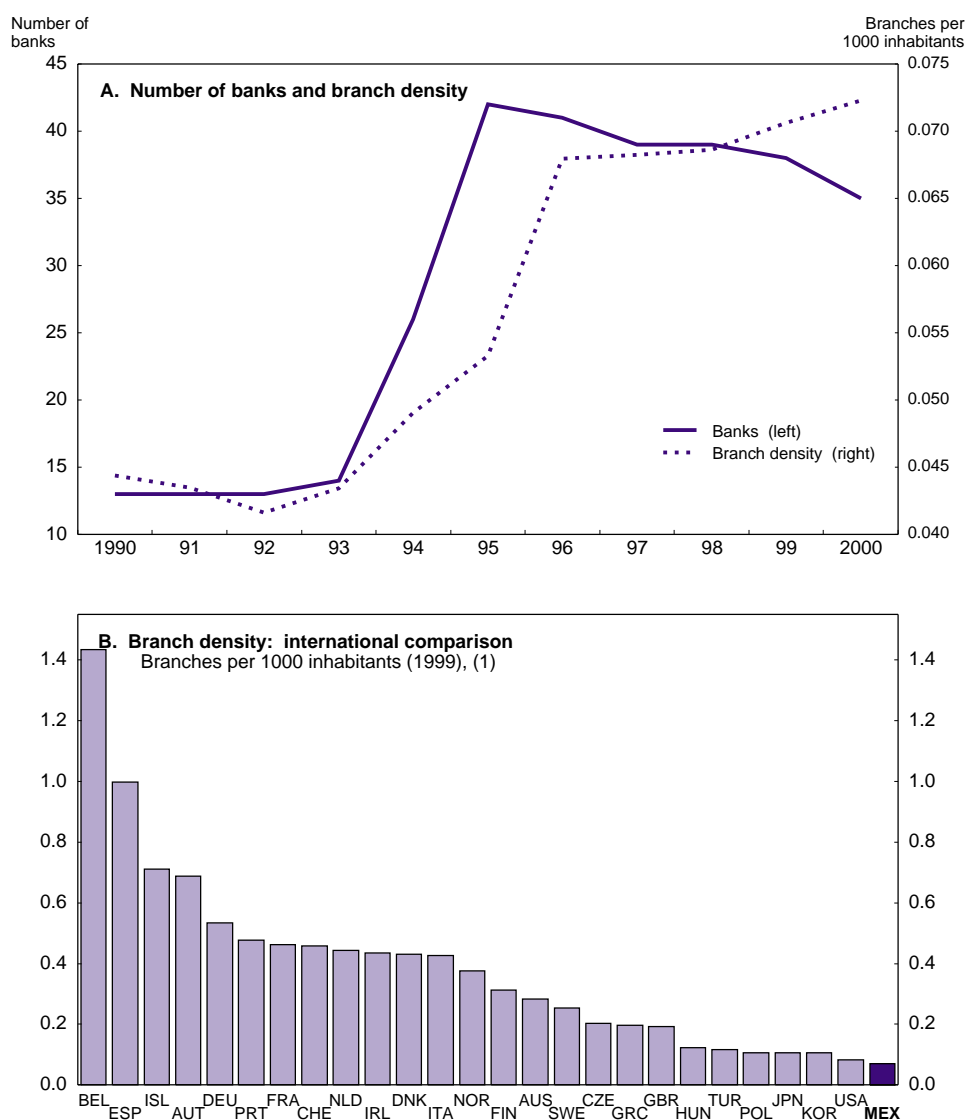
17. By removing constraints on the supply of financial services, deregulation led to a temporary jump in the size of the banking system in most OECD countries. Often, an initial increase in the number of banks was followed by a process of consolidation, as less competitive institutions were driven out of the market. This process has also been evident in Mexico: at the onset of the privatisation process in the late 1980s, there were 18 private commercial banks operating in the country.<sup>14</sup>

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13. See Annex 2 for details of the 2001 financial sector reforms. With the approval of these reforms, important advances were made in the updating of the corporate governance regime and in the revision of capital market regulations, which could be determinant in increasing capital deepening and financial intermediation. See Martínez (2000).

14. See Gruben and McComb (1997). These banks were classified according to their geographical coverage: there were 6 nation-wide banks, 7 multi-regional banks and 5 regional banks.

Figure 1. The size of the banking system



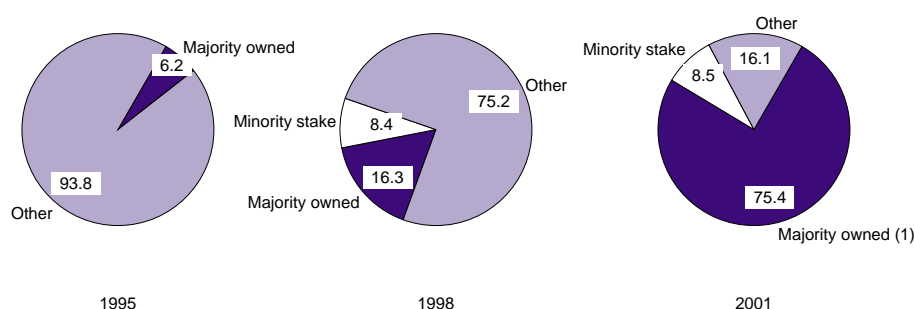
1. 1998 for Austria, Finland, Greece, Ireland and the Netherlands. All banks except for the following: commercial banks for Greece, Hungary, Japan, Mexico, Portugal, Turkey and United Kingdom; commercial banks and foreign commercial banks for Korea; commercial banks and savings banks for Iceland and the United States; commercial banks, foreign commercial banks and savings banks for Sweden.

Source: OECD, *Bank Profitability -- Financial Statements of Banks* (2001); National Banking and Security Commission (CNBV).

18. In 1995, this number peaked at 42. After that, the trend was reversed, with the peso crisis being one of the factors that triggered a process of consolidation (Figure 1).<sup>15</sup> The role of foreign investment in this consolidation has also been significant. Contributing to this has been the gradual liberalisation of rules governing FDI in the sector, following the entry into force of NAFTA. Consolidation was particularly swift after 1998, when foreign stakes in the three largest banks were allowed. In the 1980s, only one foreign institution had (relatively minor) banking operations in Mexico. As restrictions were partly eased, the share of commercial banks with a significant (20 per cent or above) foreign stake increased to about a quarter of banking assets in 1998. With full liberalisation, this jumped again to more than three quarters in 2001 (Figure 2). By mid-2001, the three largest commercial banks, representing about half of total assets in the system, were under the control of foreign shareholders.<sup>16</sup>

Figure 2. **Market share of foreign-controlled banks**

Per cent of total assets



1. September 2001.

2. Includes Bancomer, which is controlled by BBVA (holding 48.5% of total capital).

Source: CNBV.

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15. By mid-2001, the number of banks operating in Mexico had fallen to 35, six of which under IPAB administration (*i.e.* awaiting sale or liquidation). The number of branches also jumped sharply in the few years following liberalisation, as competition in the retail end of the market increased. After the peso crisis however, the bank branch density stagnated at levels considerably lower than the OECD average.
16. The share of foreign-controlled banks in total assets in the banking system is among the highest in the OECD. The three largest banks operating in Mexico in mid-2001 were BBVA-BANCOMER, CITIBANK-BANAMEX and SANTANDER-SERFIN.

19. The level of financial intermediation is often positively correlated with economic growth, but can also be influenced by structural reforms. Indeed, the importance of financial intermediation increased significantly in most OECD countries following liberalisation. In Mexico, domestic credit to the private sector grew sharply as a percentage of GDP between 1989 and 1994, but it has since declined steadily, even after the approval of reforms in 1998/99. Despite a brief recovery, in mid 2001, domestic credit had fallen to below 20 per cent of GDP and other indicators of financial deepening, such as the ratio of banking assets and monetary aggregates to GDP, were among the lowest in the OECD (Figure 3).

#### *Development banks*

20. As with commercial banks, dis-intermediation has also been evident in the development bank sub-sector, which has traditionally played a significant role in Mexico's financial system. The sub-sector was badly hit by the peso crisis and was re-capitalised through the transferring of bad loans to a specialised trust fund, FIDELIQ.<sup>17</sup> Since then, development banks have curtailed lending even more sharply than commercial banks, with the sub-sector experiencing a net dis-intermediation every year since 1995 (Box 3). By early 2001, development banks accounted for only a third of total assets in the banking system and less than 10 per cent of total direct lending to the non-bank private sector. In spite of repeated re-capitalisation exercises, some development banks are still loss-making. The fact that such losses are not just a transitory phenomenon, but continue throughout the business cycle, points to a subsidy element in the operation of these institutions. This may have created distortions and hampered the development of the private credit market. Indeed, the one important challenge facing state-owned financial institutions derives from the overlapping among some public sector institutions, as well as between state-owned and private sector intermediaries. For instance, several trust funds target the agricultural sector (Fira, composed of four different funds), but so does the national bank for the agricultural sector (Banrural). Also, the national bank for foreign trade (Bancomext) finances some construction and tourism infrastructure, in spite of the existence of a national bank that supports capital investment (Nafin) and of a trust fund for the promotion of tourism (Fonatur). The problem is exacerbated by the fact that trust funds are generally managed separately, by different ministries, or even by the Central Bank. This overlapping leads to efficiency losses and lack of transparency.

#### *Alternative sources of finance*

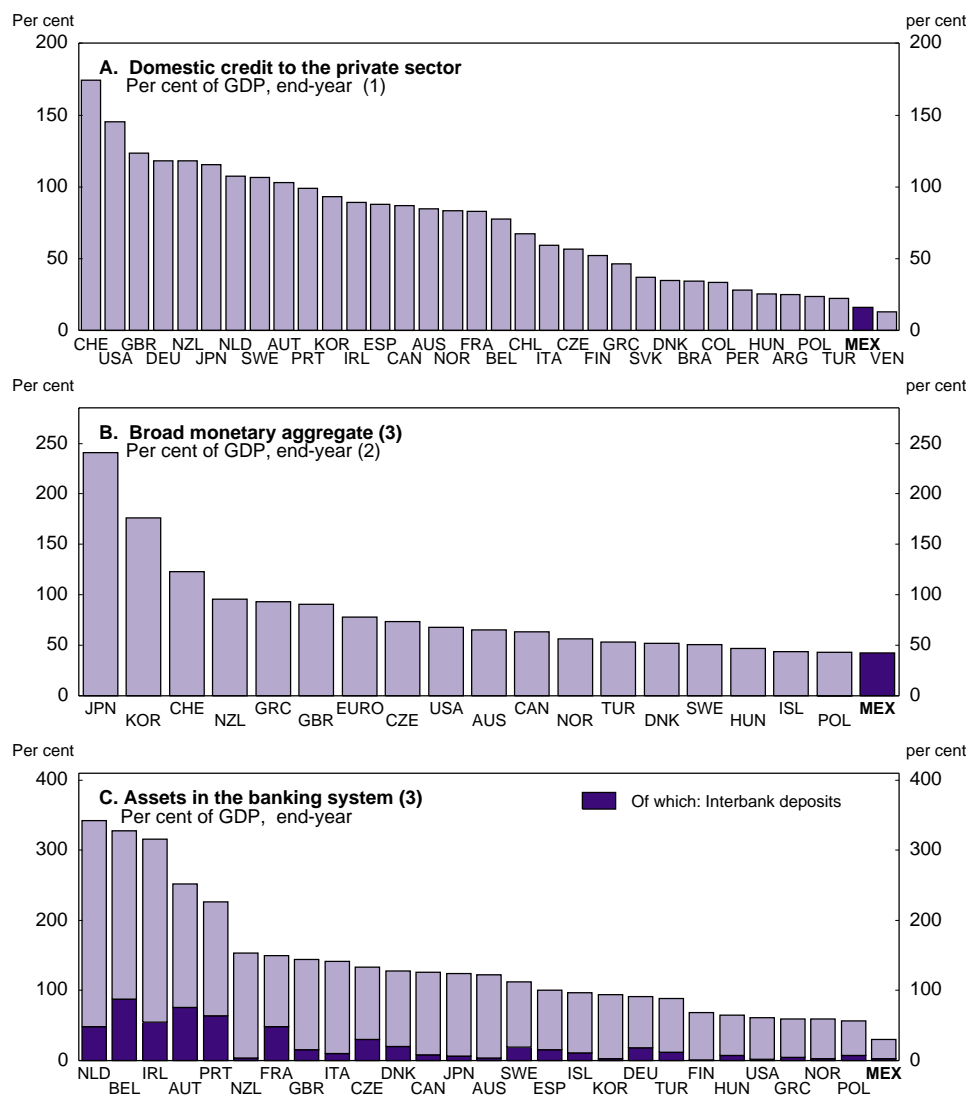
21. It is important to notice however, that the decline in lending by both commercial and development banks has been partly offset by increased lending from sources other than domestic banks, including foreign bank credit, credit granted by non-bank financial intermediaries, and suppliers' credit. Credit granted to the private sector by these lenders has grown from 14 to 17 per cent of GDP in the past four years, reaching almost 50 per cent of total lending in 2000, up from about a quarter in 1994 (Box 6). The bulk of credit outstanding from these alternative sources are in commercial loans, but lending related to consumer credit and housing have also been increasing steadily (Figure 4).

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17. *Fideicomiso Liquidador de Instituciones y Organizaciones Auxiliares de Crédito.*

Figure 3. Indicators of financial intermediation

1999



1. Refers to financial resources provided to the private sector that establish a claim for repayment.
2. Defined as M4 (or related aggregates) for Belgium, Brazil, Greece, Japan, Mexico and United Kingdom; M2 for Poland, Czech Republic, Norway and Denmark; M3 (or related aggregates) for other countries.
3. Commercial banks. Latest year available: 1998 for Australia, Austria, Finland, Ireland and the Netherlands.

Source: OECD, *Bank Profitability -- Financial Statements of Banks* (2001); World Bank, *World Development Indicators* 2001.



