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Financing of the Private Sector in Mexico, 2000-2005: Evolution, Composition and Determinants

by

Constantinos Stephanou and Emanuel Salinas Munoz*

Abstract: The objective of this paper is to describe the evolution, composition and determinants of financing to the non-financial private sector in Mexico between 2000 and 2005. Supported by the macroeconomic environment and financial system reforms, total financing to the private sector (particularly consumer credit) increased relative to GDP, while accessibility and affordability generally improved. Equity issuance did not play an important role during the period under consideration. Although the supply of financing shifted towards domestic non-bank providers, commercial banks remain the primary source of funding. Significant progress was made in cleaning up bank loan portfolios and in strengthening financial system soundness and infrastructure. The prospects for continued private sector financing growth remain very positive, but financing is not spread out evenly across all market segments. The authors conclude with some policy implications to further facilitate deeper and broader financing of the private sector.

Keywords: Mexico, debt financing, equity financing, private sector financing, consumer finance, housing finance, bank lending.

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Table of Contents

I. INTRODUCTION 4

II. OVERVIEW OF FINANCING TO THE PRIVATE SECTOR 6
Equity Financing 6
Debt Financing 7
Financing Sources outside the Financial System 11
Bank Lending 12
Macroeconomic Performance and Financial System Reforms 14

III. DEBT FINANCING BY MARKET SEGMENT 18
Debt Financing to Firms 18
Mortgage Financing 24
Consumer Financing 25

IV. ACCESSIBILITY AND AFFORDABILITY OF FINANCING 28
Companies 28
Households 33
States 35

V. CONCLUSIONS AND POLICY IMPLICATIONS 38
Conclusions 38
Policy Implications 40

REFERENCES 43

List of Tables

Table 1: Selected Cross-Country Doing Business Comparisons (2005) 22
Table 2: Selected Micro and SME Loans Supported by *Apoyo Pyme* Program (February 2006) 33
Table 3: Cross-Country Branch and ATM Penetration Comparisons (2002-2003) 34

List of Figures

Figure 1: Number of Listed Companies and Capitalization of Stock Market (2000-2005) 6
Figure 2: Comparative Size of Stock Market Capitalization (2004) 6
Figure 3: Equity Issuance by Mexican Private Sector Companies (2000-2005) 7
Figure 4: Evolution of Debt Financing to Non-Financial Private Sector (2000Q1-2005Q3) 8
Figure 5: Evolution of M4 Components (2000Q1-2005Q3) 9
Figure 6: Cumulative Real Growth in Credit to the Private Sector by Provider (2000Q1-2005Q3) 10

Figure 7: Financing to the Private Sector by Source (% GDP) 11
Figure 8: Composition of Financing by Public Sector (% GDP)..... 11
Figure 9: Mexico – Evolution of Domestic Credit to the Private Sector (1960-2004)..... 12
Figure 10: Cross-Country Comparisons of Domestic Credit to the Private Sector (2004) 12
Figure 11: Evolution of Commercial Banks' Performing Loan Portfolio (MXP Billion) /1 13
Figure 12: Evolution of Commercial Banks' Performing Loan Portfolio (% of GDP).... 13
Figure 13: Evolution of Private Sector Debt Financing by Provider (2000-2005)..... 13
Figure 14: Composition of Commercial Banks' Performing Loan Portfolio (2000-2005) 14
Figure 15: Evolution of Past Due Loans in Commercial Bank Portfolios (2000-2005)... 14
Figure 16: Evolution of Loans Linked to Restructuring Programs (2000-2005)..... 14
Figure 17: Evolution of Commercial Financing by Provider (2000Q1-2005Q3)..... 18
Figure 18: Cumulative Real Growth by Economic Sector (2000-2005) and GDP Contribution by Sector in 2005..... 19
Figure 19: Cumulative Real Growth in Bank Commercial Credit for 2000-2005 by Sector 19
Figure 20: Real Growth in Bank Commercial Credit for Banamex Versus Rest of Banking System (2000-2005) 20
Figure 21: Evolution of Mexico's Sovereign Yield Curve (2000-2005)..... 23
Figure 22: Domestic Corporate Debt Issuance (May 2002 – January 2006)..... 23
Figure 23: Evolution of Mortgage Financing by Provider (2000Q1-2005Q3)..... 24
Figure 24: Evolution of Consumer Financing by Provider (2000Q1-2005Q3)..... 26
Figure 25: Composition of Banks' Consumer Loans (September 2005)..... 26
Figure 26: Number of Outstanding Corporate Bond Issuers by Rating (2000-2005)..... 28
Figure 27: Value of Corporate Bonds Outstanding by Rating (2000-2005)..... 28
Figure 28: Main Provider of Financing by Company Size (December 2000)..... 29
Figure 29: Main Provider of Financing by Company Size (December 2005)..... 29
Figure 30: Outstanding Bank Credit to Firms by Firm Size (2001Q4-2005Q3)..... 30
Figure 31: Number of Companies in Mexico by Size (1999)..... 31
Figure 32: Evolution of the SME Financing Guarantee Program (2002-2005)..... 31
Figure 33: Main Constraints to Bank Credit by Company Size (December 2000) 32
Figure 34: Main Constraints to Bank Credit by Company Size (December 2005) 32
Figure 35: Evolution of Nominal Interest Rates (2000-2005)..... 34
Figure 36: Comparative Effective (CAT) Consumer Credit Rates (December 2005)..... 35
Figure 37: Comparative Nominal Credit Card Rates (December 2005)..... 35
Figure 38: Performing Bank Credit to GDP and to Deposits by Mexican State (2003)... 37

List of Boxes

Box 1: Selected Reforms to the Prudential Framework and Financial Infrastructure (2000-2006)..... 15

I. Introduction

Following the 1994-95 tequila crisis, Mexico experienced a significant 'credit crunch' that persisted into the early part of this century. The objective of this paper is to describe and account for the evolution in financing to the private sector between 2000 and 2005, a period in which the long-sought recovery in credit began to materialize. In particular, the paper describes the changes in the volume, accessibility, affordability, and diversity of financing to the Mexican non-financial private sector (households and firms), and identifies contributing factors. For the purposes of this document, financing to the non-financial private sector is defined broadly to include various types of instruments (loans, bonds, equity) by both domestic and external providers of finance (banks, non-banks and capital markets).

The paper focuses mainly on debt financing from a supply/provider point of view. Although this focus might have been sufficient in earlier years given the empirical evidence of a post-crisis credit crunch and supply side-driven evolution of bank lending, recent developments – especially in the composition of lending – require an analysis of the determinants of the demand for financing as well. However, such an analysis is constrained by the paucity of available information on the financial condition of the corporate and household sectors in Mexico[1]. As a result, the paper adopts a supply-side perspective and complements it, whenever possible, with a description of relevant real sector developments. Given the marginal contribution of equity financing to the private sector (see next section), the analysis focuses primarily on the evolution of (external and domestic) debt financing of firms and households.

In order to ensure consistency, the analysis relies principally on official statistics compiled by *Banco de Mexico* (BOM)[2]. It is complemented by other data sources – such as the *Secretaria de Hacienda y Crédito Publico* (SHCP), the *Comisión Nacional Bancaria y de Valores* (CNBV) and the *Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros* (Condusef) – as necessary. It is important to note that only performing loans are included in the definition of financing to the non-financial private sector, since the vast majority of non-performing credits (denominated in both inflation-index units[3] and pesos) in the early part of the period dated back to the 1994 crisis and did not therefore represent current lending activity[4]. In addition, private sector financing is mostly compared to GDP and is therefore implicitly deflated by the

[1] Some information can be found in the statistics bureau INEGI ("*Instituto Nacional de Estadística Geografía e Informática*"), the social security institute IMSS ("*Instituto Mexicano de Seguro Social*"), the Ministry of Economy's *Sistema de Información Empresarial Mexicano* (SIEM) and in household surveys, but it tends to be general, outdated or incomplete, and cannot be cross-referenced or reconciled easily to supply-side financing data.

[2] Some data (for example, on financing by banks that have been intervened) and definitions (for example, the definition of the non-financial private sector) differ from those used by the CNBV.

[3] These are called *Unidades de Inversión* or UDIs.

[4] As explained later, the restructuring of credit portfolios in recent years has resulted in a much lower level of non-performing loans in 2005 that, with the exception of mortgages, represents current lending activity.

GDP deflator, which can differ from the retail price index. Finally, given the broad scope of this exercise, the document does not attempt to provide an in-depth analysis of each market segment and provider, and does not describe in detail financial reforms over this period.

The paper is structured as follows:

- overview of broad trends in, and some of the main determinants of, financing to the private sector for the period 2000-2005 (section II)
- description of the evolution and drivers of commercial, mortgage and consumer financing (section III)
- review of available indicators on the affordability and accessibility of financing (section IV)
- summary of the main findings and related policy implications (section V).

II. Overview of Financing to the Private Sector

Equity Financing

Equity issuance has not played an important role in financing the private sector in Mexico during 2000-2005. As can be seen in figures 1 and 2, both the domestic stock market capitalization and the number of listed non-financial private sector companies are relatively small compared to international peers. In fact, the number of non-financial private sector issuers actually declined from 173 in 2000 to 155 at the end of 2005. The stock market is highly concentrated, with the top 10 companies representing close to 70 percent of market capitalization; ownership of listed firms also tends to be highly concentrated. While there was a significant growth in market capitalization during this period, it was due mainly to asset revaluation as opposed to new equity issues. Cumulative public equity issuance volume (both domestically and abroad) for 2000-2005 totaled only around MXP 90 billion, which represents just over one percent of Mexico's 2005 GDP (see figure 3). Private equity is also not well-developed; according to industry estimates, Mexico attracted only 0.1 percent of global and 10 percent of regional private equity investments over the period 1993-2004[5]. Given the marginal impact of equity financing to the private sector[6], subsequent analysis in this paper focuses solely on the evolution of debt financing.

Figure 1: Number of Listed Companies and Capitalization of Stock Market (2000-2005)

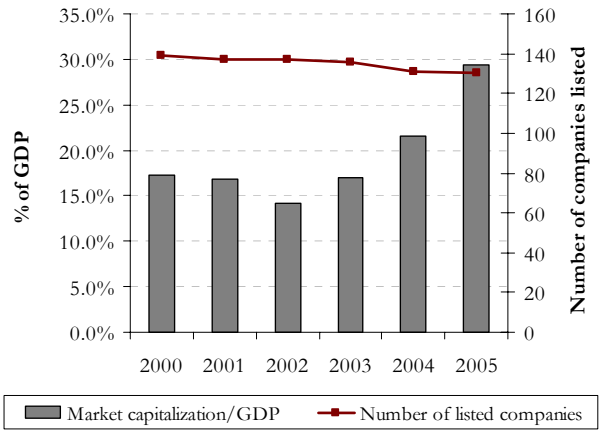
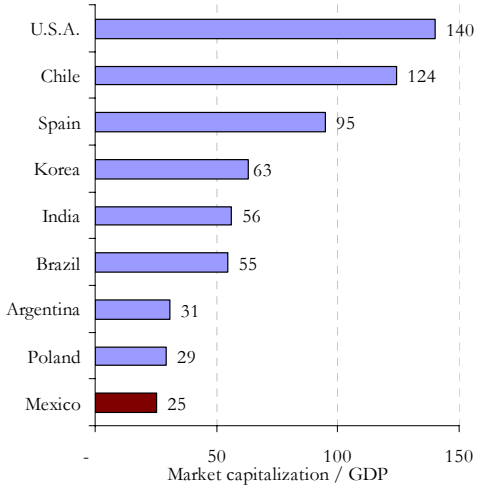


Figure 2: Comparative Size of Stock Market Capitalization (2004)

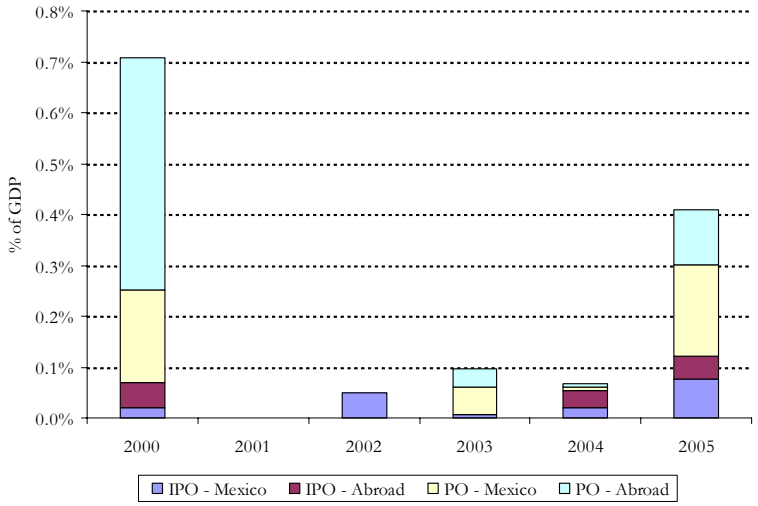


Source: Bolsa Mexicana de Valores and World Bank.
Note: Only non-financial private sector equity issuers are included in the above Figure.

[5] See NAFIN and US Trade and Development Agency (2004) for a recent description of the situation and main obstacles that impede the industry's growth.

[6] The recent passage of the new Securities Markets Law is expected to support greater equity financing by enhancing corporate governance and minority shareholder rights of publicly listed firms and by facilitating access to capital markets through the creation of a new corporate vehicle (*Sociedad Anónima Promotora de Inversión* or SAPI).

Figure 3: Equity Issuance by Mexican Private Sector Companies (2000-2005)



Source: CNBV.
Note: Only non-financial private sector equity issuers are included in the above Figure. IPO is Initial Public Offering, while PO refers to secondary Public Offering (i.e. for firms that are already listed in the Bolsa). Both domestic and international listings are included.

