BBVA Bancomer

Bank Watch Mexico

Economic Research Department

February 2010

adelante.

Contents

Closing date: February 16, 2010

February 2010

This publication was prepared by:

Editor: Adolfo Albo a.albo@bbva.bancomer.com

Eduardo Amerena* e.amerena@bbva.bancomer.com

Sara Gabriela Castellanos sara.castellanos@bbva.bancomer.com

Arnoldo López arnoldo.lopez@bbva.bancomer.com

Fco. Javier Morales francisco.morales@bbva.bancomer.com

Art: Fernando Tamayo fernando.tamayo@bbva.bancomer.com

Editorial Board:

Cover image design:

Angel René López Marmolejo

Cover image title: "*A Good Outlook*"

We appreciate the valuable comments and suggestions of Ricardo Calderón, Edgar Castillo, Uriel Galicia, José Ángel Juárez and Rubén Márquez (BBVA Bancomer); as well as José Humberto Alarcón, Arturo Arenas, José M. Domínguez, Betsy Alexandra Espinosa, Alberto Galván and Flavio A. Torres Nájera (ABM).

* Section responsible

Presentation

The banking system fulfills various important activities for the proper functioning of any economy. It provides savers with different savings options and increase their resources, the various participants (families, companies and government) to satisfy their demand for financing multiple needs and projects, and society in general with the means of payment to conduct various transactions. The international evidence also shows that there is a close relationship between financial penetration and countries' development. A greater supply of financial products and services increases the possibilities of consumption, savings and investment by economic agents and with this, raises potential growth.

Despite its importance, the role and evolution of the banking system and in general of the financial system in Mexico is not well known. Commonly, there are references to banking activity, very specifically with regard to its operation and to the characteristics of financial products, without information on the context in which the sector develops, the contributions it makes, the impact on and its relation with economic activity or the historic evolution it has had. This situation could lead to an incorrect or imprecise interpretation of its performance.

In this context, the need arises of having a periodic reference on the evolution of the banking system in Mexico, based on an analytical, comprehensive approach to temporary regulatory aspects and the performance of the banking business. Thus, we offer you the first edition of ***Mexico Bank Watch***, with the intention of satisfying this demand for analysis and information on the sector.

In the current situation, and in contrast with other recessions, the banking sector in Mexico has been an element of strength for the economy, by contributing to counteract the effects of the global crisis. Its high capitalization level, low levels of past-due indebtedness and a steady supply of credit, have prevented the exacerbation of downward trends in its penetration and have contributed to mitigating adverse impacts on economic activity. It is important to highlight that in other recessions, the reduction of credit was considerable; for example, during 1995-1996, it was equivalent to 9 percentage points of GDP and, on a longer-term horizon, 1995-2002, the reduction was slightly more than 18 points of GDP. In a more favorable phase, such as the one we are facing, greater financing will facilitate consolidating the recovery of the economy.

But the potential goes beyond this; from 2002 to 2007, the expansion of credit has accelerated and it is noteworthy that it has occurred with healthier bases, which allow us to be optimistic with regard to its recovery and sustainability in the future. The recent global crisis only temporarily interrupted its expansion, but did not change drastically its medium-term growth trend. Although it is true that modifications can be made that will allow accelerating the growth of credit, it should also be noted that the sector is carrying out its work on a daily basis to achieve greater bank penetration levels and the coverage of financial services. Two signs of these efforts are the introduction of the correspondent bank model and various programs of financial education.

We hope that ***Mexico Bank Watch*** will be of interest.

Ignacio Deschamps
Chairman and Chief Executive Officer
BBVA Bancomer

Editorial

Since the end of the decade of the 90's financial savings have maintained a growth trend. The gradual recovery of the economy, the stability of macroeconomic conditions, the creation of jobs, the population dynamic and a greater supply of financial products are some of the factors that explain this performance. In terms of components, the most dynamic are non-bank products and mandatory savings resulting from pension funds. The recent crisis only temporarily moderated the growth rates. It is to be expected that in the coming years, domestic savings will sustain the expansion of credit, although the dynamic is not as clear considering only traditional bank savings.