### Box 3. Mexican development banks

In mid-2001 there were five development banks in Mexico: Nafin (*Nacional Financiera*), which is in charge of supporting capital investment and providing development finance; Bancomext (*Banco Nacional de Comercio Exterior*), providing credit and guarantees for foreign trade operations and export-oriented projects; Banobras (*Banco Nacional de Obras y Servicios Públicos*), responsible for financing the development of public works, including infrastructure and urban equipment; Banrural (*Banco Nacional de Crédito Rural*), in charge of financing rural projects; and Banjército (*Banco Nacional del Ejército, Fuerza Aérea y Armada*), which provides financial support for the members of the armed forces. Nafin is by far the largest of the five development banks in terms of assets, accounting for about 45 per cent of the total in mid-2001. Banobras and Bancomext accounted for about 25 and 17 per cent respectively, with the much smaller Banrural and Banjército sharing the rest.

Two more development banks were created in mid-2001. PAHNAL, the national savings trust (PAHNAL, Patronato del Ahorro Nacional) was a publicly-owned savings institution that channelled small deposits into government securities. It was transformed into Bansefi (*Banco del Ahorro Nacional y Servicios Financieros*), which will promote small savings through the savings and loan network. Fovi, the housing trust fund, and a newly created mortgage institution (*Hipotecaria federal*) were transformed into a development bank (Nacional Hipotecaria) to guarantee low-income residential mortgage lending, modelled loosely on the US Fannie-Mae.

#### The recent performance of state-owned institutions

After the bailout in 1996/97, the activities of development banks have been sharply curtailed. Efforts have also been made to capitalise institutions and make them more efficient and transparent, including through the stricter application of prudential rules and the tightening of accounting practices. Development banks have also increasingly concentrated on second-tier banking — *i.e.* the provision of funds to commercial banks, which then engage in direct lending to targeted sectors. This has the potential to minimise distortions created by these state-owned financial intermediaries. However, care should be exercised in drawing contracts between government and private institutions, to ensure transparency and a clear assignment of risk in case of non-payment.

The reform strategy has been met with good results: by mid-2001, most development banks' performance indicators had improved significantly, and solvency and capitalisation ratios were adequate and comparable with those of commercial banks (Table 1). Development bank profitability still lagged that of private sector counterparts however, mostly as a result of the importance of the former's non-profit activities. FIDEICOMISOS, non-bank financial intermediaries organised as government trust funds, experienced similar phenomena of dis-intermediation, re-capitalisation and increased efficiency since the mid-1990s. By early 2001, their profitability and productivity had improved and were somewhere in-between those of development and commercial banks.<sup>1</sup>

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1. Capitalisation and solvency ratios are not comparable with those of banks, as Fideicomisos are not subject to the same prudential rules and are directly financed from the budget.

Table 1. **State-owned financial intermediaries: performance indicators in comparison**

	Development banks <sup>1</sup>	Government trust funds	Commercial banks <sup>2</sup>
<b>Profitability, productivity</b>			
Net profit / total assets	0.1	0.8	0.8
Net profit / equity	1.0	2.8	8.8
Net profit / employee	0.02	0.8	0.1
Operational costs / balance sheet total	0.2	0.6	5.7
<b>Solvency, capitalisation</b>			
Capitalisation ratios	19.6	--	14.3
Non-performing loans / total loans	6.5	--	5.7
Provisions / non-performing loans	84.4	--	117.2
Equity / liabilities	5.5	--	11.0

--: Not applicable.

1. February 2001.

2. September 2000

Source: CNBV and Ministry of Finance.

#### Box 4. Non-bank financial intermediaries

Non-bank intermediaries are an increasingly important source of financing to the private sector in Mexico. Together with suppliers' credit. They provide the bulk of lending to small and medium-sized enterprises. Foreign bank lending, on the other hand, is available mainly to larger enterprises. Non-bank intermediaries can take different forms:

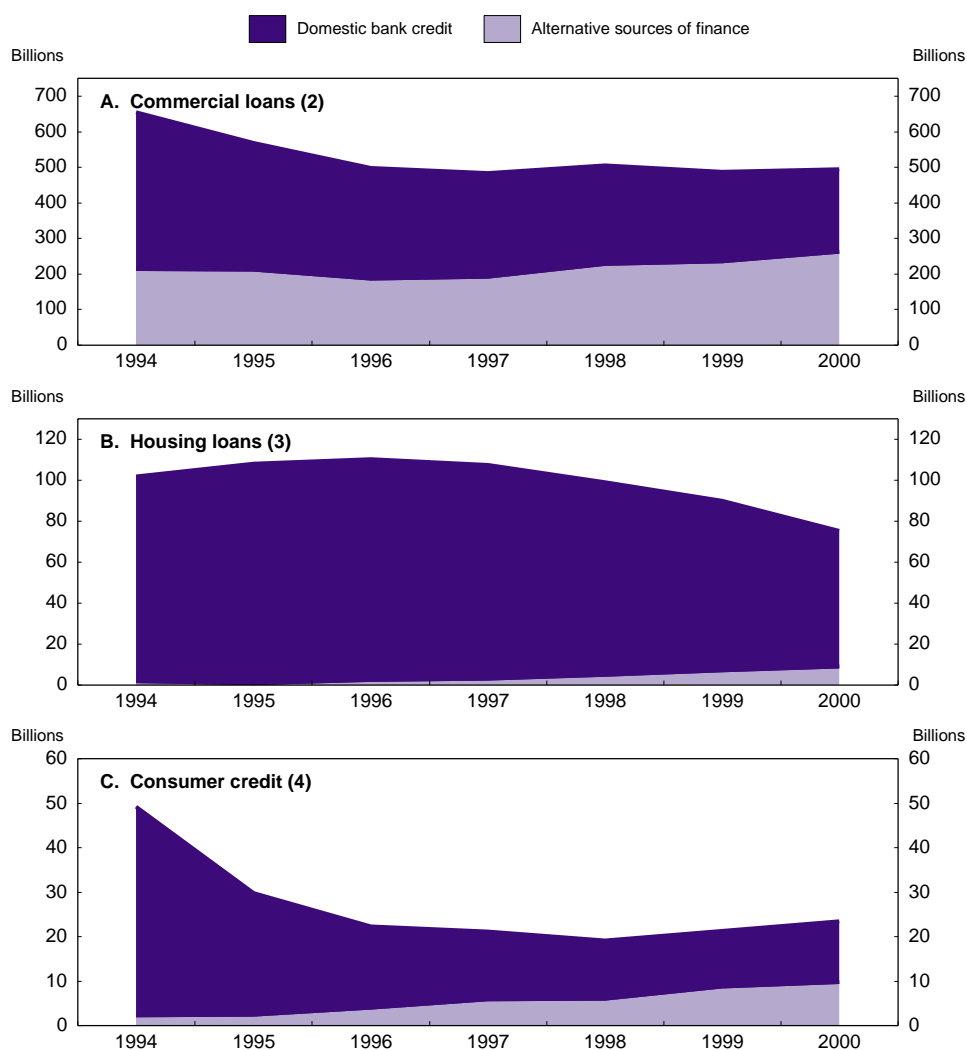
- Limited purpose financial companies (*Sociedades Financieras de Objeto Limitado*, SOFOLES) are specialised institutions that do not take deposits and that concentrate either on a given type of lending (mortgage, consumer credit) or on a particular sector (automobile, construction). They can either be part of a financial conglomerate or be fully independent. In either case, they are subject to regulation by the Ministry of Finance, dispositions issued by the Bank of Mexico and supervision by the CNBV.
- Savings and loan and credit union institutions can receive deposits and generally engage in consumer and commercial loans. The legal status of these institutions varies from that of banks both in terms of prudential and regulatory frameworks. In some cases, such as credit co-operatives, institutions had until recently escaped effective supervision. The newly created BANSEFI is expected to play a leading role in re-organising this sector.<sup>1</sup>
- FIDEICOMISOS are government trust funds, directly financed by the budget, which were created to support certain sectors or activities, often through subsidised loans. They can be linked to and managed by particular government ministries, or in some cases, the Bank of Mexico. FIDEICOMISOS may also engage in second-tier lending, operating through banks or SOFOLES.<sup>2</sup>
- INFONAVIT (National Employees' Housing Fund) is an autonomous entity that manages workers' funds and that operates mainly in the housing market.

1. Since June 2001, a new law provides a regulatory framework that requires *inter alia*, that these entities should be transformed into co-operatives or corporations. The new law puts CNVB in charge of supervision, with the support of federations (under a delegated supervision scheme).

2. Among the most important funds are Fovi (Fund for Low-income Housing), Fonatur (National Fund for Tourism Activities) and Fira (Fund for the Agricultural Sector).

Figure 4. **Lending to the private sector**<sup>1</sup>

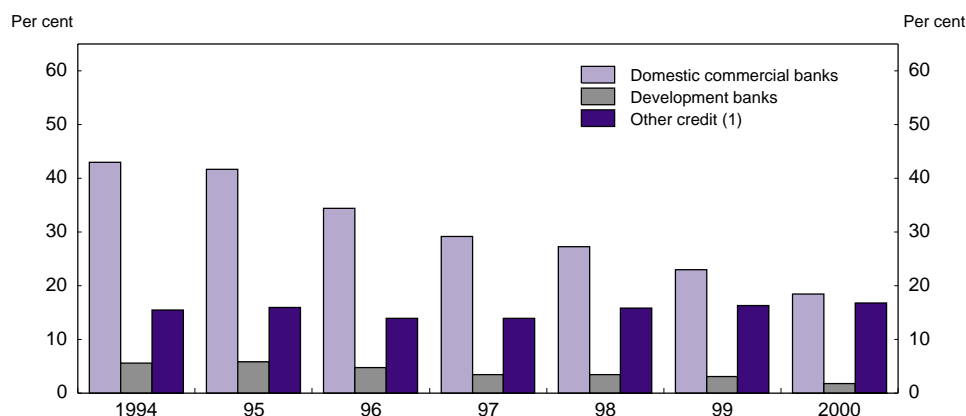
Stocks in billions of 1994 pesos, end of period



1. Sources of finance to the non-bank private sector.
2. Alternative sources of finance include mainly lending through supplier credit, commercial paper and other securities, Sofoles, foreign banks, credit unions and leasing, factoring and insurance companies.
3. Alternative sources of finance include mainly lending by savings and loans institutions, Sofoles and insurance companies.
4. Alternative sources of finance include mainly credit obtained through department stores' credit cards.

Source: Bank of Mexico.

Figure 5. **Credit to the private sector**  
Per cent of GDP, end-year



1. Includes credit obtained through department stores' credit cards, lending by savings and loans institutions, Sofoles, supplier credit, commercial paper and other securities, foreign banks, credit unions and leasing, factoring and insurance companies.

Source: Bank of Mexico.

22. Non-bank financial intermediaries, although their role is increasing, are unlikely to represent a long-term solution to the low levels of overall lending. As seen above, these intermediaries have been an important source of new financing to the private sector. By mid-2001, the total amount of credit granted by alternative sources of finance was at a comparable level to that lent by domestic commercial banks (Figure 5). Most of this was represented by foreign bank lending. Among the non-bank intermediaries, SOFOLES, which cannot receive deposits, presented the highest rate of growth. SOFOLES finance their operations by placing securities or borrowing, either from private banks or from the public sector. For instance, in the case of mortgage lending and the financing of construction activity, it is common for SOFOLES to serve as agents for the granting of subsidised loans from the public sector, either through development banks or through Trust Funds, such as Fovi. As such, SOFOLES can only have an indirect impact on overall lending, either through increased competition in financial intermediation or through their role in financial deepening.

### Indicators of performance: emerging from the crisis

23. The financial sector has responded rapidly to recent reforms, mostly through an increase in efficiency and profitability, a system-wide re-capitalisation and an overall clean-up of balance sheets. This in turn has put institutions in a better position to face a more stringent supervision and regulatory framework, which included an upgrade of capitalisation and provisioning requirements and stricter rules for overall risk-management. Today, the Mexican banking system is increasingly solid and as profitable as its OECD counterparts; and the supervision and regulatory framework, including, importantly, disclosure requirements, are close to the standards of more advanced countries. Overall, it can be ascertained by several performance indicators that the Mexican financial sector has recovered from the 1994-1995 peso crisis.

*Solvency and profitability of the financial system*

24. In the years preceding the peso crisis, Mexican commercial banks were already suffering from a decline in income (both interest and non-interest), a deterioration in the quality of their loan portfolio (reflected in an increase in non-performing loans) and a consequent drop in profitability and solvency indicators.<sup>18</sup> The peso crisis and its aftermath made matters significantly worse, with the effect that by 1996, interest income had fallen to about half of pre-crisis levels and non-performing loans had reached 13 per cent of the credit portfolio.<sup>19</sup> Not even a sharp reduction in operating expenses was sufficient to prevent significant losses in the banking system as a whole.

**Table 2. Commercial banks' income statement**  
Percentage of average total assets

	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>1</sup>
Net interest income	6.37	5.07	5.33	3.35	3.77	5.15	5.41	5.19	5.01
Non-interest income (net)	2.05	1.40	2.04	2.69	2.26	1.46	3.30	2.05	1.81
Net profits or loss on financial operations	1.39	0.77	1.10	2.12	0.87	0.49	1.69	..	..
Gross income	8.42	6.47	7.37	6.04	6.03	6.61	8.71	7.24	6.82
Operating expenses	4.65	4.15	3.93	3.85	4.42	5.02	5.25	5.15	4.71
Staff costs	2.30	1.99	1.59	1.50	1.93	2.07	2.05	2.36	..
Property costs	2.20	1.92	2.12	2.13	2.25	2.57	2.81	2.79	..
Net income	3.77	2.32	3.44	2.20	1.61	1.59	3.46	2.09	2.10
Provisions on loans	1.49	1.55	2.95	2.83	1.48	1.44	2.51	0.96	1.09
Profit before tax	2.28	0.76	0.49	-0.63	0.13	0.15	0.95	1.13	1.01
Profit after tax	1.82	0.59	0.40	-0.69	0.07	0.57	0.71	0.94	0.80
<i>Memorandum item:</i>									
Assets (billions of pesos)	463	619	837	1061	1112	1150	1314	1438	1521
Solvency, capitalisation									
Capitalisation ratio <sup>2</sup>	..	9.8	12.4	13.2	13.8	14.4	16.2	13.8	14.9
Capital/total assets	..	5.5	6.8	6.0	8.5	8.4	10.5	..	..
Non-performing loans/total loans <sup>3</sup>	..	7.3	6.9	5.9	11.1	11.4	9.7	5.8	5.3
Provisions/non-performing loans	..	48.6	72.6	119.9	62.8 <sup>4</sup>	66.0	107.8	115.3	119.8
Current assets/current liabilities	..	1.07	1.08	1.02	1.06	1.09	1.09	1.11	1.11

1. Third quarter data.

2. Net capital over risk-weighted assets. Since December 1997, this ratio also includes market risk.

3. Including IPAB notes.

4. Break in data, reflecting the transition to the new accounting system (based on internationally-accepted accounting principles since 1997).