Debt Financing

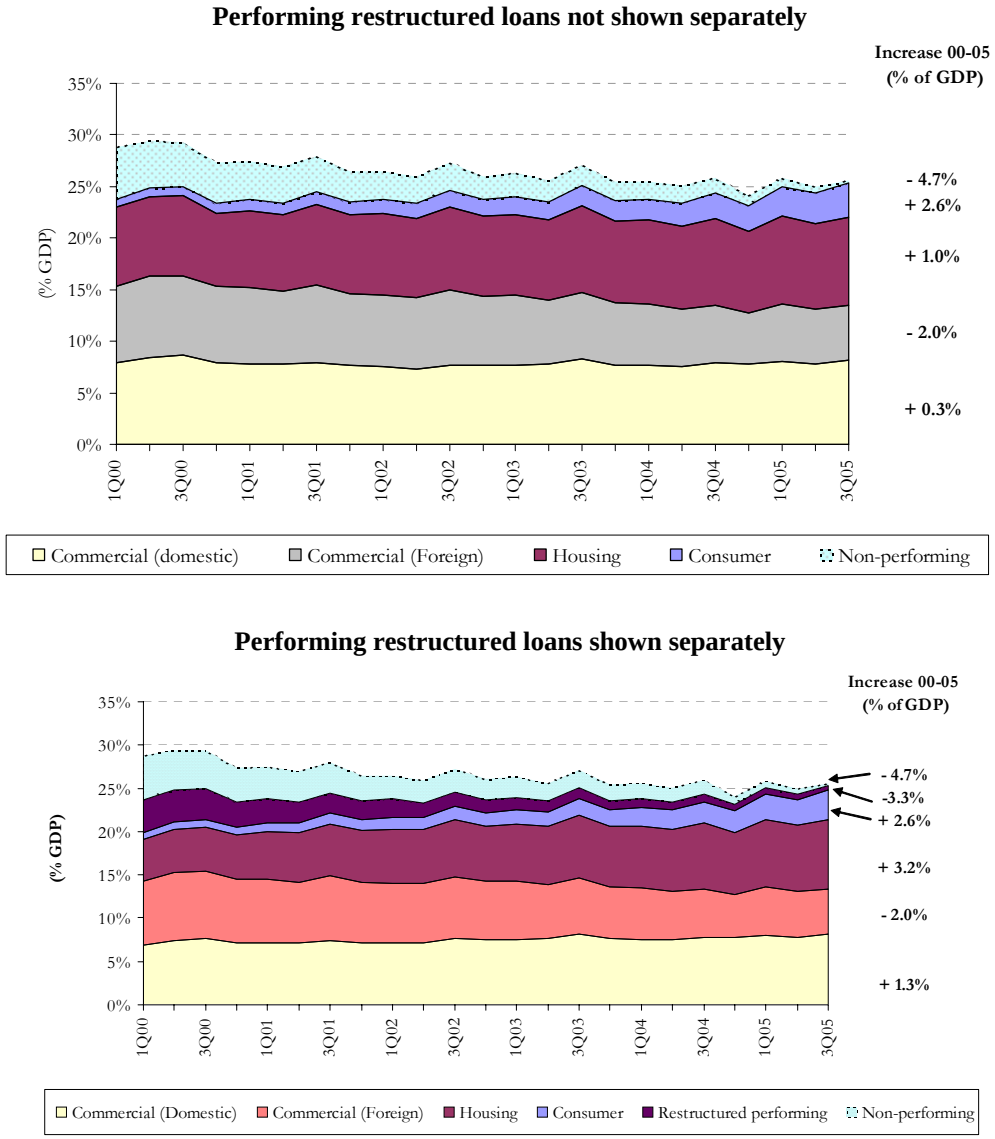
Overall debt financing to the private sector excluding non-performing loans (NPLs) has increased relative to GDP between 2000 and 2005, while its quality has improved considerably. Several trends are evident in the figure below. First, total financing (excluding NPLs) has increased by almost 2 percent of GDP between 2000 and 2005. Second, the domestic portion of that financing (i.e. excluding foreign funding sources) has increased by almost 4 percent of GDP since 2000, primarily due to the substitution of external by domestic commercial financing and the significant expansion of consumer financing throughout this period, albeit from a low base. Third, the size of restructured performing loans is significant in the early part of the period[7] and helps to partly mask the strong underlying growth in housing finance since 2003[8]. Excluding all restructured loans

[7] A large share of the restructured loans dates back to three main government-sponsored programs introduced after the 1995 Tequila crisis to avoid further deterioration of banks' loan portfolios and to protect borrowers: FOBAPROA, UDIS and ADE. Under the FOBAPROA (*Fondo Bancario para la Protección al Ahorro*) program, banks sold mostly impaired loans to FOBAPROA (the predecessor of *Instituto para la Protección de Ahorro Bancario* or IPAB, the deposit insurance and bank restructuring agency) in return for 10-year non-tradable promissory notes, but retained a downside risk if collections fell short of the sale value. An agreement was reached in 2004 to convert remaining FOBAPROA notes into tradable IPAB securities. UDIS refers to the restructuring of housing, commercial and state/municipality loans by converting such financing to an inflation-indexed currency. ADE (*Acuerdo de Apoyo a Deudores de la Banca*), which was paid out in 1997, was mainly targeted to individual debtors and provided a discount on consumer loan rates charged by banks; an additional program of rate discounts ("*Punto Final*") was later established and funded by banks and the government; see Graf P. (August 1999) for a description.

[8] This is because new mortgage lending in pesos (i.e. financing 'flow') is partly offset by the decline in banks' restructured UDIs-denominated performing mortgage portfolio over this period, resulting in a relatively small overall increase in outstanding housing finance (i.e. financing 'stock').

(performing and non-performing), the stock of debt finance to the private sector rose by about 5 percentage points of GDP during the 6-year period ending in 2005 (figure 4, second panel). Fourth, total (i.e. domestic and foreign) debt financing to firms has marginally declined as a percentage of GDP. Finally, there has been a remarkable improvement in the quality of bank credit portfolios – in fact, NPLs have declined from over 5 percent of GDP in 2000 to below 1 percent in 2005Q3.

Figure 4: Evolution of Debt Financing to Non-Financial Private Sector (2000Q1-2005Q3)

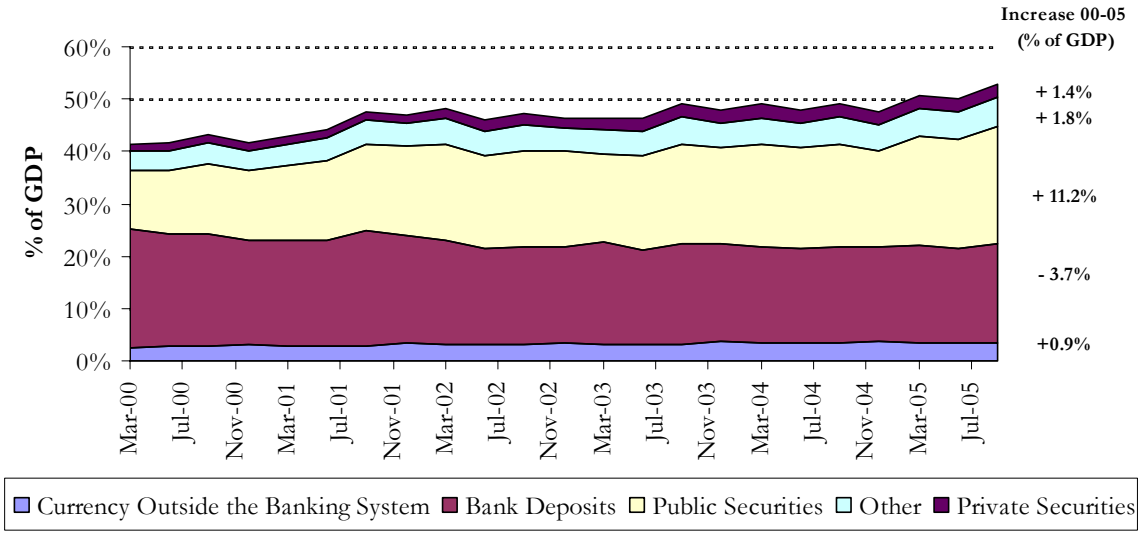


Source: BOM.

Note: Equity financing, FIRA and Financiera Rural lending, certain public sector retirement programs financing mortgages (e.g. FOVISSSTE) and mortgage/asset-backed securities are excluded. Commercial, housing and consumer financing include only performing loans. Domestic bond issuance (included in domestic commercial financing) only includes outstanding bonds that were issued by non-financial private sector firms. Foreign commercial financing consists of cross-border bank lending and bond issuance abroad.

However, domestic financing to the private sector expanded at a much smaller pace than domestic financial savings, which grew considerably but were largely channeled to public debt. As can be seen in figure 5, there was a significant deepening of the domestic financial system during 2000-2005 as indicated by the evolution of a broad monetary aggregate such as M4. However, much of the increase in domestic financial savings has been channeled – mostly indirectly via the growth in the size of institutional investors such as Afores – to the public sector[9].

Figure 5: Evolution of M4 Components (2000Q1-2005Q3)



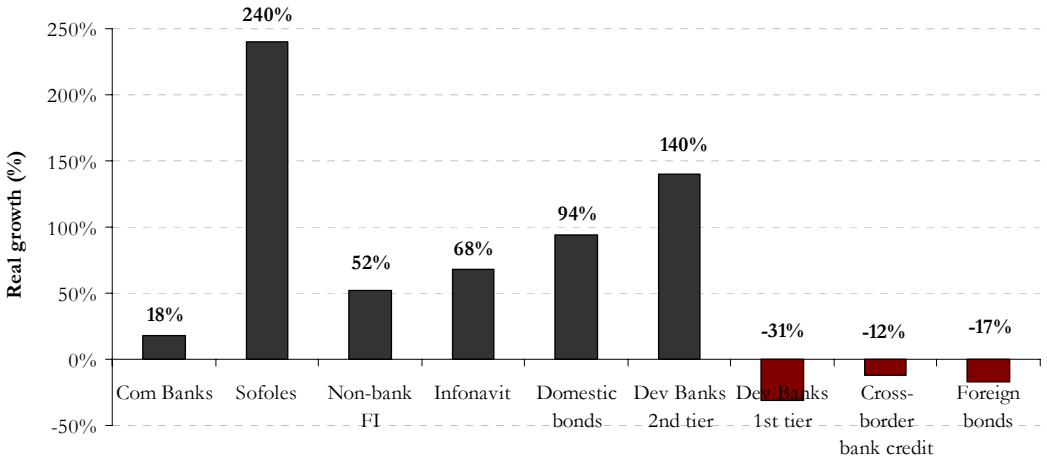
Source: BOM.

The supply of debt financing to the private sector has shifted toward domestic non-bank providers. There has been a switch from foreign funding sources (bond issuance and cross-border bank lending) towards domestic credit providers (see figure 6). The increase is particularly pronounced for Sofoles, whose portfolio more than tripled in real terms over this period, albeit from a low base. Lending by other non-bank financial institutions such as credit unions, savings and loans associations ("*Sociedades de Ahorro y Crédito Popular*" or SAPS) and leasing and factoring companies ("*Organizaciones y Actividades Auxiliares de Crédito*" or OACs), as well as domestic private sector bond issuance, have increased considerably, again from a small base. The mortgage portfolio of Infonavit ("*Instituto del Fondo Nacional para la Vivienda de los Trabajadores*")[10] has also expanded significantly over this period.

[9] This does not necessarily imply crowding out; in fact, a recent paper by Moissinac V. (December 2005) refutes the hypothesis that bank credit to the public sector – primarily in the form of FOBAPROA notes used to restructure the banking sector following the 1994 crisis – has crowded out private sector lending in recent years.

[10] Infonavit is an autonomous, publicly administered pension fund for private sector employees that receives mandatory payroll contributions and is required by law to provide housing finance to affiliates.

Figure 6: Cumulative Real Growth in Credit to the Private Sector by Provider (2000Q1-2005Q3)



Source: BOM and SHCP.

Note: FIRA and Financiera Rural lending, certain public sector retirement programs financing mortgages (e.g. FOVISSSTE) and mortgage/asset-backed securities are excluded. Only performing loans are included in the analysis. Domestic bond issuance only includes outstanding bonds issued by non-financial private sector firms. Non-bank FIs (Financial Institutions) includes SAPS, OACs and credit unions. Information for development banks is separated into first-tier and second-tier (i.e. via commercial banks and Sofoles) lending. Some numbers might differ from other Figures because they are deflated using the retail price index as opposed to the GDP deflator.

The share of debt financing to the private sector that is provided (directly or indirectly) by the public sector has risen. While development banks have generally moved from first- to second-tier lending, their funding (direct and indirect) of private sector finance has risen in the last five years in terms of GDP (see figures 7 and 8)[11]. In addition, development banks have began to provide a larger volume of partial credit guarantees to banks and Sofoles, which is used to promote lending to underserved sectors (e.g. small and medium-sized enterprises or SMEs, low-income housing and agriculture). Although the volume of these guarantees remains relatively low (around 0.5 percent of GDP as of 2005Q3), their effect is amplified by the fact that they are used to leverage a greater amount of lending and that they concentrate on specific sectors of the economy.

[11] Development banks have also made a few private equity investments, but these remain small in size (around US$250 million in 2005).

Figure 7: Financing to the Private Sector by Source (% GDP)

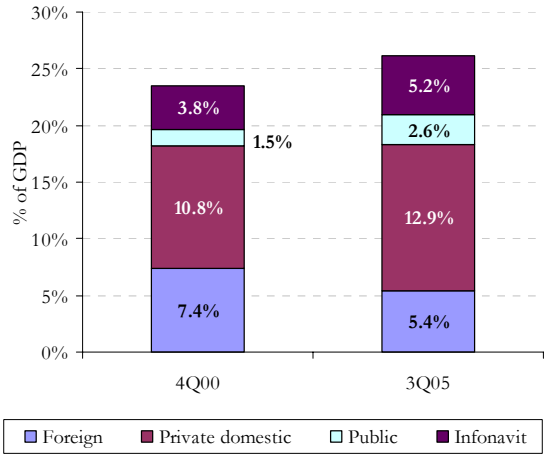
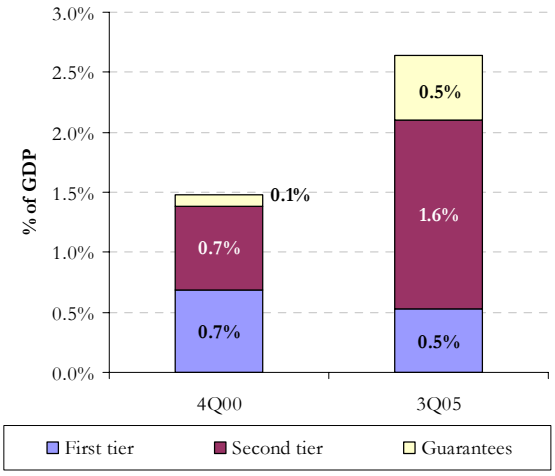


Figure 8: Composition of Financing by Public Sector (% GDP)



Source: BOM and SHCP.
Note: FIRA and Financiera Rural lending, certain public sector retirement programs financing mortgages (e.g. FOVISSSTE) and mortgage/asset-backed securities are excluded. Only performing loans are included in the analysis. Foreign financing consists of cross-border bank lending and bond issuance abroad. Private domestic financing consists of lending by non-banks, domestic bond issuance by non-financial private sector firms, as well as that part of lending by commercial banks and Sofoles that is not related to public sector support (i.e. it excludes second-tier development bank lending and credit guarantees).

Financing Sources outside the Financial System

Financing sources outside the formal financial system might explain the relatively low level of private sector credit to GDP, but data are scarce. As can be seen in figures 9 and 10, Mexico's domestic private sector credit as a percentage of GDP in 2004 was roughly at par with the level of the late 1970s[12]. This level is low when compared to countries of similar per capita income and economic size, which might suggest that financing outside the formal financial system is an important source of funding for the private sector. Examples of this type of financing include the reinvestment of retained earnings[13], supplier credit (see section IV) and the numerous providers of unofficial household financing[14], but there is a paucity of data to substantiate this hypothesis. In the case of Mexico, foreign financing is also important – according to the BOM, foreign bond issuance and cross-border bank lending amounted to around 5.4 percent of GDP as of 2005Q3.

[12] 2004 figures are used in the analysis because of the unavailability of 2005 figures for all countries.
[13] An interesting hypothesis, which cannot be tested due to lack of available data, is that Mexican SMEs tend to rely more on retained earnings than their foreign counterparts and would hence have relatively lower leverage ratios.
[14] These include *tiendas comerciales*, *casas de empeño*, *agiotistas*, *familiares*, *tandas*, *autofinancieras* and *armadoras*. According to a recent exercise undertaken by BOM using published financial statements, consumer credit by non-financial publicly listed companies (e.g. department stores) amounted to MXP 30.7 billion, or 12 percent of total household financing.

Figure 9: Mexico – Evolution of Domestic Credit to the Private Sector (1960-2004)

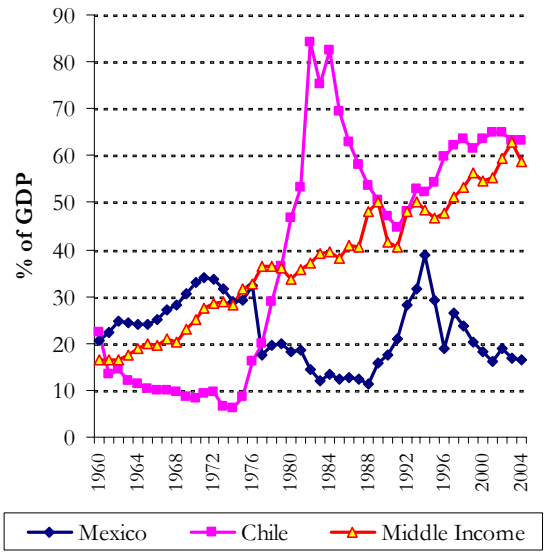
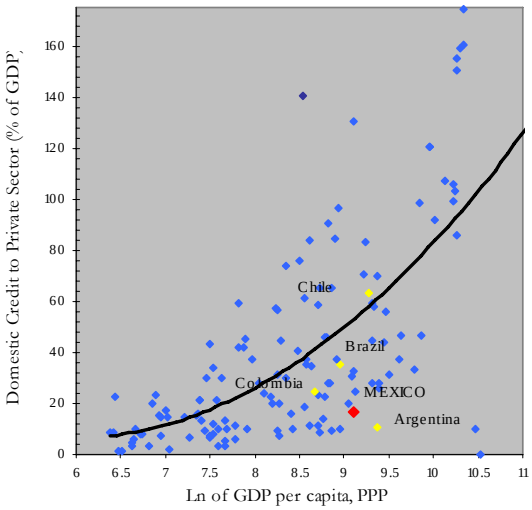


Figure 10: Cross-Country Comparisons of Domestic Credit to the Private Sector (2004)



Source: World Bank (World Development Indicators).

Bank Lending

The evolution of total credit (excluding NPLs) by local commercial banks to households and firms can be conceptually divided into two periods. During 2000-2002, there was a contraction in lending in both absolute and relative (to GDP) terms, reflecting a relatively poor macroeconomic performance and on-going de-leveraging of bank balance sheets. The reactivation of bank credit – which has been uneven across different segments – broadly began in 2003 and has accelerated since then (see figures 11 and 12). In real terms, banks' performing loan portfolio to the non-financial private sector grew by more than 27 percent since 2000, although it stood at around the same level of GDP (9 percent) in 2005Q3 as in 2000[15].

[15] See BBVA Bancomer (2005Q3) for an overview of the reactivation in commercial bank credit and its determinants.

Figure 11: Evolution of Commercial Banks' Performing Loan Portfolio (MXP Billion) /1

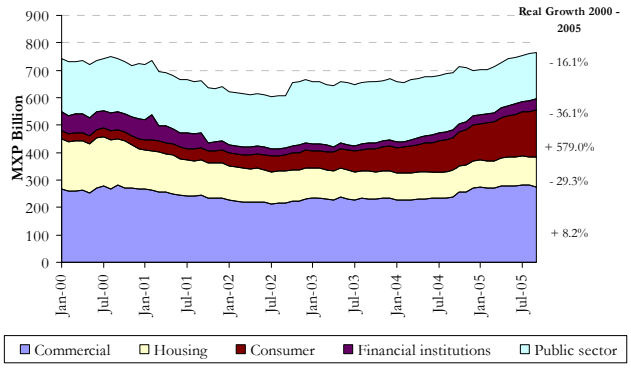
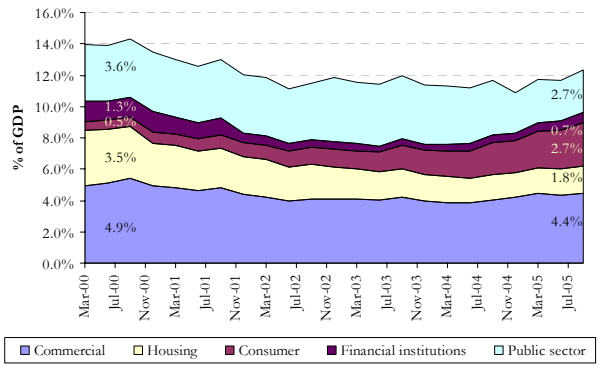


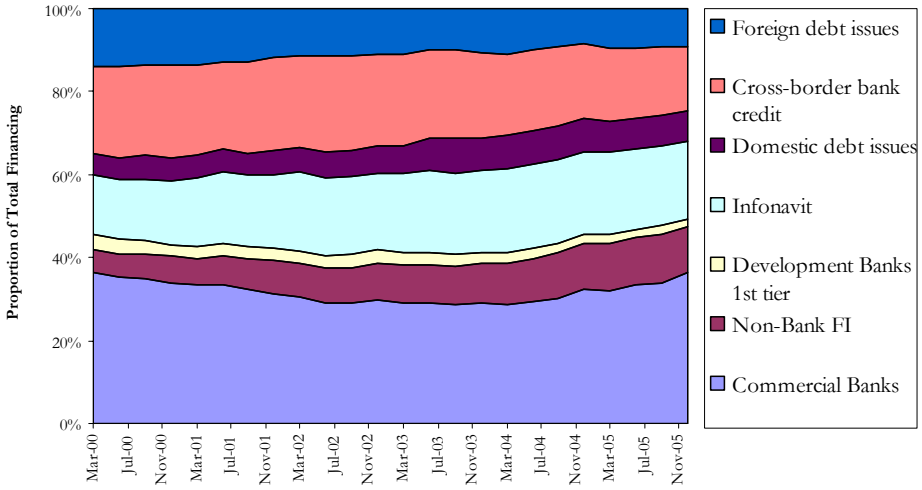
Figure 12: Evolution of Commercial Banks' Performing Loan Portfolio (% of GDP)



Source: BOM.
/1 Figures in constant pesos of January 2000.
Note: Performing restructured UDI-denominated mortgage loans that are off bank balance sheets ("Fideicomisos UDIs") are also included in the analysis.

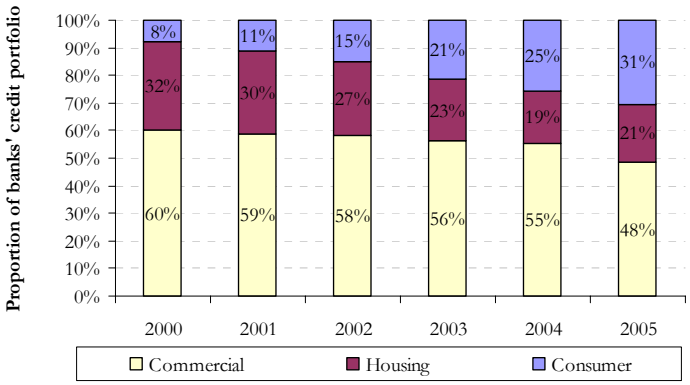
Commercial banks remain the primary source of financing to the non-financial private sector, although the composition of their credit portfolio has changed. As can be seen in figures 13 and 14, performing commercial bank credit accounted for around 36 percent of total domestic and foreign debt financing as of end-2005, a level that is almost unchanged to that of 2000. However, the composition of banks' loan portfolio has shifted significantly during this period towards consumer credit at the detriment of mortgage and commercial lending.

Figure 13: Evolution of Private Sector Debt Financing by Provider (2000-2005)



Source: BOM.
Note: FIRA and Financiera Rural lending, certain public sector retirement programs financing mortgages (e.g. FOVISSSTE) and mortgage/asset-backed securities are excluded. Only performing loans are included, while domestic bond issuance only includes bonds issued by non-financial private sector firms. Non-Bank FIs (Financial Institutions) includes SAPS, OACs and credit unions.

Figure 14: Composition of Commercial Banks' Performing Loan Portfolio (2000-2005)



Source: BOM.

Note: Only performing loans to the non-financial private sector are included in the analysis. Performing restructured UDI-denominated mortgage loans that are off bank balance sheets ("*fideicomisos UDIs*") are also included.

Substantial progress has been achieved in 'cleaning up' bank loan portfolios. In particular, the NPL ratio has declined substantially since 2000, which can be primarily attributed to the resolution of the NPL overhang stemming from the 1995 crisis and the conversion of FOBAPROA notes (which were included in loan figures because they carried a downside risk for the banks) into IPAB securities (see figures 15 and 16). Quality has also improved due to enhanced loan origination standards and better risk management systems in banks, and to a greater availability of currency hedges and local currency denominated debt at longer maturities, which mitigates currency and maturity mismatches in debtor balance sheets.

Figure 15: Evolution of Past Due Loans in Commercial Bank Portfolios (2000-2005)

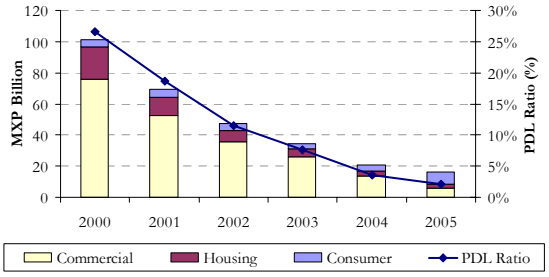
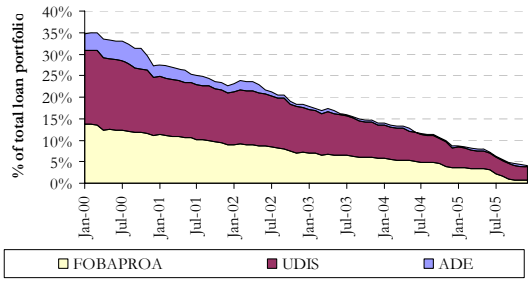


Figure 16: Evolution of Loans Linked to Restructuring Programs (2000-2005)



Source: BOM.

Note: PDL Ratio = Past Due Loans / Total Loans to Non-Financial Private Sector. Total loan portfolio comprises of only performing loans to the non-financial private sector. Performing restructured UDI-denominated loans that are off bank balance sheets ("*fideicomisos UDIs*") are also included.

Macroeconomic Performance and Financial System Reforms

Macroeconomic performance and financial system reforms have been the two 'pillars' underlying developments in financing to the private sector. In addition to segment-specific factors (described in the next section), two common drivers of credit

across all market segments (commercial, mortgage and consumer) have been the macroeconomic environment and financial system reforms over the last six years.

Mexico's macroeconomic fundamentals have strengthened considerably since 2000. Economic growth for 2001-05 has been lackluster, with the average real growth rate being volatile and averaging only around 2 percent per annum. This can be attributed to the global economic slowdown (especially US industrial production) over the early part of this period and to Mexico's competitiveness challenges stemming from weaknesses in institutions, market incentives, physical infrastructure and an incomplete reform agenda[16]. However, at the same time, Mexico's macroeconomic fundamentals have strengthened considerably, as evidenced by the attainment of investment-grade rating and uninterrupted access to international capital markets. Consumer price inflation has declined from 9 percent in 2000 to below 4 percent in 2005 in the context of an inflation targeting regime and floating exchange rate, while the fiscal and current account deficits as well as the gross public sector and external debt have been contained. A more stable macroeconomic environment has reduced financing costs and permitted the development of fixed-rate lending products and of domestic capital markets. Moreover, real GDP growth has picked up since 2004 and is expected to continue in the near future.

A comprehensive financial system reform agenda has been implemented over the last few years. The main objectives of the authorities have been to consolidate financial stability and enhance the role of the financial system in efficiently financing the private sector and allocating risks to those better able to bear them. According to the 2002-2006 National Program for Development Financing (*PRONAFIDE* or *Programa Nacional de Financiamiento del Desarrollo*), some of the specific goals of these reforms were to: (1) promote domestic savings, particularly popular and long-term savings; (2) further strengthen financial system regulation and supervision; (3) accelerate the modernization of the financial services industry; (4) facilitate the reactivation of bank credit; (5) deepen domestic stock and bond markets; (6) modernize development banks; and (7) consolidate the pension system. A summary of the main legal reforms introduced during 2000-2006 is presented in Box 1, while the most important ones are discussed in the relevant sections covering specific market segments.

Box 1: Selected Reforms to the Prudential Framework and Financial Infrastructure (2000-2006)

Law	Main Features
New Bankruptcy Law (*Ley de Concursos Mercantiles*, 2000)	• Introduced a single insolvency procedure (conciliation/reorganization phase, which can be converted into bankruptcy declaration) • Created a government expert body overseeing and facilitating insolvency proceedings (*Instituto Federal de Especialistas de*

[16] This is reflected in various survey-based indicators (for example, the International Institute for Management Development's *World Competitiveness Yearbook*, the World Economic Forum's *Global Competitiveness Report* and the World Bank's *Doing Business* report) and in Mexico's reduced global and US export market share in recent years. See, for example, Instituto Mexicano para la Competitividad (2005), IMF (December 2005) and BBVA Bancomer (2006Q1 and February 2006).