Source: Comisión Nacional Bancaria y de Valores (CNBV); OECD, *Bank Profitability-Financial Statements of Banks*.

18. Solvency ratio is defined as the ratio of past-due loans minus loan loss provisions to stockholders' equity.

19. Data on non-performing loans refer to the first quarter of 1997, when new accounting rules took effect. Data for the last quarter of 1996 are not comparable with data for the following period.

25. Since 1997, profitability has recovered rapidly. First, gross income has grown significantly, pushed by non-interest income such as fees and commissions, which jumped from 0.9 to 1.4 per cent of total assets in the three years to December 2000 (Table 2). This is in part derived from earnings on non-core activities, such as those related to the management of the retirement funds (see below) and “bancassurance”. Interest income on the other hand has failed to recover consistently, in part as a result of the low levels of lending. Second, the non-performing loan portfolio has declined considerably — reaching less than 6 per cent of the total credit portfolio in early 2001 — in part as a result of *Punto Final*. This has allowed banks to reduce provisions without jeopardising solvency ratios. Third, consolidation has translated into increased labour efficiency, with the number of staff being reduced by more than 10 per cent between 1997 and 2000.<sup>20</sup> In sum, overall profitability trends have been positive and banks seem increasingly well positioned to face fiercer competition in credit markets.

26. The profitability of Mexican banks’ is now as high as in other OECD countries, but this reflects relatively high financial margins, fees and commissions, offset by above-average operating expenses and a high level of provisions against losses (Figure 6). This indicates that, although the profitability of the system is at a reasonable level, the burden of bad loans has been significant and banks remain relatively inefficient, with negative spill-over effects on the rest of the economy. Staff and property costs are significantly heavier in Mexico than in other OECD countries (as a percentage of balance sheet total), in spite of the relatively low branch density. Concerning past-due loans, these have been on a declining trend, especially since the implementation of the *Punto Final* programme. In spite of this, though, they still represented 5.3 per cent of the total loan portfolio in September 2001. When measured as a percentage of total balance sheet, provisions in the Mexican commercial banking system were among the highest in the OECD (Figure 7). These results should be interpreted with caution however, since Mexican banks have in recent years increased the proportion of their operations off-balance sheet.

### *Efficiency of intermediation*

27. The collective experience of OECD countries shows that financial sector liberalisation affects allocative efficiency in the economy through its impact on financial intermediation.<sup>21</sup> Liberalisation also has a direct effect on the operation of financial markets, as an environment of increased competition generally leads to more efficient institutions. One measure of this internal efficiency is the differential between lending and deposit rates in the banking system. The smaller this differential, the more efficient is financial intermediation, since savers receive higher returns and investors pay lower capital costs. Using this yardstick, the impact of the initial bout of reforms (in the late 1980s and early 1990s) on the efficiency of the Mexican financial system was initially positive, before the banking sector was derailed by the peso

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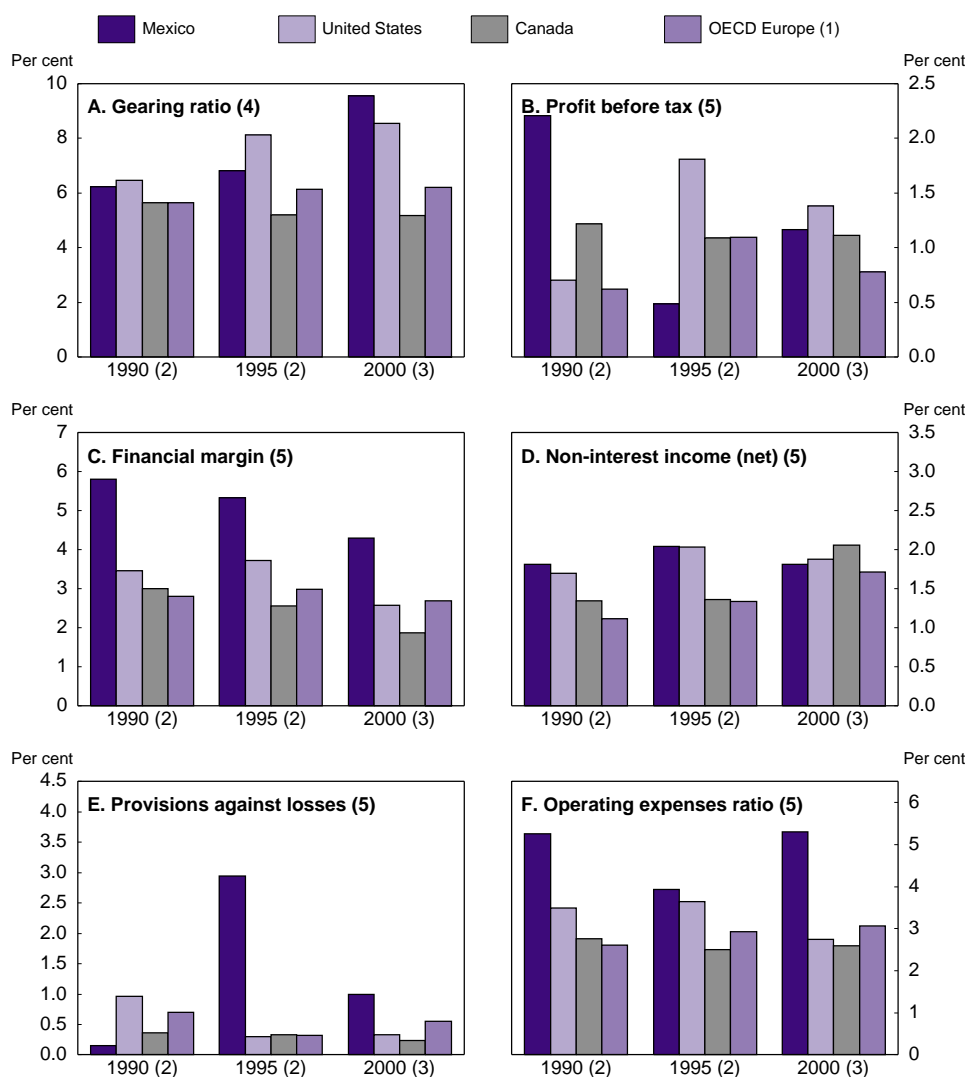
20. Operating expenses continued to move up, in spite of the drop in the number of employees. In fact, although some individual banks have obtained significant savings in operating expenses from recent mergers, the banking system as a whole has experienced an increase in staff costs since 1996. These figures are misleading, however, since this has been mostly as a result of the one-off cost of redundancy packages.

21. Financial sector reforms have also tended to introduce incentives for financial innovation, customer differentiation and the diversification in the supply of financial services. The modernisation of the financial system in OECD countries is evidenced by the large increase in the availability of automatic teller machines (ATMs) and other means of electronic payments, such as credit and debit card transactions. In the case of ATMs, the number of terminals in Mexico has increased rapidly, from less than 5 000 in 1994 to almost 18 000 in 2000. But at 18 terminals per million inhabitants, this considerably lags the OECD average of over 500. The number of credit cards dropped by half after the peso crisis, from 14 million in 1994 to 7 million in 1997, and has since stagnated. Debit cards, on the other hand, have more than doubled, jumping from 14 million in January 1997 to 33 million in December 2000. The value of transactions with credit and debit cards taken together has reached 9 per cent of GDP in 1999, lower than in Canada or the US (19 and 17 per cent respectively), but close to the average level in OECD Europe.

crisis. Interest rates differentials remained high through most of the second half of the 1990s, closely mirroring the behaviour of Mexican sovereign spreads. More recently, further efforts at liberalisation were met with a gradual narrowing of the spread between lending and deposit rates (Table 3). Although higher than the OECD average, the spread in mid 2001 had dropped to the lowest level since the peso crisis (Figure 8). The contrast is particularly sharp if compared with 1998, when the index was affected by the turbulence in emerging markets.

Figure 6. **Income statement of the financial system**

Commercial banks

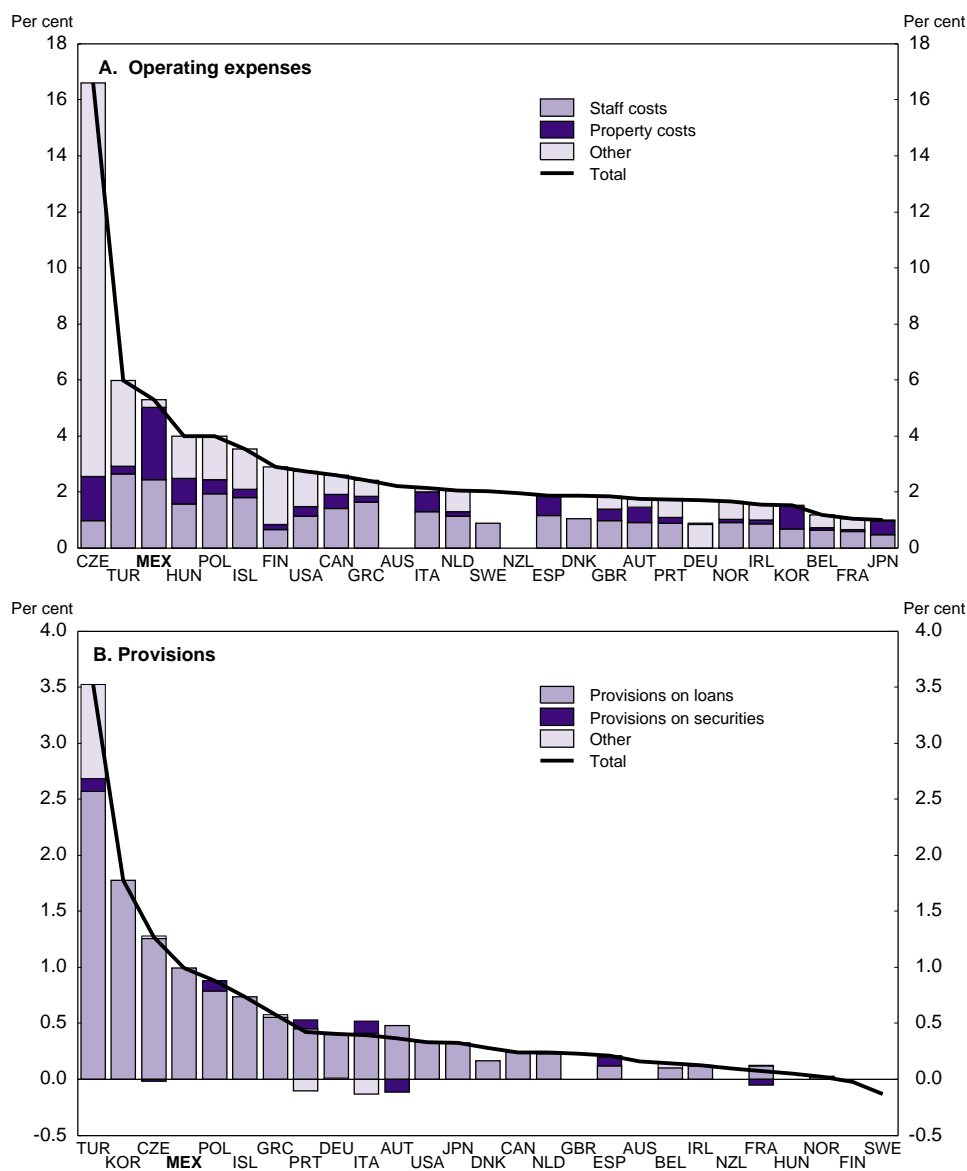


1. Unweighted average of countries for which data are available.
2. The data for Mexico are not strictly comparable before 1997 as a result of different accounting standards.
3. 1999 for Canada; 1998 for OECD Europe.
4. Capital and reserves as a percentage of year-end balance sheet total.
5. As a percentage of average balance sheet total.

Source: Bank of Mexico; OECD, *Bank Profitability -- Financial Statements of Banks* (2001).

Figure 7. **Operating costs and provisions**

Per cent of average balance sheet total



1. 2000 or latest year available.

Source: CNBV; OECD, *Bank Profitability -- Financial Statements of Banks* (2001).