	Concursos Mercantiles or IFECOM) • Assigned exclusive jurisdiction to federal courts over insolvency proceedings • Limited the time for good faith negotiations after which liquidation has to start • Allowed for greater flexibility and value maximization in deciding possible reorganization plans • Permitted netting of financial derivatives • Clarified the ordering of creditors in case of liquidation.
Security Interest Package (*Miscelánea de Garantías*, 2000)	• Introduced the pledge on movable property without transfer of possession ("*la prenda sin transmisión de posesión*") • Regulated the security trust ("*fideicomiso de garantía*") • Included provisions related to the enforcement and foreclosure of such security interest
Amendments to the Credit Institutions Law and Financial Groups Law (*Ley para Regular las Agrupaciones Financieras*, 2001)	• Strengthened banking regulation and supervision • Promoted transparency and competitiveness • Fostered new financial products and services • Strengthened credit institutions' corporate governance.
Amendments to the Securities Market Law and to the Mutual Fund Law (2001)	• Promoted the development of the securities market by making it more transparent, efficient and liquid • Provided more protection to investors; creates a more transparent corporate mechanism by enhancing the provision of information, improving corporate governance practices and the rights for minority stockholders • Introduced a new versatile instrument (*certificado bursatil)*, a security note that can be issued by private and public debtors • Incorporated clearing houses (responsible for the liquidation and compensation of operations) to the market structure, reducing systemic risk in the securities market • Introduced consolidated regime applicable to public companies • Promoted access to securities market to small and medium-size firms through new corporate vehicles.
Law for Transparency and Development of Collateralized Credit (*Ley de Transparencia y de Fomento al Crédito Garantizado*, 2002)	• Improved disclosure and transparency of terms and conditions in various types of financial transactions • Outlined the requirement for lenders to publish the all-inclusive (*Costo Anual Total* or *CAT*) of the credit products offered • Allowed substitution of creditors and debtors in existing credit agreements.
New Law on Regulated Credit Information Institutions (*Ley para Regular las Sociedades de Información Crediticia*, 2001 and amended in 2003)	• Regulates the inception and operation of credit bureaus • Defines consumer rights related to credit bureaus • Reform aims at eliminating conflict of interests by placing maximum ownership thresholds in ownership of credit bureaus
Amendments to the Security Interest Package (*Miscelánea de Garantías*, 2003)	• Eliminated non-recourse clause on the pledge on movable property without transfer of possession and on security trusts • Introduced new rules to expedite commercial procedures, which include harmonization of commercial litigation procedures across different states • Allowed expeditious out-of-court foreclosure of collateral on guaranty trusts (*Fideicomiso de Garantia*) • Allowed the use of blanket lien on assets to non-banks • Enhanced the collateral value of leased goods through enhanced repossession rules

Law of Transparency and Ordering of Financial Services (*Ley de Transparencia y Ordenamiento de los Servicios Financieros*, 2004)	• Regulated commission fees and other aspects related with the provision of financial services • Prohibited discriminatory practices between credit institutions and between users; established transparency requirements in contracts and check account balances, credit and debit cards • Created transparency mechanisms to allow clients of credit institutions to know about the value and fees of transactions
Amendments to the Credit Institutions Law (*Ley de Instituciones de Crédito*, 2005)	• Established a system for prompt corrective actions based on banks' capital adequacy ratios consistent with international practices • Facilitated access of enterprises to capital markets in order to fund their credit activities
New Securities Markets Law (*Ley de Valores*, 2006)	• Introduced the legal form of SAPI ("*Sociedad Anónima Promotora de Inversión*) to promote private equity investments • Enhanced corporate governance in publicly listed firms • Improved disclosure of information to investors • Updated the legal framework for securities firms and other entities (e.g. securities depositories and central counterparties) • Updated regime of criminal offenses and redefined the powers of financial authorities to make their functioning more efficient

The aforementioned reforms have been particularly important in strengthening the soundness and integrity of the financial system, although their beneficial effects on financing will take time to materialize. The impact of the reforms has been particularly pronounced on risk measurement and management practices in the banking system as evidenced by the following reforms:

- improved accounting and auditing standards
- establishment of a system of capital adequacy-based early warning indicators for prompt corrective actions
- introduction of new security instruments and foreclosure procedures to strengthen creditor rights (see section III)
- regulation of the activities of credit bureaus and consumer protection issues, including the mandatory use of the credit bureau by banks for all prospective borrowers (see section III)
- stronger corporate governance requirements for integrated risk management of credit institutions
- strengthening and harmonization of risk management practices across FIs
- establishment of risk-based loan classification and provisioning rules
- stronger internal control procedures
- enhanced market disclosure and transparency (financial reporting requirements for financial group holding companies and disclosure of credit information)
- enhanced solvency rules (definition of regulatory capital, capital treatment of new instruments and harmonization of requirements across credit institutions).

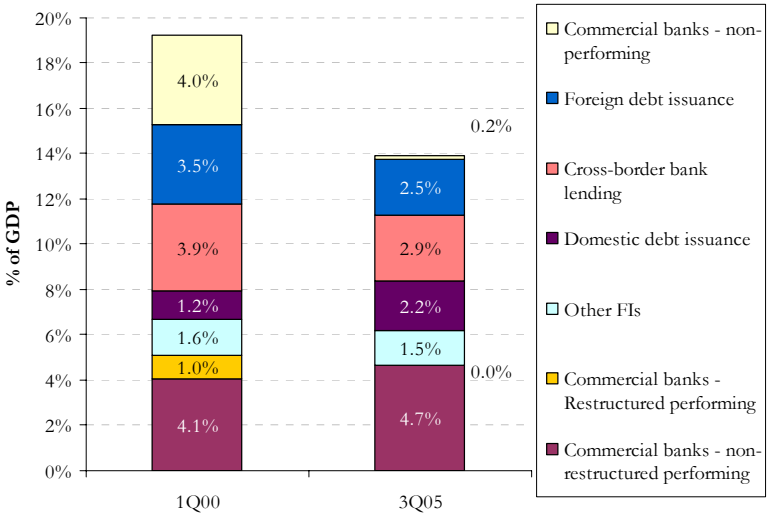
The tightening of risk management standards *ceteris paribus* inhibits a more rapid growth of credit in the short term, but ensures that the system remains sound and better able to cope with credit downturns over the longer term. Given the brief time period that has elapsed since many of the reforms were implemented, their beneficial effect on financial intermediation will take longer to materialize.

III. Debt Financing by Market Segment

Debt Financing to Firms

Overall financing to firms has marginally declined between 2000 and 2005, but its quality has improved substantially and there has been a shift from external to domestic funding sources. These three main stylized facts can be seen in figure 17. The improvement in the quality of banks' commercial credit portfolio is particularly striking since non-performing loans dropped from 4 percent in 2000 to only 0.2 percent of GDP in 2005. Bank commercial credit growth has resumed in 2004, although its pace remains slower than that of consumer and mortgage credit. The relative importance of non-bank financial institutions has remained fairly stable over this period although – as noted previously – the role of development banks has actually increased due to second-tier lending and guarantees. Even though the substitution of foreign for domestic bond issuance can be ascribed to several contributing factors (see later paragraphs), the reduction in cross-border bank credit cannot be easily explained and is counter-intuitive given that most large Mexican banks were acquired by foreign financial institutions over this period.

Figure 17: Evolution of Commercial Financing by Provider (2000Q1-2005Q3)



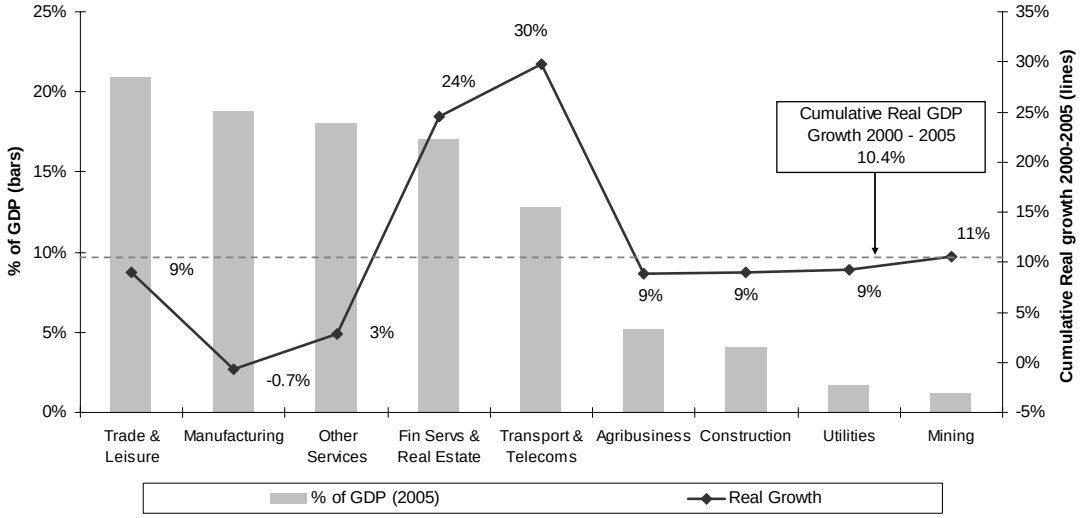
Source: BOM.

Note: Equity financing, FIRA and Financiera Rural lending, and asset-backed securities issuance are excluded. Domestic debt issuance only includes bonds issued by non-financial private sector firms. Other FIs (Financial Institutions) includes development banks, Sofoles, OACs and credit unions.

Sluggish economic growth over this period is among the main reasons for stagnant commercial credit. Econometric and anecdotal evidence across countries tends to relate commercial credit growth to actual and expected developments in overall economic performance. As mentioned in the previous section, firms' demand for credit appears to have been dampened by the sluggish economic growth and investment over this period. It

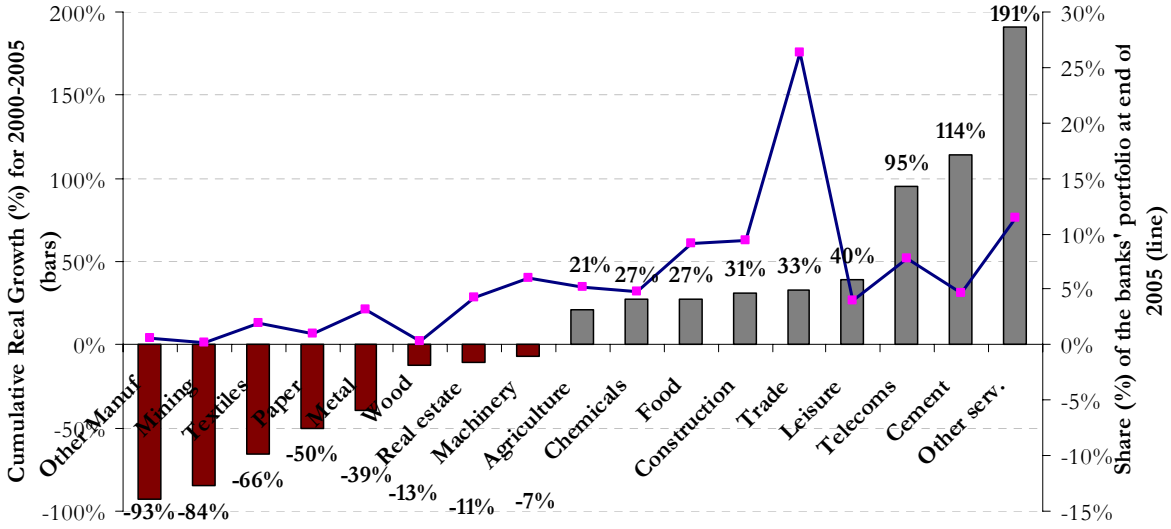
is worth noting the relatively strong growth of most services sectors compared to manufacturing, which is also reflected in bank commercial credit patterns (see figures 18 and 19). As a result, bank loans to services sectors accounted for more than 60 percent of the performing loan portfolio as of 2005Q3, up from 42 percent in 2000.

Figure 18: Cumulative Real Growth by Economic Sector (2000-2005) and GDP Contribution by Sector in 2005



Source: INEGI.
Note: The GDP of each year is calculated as the average of GDP over the four quarters, and it is deflated by the retail price index in order to derive the cumulative real growth rate for 2000-2005.

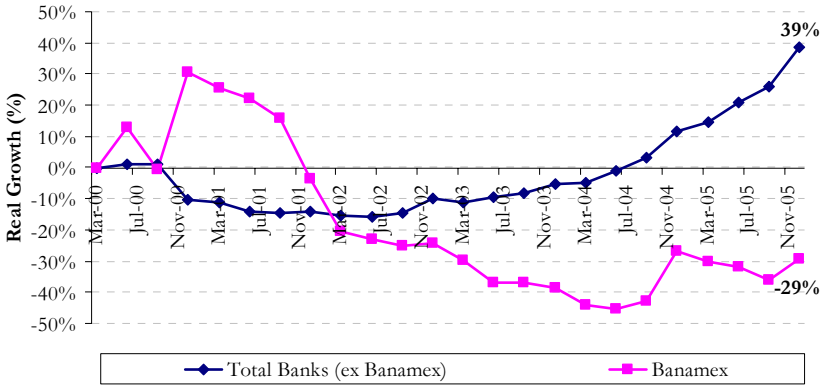
Figure 19: Cumulative Real Growth in Bank Commercial Credit for 2000-2005 by Sector



Source: BOM and SHCP.
Note: Only bank performing loans to the non-financial private sector are included in the analysis. Economic sectors are based on CNBV's classifications. Some numbers might differ from other Figures because they are deflated using the retail price index as opposed to the GDP deflator.

An idiosyncratic factor that contributed to the overall decrease (as a proportion of GDP) in the banking system's commercial credit portfolio has been the 'de-leveraging' of Banamex. Grupo Financiero Banamex was purchased by Citigroup in August 2001. At around the same time, Banamex began to significantly lower its commercial credit exposure, a process that lasted until mid-2004 (see figure 20). Banamex's credit portfolio movement contrasts sharply to the rest of the banking system which grew by almost 40 percent in real terms since 2000, thereby halving its share of performing loans to 7 percent by end-2005.

Figure 20: Real Growth in Bank Commercial Credit for Banamex Versus Rest of Banking System (2000-2005)



Source: BOM, CNBV and INEGI.
Note: Some numbers might differ from other Figures because they are based on CNBV data (e.g. performing loans to the private sector shown above exclude the FOBAPROA portfolio) and are deflated using the retail price index as opposed to the GDP deflator.

Corporate insolvency procedures have been significantly improved, but the extent of their contribution to greater bank lending remains unclear. A new law in 2000 (see Box 1) radically changed the commercial insolvency ("*concurso mercantil*") procedural framework and eliminated the incidence of suspension of payments by insolvent debtors that was prevalent and that delayed enforcement proceedings indefinitely[17]. The record to-date under the new law has been generally positive (around 40 percent of filed cases have already been concluded and out-of-court negotiated settlements have increased), although some doubts have been raised as to the law's contribution to the recent resurgence of bank credit. Firstly, bankruptcy remains a rarely used option in Mexico (only around 220 cases since the law's introduction[18]) and there is no data on the law's impact on restructuring agreements prior to bankruptcy filing. Secondly, as much as 60 percent of all cases have been initiated by the debtors themselves, which could be an indication of its lack of appeal for bank creditors. On the other hand, the cases that have actually been filed involve a large number of creditors and high value of assets (about

[17] See Sánchez-Mejorada y Velasco C. (2004 and 2005), Méjan Carrer L.M. (2005), Gamboa-Cavazos M. (January 2005) and Martínez, Algaba, Estrella, de Haro y Galván-Duque (2005).
[18] By contrast, IMSS figures show that around 3,000 companies were closed just in 2005, although most of these are likely very small and are not obliged to follow the new bankruptcy procedures (the law automatically applies to firms with a minimum debt of 400,000 UDIs).

MXP 230 billion), which could indicate a relatively more important role for the new bankruptcy law than what is implied by looking at the number of cases per se.

The legal framework for secured lending has been strengthened considerably since 2000, although its impact on commercial lending growth will take time to materialize. The provision of a security interest is an important prerequisite for most lending transactions, particularly for micro-enterprises as well as small and medium-sized companies (SMEs)[19]. The 2000 Security Interest Package (see Box 1) introduced a new secured lending mechanism (non-possessory pledge on movable property) and regulated security trusts (and their associated out-of-court foreclosure procedures) that had only been intermittently used until then as security interest vehicles. The 2003 reform[20] eliminated some of the problems of the previous law[21], thereby enabling the two aforementioned instruments to become adopted by banks in secured lending transactions. Anecdotal evidence suggests that the contribution of these reforms to the resurgence in lending has been positive, although business transactions under the new legislation have not yet been fully tested in Mexican courts. As a result, the overall impact and value-added of these instruments will only become clear over time, particularly during a credit downturn[22].