Table 3. Interest rate differentials

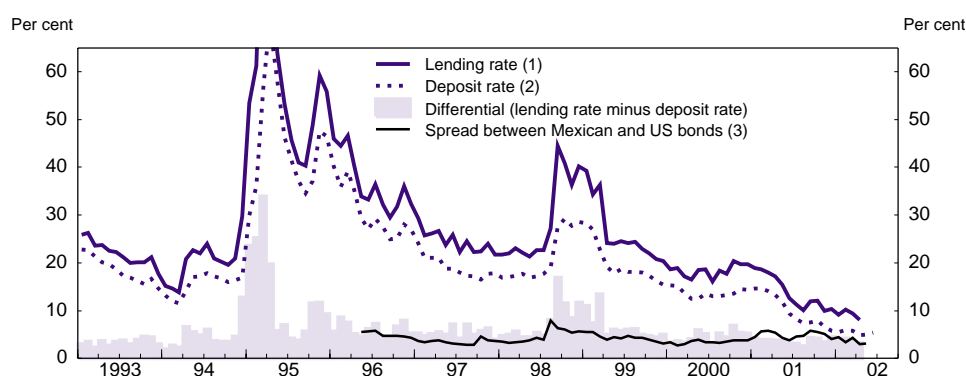
Bank's lending rates less money market rates, year average<sup>1</sup>

	1993	1994	1995	1996	1997	1998	1999	2000
United States	3.0	2.9	3.3	3.3	3.4	3.6	3.4	3.4
Japan	2.0	1.9	2.2	2.1	1.9	1.6	1.9	1.8
Germany	5.6	6.1	6.4	5.5	4.2	3.2	2.7	2.2
France	0.3	2.0	1.5	2.8	2.9	3.0	3.4	2.3
Italy	3.7	2.7	2.0	3.2	2.9	2.9	2.6	1.9
United Kingdom	..	..	1.8	1.5	1.4	1.9	2.0	1.8
Canada	1.0	1.2	1.4	1.7	1.3	1.6	1.5	1.6
Australia	4.6	3.9	3.4	3.8	3.9	3.0	2.5	2.6
Belgium	3.6	3.7	3.6	3.9	3.6	3.7	3.7	3.6
<b>Mexico</b>	<b>7.1</b>	<b>6.3</b>	<b>10.1</b>	<b>5.5</b>	<b>4.7</b>	<b>3.9</b>	<b>4.5</b>	<b>3.0</b>
Netherlands	3.5	3.1	2.8	2.9	2.8	3.0	0.5	0.4
Portugal	na	4.3	4.1	4.5	3.6	..	2.2	..
Spain	1.1	0.9	3.5	4.1	3.4	2.8	2.6	1.9
<i>Memorandum item:</i>								
Euro area <sup>2</sup>	..	..	..	4.0	3.3	2.9	2.7	2.2

1. United States: Base rates charged by banks on short-term business loans less 3-month Treasury bill rate.  
 Japan: Weighted average of contracted interest rates charged by all banks on both short- and long-term loans, discounts and overdrafts, less 3-month certificates of deposit.  
 Germany: Until 1995 rate on current-account credit thereafter credit to enterprises up to one year less until 1998 3-month Fibor, thereafter 3-month Euribor.  
 France: Banks' prime lending rate less until 1996 3-month Pibor, thereafter 3-month Euribor.  
 Italy: Rate on short-term bank loans less until 1998 3-month interbank rate, thereafter 3-month Euribor.  
 United Kingdom: Building Societies's mortgage basic rates less 3-month Treasury bill rate.  
 Canada: Rate from chartered bank on large business loans less 3-month Treasury bill rate.  
 Australia: Rate charged by banks on loans to small and large business less 90 days buying rates for commercial bills.  
 Belgium: Rate for liquidity credit charged by the four major banks less 3-month Treasury Certificate (tender rate).  
 Mexico: Weighted average of amounts placed on securities exchange at various terms with the yield curve calculated on 28-day commercial paper of qualified companies less 3-month Cetes.  
 Netherlands: Mid-point rate charged on current account advances less until 1998 3-month Aibor, thereafter 3-month Euribor.  
 Portugal: Average rate charged by deposit money banks on 91 to 180-day loans and advances to non-financial enterprises less until 1998 3-month Treasury bill rates, thereafter 3-months Euribor.  
 Spain: Rates on 3-month credit (variable rate) less until 1998 3-month interbank rate; thereafter 3-month Euribor.
2. Weighted average Euro area retail bank lending rate for loans to enterprises up to one year less 3-month Euribor.

Source : IMF, *International Financial Statistics*; OECD, *Main Economic Indicators*.

Figure 8. **Lending and deposit rates**  
Per cent



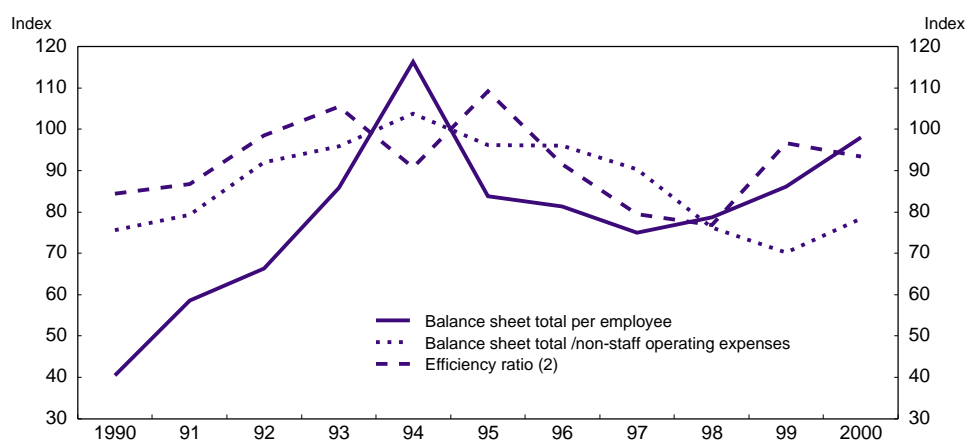
1. The commercial paper rate is used as a proxy for the lending rate. In March and April 1995 it reached respectively 91 and 90 per cent.
2. In April 1995, the deposit rate ("Costo de captacion") reached 70.26 per cent.
3. Spread between Mexican Brady 30-year bonds and US 30-year Treasury bonds.

Source: Bank of Mexico; International Monetary Fund, *International Financial Statistics*.

28. Alternative productivity and efficiency indicators also suggest rapid improvement until 1994 and decline or stagnation during the crisis and its aftermath. However, only one measure shows gradual recovery after 1998/99 (Figure 9). Overall, productivity (balance sheet per employee and per non-staff operating expenses) and efficiency ratios (net interest income plus fee and commissions income divided by operating expenses) remain similar to the levels attained in other emerging market economies, which means that there remains much scope to catch up with the more advanced OECD countries (Figure 10).

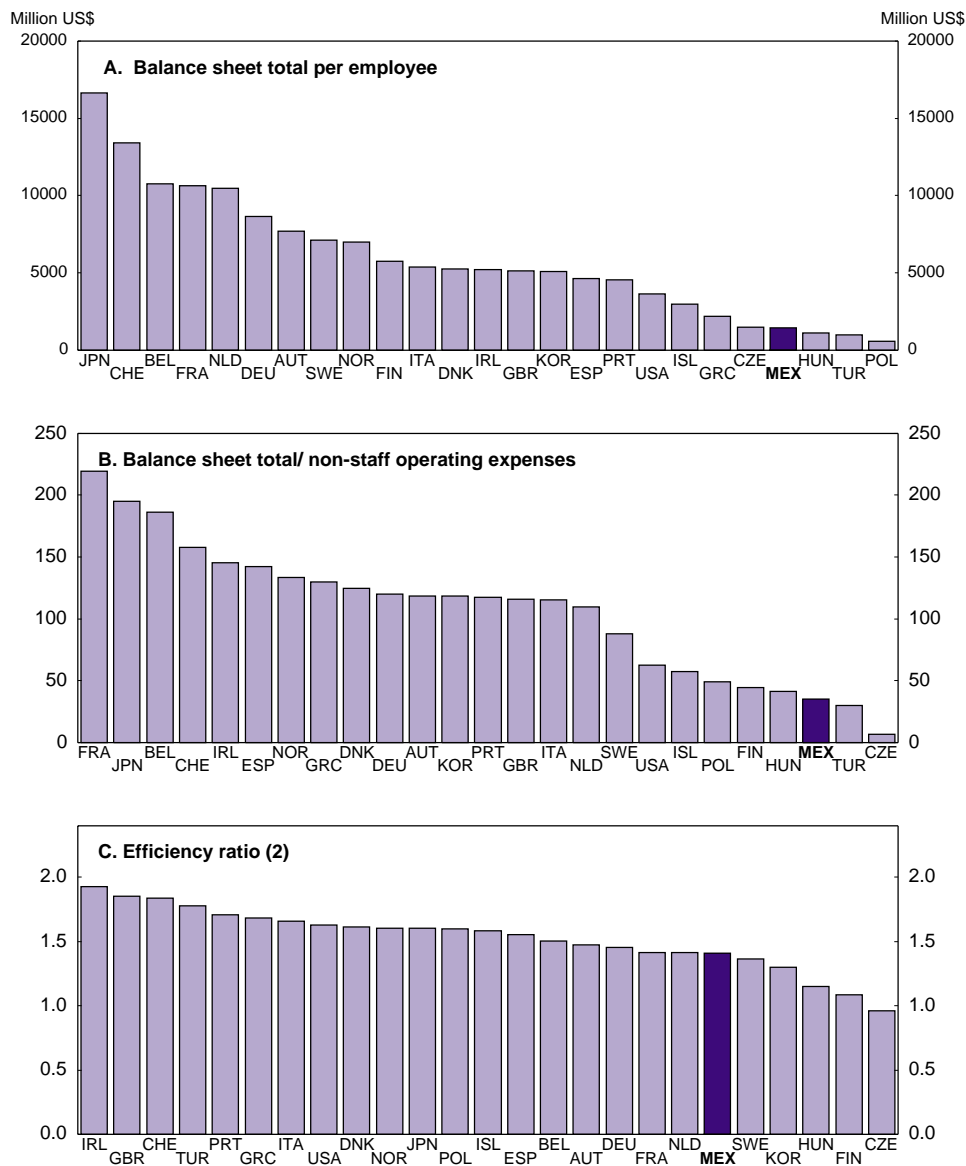
Figure 9. **Productivity and efficiency indicators in the banking sector**<sup>1</sup>

Average 1994/95 = 100



1. Commercial banks.
2. Net interest income plus fee and commissions income divided by operating expenses.

Source: Bank of Mexico; OECD, *Bank Profitability -- Financial Statements of Banks* (2001).

Figure 10. **Productivity and efficiency indicators: international comparison<sup>1</sup>**

1. Commercial banks. 2000 or latest year available.
2. Net interest income plus fee and commissions income divided by operating expenses.

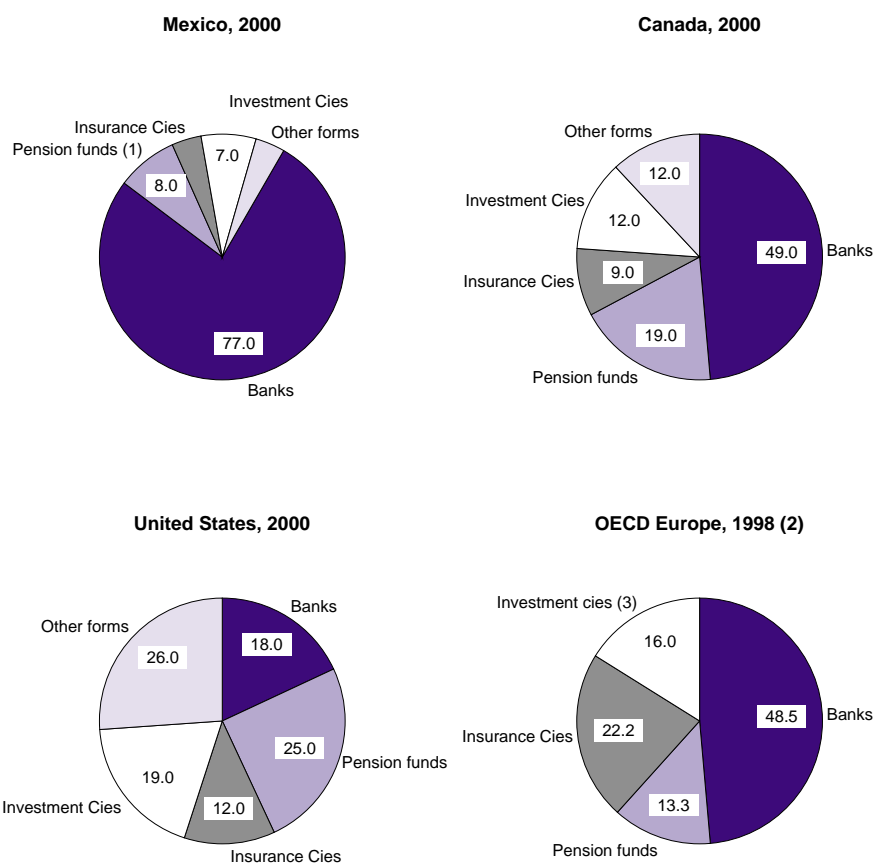
Source: CNBV; OECD, *Bank Profitability -- Financial Statements of Banks* (2001).

### Securitisation

29. Financial market liberalisation has led to the increased use of securities across the OECD area ("securitisation"), which has often implied the emergence of (non-bank) institutional investors as important financial intermediaries. This process has not yet been evident in Mexico, where banks still retain the bulk of financial intermediation, with approximately three-quarters of total assets at the end of 2000. This compares with about half in Canada and most of OECD Europe and less than 20 per cent in the US, where institutional investors such as pension and mutual funds and insurance companies hold a larger share of total assets (Figure 11). Assets held by institutional investors in Mexico have expanded rapidly in the past three years, but these remains at one of the lowest levels among OECD countries (Figure 12).

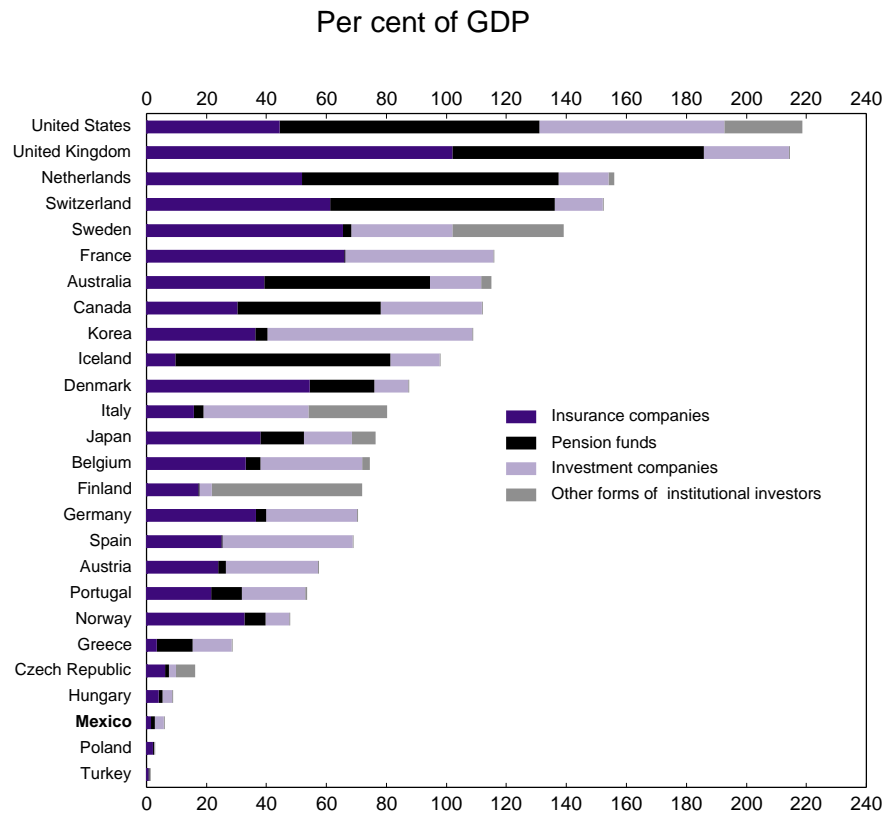
Figure 11. **Composition of financial assets**

Per cent of total financial assets



1. Includes Siefores.
2. Unweighted average of following countries: Germany, France, Italy, United Kingdom, Belgium, Netherlands, Sweden and Switzerland.
3. Including other forms of institutional investor.

Source: Bank of Mexico; OECD, *Institutional Investors, Statistical Yearbook*, 2000 Edition.

Figure 12. Vehicles for savings<sup>1</sup>

1. Financial assets of institutional investors in 1998; 1996 for Switzerland and Greece; 1997 for Belgium, the Czech. Republic, Poland, Portugal, Sweden and Turkey.

Source: OECD, *Institutional Investors, Statistical Yearbook*, 2000 Edition.

### *Institutional investors*

30. Pension funds (*Sociedades de Inversión Especializadas en Fondos para el Retiro*, SIEFORES) are the most dynamic among Mexican institutional investors, holding the equivalent of 9 per cent of total financial savings.<sup>22</sup> These funds have expanded quickly after mid-1997, when social security reforms introduced a fully-funded capitalisation pension scheme for private sector employees, to replace the previous pay-as-you-go (PAYG) system (see previous *Economic Surveys* of Mexico). The scheme operates through individual pension accounts, with private administrators competing to attract funds. These administrators, known as AFORES, are often subsidiaries of a bank-led financial conglomerate. Four large firms, which held about 60 per cent of the market in December 2000, dominate the sector. Competition has been increasing gradually however, mostly through new entry. Concentration ratios have been falling steadily since 1997 and no firm now holds more than a 20 per cent market share.<sup>23</sup> Although pension contributions are mandatory, in practice the scheme reaches only 18.5 million workers, about half of the labour force (as of March 2001). Generally excluded from the scheme are workers in the large informal sector as well as public sector employees, which have their own (defined benefit, PAYG) pension schemes.

22. This includes funds in the new system, as well as accumulated balances in an old voluntary scheme, known as SAR92.

23. The Mexican Pension System Law forbids that a single Afores hold more than 20 per cent of the market.

31. Participants in the scheme can also make voluntary deposits into their accounts in addition to the required contribution. These voluntary contributions have grown rapidly in the past few years (albeit from a very low base) and by mid-2001 were equivalent to 0.3 per cent of total deposits in the banking system. Contrary to the experience of other countries until now, the growth of Mexican pension funds has not directly led to increased lending to households or enterprises, since these funds invest the bulk of their portfolio in government securities rather than in private sector debt or equity. This is mostly as a result of their regulatory regime, as present requirements encourage the purchase of inflation-indexed instruments (of which the public sector is the only issuer) and high-rated debt (which excludes most of the private sector).<sup>24</sup>

32. Mutual funds, with almost 9 per cent of total assets in the financial system, are the largest among institutional investors. The mutual fund industry in Mexico dates back to the 1950s, but grew rapidly only after financial sector liberalisation in the 1980s and early 1990s. Since then, its role has been declining steadily as a result of the economy-wide financial dis-intermediation following the peso crisis and more recently, the creation of SIEFORES. Compared with pension funds, mutual funds are more liquid and tend to attract shorter-term investment, acting in many ways as money market funds in the United States.<sup>25</sup> Mutual funds are distributed either by banks or by brokerage houses, although the latter are generally part of bank-led financial conglomerates. The main supervisory and regulatory role falls under the CNBV, although the Bank of Mexico retains a role in supervising repurchase operations and the stock exchange (*Bolsa Mexicana de Valores*, BMV) provides an advisory function. As pension funds, and for similar reasons, mutual funds also invest the bulk of their resources on government securities.

33. Another important institutional investor in Mexico is the insurance sector, which held assets equivalent to about 2.6 per cent of GDP in December 2000. As with banking, the insurance sector was hard-hit by the peso crisis, but has since experienced a strong recovery (Figure 13). Since 1998, direct gross premia have been growing at an annual average real rate of about 8 per cent (excluding pension funds). The sector has also benefited from the social security reform of mid-1997, to the extent that part of the mandatory contributions (equivalent to 2.5 per cent of wages) are earmarked to disability and life insurance and managed by insurance firms. By late 2000, about 30.8 per cent of reserves in the sector had originated from social security contributions. More recent reforms, including the 1999 creation of specialised health insurance operators (*Instituciones de Seguros Especializadas en Salud*, ISES), are also expected to have a significant impact on the sector. There are 70 firms operating in the insurance sector, 29 of which are subsidiaries of foreign financial groups. Concentration ratios remain relatively high however, with the four largest insurance companies holding 58 per cent of the market in December 2000 (down from 70 per cent in 1994).<sup>26</sup> In spite of the strong recent performance of the sector, insurance penetration rates, both in the life and non-life segments, remain low relative to per capita income, even

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24. The regulatory regime is under revision by Congress. The administration has proposed reforms in order to allow pension funds to invest in a broader class of private bonds.

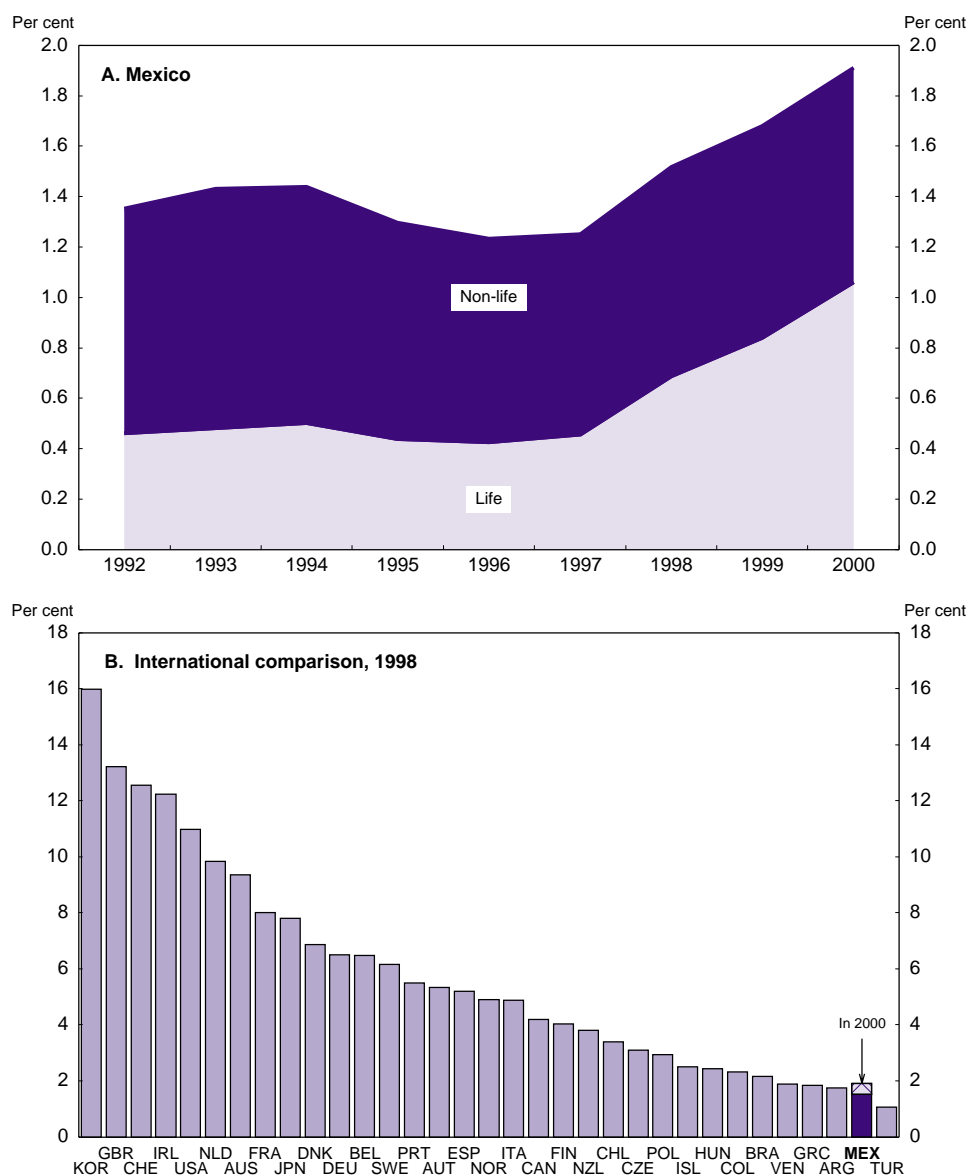
25. There are other important differences between mutual funds and voluntary contributions to SIEFORES. First, the tax treatment of savings is slightly more favourable for the latter, especially in the case of longer-term investment. Second, regulations concerning asset allocation by mutual funds are rather restrictive, but less so than for SIEFORES, with the effect that the former can maintain a larger share of portfolio in equity or short-term instruments. Finally, mutual funds had traditionally required higher minimum account balances, making them inaccessible to small investors. More recently however, independent fund managers entered the mutual fund market by offering lower required minimum balances to target those smaller investors.

26. These were Com-Ame, GNP, A. Hidalgo and Seguros Inbursa.

compared with countries at a similar level of development. This is explained by the low levels (or lack of enforcement) of compulsory insurance, such as automobile and home-owner insurance, and by the relatively unfavourable tax treatment of insurance products compared with the situation in other countries.

Figure 13. **Insurance penetration indicators<sup>1</sup>**

Per cent of GDP



1. Direct gross premium as a percentage of GDP.

Source: Comisión Nacional de Seguros y Fianzas (CNSF); OECD, *Insurance Statistics* 1991-1998.

### Capital markets

34. Mexican capital markets boomed in the late 1980s and early 1990s, boosted by macroeconomic stability, trade and investment liberalisation, strong capital inflows and an ambitious privatisation programme. Mirroring developments in other parts of the financial sector however, the peso crisis led to a plunge in market capitalisation and turnover indicators. More recently, boosted by the return of macroeconomic stability and the growth of pension funds and insurance companies, capital markets have started to recover (Table 4). However, most of the savings captured by institutional investors have been channelled towards government securities, with very little spill-over to the corporate bond sector or the stock market. At the end of 2000, the value of private corporate debt outstanding was equivalent to 2 per cent of GDP. This is significantly smaller than domestic government debt outstanding (10 per cent of GDP), even excluding non-tradable instruments such as those related to the bank rescue package. Within the corporate debt market, commercial paper (with terms of less than one year) accounts for about a third of outstanding liabilities, long-term financing (over three years) is largely unavailable and liquidity in secondary markets is low. The same is true for the stock market, which remains relatively thin. This suggests that unlike the situation in many other OECD countries, capital markets are not yet playing an important role as financial intermediaries to the corporate sector. In fact, larger Mexican companies are more likely to access US than Mexican financial markets. Since 1999 however, new physical and regulatory infrastructures have been introduced, laying the ground for the development of domestic capital markets.<sup>27</sup>

**Table 4. Capital market indicators**

	1995	1996	1997	1998	1999	2000
Number of listed companies	185	193	198	195	190	177
Stock Market Capitalisation (% of GDP)	38.0	33.1	39.7	23.6	31.8	22.2
Turnover (% of GDP)						
Stock market	11.3	10.9	12.1	7.1	7.2	7.2
Fixed income market	2.72	0.84	0.24	0.23	0.08	0.09
Money market	251	395	240	299	456	719

Source: Bolsa Mexicana de Valores (BMV).

### The challenges ahead

35. With the progress made in recent years, the Mexican financial system is now broadly in good shape. Some challenges remain, however. First, the banking system is relatively inefficient, with productivity and efficiency indicators lagging behind those of most other OECD countries, and past-due loans are still relatively high, although fully covered by provision. Second, the role of development banks remains significant, sometimes, creating distortions and interfering with the operation of commercial banks. Third, the regulatory and supervision arrangement is complex and its implementation fragmented, increasing the cost of compliance and often reducing efficiency. Finally, and most importantly, lending to the private sector has continued to decline. As capital market financing of the private sector is also weak, this implies that the overall level of financial intermediation is low, suggesting that a constraint on economic growth might exist.

27. These infrastructures have included the development of rating agencies for local markets, electronic trading systems, delivery vs. payment security settlement mechanisms and the creation of a derivatives exchange.