Enforcement procedures, public registries of commerce and the judicial system represent the 'Achilles heel' of the Mexican credit infrastructure. One of the main objectives of the aforementioned reforms was to accelerate out-of-court settlements and judicial enforcement procedures. However, out-of-court enforcement, as provided by instruments like the security trust, can still be easily challenged by debtors in courts as unconstitutional ("*amparo*" procedure), which slows down the process. In addition, even though litigation experience in the federal district appears to have improved considerably[23], the quality of enforcement varies greatly across different states (see next section). Finally, although the law provides for the establishment of an electronic public registry of commerce on movable property at the federal level, it is in practice run at the state level. Slow progress has been made to-date in converting registries to electronic access and linking different states, which causes delays in the creation, registration and enforcement of creditor rights[24]. The cost to register a security is also determined at the state or municipal levels and varies substantially (see next section). The combination of

[19] According to bank commercial loan data in CNBV's R04C database, the volume of loans that was more than 90 percent covered by collateral as of end-2005 was around 44 percent for micro-enterprises versus only 27 percent for large companies.
[20] See Baker & McKenzie (June 2003) and Hill F. (2004).
[21] For example, the 2003 reform eliminated the Barzon or non-recourse clause (which was introduced to protect mortgage debtors from losing their home and still owing money to the bank) that had allowed the uncovered portion of a loan to be extinguished in the event that collateral sale proceeds were insufficient, and clarified the use of security trust agreements that had made them cumbersome and costly for trustees.
[22] According to Zuñiga Villaseñor G. (2006), the fast recovery of non-bank sources of finance implies that weak creditor rights is no longer an obstacle for the expansion of bank lending to firms and that other factors are at play.
[23] Anecdotal evidence suggests that the length of litigation procedures for collateral foreclosure in the federal district has dropped to an average of 2-3 years, as opposed to 4-6 years prior to the 2000 reform.
[24] Anecdotal evidence suggests that the process for registration of a security agreement in the public registry of commerce and property of the federal district might take as long as one year to complete.

these factors reduces the efficiency of the creditor rights framework and the predictability and amount of recovering debt – especially when one compares Mexico to peers (see Table 1) – which adversely impacts the willingness of banks to expand lending.

Table 1: Selected Cross-Country Doing Business Comparisons (2005)

	Mexico	Chile	Brazil	Region	OECD
Registering Property					
Procedures (number)	5	6	15	6.7	4.7
Time (days)	74	31	47	76.5	32.2
Cost (% of property value)	5.3	1.3	4.0	4.8	4.8
Getting Credit					
Legal Rights Index	2	4	2	3.8	6.3
Credit Information Index	6	6	5	4.5	5.0
Public registry coverage (% adults)	0	45.7	9.6	11.5	7.5
Private bureau coverage (% adults)	49.4	22.1	53.6	31.2	59.0
Protecting Investors					
Disclosure Index	6	8	5	4.1	6.1
Director Liability Index	0	4	7	3.8	5.1
Shareholder Suits Index	5	5	4	5.7	6.6
Investor Protection Index	3.7	5.7	5.3	4.5	5.9
Enforcing Contracts					
Procedures (number)	36	28	24	35.4	19.5
Time (days)	421	305	546	461.3	225.7
Cost (% of debt)	20.0	10.4	15.5	23.3	10.6

Source: World Bank.
Note: The Legal Rights Index ranges from 0-10, with higher scores indicating that those laws are better designed to expand access to credit. The Credit Information Index ranges from 0-6, with higher values indicating that more credit information is available from a public registry or private bureau. The Investor Protection Index is an average of three dimensions: transparency of transactions (Extent of Disclosure Index), liability for self-dealing (Extent of Director Liability Index) and shareholders' ability to sue officers and directors for misconduct (Ease of Shareholder Suits Index); each of these indices varies between 0-10, with higher scores indicating better investor protection.

The growth in domestic debt issuance by private sector firms has been facilitated by a supporting macroeconomic environment and significant financial system reforms. The aforementioned improvements in economic fundamentals (see previous section) have allowed a substantial shift from external to domestic public (sovereign, parastatal and municipal) and private sector bond issuance at progressively longer maturities and fixed rates in the last few years (see figure 21)[25]; anecdotal evidence also suggests the replacement of some bank business loans with corporate debt issuance. The process has been supported by important reforms that have contributed to the growth of domestic institutional investors (e.g. mutual funds and Afores) and a more robust, efficient and transparent capital markets framework and infrastructure (see Box 1 in previous section)[26]. With respect to the latter, the introduction in 2001 of the *certificado bursátil*, a versatile bond contract, has been particularly beneficial since it combined flexible

[25] This does not necessarily mean that financing has shifted from foreign currency to MXP; in fact, anecdotal evidence suggests that large multinational Mexican firms swap their domestic bond proceeds into US dollars in order to take advantage of pricing differences between the domestic and foreign debt markets.
[26] See, for example, Ilyina A. (2005) and Soueid M. (December 2005).

amortization schedules, covenants and legal restrictions and better enforceability (see figure 22)[27]. The reforms have led to the near-doubling (in terms of GDP) of domestic bonds issued by the non-financial private sector and to significant innovation in structured issuance[28]. However, the size of the non-financial private debt market is still small compared to other countries[29], which is partly a function of the limited number of large, highly-rated corporate issuers (see next section)[30]. Further growth of this sector will likely require issuance by smaller firms (perhaps combined with a slight relaxation of investment limits for institutional investors) and additional innovations in securitization structures (tranching and financial guarantees).

Figure 21: Evolution of Mexico's Sovereign Yield Curve (2000-2005)

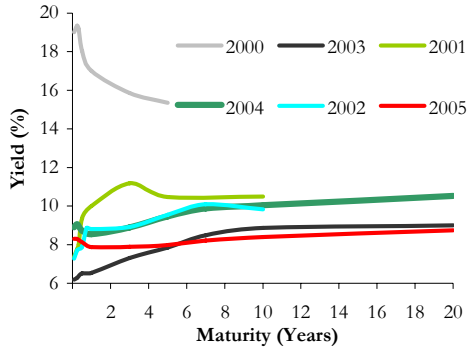
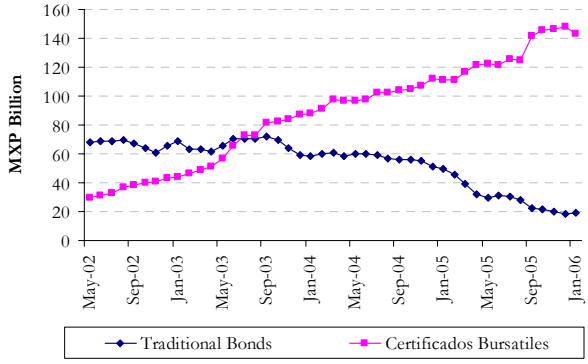


Figure 22: Domestic Corporate Debt Issuance (May 2002 – January 2006)



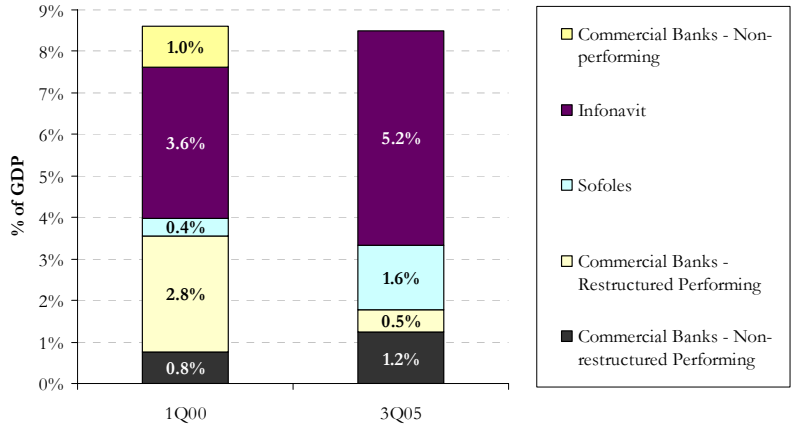
Source: BOM and SHCP.
Note: Domestic corporate debt issuance only includes bonds denominated in MXP and UDIs that are issued by non-financial private sector companies. Traditional bonds refers to commercial paper, *pagarés*, *obligaciones* and *certificados de participación*.

[27] Other examples include the creation of a central counterparty for securities markets transactions and of an organized derivatives market (MexDer), improvements in the functioning of the repo and securities lending markets, and the development of the legal framework for payment finality and the netting of financial instruments and for default insurance and financial guarantees for mortgage-backed securities.
[28] Examples include the securitization of take-out construction loans, residential and commercial mortgages, current receivables and future flows, although most of the issues have actually been made by financial institutions; credit enhancements have also been used to raise the rating of the issue. According to the Moody's Investor Services (January 2006) and Fitch Ratings (March 2006) reports, Mexico continued to be the largest local securitization market by volume in Latin America in 2005.
[29] According to the Bank for International Settlements, the amount outstanding of domestic private bonds in Mexico (a broader definition than the one used in this paper, since it includes financial institutions) was around 3.4 percent of GDP as of end-2004, compared to 23.3 percent in Chile and 12.6 percent in Brazil.
[30] While institutional investors such as Afores are allowed to invest in bonds rated A-AAA (local scale), in practice, they conservatively restrict their purchases primarily to securities with a AA and AAA rating. As a result, these types of bonds currently comprise the large majority of all outstanding issues, which limits the investable universe to only 20-30 firms with strong credit fundamentals.

Mortgage Financing

While Sofoles and Infonavit dominate the mortgage market, there has been a resurgence of commercial bank-financed mortgages since 2004. As can be seen in figure 23, the outstanding stock of mortgage financing (excluding non-performing loans) in 2005 was only around 1 percent of GDP above its 2000 level. The rapid repayment of commercial banks' restructured UDIs-denominated mortgage portfolio understates the actual growth in peso-denominated mortgage originations that has taken place in the last few years. Evidence for the increased attractiveness of this market segment for banks can also be found in their acquisition of mortgage Sofoles in 2004-2005 to allow them to reach the moderate to lower-income households that Sofoles typically target[31]. Commercial banks' re-entry in this market segment is still overshadowed by Infonavit, which had significantly increased its market share to around 60 percent by end-2005. The contribution of the public sector in this market is reflected in the considerable reliance of Sofoles on development banks (especially the *Sociedad Hipotecaria Federal* or SHF) for their funding, as well as the existence of mortgage lending by other public sector retirement programs such as FOVISSSTE (the equivalent of the Infonavit for public sector employees). Fifteen mortgage-backed securities (MBS) have also been issued – primarily by Sofoles – since 2003 totaling MXP$11.5 billion, but their size is still very small compared to GDP or to the total stock of mortgage credits.

Figure 23: Evolution of Mortgage Financing by Provider (2000Q1-2005Q3)



Source: BOM.

Note: Certain public sector retirement programs financing mortgages (e.g. FOVISSSTE) are excluded due to lack of data. Mortgage-backed securities issuance is also excluded, but it is small in size.

Favorable demographics and macroeconomic stability have led to increased demand for mortgages. The overall growth in the housing market has been underpinned by strong pent-up demand for housing due to favorable demographics. While mortgage origination has risen, a housing deficit remains in excess of 4 million units, and production still falls well short of the government's target of 750,000 new housing units per year, a pace that

[31] Sofoles' more labor-intensive business model and more flexible underwriting standards have permitted them to succeed in mortgage lending to segments that banks traditionally have ignored. Sofoles have targeted households that earn between three and eight times the monthly minimum wage.

would match that of new household formations[32]. In addition, lower and less volatile inflation and interest rates have permitted the development of longer-term, fixed-rate products, which has improved mortgage affordability.

Supply-side factors, supported by financial system reforms, have also contributed to increased mortgage financing over the last few years. Improvements in Infonavit's management, operations and corporate governance have significantly reduced NPLs and improved loan collection, thereby allowing it to fund more mortgages. The existence of SHF funding (which will be phased out by 2009) and the 'opening up' of domestic capital markets have also allowed Sofoles to increase mortgage lending. In addition, reforms in the credit infrastructure – particularly in the operation of the credit bureau and in the secured lending framework (2003 Security Interest Package reform) – have allowed banks to better measure and manage their risks, thereby permitting them to resume mortgage lending. Increased competition has also led to lower rates and product innovation, such as the appearance of mortgages with progressively lower interest rates for borrowers who continue to repay their obligations in a prompt manner (see next section for more details on the improved accessibility and affordability of mortgage financing). However, as mentioned previously, inefficient and costly state-level enforcement procedures and public registries of property raise both the overall level and variability by state in cost and risk of mortgage lending (see section IV) – in fact, the absence of a secondary mortgage market can be mainly attributed to the costs of switching between mortgage providers[33].

Consumer Financing

Consumer lending has grown four-fold as a proportion of GDP since 2000, albeit from a very small base. Commercial banks have increasingly dominated this market, accounting for almost 80 percent of outstanding loans as of end-2005. Bank-originated consumer credit is mostly provided via credit cards, which comprised 56 percent of their consumer loan portfolios as of September 2005. By contrast, Sofoles mostly finance the purchase of consumer durables, especially automobiles. The contribution of SAPS in overall consumer credit volume remains relatively small, but they are important in terms of access to lower income households.

[32] See BBVA Bancomer (July 2005) for a recent analysis of the housing market.

[33] Depending on the nature of the security interest to be created, the relevant agreement may require registration either with the public registry of commerce of the corporate domicile of the pledgor (i.e. for pledges without transfer of possession and for mercantile pledges) or with the public registry of property where the real estate is located (i.e. for mortgages).

Figure 24: Evolution of Consumer Financing by Provider (2000Q1-2005Q3)

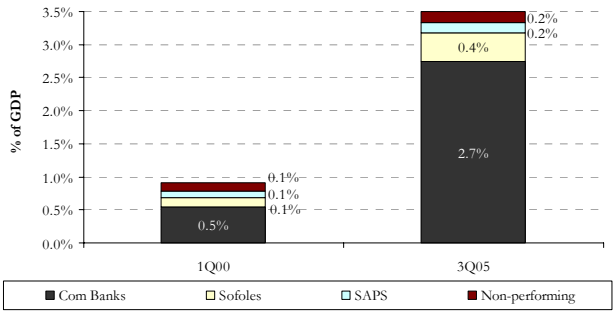
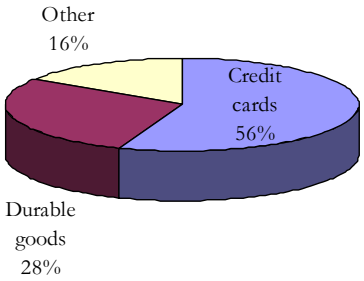


Figure 25: Composition of Banks' Consumer Loans (September 2005)



Source: BOM and CNBV.

Note: Consumer credit in the form of asset-backed securities is excluded from the analysis due to lack of data, but it is very small in size. The Figure showing the composition of banks' consumer loans is based on CNBV data and excludes any restructured consumer loans.

The strong growth in consumer lending has been driven by a combination of demand- and supply-side factors. On the demand side, significantly under-leveraged households at the beginning of the period led to a consumer lending boom that has encouraged growth in private consumption, which has been a key component of Mexico's economic growth in recent years. On the supply side, product innovation and the introduction of new lending technologies (e.g. automated credit scoring, mass distribution channels, electronic lending platforms) by banks – supported by the entry of foreign financial institutions with relevant experience – has facilitated this process. Good macroeconomic performance combined with increased bank soundness and competition enabled the introduction of innovative products with lower and/or fixed interest rates such as "*créditos a la nomina*" (salary-linked loans) and consumer durables financing on flexible repayment terms. Finally, the entrance of new credit providers (especially Sofoles) strengthened the supply of credit in specific niches such as auto loans.