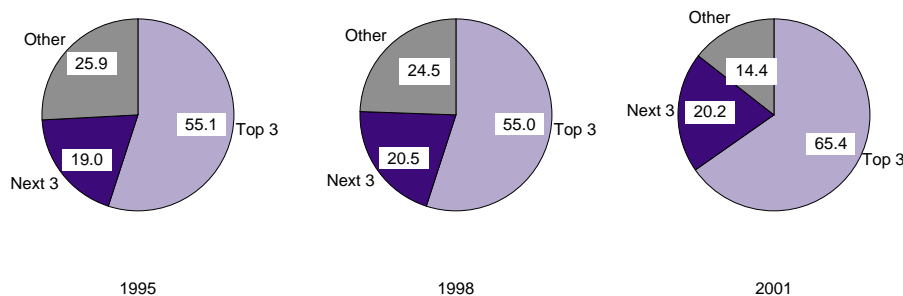


***The efficiency of the banking industry: challenges related to consolidation***

37. The consolidation of the banking industry, which started in the mid-1990s, but has accelerated since full liberalisation of FDI rules in 1998, has had an impact on concentration ratios. The six largest banks' share of total assets rose from 75 per cent in 1998 to 85 per cent in September 2001, one of the highest ratios among OECD countries (Figure 14). In spite of this trend, competition in the banking system does not seem to have been negatively affected.

**Figure 14. Concentration ratios**

Market share of the six largest banks<sup>1</sup>



1. As a percentage of total assets.
2. September 2001.

Source: CNBV .

38. Authorities have been monitoring the consolidation of the banking industry closely. The Federal Competition Commission (FCC) has reviewed several acquisitions and mergers in the financial system, including those involving foreign investors.<sup>28</sup> It has also been careful to define the relevant product market as encompassing the whole range of banking and credit services offered by the financial conglomerate, which is important in a country with a universal banking model such as in Mexico. Indeed, some recent mergers have been conditioned by the FCC to prevent them from having an adverse impact on the AFORES market, as well as on the commercial banking market *per se*. The competition authorities generally found that foreign acquisitions increased competition in the industry, to the extent that capital injections into ailing banks served to increase their capacity to compete effectively in the market. In these cases, the strengthening of the financial system and the stability of the banking sector were compatible with — and actually supported — the development of a more competitive market. In recent years, the FCC has intervened in two cases involving the financial sector, related to horizontal agreements among banks affecting the credit card and the government debt markets.

28. Market structure has been monitored by means of the review of mergers, a large proportion of which have an international dimension. In the last two years, the FCC has reviewed 70 operations affecting several financial markets, including Afores, insurance and leasing. Business conduct has also been monitored through complaints and ex-officio procedures. In the past two years, no anti-competitive conduct has been verified.

39. Consolidation in the financial sector is likely to continue, since some banks remain to be sold or closed down by IPAB and some smaller banks may have difficulties meeting new capitalisation requirements (to come fully into effect as of 2003). The benign effects of consolidation on competition observed so far, are likely to be less intense in the future, as the banking system is now largely re-capitalised and relatively more solid. Instead, it is possible that further mergers, if occurring between two of the remaining six largest banks, may have anti-competitive effects. As a result, continued vigilance on the part of competition authorities is required.

40. As seen above, the consolidation process has already had an impact on the performance of the financial system, but efficiency and productivity levels still lag those of other OECD countries, in large part because of high operating costs and provisions.<sup>29</sup> This relative inefficiency constitutes a cost to the economy as a whole, reducing the return to savers and increasing the costs to those who invest. The reduction of operating costs is expected to be achieved in part through increased competition in the industry. Policies that increase labour market flexibility and improve the operation of real estate markets can also have an impact on banks' expenditures as it may lead to lower staff and property costs. Efficiency would also be enhanced by policy action to deal with the persistent problem of loan defaults. The level of non-performing loans in an economy can be influenced by the adequacy of bankruptcy and loan recovery legislation and the efficiency and transparency of the legal system. A new legal framework for bankruptcy and credit guarantees came into effect in May 2000, shortening and simplifying the process of bank foreclosure and increasing the legal certainty of lending operations. But bankruptcy proceedings were yet to be tested by the banking system in late 2001 and the exercise of credit guarantees still faced high legal costs, slow proceedings and poor enforcement at local level. An efficient judicial system is thus crucial for the effective implementation of the new laws, suggesting the need to modernise processes and increase resources available to judiciary authorities. In that regard, the option of creating separate commercial courts, to hear and settle disputes concerning the financial sector, should be considered.

41. Default rates could also be reduced (and overall lending increased) by better credit information sharing systems.<sup>30</sup> But the density of the Mexican credit history system, at 5 million consultations in 2000, remains significantly below that of other OECD countries. Although recent regulatory changes have gone in the right direction, some problems remain.<sup>31</sup> The monopoly position of the dominant credit reporting firm, and the fact that it is owned by banks, raises some moral hazard issues, including some potential conflicts of interest. This leads to reluctance among non-bank intermediaries and utility companies to share credit information. The lack of integration between credit files generated by banks and by other sources is a major source of inefficiency in the system.

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29. Part of these high costs are related to one-off expenditures related to mergers and acquisitions.

30. There is strong evidence that information sharing between lenders attenuates adverse selection and moral hazard. See Jappelli, M. and Pagano, M. (1999); and Negrin, J (2000).

31. Significant legal changes took place in December 2001, with the approval of a new law that improved the access of individuals to their credit history and provided for the expeditious correction of mistakes. The new law also established regulations that promote competition in credit information through mandatory sharing of certain types of information between credit bureaus.

*Development banks and government trust funds: the need to rationalise*

42. Recent government proposals for the development bank sector, sent to Congress in April 2001, are two-pronged: to re-think the role of each bank and to upgrade two existing institutions, transforming them into banks. The first part of the proposal, still under examination by Congress, is to be welcomed and should be considered in the wider context of the role of the public sector in financial intermediation. As such, the exercise should not be limited to development banks, but would also need to involve a re-thinking of the activities and management of the various trust funds. Ideally, this would lead to a process of rationalisation, in which the existence of each state-owned financial institution will need to be questioned. A standard claim for the existence of development banks or trust funds is that they provide public goods or that they correct market failures. For instance, it is often pointed out that these institutions operate in markets in which private banks do not find it profitable to lend. But the very existence of publicly-supported financial institutions may have prevented the development of private lending, although this hypothesis is difficult to verify. In the case of Mexico, market failures seem to exist, in particular in the rural sector, but this does not necessarily justify the existence of numerous publicly-owned financial institutions. In that regard, consideration should be given to transforming some development banks into non-financial development agencies, which would for instance, preclude borrowing from financial markets. In that context, the second part of the government's proposal for upgrading two existing institutions, recently approved by Congress, needs to be implemented carefully. Authorities should ensure that development banks engage exclusively in second-tier lending, to avoid overlapping and the crowding out of the private financial sector. There have already been significant efforts made in that regard.<sup>32</sup>

*Reducing the weight and enhancing the efficiency of the regulatory framework*

43. Significant steps have been taken in recent years to upgrade the regulatory framework for the operation of the financial system. Some issues remain, however, related to the implementation and enforcement of these new regulations, which will require some capacity building, as well as financial and human resources. There also remains a fundamental challenge related to the cost and complexity of the regulatory and supervisory framework. The problem is more strongly felt in two areas: the inefficiencies related to the fragmentation of supervision, exemplified by the large number of agencies with authority over the financial system, and the cost of the deposit insurance scheme:

- Mexico's fragmented regulatory model in the financial sector (Box 5) is not a problem *per se*, and it is followed successfully by several other OECD countries. The problem resides instead in the inadequate co-ordination between different agencies, the overlapping of their responsibilities and their sometimes insufficient level of autonomy.
- The deposit insurance fund being phased in is financed by insurance quotas paid by commercial banks. The funded system replaces blank coverage of deposits and as such, it is expected to induce more prudent behaviour by depositors and lead to better financial management practices by banks.<sup>33</sup> But the insurance quotas are quite high by international

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32. In the past few years, development banks have increasingly relied on second-tier lending. The budgets for 2001 and for 2002 included provisions that cap first-tier lending by development banks.

33. The current insurance quota regime charges a flat fee of 0.4 per cent of banking institutions' liabilities. Under extraordinary circumstances, or through risk differentiation, this fee can be increased up to a maximum of 0.8 per cent. In any case, the base for charging this fee is total bank liability. IPAB has reserved the right to differentiate quotas by risk in the future, but this is not expected until the system reaches greater maturity

standards, denting bank profitability and increasing the cost to borrowers. The high cost of the scheme is related to the need to finance IPAB operations. Indeed, three-quarters of funds collected from these levies will be used to help pay for the fiscal cost of the post-1995 rescue package, with the remaining amount being accumulated in a contingency fund for future rescue operations.

#### Box 5. Financial sector regulation and supervision

Financial sector regulation and supervision is rather fragmented in Mexico. The Bank of Mexico regulates the financial system from a more “systemic” viewpoint of the functioning of the different markets, such as the money and the foreign exchange market as well as the payment system. It also regulates and supervises some financial operations. The role of regulating and supervising individual financial institutions falls under the Ministry of Finance (*Secretaría de Hacienda y Crédito Público, SHCP*), either directly or through the functioning of the different agencies linked to it. SHCP is directly in charge of licensing, merger approval and general regulation affecting the banking system as a whole, such as the establishment of minimum capital requirements and risk rating. Other, more specific, roles are assigned to SHCP agencies with authority over the financial system.

- The Banking and Securities Commission (*Comisión Nacional Bancaria y de Valores, CNBV*) is the agency in charge of the regulation and supervision of financial sector institutions in the banking (including development banks) and securities sectors, as well as those engaged in factoring, financial leasing and custody operations. It also has responsibility over money exchange houses, credit unions and savings and loan associations.
- The Insurance Commission (*Comisión Nacional de Seguros y Fianzas, CNSF*) regulates and supervises the insurance sector, as well as institutions offering surety bonding (*fianzas*).
- The Retirement Fund Commission (*Comisión Nacional del Sistema de Ahorro para el Retiro, CONSAR*) is in charge of overseeing pension funds (*SIEFORES*) and regulating and supervising pension fund administrators (*AFORES*).

Other agencies, not linked to the SHCP include:

- The Institute for the Protection of Bank Savings (*Instituto para la Protección del Ahorro Bancario, IPAB*) has the role of managing the deposit insurance scheme and is also in charge of the resolution of bank failures.
- The Protection Agency for Users of Financial Services (*Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros, CONDUSEF*) has an advisory role to users of financial services and provides legal help in case of conflict with financial institutions.

44. The simplification of the regulatory framework could lower the cost of compliance and lead to lower interest rate spreads. Deposit insurance premia could be reduced and applied only to insured assets, with the impact on IPAB’s revenues offset by an increase in direct budget transfers. Concomitantly, a differentiation of premia by the level of risk, already foreseen in law but not yet applied, should be introduced. Moreover, the fragmented responsibility model should be revised and the co-ordination between the different agencies better institutionalised, perhaps through the creation of an “umbrella” institution. For instance, the banking and securities commission could be better integrated with other specialised agencies in view of the need to supervise integrated financial groups. This would also facilitate the elimination of present inconsistencies in the regulatory treatment of different types of financial institutions. The bank failure resolution system should also be re-visited, especially in the context of the gradual reduction in the coverage of the deposit insurance scheme.<sup>34</sup> Overall, the autonomy of the various

34. In mid-2001, CNBV acquired additional powers to introduce prompt corrective actions in case of a threat of bank failure. Although this measure was appropriate, recent interventions in problem banks (including Quadrum Bank for instance) point to the need of redesigning the bank failure resolution system, giving authorities the opportunity to act more expeditiously.

agencies should be reinforced, perhaps through the severing of institutional links with the Ministry of Finance. This would be of particularly importance for instance, to maintain the effective regulation of development banks and trust funds controlled by the Ministry of Finance. The appointment of agencies' boards for a fixed term, as in the case of the Bank of Mexico, should be considered. Measures towards increased autonomy would also need to involve the access to a secured source of financing. Authorities are examining these issues and should come up with concrete proposals in the next few months.

### *Creating conditions for an increase in credit to the private sector*

45. Although the challenges described above will require attention from the authorities, the most important concern remains by far the low level of credit to the private sector, including both bank lending and other sources of finance. Some components of domestic credit started to pick up in late 2000 (especially when adjusted for the decline in non-performing loans), but there are still no clear signs of a sustained revival of credit to the private sector (Figure 15).<sup>35</sup> The problem is felt more severely by small and medium-sized enterprises (SMEs), since larger companies can often access foreign borrowing. Such asymmetries are probably inevitable, given the intrinsic higher risk of lending to smaller enterprises. However, governments should continue to implement measures to ensure a level playing field by eliminating barriers to lending with an asymmetrical effect. More active policies that do not create distortions could also be envisaged to help smaller firms (Box 6).

46. A broader question refers to how financial intermediation is likely to develop in Mexico. Access to foreign sources of finance is to a large degree part of a global trend towards increased internationalisation of financial markets and should not be countered by policy action. To the contrary, the tax and regulatory treatment of domestic and foreign investment should be harmonised, so as to level the playing field and allow domestic capital markets to become more integrated with their foreign counterparts. It is likely that globalisation will lead to a certain division of labour between various international markets. Domestically-based financial institutions, to the extent that they have superior knowledge of local borrowers and local conditions, are likely to keep a comparative advantage in lending to small-and medium-size enterprises.

47. The low level of bank lending is in part related to the small amount of deposits in the banking system. These have been declining steadily from about 25 per cent of GDP in 1998 to less than 20 per cent in late 2000. Part of the reason is the increasing competition from investment funds, which generally offer higher returns. Purchases of government securities by the general public have also been increasing.<sup>36</sup> Increased competition among banks, by boosting returns on bank deposits, is expected to partly remedy this situation. Overall however, the decline in deposits, when it derives from the enhanced competition between banks on one hand and non-bank financial intermediaries on the other, is part of a natural "securitisation" process, also experienced by other OECD countries, and should not be countered by policy action.

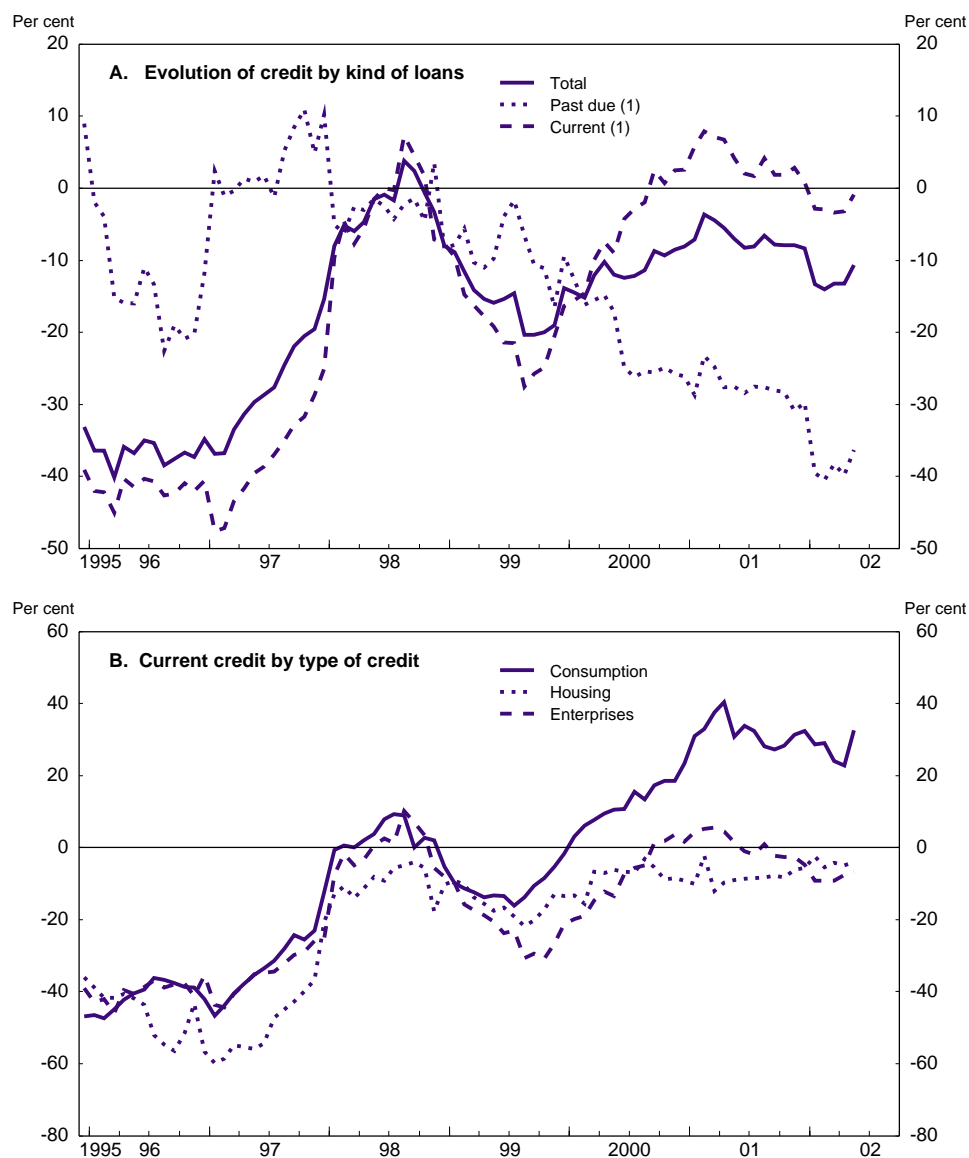
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35. A closer observation of banks' loan portfolio indicates that performing loans have started to increase slightly in real terms in the last quarter of 2000 and the first quarter of 2001, although at rates lower than output growth (implying that they are still falling as a percentage of GDP). Indeed, non-performing loans have declined sharply, explaining in large part the contraction in the loan portfolio overall. The growth of consumer credit, starting from a very low basis, has been particularly buoyant. Commercial credit, which still represents the bulk of bank lending, has started to fall less rapidly. By contrast, housing loans continued to contract sharply.

36. These purchases are generally intermediated by commercial banks through repurchase operations.

**Figure 15. Recent trends in domestic credit to the private sector<sup>1</sup>**

Year-on-year percentage change in real terms



1. Direct credit by commercial banks.

Source: Bank of Mexico.

**Box 6. Increasing credit to SMEs.**

The financing of entrepreneurial activity in Mexico has been characterised in recent years by its duality. Larger companies in the tradeable sector have access to foreign sources of borrowing or to the shrinking pool of domestic bank loans, whereas small and medium-sized enterprises (SMEs) have had to rely on development banks or less traditional sources — especially suppliers' credit.

Some of the factors that have prevented a revival of bank lending to the private sector, as described above, affect SMEs more strongly than larger firms. Factors with an asymmetrical effect have included weak bankruptcy and credit guarantee laws, costly and cumbersome judicial procedures and the lack of adequate credit risk assessment. The recent correction of some of these inadequacies will go some way to level the playing field between enterprises of different sizes, although further measures may be required.

Other policies, directed specifically to the needs of SMEs, could also be envisaged. In many OECD countries, funding for smaller firms is also relatively scarcer, as the inherent high risk of SMEs make them less attractive to the banking sector. As a result, many governments have been focusing on improving access to venture capital and other types of private financing. This has been done through many channels, including the development of secondary stock markets that allow easy and less costly entry and exit to venture investors, and the easing of conditions for riskier investments by pension funds and other institutional investors. "Business angel" networks, which bring together small companies and wealthy investors, have also been tried successfully in the United States, Austria, Sweden and Germany. Finally, some OECD governments still play a more direct role in helping SMEs, by guaranteeing or providing venture capital. However, this support is likely to be costly and may create distortions, so the scope of these programmes is likely to diminish relative to measures described above, which focus on the better functioning of private markets.

48. The size of the deposit base is also affected by the insufficient level of domestic saving. The recent reform of the social security system could continue to play a positive role in this regard, especially if it is extended to public sector employees, as proposed by the government.<sup>37</sup> The action of PAHNAL and the savings and loan sub-sector, by capturing small deposits (a segment not generally targeted by commercial banks), could also lead to an increase in aggregate saving. In Mexico, only a small percentage of the population has access to bank accounts, which reduces the available pool of potential savers, while raising issues of equity. Increased access to financial services from viable and safe intermediaries can helpfully increase overall savings. In a country with a relatively young population and a skewed distribution of income like Mexico, however, this is unlikely to have a major macroeconomic impact in the short or medium run.<sup>38</sup>

37. As seen above, the creation of pension funds is affecting the distribution of savings among financial intermediaries. As the government incurs the cost of the transition from the PAYG system to the capitalisation system, reforms are in practice inducing a shift from public to private saving. Beyond that, and because of the voluntary scheme, it can also have an effect on the pool of savings in aggregate.

38. Social banking, with 2.3 million account holders, has an undeniable role in a country where two-thirds of the workforce are not covered by commercial banking services. The main challenge related to non-bank intermediaries in the relatively small social banking sector — which includes savings and loans associations, credit unions, co-operatives, solidarity and popular savings banks — is of a prudential nature.

49. More importantly, private lending has been to a large extent crowded out by the public sector. Mexico's public sector net debt, at about 40 per cent of GDP (including financial rescue-related debt) is not unduly large when compared with most other OECD countries. However, the domestic component of this debt, at around 25 per cent of GDP, is large relative to the stock of private domestic financial assets and thus for the absorption capacity of the domestic financial market. Indeed, domestic public debt accounted for about 60 per cent of M4 at the end of 2000, which is very high by international standards.<sup>39</sup> Accordingly, public sector debt accounts for 60 per cent of commercial banks' total assets, either in the form of notes related to the financial rescue package, direct lending or through the purchase of government securities. Once unproductive and fixed assets are deducted, about 30 per cent of banks' total portfolio is composed of private sector loans, against more than 50 per cent in most other OECD countries.<sup>40</sup> This situation is replicated in other markets. Government paper (including IPAB and Central Bank obligations) accounted for 93 per cent of the balance of money market instruments outstanding at the end of 2001 (Figure 16). Hence, private sector debt, mostly in the form of commercial paper, is insignificant, at below 3 per cent of GDP. Finally, in the insurance and pension fund (AFORES) markets, government debt also accounts for an overwhelming share of total assets, especially when compared with other countries that have introduced fully-funded first-pillar systems, such as Argentina, Chile and Poland (Table 5).

50. This crowding out needs to be reduced for private sector credit to pick up. Fiscal consolidation has already led to a significant drop in debt levels since 1994 (abstracting from the cost of the banking sector bail-out). Further efforts at reducing net public sector borrowing requirements could lead to a faster decline in debt. It would also take pressure off monetary authorities in achieving further disinflation, reducing the need for high real interest rates and lowering lending rates. Other reforms that could be beneficial are further measures to liberalise legislation on investment by AFORES, in line with government proposals contained in the April 2001 package of financial sector reforms (but still awaiting Congressional approval). Indeed, pension funds at present under-invest in private securities, even when compared to the maximum amounts allowed under prudential rules. But the fact that these rules are relatively stringent and biased towards government debt is one of the factors explaining the lack of offers from private sector issuers in the first place. Measures recently approved, including the modernisation of legislation concerning capital markets, are expected to have a positive impact on credit to the private sector. By tackling issues related to corporate governance and by improving the regulatory framework, this is likely to have a beneficial impact on the efficiency and transparency of the system, leading to a gradual deepening of markets.

51. The reduction of crowding out would also require changes to public debt management. Domestic debt issued by the Treasury rose from less than 6 per cent of GDP in 1996 to 10.5 per cent of GDP in 2000. At the same time both IPAB and the Central Bank have started to issue new instruments in the domestic debt market. By the end of 2000, these were already equivalent to more than 3 per cent of GDP. Debt management is fragmented, with the Treasury and IPAB acting separately. The recent practice has been to allow each institution to operate in a different segment of the market, so as to avoid direct competition between instruments. But these markets are fungible and a certain degree of substitution is unavoidable. In that regard, the centralisation of debt management could produce a more efficient strategy, an overall narrowing of spreads and a reduction in the crowding out of private lending.

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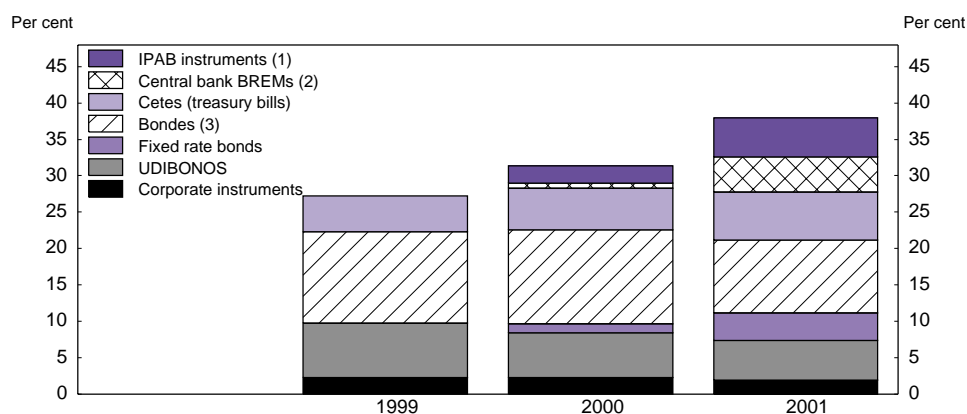
39. The large share of public sector debt reflects in part the exchange of private paper for public securities in banks' portfolio as a result of the bank rescue operation.

40. Non-earning assets, including past-due loans, accounted for 15 per cent of commercial banks' portfolio in late 2000, high by international standards. Cash and other liquid assets accounted for another 13 per cent, mostly as a result of prudential requirements.



Figure 16. Money market instruments

Per cent of GDP, end-year



1. IPAB instruments: Bonds for Savings Protection (BPAs).
2. Central bank instruments: Bonds for Monetary Regulation (BREMs).
3. Treasury bonds, regrouping 28-day maturity, 91-day maturity and 182-day maturity Bondes, and quarterly payment Bondes.

Source: Bolsa Mexicana de Valores (BMV).

Table 5. Pension fund asset allocation<sup>1</sup>

Per cent

	Mexico	Poland	Argentina	Chile
Public sector debt	92.6	58.4	56.0	35.7
Non-financial private sector debt	5.4	0.3	2.8	4.0
Financial sector debt	2.0	31.4	15.6	35.1
Stocks	0.0	5.7	12.3	11.6
Mutual and investment funds	0.0	0.0	8.2	2.4
Foreign assets	0.0	0.0	4.5	10.9
Other	0.0	4.2	0.6	0.2
<i>Memorandum item:</i>				
Total assets under management (% of GDP)	3.0	2.0	7.0	60.0

1. As of December 2000. Figures expressed as percentage of total.

Source: Estudio Comparativo sobre Prácticas Internacionales en Gestión de Activos Financieros Previsionales, Conference proceedings, by Julio Bustamante Jeraldo (July 2000).

## Concluding remarks

52. The accomplishments of the past 3 to 4 years have been impressive and the 1994-95 banking crisis is increasingly a thing of the past. Two main challenges facing the financial sector remain however: to ensure that the banking system becomes more efficient and to create the conditions for lending to pick up on a sustainable basis. This chapter argued that, in spite of the significant progress made, policy action is warranted on both counts. This would allow authorities to build on earlier successes and correct some remaining distortions and inefficiencies. Box 7 lists the main recommendations for enhancing the efficiency of financial intermediation and helping lending to the private sector to increase on a sustainable basis.<sup>41</sup> These challenges are to a large extent inter-connected. For instance, well-designed responses to banking consolidation will tend to increase the efficiency of financial intermediation. These would include the efficient conduct of competition policy, actions to reduce non-performing loans, rationalisation of the state-owned financial sector and efforts at regulatory simplification. These moves would in turn be likely to lead to more lending by commercial banks. Conversely, actions that might increase lending to households and enterprises, such as removing obstacles to domestic saving and reducing crowding out by the public sector would encourage the development of financial intermediation within the private sector, increasing economies of scale and scope and leading to improved efficiency of financial institutions.