The existence and extensive use of the credit bureau has been an essential ingredient for the successful take-off of this market. The only credit information sharing mechanism until the early 1990's was the public credit registry ("*Servicio Nacional de Información de Crédito Bancario*" or SENICREB) operated by BOM, but its use in supporting credit decisions was limited given its original purpose of producing statistics. A few private credit bureaus subsequently entered the market but a shakedown in the late 1990's led to the emergence of one dominant entity (*Buró de Crédito*) that is owned by financial and non-financial institutions[34]. The enactment of a law in 2002 (amended in 2003) to regulate their activities and protect privacy rights, as well as of supporting prudential

[34] *Buró de Crédito* operates as two firms: one in association with TransUnion (for individuals) and the other one with Dun & Bradstreet (for companies). Mexican commercial banks as a group own around 70 percent of the shares, with the largest individual stake being 18 percent. A second private credit bureau (*Circulo de Crédito*) has recently entered the market.

regulations[35], provided a strong impetus to the credit reporting industry. As a result, more than 1,000 institutions feed the databases of *Buró de Crédito* with positive and negative information on more than 64 million individual accounts and 4 million company accounts. Banks and other lenders can obtain real-time data on customers that, in combination with their own proprietary information, allow them to better differentiate borrower risk (calibration of scoring models) and expand credit. The relatively early resumption of consumer credit (as compared to commercial and housing finance) in 2000 can, at least partly, be attributed to the presence and compulsory use of credit bureau information. Although the experience has been positive to-date, more can be done to further strengthen the credit reporting industry[36].

[35] Financial institutions are required to obtain a copy of the credit history of prospective borrowers as part of the loan paperwork for loans over USD 300. A provisioning requirement of 100 percent of the loan amount may be imposed upon failure to obtain such a report.

[36] Examples include better coordination across agencies responsible for the oversight of different parts of the credit reporting industry, analysis of whether/how the governance structure and ownership of the *Buró de Crédito* has affected competition, the speed of product innovation and expansion of coverage (especially the number of bureau clients), inclusion of payment information on public utility and Infonavit clients, bankruptcy or other judicial data etc.; see Western Hemisphere Credit and Loan Reporting Initiative (March 2005).

IV. Accessibility and Affordability of Financing

Accessibility and affordability represent important complementary dimensions to the volume of private sector financing. For the purposes of this document, accessibility refers to the extent to which an increase in the volume of financing represents an expansion in the client base, as opposed to merely a 'deepening' of credit relationships with existing clients[37]. By the same token, affordability refers to the cost and terms of financing when compared to borrowers' income and assets. An analysis of both dimensions requires extensive – and generally unavailable – information on the characteristics of prospective and actual borrowers in Mexico. This section focuses on available indicators that could be used to assess the evolution in accessibility (e.g. number of borrowers) and affordability (e.g. lending rates and terms) for companies and households as well as across Mexican states.

Companies

Access to domestic capital markets has improved considerably since 2001, but mostly for large highly-rated firms. As described in the previous section and as can be seen in figures 26 and 27, both the number and volume of debt issuance has significantly increased since 2001. Anecdotal evidence also suggests that the minimum amount required for an economically feasible debt issuance has also declined over this period to around US$20 million equivalent[38]. However, the vast majority of the increase is attributed to issuance – at progressively longer maturities (typically 5-7 years) and mostly floating rate – by a few large, investment grade-rated (local scale) Mexican firms.

Figure 26: Number of Outstanding Corporate Bond Issuers by Rating (2000-2005)

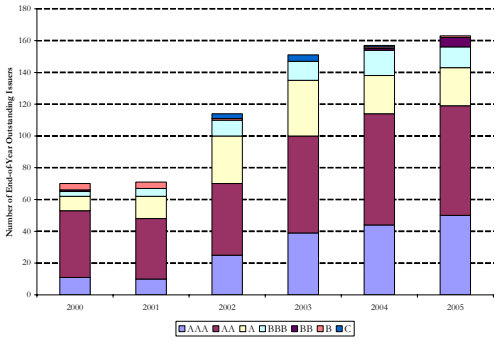
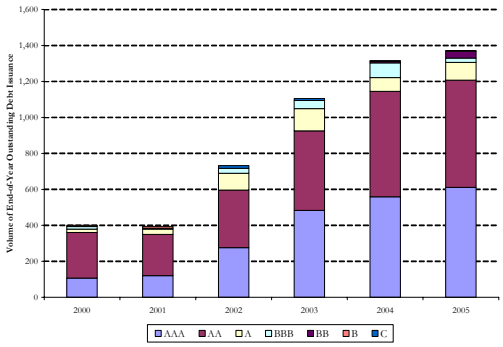


Figure 27: Value of Corporate Bonds Outstanding by Rating (2000-2005)



Source: CNBV.
Note: Only domestic medium- and long-term issuance in MXP and UDIs by non-financial private sector firms is shown.

[37] There is also an important conceptual difference between the possibility of using formal financing sources and their actual use (which depends on factors such as investment opportunities etc.).
[38] There have also been smaller issues that have been placed privately to retail investors, but they are few and expensive. Anecdotal evidence suggests that an issuance size of at least MXP 300 million is required to attract investment by Afores. However, according to Zervos S. (October 2004), Mexican firms issue debt (but not equity) more cheaply than Brazilian or Chilean firms.

It is difficult to substantiate increased access to bank commercial credit in the last few years due to lack of reliable data. Available information (i.e. the R04C database of the CNBV) on the number of commercial borrowers is not necessarily related to increased accessibility[39]. On the other hand, a quarterly survey by BOM ("*encuesta de evaluación coyuntural del mercado crediticio*"), which collects the views on access to credit of a static pool of at least 500 companies, shows that the proportion of all surveyed companies that considered domestic commercial banks as one of their main sources of credit declined from 24 to 17 percent since 2000, with the largest drop observed among large companies (see figures 28 and 29)[40]. A similar drop was observed in the proportion of firms that counted offshore (i.e. non-resident) banks as their main source of funding, which is consistent with the aforementioned decrease in foreign bank lending. By contrast, supplier credit has increasingly become the most important source of financing for Mexican companies of all sizes; in fact, 60 percent of all surveyed firms considered suppliers as one of their main source of credit, up from 48 percent in 2000[41].

Figure 28: Main Provider of Financing by Company Size (December 2000)

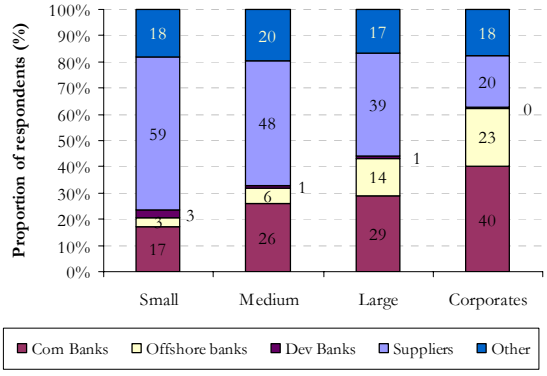
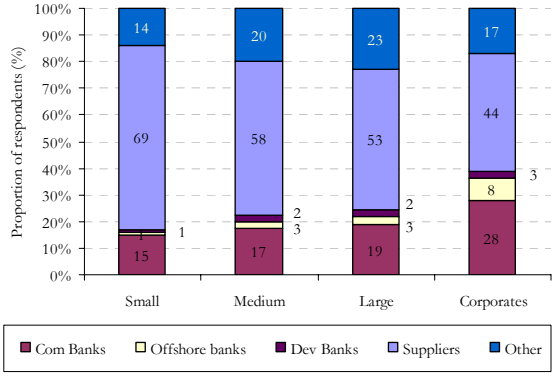


Figure 29: Main Provider of Financing by Company Size (December 2005)



Source: BOM.
Note: The size of companies is determined based on their annual sales in 1999 according to the following cut-off levels: Small (MXP 1-100 million), Medium (MXP 101-500 million), Large (MXP 501-5,000 million), AAA/Corporate (MXP 5,000+ million). Other financing consists of financing from other group companies, head office, non-banks, capital markets and other sources.

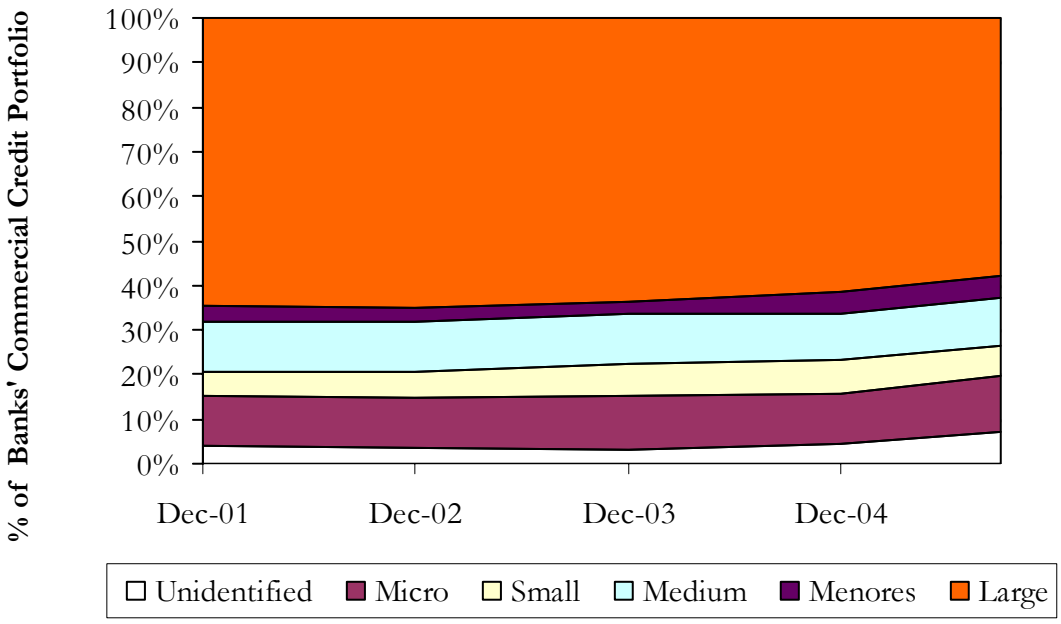
[39] According the database, the number of commercial borrowers increases from 62 to 232 thousand between 2003 and 2005, but total commercial credit volume remains virtually unchanged. This can be attributed to the inclusion of guarantees by Nafin for SME loans and by the decline in credits to the government. The number of commercial credit accounts filed in the credit bureau, which increased from 1.8 million in 2000 to more than 4 million in 2005, can also be used as an indirect indicator of access.

[40] However, the results of this survey need to be treated with caution. Firstly, the selected pool of 900 companies was drawn from a database of pre-existing bank borrowers as of 1999, implying that the sample is not representative of the corporate sector as a whole. Secondly, responses to the questionnaire are qualitative, meaning that the actual volume/proportion of funding by source is not captured. Finally, the sample has not been updated since 1999 to reflect the growth in sales turnover by some firms that might have moved them to larger-size categories; in addition, the definition of company size (based on annual turnover) differs to that used by the CNBV or the Ministry of Economy (see next paragraph).

[41] According to the BOM, foreign supplier credit amounted to around 1 percent of GDP as of end-2005.

The share of lending to SMEs does not seem to have increased considerably. The problem of tracking the evolution in the accessibility of commercial financing is exacerbated when attempting to review lending by firm size, since there are different SME definitions used by the CNBV (from which most bank reporting is derived) and by the Ministry of Economy[42]. For example, according to the former definition and the R04C database, only around 5 percent of the banks' commercial loan portfolio as of end-2005 comprised of SME loans. By contrast, according to recent BOM analysis based on the SENICREB database cross-referenced with information from the Ministry of Economy's *Padrón SIEM* and the magazine *Expansión 500* databases, micro and SME lending made up 30 percent of bank commercial lending as of end-2005. As can be seen in figure 30, that proportion does not appear to have increased considerably in recent years, although the reported figure might be understated for several reasons[43].

Figure 30: Outstanding Bank Credit to Firms by Firm Size (2001Q4-2005Q3)



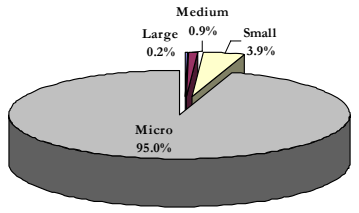
Source: BOM's *SENICREB* database cross-referenced with information from *Padrón SIEM* (Secretaria de Economía) and *Expansión 500* databases.
Note: Firm size uses the Ministry of Economy definition, which is based on the number of employees and varies by economic sector. Restructured FOBAPROA loans are excluded, even when they are performing.

The experience of various government programs to support micro and SME lending has been generally positive but limited to-date. According to the 1999 census, 99.7 percent of all firms are classified as micro and SMEs (see figure 31), which support 7 out

[42] The Ministry of Economy's definitions of firm size are based on the number of employees and vary by economic sector (manufacturing, trade and services). By contrast, according to the CNBV, only companies with loans from commercial banks below 900,000 UDIs are considered to be SMEs.
[43] These include banks reporting reverse factoring arrangements with SME suppliers of large corporates as loans to the latter as opposed to the former, and reporting short-term revolving loans to micro-entrepreneurs via credit cards and similar instruments as consumer loans. However, these forms of financing are not yet large in volume.

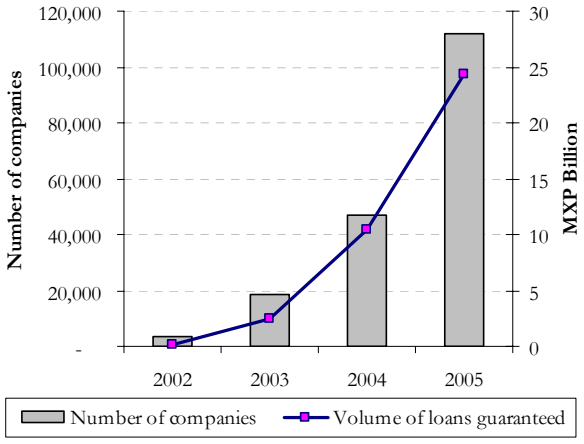
of 10 employees and contribute almost half of Mexico's GDP. Access to external financing for these firms is limited by governance issues arising from their family-based structure and by their relative lack of collateral, financial and credit history information, which is partly a function of the high level of informality in the economy[44]. High transaction and monitoring costs and small loan amounts further restrict the economic appeal of lending to these companies. A joint program by the Ministry of Economy and development bank *Nacional Financiera* (NAFIN) entitled *Sistema Nacional de Financiamiento PyME* was incepted in 2001 to foster micro and SME credit through the provision of direct guarantees[45], but its impact is still relatively small with guaranteed loans representing less than 7 percent of bank commercial credit portfolios as of December 2005 (see figure 32). The development of a web-based reverse factoring program for trade receivables ("*Cadenas Productivas*") by NAFIN has also contributed materially to greater bank lending to SMEs[46].

Figure 31: Number of Companies in Mexico by Size (1999)



Size	Manufacturing	Trade	Services
Micro	< 30	< 5	< 20
Small	31 - 100	5 - 20	21 – 50
Medium	101 - 500	21 - 100	51 - 100
Large	500+	100+	100+

Figure 32: Evolution of the SME Financing Guarantee Program (2002-2005)



Source: Ministry of Economy, INEGI.
Note: Size of firm refers to number of employees.