53. The reform measures set out above would be important in facilitating lending to the private sector and increasing the efficiency of financial intermediation. In that regard, they would complement the already impressive body of reforms implemented in the past 3 years. The effects of these reforms will only be fully felt in the medium-term however, as financial institutions adjust and macroeconomic stability becomes further ingrained. Indeed, the decline in interest rates of recent months may be more important in addressing the challenges described above than any reform measure taken in isolation. What should not be forgotten, however, is that the decline in interest rates is in itself a reflection of the prudence of macroeconomic policies and advances in structural reforms, including those concerning the financial sector. This indicates the need for further efforts on both the macroeconomic and structural reform fronts, as argued in this *Economic Survey*. It also means resisting the urge for more interventionist and hasty measures to increase financial intermediation, and in particular avoiding the use of the development banks as a substitute for the lack of commercial bank lending to the private sector. Although well-designed government action can help correct market failures and help reach equity objectives, these goals are seldom best served by development bank lending. A sharp increase in financial intermediation by the public sector would exacerbate distortions in the economy and lead to longer-term pressures on public finances. It could also potentially jeopardise the hard-won credibility earned over the past few years.

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41. These recommendations are broadly in line with those made by the IMF, in the context of the Financial Sector Assessment Programme (FSAP) released in October 2001. The FSAP concluded that “the banking system does not pose a risk to the financial stability of the Mexican economy, but still has to resume broad-based and sound lending to the private sector. Other financial sectors are not expected to be a source of systemic risk in the near future”.

### Box 7. Main recommendations concerning the financial sector

#### (a) The consolidation of the banking industry

- *Implement measures to help banks reduce staff and property costs.* Reforms that would increase labour market flexibility and improve the operation of real estate markets would be helpful in that regard.
- *Deal with the problem of loan defaults.* Consider the option of creating separate commercial courts to settle disputes regarding the financial sector. Increase resources available to judicial authorities.
- *Improve credit information exchange systems.* Introduce new legislation to prevent moral hazard issues related to bank ownership of the dominant credit reporting firm.

#### (b) Development banks and government trust funds

- *Rationalise the operation of state-owned financial intermediaries.* Rethink the role of development banks and trust funds, some of which should be merged to avoid overlapping. Rationalisation should aim at ensuring efficiency gains and increasing operational transparency of the sub-sector. Consideration should be given to creating development agencies to replace development banks.
- *Engage exclusively on second-tier operations.* Lending should take place in partnership with the private sector, which should remain solely responsible for first-tier lending. Contracts between the public and private financial sectors should be transparent and ensure a clear assignment of risk in case of default.
- *Avoid crowding out private sector financial institutions.* Development banks should not be used as substitutes for private sector lending. A sharp increase in financial intermediation by the public sector could exacerbate distortions in the economy and lead to long-term pressures on public finances.

#### (c) The weight and efficiency of the regulatory framework

- *Improve co-ordination and revise the role of agencies responsible for the financial sector.* Consider creating an umbrella organisation to institutionalise co-ordination between different agencies. The bank failure resolution system should be redesigned to allow financial authorities to act more expeditiously with problem banks.
- *Increase autonomy of regulatory agencies.* The autonomy of the various agencies should be reinforced, perhaps through the severing of institutional links with the Ministry of Finance. Governing boards should be appointed for a fixed term. Agencies should have access to a secured source of financing.
- *Revise the deposit insurance scheme.* Deposit insurance premia should be reduced and applied only to insured assets. The differentiation of premia by risk should be introduced.

#### (d) Increasing lending to the private sector

- *Eliminate barriers to domestic savings.* Actions to provide small depositors with secured access to savings instruments and other financial services, as well as measures to extend the reach of social security reform to government employees would be beneficial in that regard.
- *Reduce crowding out by the public sector.* Maintain fiscal prudence in order to reduce debt levels further. Rethink the public debt strategy for the Treasury and IPAB, centralising management to reduce spreads.
- *Revise some regulations affecting the financial sector.* Liberalise investment rules governing pension funds, to allow them to diversify away from government instruments.

## BIBLIOGRAPHY

- GOLDBERG, L., B. DAGES and J. CRYSTAL (2001), “Does foreign ownership contribute to sounder banks in Emerging Markets? The Latin American Experience”. The Federal Reserve Bank of New York, *Staff Report No. 137*, May 2001.
- GRUBEN, W. and R. MCCOMB (1997), “Privatisation, Competition and Supercompetition in the Mexican Commercial Banking System”, Centre for Latin American Economics, Federal Reserve Bank of Dallas, *Working Paper No. 0199*.
- GRUBEN, W., J. KOO and R. MOORE (1999), “When does liberalisation make banks risky? An empirical examination of Argentina, Canada and Mexico.” Federal Reserve Bank of Dallas, *Economic Research Working Paper No. 9905*.
- JAPPELLI, M. and M. PAGANO (1999), “Information sharing, lending and defaults: cross-country evidence”, Centro Studi in Economia e Finanza (CSEF), University of Salerno, *Working Paper No. 22*, May.
- LEAHY, M., S. SCHICH, G. WEHINGER, F. PELGRIN and T. THORGEIRSSON (2001), “Contributions of Financial Systems to Growth in OECD Countries”. OECD *Economics Department Working Paper*, No. 280, January.
- MARTINEZ, L. (2000), “La importancia de la Protección de los Derechos de Propiedad en el Sistema Financiero y en el Crecimiento Económico”. Bank of Mexico *Working Paper No. 2000-07*, December 2000.
- NEGRIN, J (2000), “Mecanismos para Compartir Información Crediticia: Evidencia Internacional y la Experiencia Mexicana”, Bank of Mexico *Working Paper No. 2000-05*, December.
- OECD (2001), “Bank Profitability “, *Financial Statements of Banks*.
- OECD (2000 a), *Country Survey of Mexico*, Paris.
- OECD (2000 b), “Institutional Investors”, *Statistical Yearbook*.
- OECD (1998), *Country Survey of Mexico*, Paris.
- WELCH, J., and W. GRUBEN(1993), “A brief modern history of the Mexican Federal System”, Financial Industry Studies, Federal Reserve Bank of Dallas, October 1993, *No. 110*.

## ANNEX 1. THE FINANCIAL SECTOR REFORMS OF 1998 AND 1999

The package of reforms concerning the financial sector, approved in December 1998, included the creation of the Institute for Bank Deposit Insurance (*Instituto para la Protección del Ahorro Bancario*, IPAB), the easing of foreign ownership restrictions, the gradual reduction in the coverage of the deposit guarantee scheme, and the clarification of the legal status of the liabilities arising from the financial rescue package.<sup>1</sup>

- The new Institute for Bank Deposit Insurance became operational in June 1999. Its main roles are to administer the various financial support programmes and manage the deposit guarantee scheme, while implementing a programme to maximise the recovery value of assets, by disposing of these and collecting overdue loans. Until the creation of IPAB, asset sales had been slow -since transactions focused on selling banks as a whole. On the other hand, in 1997 and 1998, the authorities had worked to remove the legal and practical obstacles for the direct sale of assets, including tax impediments. IPAB has succeeded in selling the collection rights to several loan packages through public bidding processes and reprivatising several banks that had been under intervention. It has also started to refinance rescue-related liabilities with the aim of improving their maturity profile and lowering debt servicing costs.
- Restrictions which barred majority foreign stakes on large financial institutions — defined as those with more than 6 per cent of total capital in the banking system<sup>2</sup> were lifted and replaced by non-discriminatory restrictions on individual holdings. This measure has opened the way for further consolidation of the banking sector. This is expected to reduce the overall fragility of the system and lower the risk of a systemic crisis. Foreign-controlled (majority-owned) banks accounted for 22.1 per cent of assets in the Mexican banking in December 1999, up from 4 per cent in 1994. With the easing of restrictions, this share is expected to increase further in the next few years.
- The elimination of blanket coverage on bank deposits and the capping of guarantees at about US\$100 000 are meant to reduce risks of moral hazard.<sup>3</sup> The deposit insurance fund is to be financed by insurance quotas paid by commercial banks and is expected to induce more prudent behaviour by depositors and lead to better financial management practices by banks — since quotas will vary according to the level of individual bank consolidation. Three-quarters of funds collected from these levies, which are relatively high by international standards, will be used to pay the current fiscal cost of the post-1995 rescue package. The remaining quarter will be accumulated on a contingency fund for future rescue operations.<sup>4</sup>
- In July 1999, IPAB securities with a sovereign guarantee started to be issued in replacement of old liabilities. As of 2000, the government is legally committed to complement IPAB's own resources through budgetary transfers so that the real component of its debt is fully serviced. Until then, liabilities associated with the rescue programmes did not have a regular service schedule and interest payments were recapitalised. As a result, these liabilities continued to grow, reaching 27 per cent of commercial banks' total assets in November 1999, inhibiting fresh lending to the private sector. The issuance and regular service of new guaranteed securities is expected to lead to a pick up in lending to the private sector and lower IPAB's debt servicing costs (as yields are reduced and changes are made to the term structure of the debt). It should also allow for more efficient liquidity management by commercial banks (as securities are traded in the secondary market), helping to strengthen their balance sheets by enhancing profitability.

## NOTES

1. Other parts of the package, sent to Congress in March 1998, have not been approved by the legislature, namely, the proposals for: *i*) changing the Bank of Mexico Basic law to give it full autonomy for exchange-rate policy; and *ii*) transferring most functions pertaining to regulation, supervision and control of the financial system to the supervisory agency for banks and securities (*Comisión Nacional Bancaria y de Valores*, CNBV), while giving it operational independence from the Finance Ministry.
2. In practice, these restrictions applied to the three largest banks in terms of capital: Banamex, Bancomer and Serfin. Serfin was taken-over by IPAB in July 1999 and sold in May 2000.
3. This measure will be implemented gradually. Until January 2002, several instruments, including liabilities arising from derivative operations, will no longer be guaranteed. From 2003 to 2005, the coverage on remaining operations, mostly savings, checking, time deposits and loans, will be gradually reduced until it is capped at 400 000 UDIs (an inflation-indexed instrument), equivalent to US\$100 000.
4. Insurance quotas may vary between 0.4 and 0.8 per cent of banking institutions' liabilities. They have been initially set at 0.4 per cent, independently of the characteristics of the liability. IPAB has reserved the right to differentiate quotas by risk in the future, but this is not expected to occur until the system reaches greater stability.

## ANNEX 2. THE FINANCIAL SECTOR REFORMS OF 2001

A series of laws related to the financial sector were amended during 2001. These include the Banking Law (*Ley de Instituciones de Crédito*), the Securities Market Law (*Ley de Mercado de Valores*), the Mutual Fund Act (*Ley de Sociedades de Inversión*), and the Insurance Company Law (*Ley General de Instituciones y Sociedades Mutualistas de Seguros*). Savings and loan institutions are now regulated through the new Popular Savings and Loan Law (*Ley de Ahorro y Crédito Popular*), while a new Law for Credit Information (*Ley de Sociedades de Información Crediticia*) was also enacted. A common theme throughout these reforms is the strengthening of corporate governance practices of the different financial intermediaries. These include limiting the size of boards and creating audit committees to prevent conflict of interest and review all related party transactions. Reforms also include measures aimed at deterring misconduct of intermediaries and promoting investor confidence.

- **Banking Law:** The CNVB was granted powers to determine early corrective measures (*e.g.* limiting dividend payout) for banks with a deteriorating capital base, as well as to disclose all relevant bank information so depositors are able to ascertain the financial strength of each intermediary. Also, tighter rules regarding related lending were introduced which both limit their amount and make a more precise and wide definition of related parties. Finally, factoring and “back to back” operations are introduced as part of banks' menu of activities.
- **Securities Market Law:** The reform aims to promote greater transparency in the capital markets in order to generate confidence and trust among investors about its attractiveness. On the side of publicly quoted companies, corporate governance practices similar to those described above for financial intermediaries were established, while specific minority shareholder's rights were also implemented. Regarding market transactions, a new framework to regulate and sanction incorrect market behaviour was implemented, making it easier for the CNVB to persecute insider trading, front running, market manipulation, etc. The CNVB is for the first time allowed to share information with foreign financial authorities, facilitating the build up of cases of market abuse, while it may now subpoena persons outside the securities industry and obtain key information such as telephone records during investigations.
- **Mutual Fund Act:** This new law aims to completely overhaul the structure and regulation of the mutual fund industry. First, it prohibits banks and brokerage houses to directly act as mutual fund managers, thus effectively strengthening the Chinese walls between asset management and other financial intermediaries' activities such as investment banking and the management of proprietary portfolios. As a result, the new law clearly distinguishes for the first time the role of mutual funds from that of mutual fund managers. The law allows greater flexibility of the products offered by mutual funds, permitting the creation of funds of funds, umbrella funds, hedge funds and funds that invest in foreign assets, derivatives, real estate and in general any kind of assets, as long as disclosure is accurate and complete. Single mutual funds may now offer different fee and commission structures to different classes of investors. The new regulatory framework also creates the means to wider distribution channels by permitting third parties, including financial intermediaries and specialised companies, to distribute mutual funds.

- **Insurance Law:** To foster the growth of the insurance sector, insurance companies are now allowed to issue medium and long term debt as well as to purchase financial reinsurance, both within clear prudential limits. To protect consumers interests, and in compliance with OECD standards, the law now mandates the specialisation of insurance companies in either life or non-life lines of business. It also establishes a speedier process for revoking the authorisation and liquidating undercapitalised companies and grants executive power to the CNSF to suspend, partially or totally, business operations.
- **Popular Savings and Loan Law:** Provides a regulatory framework for savings and loan kind of intermediaries that did not exist before, thus preventing the scope for abuse within deposit taking institutions. These intermediaries will be subject to prudential regulation that place limits on leverage, concentration of credit, related party transactions etc. A private insurance deposit scheme is allowed for this type of intermediaries.
- **Law for Credit Information Institutions:** This law aims at upgrading the Mexican credit information system to international standards. Among other factors, it establishes for the first time consumers rights to access its report directly from a credit bureau, and creates an expedite process for correction of errors and dispute resolution in credit bureau' data bases. It also establishes mandatory sharing of information between credit bureaux.



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