Although data on the evolution of commercial lending rates are unavailable, anecdotal evidence suggests that credit affordability has improved for larger companies. In particular, there is no published commercial loan product rate or spread (in relation to

[44] For example, only about 15 million out of an estimated 42 million workers receive social security and other benefits; see Mehrez G. (December 2005). See Beck T. and Demirguc-Kunt A. (November 2006) on the link between access to finance and growth for SMEs.

[45] The focus of the credit application process shifted from the characteristics of the company, provision of collateral and evaluation of the project, to basic requirements of formalization of companies and assessment of the experience and credit record of the owners-managers.

[46] In this program, the factor (i.e. the bank) only purchases accounts receivable on a non-recourse basis by pre-identified large buyers, thereby addressing some of the SME direct financing problems linked to lack of information, risk of fraud and high transaction costs. The program has been successful in attracting large corporates and providing liquidity to their SME suppliers, while the use of an electronic platform has reduced transaction costs and fostered competition among financial institutions. See de la Torre A., Gozzi J.C. and Schmukler S.L (April 2006) for a description.

the TIIE interbank rate) series since 2000 that can be used to validate the claim of increased affordability. However, anecdotal evidence, supported by CNBV analysis of reported bank accounting income[47], suggests that average lending spreads for corporates have declined in the last few years. The BOM's quarterly firm survey also shows that high interest rates have become less of a barrier to accessing bank credit since 2000 for larger companies, but not for SMEs (see figures 33 and 34). Firm-level characteristics, such as individual growth prospects that are related to competitiveness, have progressively become more important.

Figure 33: Main Constraints to Bank Credit by Company Size (December 2000)

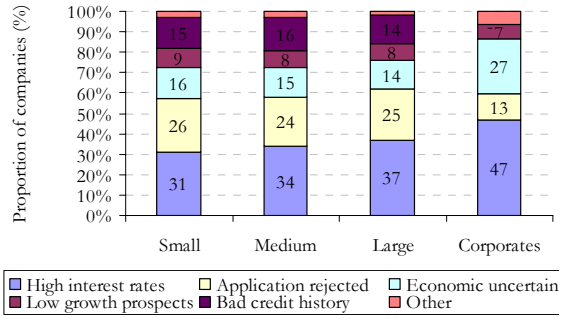
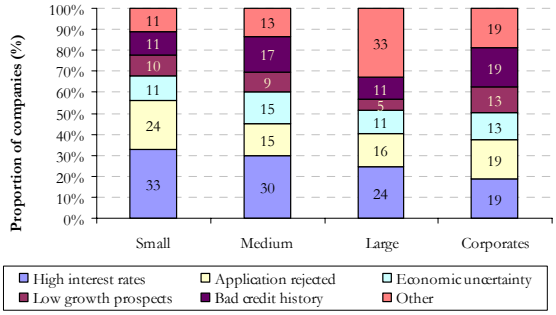


Figure 34: Main Constraints to Bank Credit by Company Size (December 2005)



Source: BOM.

Note: The size of companies is determined based on their annual sales in 1997 according to the following cut off levels: Small (MXP 1-100 million), Medium (MXP 101-500 million), Large (MXP 501-5,000 million), AAA/Corporate (MXP 5,000+ million). Low growth prospects consists of those firms that have reported lack of demand for their products or problems in market competition as their main reason for not accessing bank credit. Bad credit history consists of those firms that have reported problems of financial restructuring or a bad credit record as their main reason for not accessing bank credit. Other constraints to accessing bank credit includes the use of own funds, excessive demand by banks for collateral etc.

Government support programs do not appear to have a large impact on the affordability of micro and SME financing. A review of financing terms offered by different banks participating in the *Apoyo Pyme* program (see table below) reveals that terms vary significantly across different credit providers and that the interest rates charged on such products remain high in relation to the average rates for commercial loans (see figure 35). The much higher SME lending rates can only be attributed to their cost-intensive origination, given that the actual credit risk for banks is low[48] especially if one considers the benefits provided by government guarantees, such as high loss coverage (often first loss) and lower capital requirements and loan loss provisions.

[47] The current chart of accounts does not allow the decomposition of bank interest income or fees by market segment or loan product, so all analysis of accounting statements is at the overall credit portfolio level.

[48] According to preliminary figures by the Ministry of Economy, past due loans in this portfolio in 2005 were only 0.46 percent.

Table 2: Selected Micro and SME Loans Supported by *Apoyo Pyme* Program (February 2006)

	Interest rate	Amount of loan (MXP Thousand)		Maximum maturity (months)	Collateral / Guarantee	Minimum borrower size* (MXP Thousand)	Borrower's years of operations	Financial statements required	Require income tax information**
		Min	Max						
HSBC	15% - 24%	10	1,500	18	Not required	42	1 - 2	For loans above MXP$400th	Required
BBVA	TIIE + 8.32	75	1,000	24	Personal	900	1	Last 2 years	Required
Santander	18%	50	1,000	36	Personal	1,000	3	Last 2 years	Required
Banamex	TIIE + 11.4	NA	550	Revolving	Personal	NA	2	Last 2 years	Required
Banorte	TIIE + 12	100	11,200	60	Mortgage or personal	NA	2	Last 2 years	Required
Scotiabank	TIIE + 8.4	100	2,700	Revolving	Personal	NA	3	Last 2 years (Audited)	Required
Bajio	TIIE + 6.5	200	999	36	Personal	700	3	Last 3 years	Required
Banregio	19%	30	400	Revolving	Personal	NA	6 months	Last 2 years	Required
Banco Azteca	70%	10	60	24	Mortgage or personal	0	0	NA	Not required
Ficen	TIIE + 15	150	5,000	60	Mortgage or personal	5,000	2	Last 2 years	Required
Unicrese	TIIE + 12	30	250	36	Personal	NA	3 months	1 year	Required
Credito Real	50%	5	75	24	Fixed assets	NA	2 years	NA	Required

Source: Ministry of Economy.
Note: This table includes all commercial banks and a sample of non-bank financial institutions participating in the program.
* Minimum borrower size refers to the minimum level of annual sales that borrowers must demonstrate in order to be eligible for a loan.
** Refers to the requirement to provide proof of registration as taxpayer and/or income tax declarations.

Households

Strong growth in lending to households in recent years has expanded accessibility of financing, albeit from a low level. As can be seen in the table below, Mexico fares relatively well compared to its regional peers in geographic but not demographic penetration of bank branches and ATMs. However, banking coverage varies widely across states and is mostly concentrated in large urban areas[49]. Although direct information on the increase in the number of consumer and mortgage borrowers was unavailable, there are several other indicators that suggest broader accessibility of financing over the last few years. These include the increase in the number of consumer records on file with the credit bureau (from 28.5 million in end-2000 to around 64 million as of April 2005)[50], number of credit cards in circulation according to the CNBV (from 6.7 million in end-2000 to 21 million in end-2005) and number of new financed housing units according to the *Comisión Nacional de Fomento a la Vivienda* (from 477 thousand in 2000 to around 678 thousand in 2005).

[49] See, for example, CGAP (July 2005).
[50] Since all banks are obliged to consult the credit bureau for new credit relationships, the growing coverage of the bureau can be considered as a proxy for increased accessibility, although the growth in the number of consumer records does not necessarily reflect the increased number of individual borrowers.

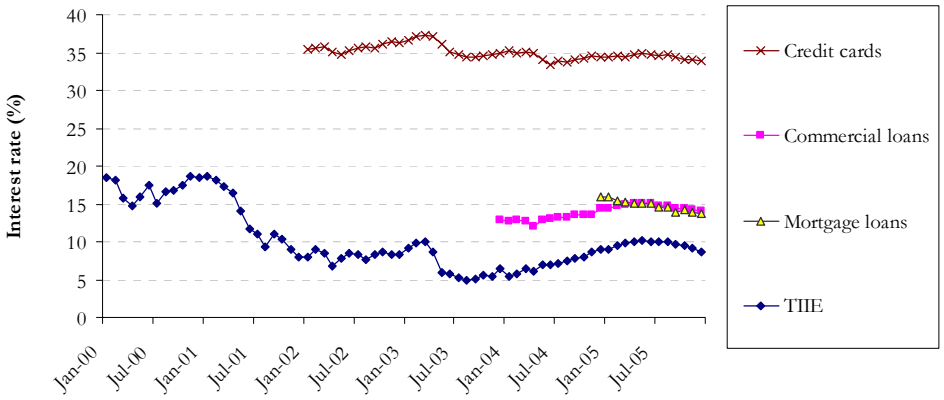
Table 3: Cross-Country Branch and ATM Penetration Comparisons (2002-2003)

	Mexico	Chile	Brazil	Argentina	United States
Branches per 1,000 sq. km	4.1	2.0	3.1	1.4	9.8
Number of branches per 100,000 people	7.6	9.4	14.6	10.0	30.9
ATMs per 1,000 sq. km	8.9	5.1	3.7	2.1	38.4
Number of ATMs per 100,000 people	16.6	24.0	17.8	14.9	120.9

Source: World Bank (Access database).

Rates and terms of household financing appear to have improved since 2000, especially for mortgages. As can be seen in figure 35, there is limited availability of historical interest rate time series by credit product, while the reliability of existing ones is questionable[51], thereby limiting any conclusive evaluation of affordability. However, anecdotal evidence strongly suggests that rates and terms of household financing have improved since the early part of the period – for example, there is strong market consensus that mortgage interest rates and commissions have fallen considerably, although an official interest rate series has only recently began to be published. The terms of mortgage credit have also improved (maturities now extend up to 20 years) while fixed-rate mortgages are becoming increasingly pervasive as banks compete for clients[52].

Figure 35: Evolution of Nominal Interest Rates (2000-2005)



Source: BOM and Infosel.
Note: The mortgage loan rate is the average of the Total Annual Cost (CAT)[53]. The commercial loan rate is the simple average of nominal interest rates in local currency loans granted during each period. The credit card rate is the simple average of bank credit card rates in the market.

[51] For example, after an initial decline in early 2001, the interest rate on credit cards (according to the Infosel series) has remained fairly stable and relatively high. However, in addition to the fact that the 'headline' rate does not capture the evolution in credit card commissions over this period, it is questionable whether it is representative of the diversity in credit card types and terms that currently exist in the market.
[52] According to a BBVA Bancomer Index of Mortgage Accessibility, the cost of paying a 15-year mortgage for a median priced house (80 percent loan-to-value ratio) has fallen from a level of 2 times the median family income in 2000 to 1.1 times in 2004; see BBVA Bancomer (July 2005).
[53] CAT (*Costo Anual Total*) is the effective interest rate used for comparative purposes that includes all direct annualized costs of a loan (e.g. bank commissions and insurance) excluding taxes and third party expenses (e.g. notary fees).

There remains significant divergence in rates for similar credit products across lenders, which could potentially suggest market segmentation and/or insufficient transparency and disclosure. As mentioned previously, there exist several potentially important sources of household credit outside the formal financial system such as department stores, which are not obliged to report information on their credit activities and are not subject to the same consumer protection laws. However, according to information collected by Condusef that is shown in figures 36 and 37, there is a wide dispersion in the cost of consumer credit both within the banking sector and across different types of lenders (banks, Sofoles, and department stores). This could potentially suggest market segmentation (i.e. limitations on alternative financing sources for lower-income versus higher-income households) and/or insufficient transparency and disclosure on rates and terms.

Figure 36: Comparative Effective (CAT) Consumer Credit Rates (December 2005)

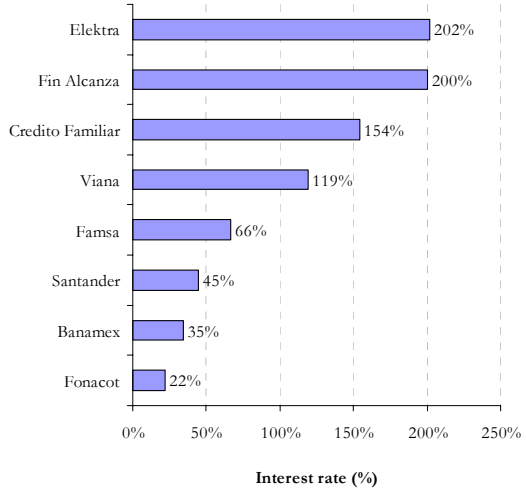
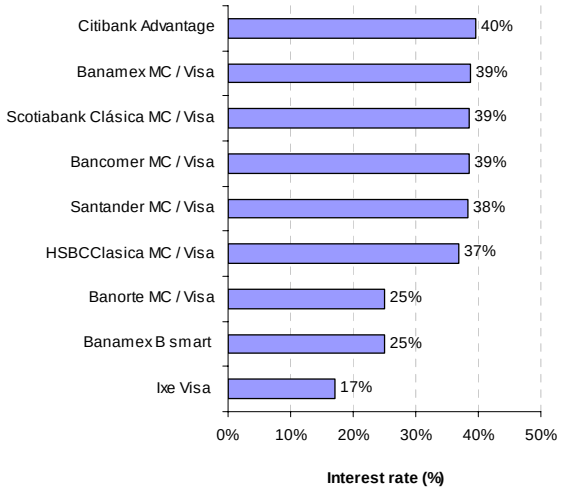


Figure 37: Comparative Nominal Credit Card Rates (December 2005)



Source: BOM, SHCP and Condusef.

States

Accessibility of financing also varies widely across different Mexican states, which can be partly attributed to differences in the business environment and the level of enforcement of creditor rights. As can be seen in figure 38, there was a wide discrepancy in bank credit volume by state when compared to each state's GDP or deposits as of 2003 (the last year for which state-level GDP figures are available). This can be partly attributed to statistical problems (i.e. some commercial loans are booked in the capital or in the state where the company's headquarters are located[54]), the level of per capita GDP and composition of GDP across states (i.e. agriculture versus industry versus services) and to typical 'core-periphery' behavior (i.e. Distrito Federal 'absorbing' the financial

[54] A breakdown of bank loans by type (i.e. commercial, mortgage and consumer) and state is not available.

savings of poorer states). However, there may be other factors at play, such as the business environment and level of commercial contract enforcement. Several reports in recent years[55] illustrate the wide divergences in the institutional development and the quality of enforcement across different states in Mexico. As previously mentioned, slow progress has been made to-date in converting public registries to electronic access and linking different states. The time and cost to register property and collateral (taxes, notary charges and registration fees[56]) is determined at the state or municipal levels and vary substantially[57]. In addition, the procedural complexity and related time and cost (court expenses and attorney fees) of enforcing contracts vary widely by state[58]. The combination of these factors reduces the attractiveness of bank lending and disproportionately hurts SMEs (which are more likely to need to offer collateral) and mortgage borrowers (who depend on the efficiency of the state's property registry). Although no analysis has been done on the impact of differences in doing business across states, there is anecdotal evidence of banks tightening lending (or being less aggressive in promoting it) in states that are perceived to be riskier and costlier.

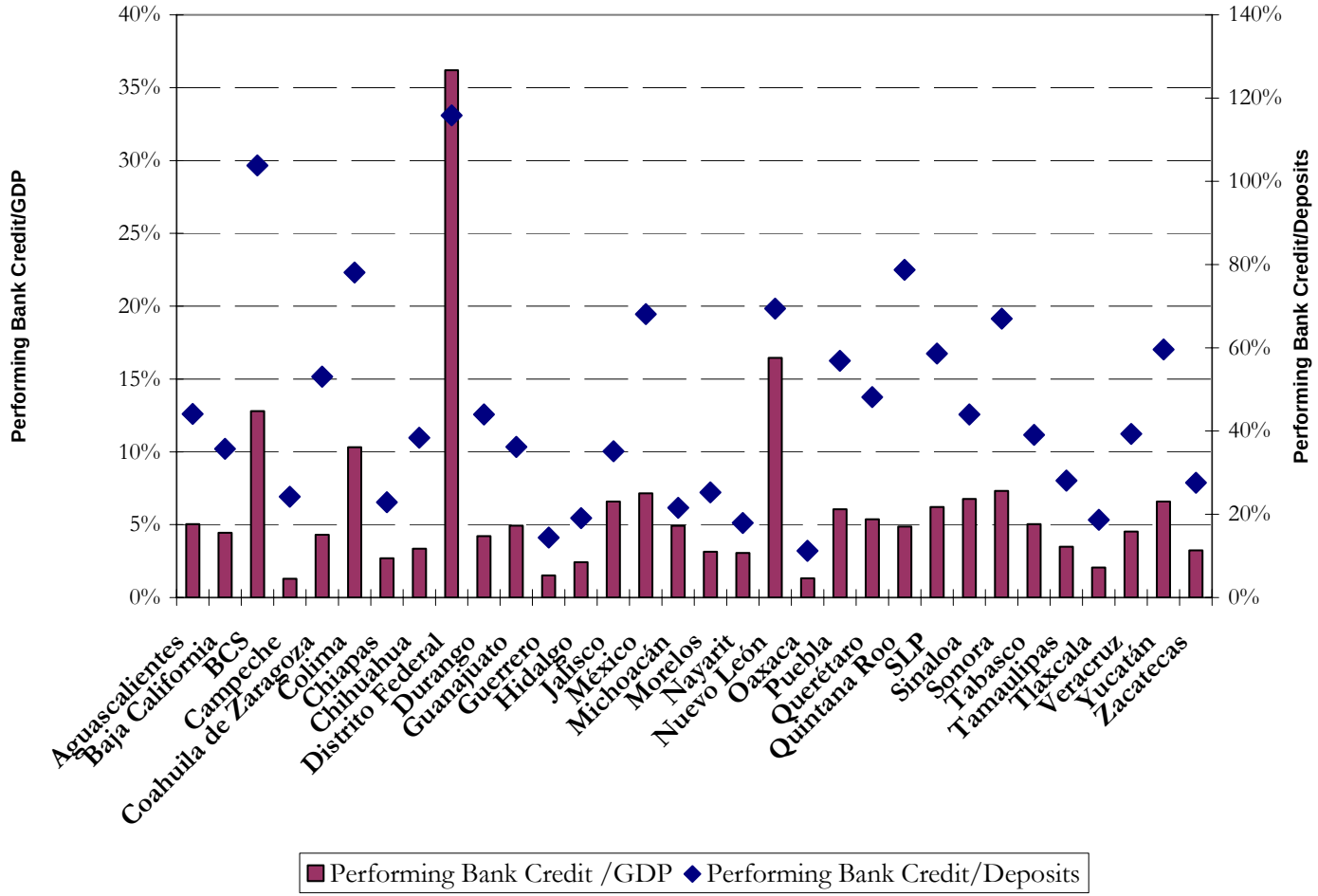
[55] See, for example, Moody's Investors Service (April 2002), Consejo Coordinador Financiero (2004) and World Bank (2006).

[56] Although most public registries have established a cap on registration fees, there remain some states (e.g. Jalisco, Hidalgo, Tamaulipas and Quintana Roo) that still determine fees on an uncapped basis as a percentage of the value of secured obligations.

[57] For example, according to the 2006 Doing Business report, the cost of registering property in Mérida (Yucatán) and Tlalnepantla (Estado de Mexico) is 2.4 and 6.1 percent respectively of the property value, while the cost of registering collateral in Aguascalientes and Ciudad Juárez (Chihuahua) is 1 and 3.2 percent respectively of the value of the loan.

[58] For example, according to the 2006 Doing Business report, the cost of enforcing a contract in Guadalajara (Jalisco) and Mérida (Yucatán) is 5 and 33 percent respectively of the debt owed.

Figure 38: Performing Bank Credit to GDP and to Deposits by Mexican State (2003)



Source: CNBV and INEGI.

Note: Performing bank credit is based on CNBV data and excludes restructured loans.

V. Conclusions and Policy Implications

Conclusions

The long-sought credit recovery from the 1994-95 crisis in Mexico began to materialize during the period under consideration in this paper. In particular, total financing to the non-financial private sector (both foreign and domestic) has increased relative to GDP since 2000, and there has recently been a strong resumption of bank lending. Equity issuance has not played an important role in financing the non-financial private sector during the period under consideration. Total debt financing (excluding NPLs) has increased by almost 2 percent of GDP; the domestic portion of that financing (i.e. excluding foreign funding sources) has increased by almost 4 percent of GDP since 2000, primarily due to the substitution of external by domestic commercial financing and the significant expansion of consumer financing throughout this period, albeit from a low base. Housing finance has also increased since 2003, although the repayment of restructured performing loans has helped to partly mask its strong underlying growth. Commercial financing has marginally declined in size once foreign and domestic financing sources are taken into account; following a contraction during the first part of the period that reflected de-leveraging and stagnant economic growth, bank commercial lending growth has resumed in 2004-05.

Although the supply of financing has shifted towards domestic non-bank providers, commercial banks remain the primary source of funding. In particular, there has been a switch from foreign financing sources (foreign bond issuance and cross-border bank lending) primarily towards Sofoles and the domestic bond market. Infonavit's mortgage portfolio has also grown considerably over this period and accounted for 5.2 percent of GDP (60 percent of all mortgage lending) as of end-2005. Development banks have moved from first- to second-tier lending and to partial credit guarantees, while their overall contribution has increased in the last five years in terms of GDP. However, commercial bank credit continues to be the main source of private sector financing (36 percent of the total as of 2005Q3), although it is increasingly channeled to household – as opposed to commercial – lending.

Financing sources outside the formal financial system might explain the relatively low level of private sector credit to GDP, but data are scarce. Mexico's domestic private sector credit as a percentage of GDP is roughly at par with its level in the late 1970s, and it is low when compared to countries of similar per capita income and economic size. This suggests that financing outside the formal financial system (e.g. reinvestment of retained earnings, supplier credit and the numerous providers of unofficial household financing) might be an important source of funding for the private sector, but there is a paucity of data to substantiate this hypothesis.

Significant progress has been made in cleaning up bank loan portfolios and in strengthening financial system soundness and infrastructure. It has been argued that commercial banks restricted credit to the private sector as a rational response to the

bursting of the credit bubble and weak protection and enforcement of property rights in the aftermath of the 1994-95 crisis[59]. Although this was likely true as late as the early part of the period under consideration in this paper, the rationale no longer carries as much weight due to the introduction of significant legal and regulatory reforms. These have supported the resolution of the non-performing loan (NPL) overhang stemming from the 1995 crisis and enhanced loan origination standards and credit risk management practices. In combination with good macroeconomic policies, foreign bank entry[60] and a favorable external environment, they have contributed to the modernization of the financial system and have significantly strengthened prudential oversight and the financial infrastructure (e.g. capital markets framework, corporate insolvency procedures, secured lending instruments, and credit bureau). While the overall impact and value-added of these reforms will become more evident over time, additional reforms are required to improve enforcement procedures, public registries of commerce and the judicial system.

The accessibility and affordability of financing have generally improved – albeit unequally across markets segments – over the period under consideration. In particular, access to domestic capital markets has increased considerably since 2001, but mostly for large highly-rated firms. Anecdotal evidence suggests that credit accessibility and affordability have also improved for bank commercial lending, although it is difficult to substantiate due to lack of reliable data. However, in spite of various government programs to support micro and SME loans, the share of bank lending to these firms does not seem to have increased considerably. By contrast, there has been a strong increase (from a low level) in household financing access and terms in recent years, although the persistent divergence in rates for similar credit products across lenders potentially suggests market segmentation and/or insufficient transparency and disclosure. The accessibility of financing also varies widely across different Mexican states, which can be partly attributed to differences in the business environment and the level of enforcement of creditor rights.

The prospects for continued private sector financing growth remain very positive. Barring unfavorable macroeconomic and external developments, the capacity of the domestic financial system to expand private sector financing (particularly to households) and thereby contribute further to economic growth is strong. It is underpinned by well-capitalized and profitable banks, sizeable institutional investor assets (which are growing at around 1 percent of GDP per annum), relatively low levels of private sector exposure in terms of GDP or financial system assets[61], and a much improved legal and regulatory framework. International experience suggests, however, that it will take time for the beneficial effects of the aforementioned improvements to be reflected in higher financial intermediation[62].

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[59] See, for example, Haber S. (2005). Other authors go even further and attribute the credit crunch to insufficient structural reforms and an incorrect policy response to handling NPLs – see, for example, Gonzales-Anaya J.A. (April 2003) and Tornell A. (January 2004).

[60] See, for example, Haber S. and Musacchio A. (November 2005) and Schulz H. (forthcoming).

[61] Private sector financing in the form of loans, bonds, and equity represents below 40 percent and 20 percent of commercial bank and institutional investor assets, respectively.

[62] See, for example, the cases of Chile and Korea in BBVA Bancomer (2005Q3).

However, private sector financing is not 'irrigated' evenly across all market segments. The prospects for continued household financing growth are especially positive given favorable demographics and the strong interest of both banks and non-banks (Infonavit and Sofoles) in this market. In particular, commercial banks prefer such mass retail loans in order to leverage their lending technology platforms and take advantage of economies of scale. Large highly-rated Mexican firms are also not credit constrained since they can freely tap (local and foreign) capital markets and switch between them and bank lending. By contrast, access to credit by SMEs is hampered by various aforementioned financial sector-related and broader structural problems that lead to a financially underserved market[63]. Funding sources outside the formal financial system may partly fill the SME financing 'gap', but they tend to be inefficient and costly.

Policy Implications

Given the above analysis, three broad types of policy implications can be deduced that could facilitate deeper and broader financing of the private sector. These are: (1) better information collection and analysis; (2) greater transparency and disclosure; and (3) promotion of SME financing. For each policy type, it is also important to distinguish (whenever possible) between short-term measures that are relatively easier and cheaper to implement, and longer-term measures that address institutional rigidities and/or would require the active involvement and coordination of several relevant entities.

Information collection and analysis: The paper has identified several key areas where more information would be highly desirable in order to better understand private sector financing developments and to guide policy. Short-term measures would include:

- analysis of overall development bank financing to the private sector (i.e. direct and indirect lending, and guarantees) – to evaluate the effectiveness of policies (e.g. to support SMEs) and instruments (e.g. guarantees), as well as to ensure consistency and no overlaps or gaps across different programs
- collection of information by relevant financial system authorities (i.e. SHCP, BOM and CNBV) on other public sector programs that currently finance the private sector (e.g. FOVISSSTE) – to accurately measure private sector financing and the public sector's involvement in it
- sharing and publication of classification methodologies by financial system authorities – to facilitate the reconciliation of their figures, such as the definition of the private sector, the evolution of loan volumes by company size, and the sample used to measure cross-border financing

[63] This does not mean that commercial banks' lending technologies cannot be used for SME loans but, given the various problems in the SME segment, it is relatively easier and more cost-effective for banks to concentrate most of their efforts on the household segment.

- access to credit bureau loan-level data – to analyze borrower characteristics and assess risk, particularly for consumer loans[64].

Longer-term measures would include:

- data collection on the financial condition of corporates and households (e.g. balance sheets, leverage ratios, income indicators etc.) – to better understand the connection between developments in the real sector and financing patterns (i.e. demand- versus supply-side factors)
- identification and analysis of alternative financing sources for companies and households outside the formal financial system – to quantify their importance and assess their impact on formal financing sources
- development of a more detailed chart of accounts on bank revenues by loan product (including both interest income and fees) – to assess bank performance when analyzing competition issues in different credit segments.

Transparency and disclosure: The development and public disclosure of standardized credit affordability indicators (i.e. interest rate time series by type of loan product and by provider) as well as of accessibility indicators (i.e. loan volumes by product, firm size, economic sector and state) would greatly contribute to a more transparent credit market. As has been the experience in other countries, publication of these indicators could provide a further impetus to competition across credit providers[65] and help borrowers become aware of credit pricing differences and hence more selective[66]; these indicators could also allow the authorities to better track credit market developments and formulate policy in areas such as financial access and competition.

Promotion of SME financing: As mentioned previously, the prospects for SME financing growth are less positive relative to other market segments, at least in the short term. Given the importance of SMEs for Mexico's economy, the authorities will need to continue to promote SME financing and strengthen the credit infrastructure for this market segment. In addition to the aforementioned recommendations, a short-term policy measure would be to promote greater information availability on SMEs – for example, by ensuring that the credit history of all SME loans is captured appropriately by the credit bureau[67]. In addition, the effectiveness of development banks' support of SME finance should be evaluated and improved, including with respect to the design of well-targeted and appropriately priced guarantee programs. Longer-term policy recommendations would include further strengthening of public registries of commerce and property and the reduction in their user cost (e.g. notaries), stronger and more consistent enforcement of creditor rights across different state jurisdictions, and further simplification of the

[64] This is important since Mexican banks have traditionally not targeted this market segment and relevant experience is relatively scarce (although not for the foreign owners of some banks); for example, even at the height of the credit boom prior to the 1994-95 crisis, consumer loans did not exceed 3 percent of GDP.

[65] Publication of various credit accessibility indicators by state might also 'sensitize' states to the importance of the business environment and of enforcement of creditor rights on the amount of lending.

[66] However, one issue that the paper does not address and that will need to be resolved is the institutional responsibility/mandate for the creation of such indicators.

[67] For instance, loans to SMEs that involve invoice discounting are currently recorded by banks in the credit bureau as loans to large corporations (i.e. to those firms whom the SMEs act as suppliers).

regulatory environment related to SME lending without compromising prudence[68]. The feasibility of tapping capital markets via innovative SME loan securitizations (e.g. by using credit enhancements in the same way that SHF has done for mortgage securitizations) should also be assessed in light of the on-going growth in institutional investor assets. Constraining factors that currently inhibit such securitizations (e.g. lack of product standardization, insufficient credit history, inconsistency in loan origination procedures across banks, inadequate size or diversification of the loan pool etc.) would need to be addressed appropriately in light of similar experiences by other countries[69].

[68] A more speculative idea would be the pooling of industry-wide SME credit data by a CNBV-managed consortium in which all credit institutions would be obliged to provide – on a confidential basis – minimum standardized information that could be used to calculate generic SME credit scoring models by size, sector and location; these could then be utilized (and improved upon based on other proprietary information) by all market participants.

[69] Examples include the USA's *Small Business Administration* program, Spain's *Fondo de Titularización de Activos Pyme*, and Germany's KfW-managed *Programme for Mittelstand Loan Securitization*.

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