The recent expansion of bank credit in Mexico, which began in 2002, has been among the fastest in its history. Despite this, banking penetration in Mexico is low and there is still a long road to travel. This deficit is a consequence of the setbacks in penetration both during the nationalization period of the banking system and during the crisis of 1995. But it is also a consequence of the institutional framework, as is also analyzed in this edition. The conclusions in Mexico's case, based on a review of the literature on the matter and estimates for a broad group of countries, point toward an improvement in the institutional framework in which the economy evolves, aimed at a better protection of property rights and the generation of incentives to eliminate informal activity that can contribute toward accelerating the rhythm at which bank credit grows. The recession of 2009 negatively affected various credit components, but with a greater intensity in families' financing demand and in particular, that of consumption, which has posted a greater expansion since 2002. Despite this, there was a setback in the penetration of bank credit of a magnitude not seen on other occasions. Various factors explain this positive performance: such as, better origination, proper risk assessment, supervision and adequate prudential regulations, and localized effects of the recession, mainly in industries and areas more closely linked with the U.S. Past-due indebtedness increased moderately in this recession, mainly also in consumption, and to a lower extent in housing; but it was also significantly lower than the deterioration seen on other occasions.

During this crisis the banking system has maintained a high solvency due to the existence of previous high capital levels, low exposure to toxic assets, financing primarily in Mexican currency and the low growth of past-due indebtedness or default. In this edition of ***Mexico Bank Watch***, we present a stricter capital measurement than the one commonly used; one that is more in line with the best international practices. This measure confirms the same conclusion: the banking system maintains high solvency levels that allow it to increase the credit supply. The challenge for Mexico is to advance in achieving a stronger banking penetration level. Some factors that contribute to this end are explored in this edition. The characteristics of the correspondent bank model are described, with an emphasis on Mexico's experience. Access to simple savings products, to various payment and some credit means can be considerably facilitated through this new model, which could allow expanding the penetration and coverage of financial services toward a greater segment of the population over a broader geographic area in the country. The launching of the model is being carefully supervised and regulated by the authorities and by the intermediaries themselves in order to guarantee their correct operation. The complementary nature of the correspondent model with other traditional distribution channels will allow increasing the coverage of basic financial services more rapidly.

Finally, we review the motivations to promote Financial Education at the international level and the road already covered on this issue in Mexico. Better informed decisions will lead to generating consistent savings habits and the responsible management of debt, for the benefit of families and of companies.

Evolution of Credit and Financing to the Private Sector

In this section, the performance of credit and financing to the private sector will be analyzed. In this first part, the effect that the macroeconomic environment had on their evolution since the middle of the decade of the 1950's through 1994 is approached. The following sections, comment in detail the effects that the crisis of 1995 had on its components, both banking and non-banking. Thus, reference is made in the text to the various factors that have boosted the reactivation and the expansion of credit in general and that of banking in particular, which allows evaluating its recent performance.

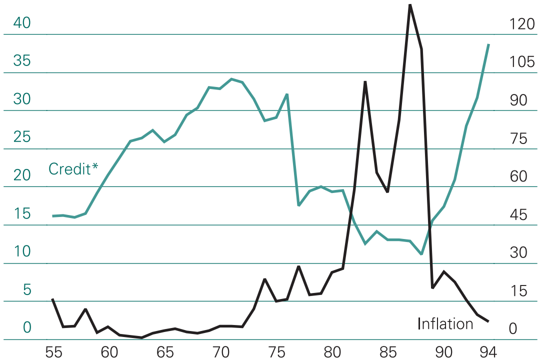
Macroeconomic stability and the expansion of credit to the private sector, from the mid 1950´s to the crisis of 1995[1]

Macroeconomic stability, characterized by low inflation, reduced interest rates and high economic growth, is an indispensable condition for credit to flow to the private sector and for it to have lasting effects on well-being and economic growth. This is exemplified by the evolution of credit from 1957 to 1970. Those years are part of the Stabilizing Development and, in that period, average annual inflation was 3.7% and GDP grew at an annual average rate of 6.4%. In this environment, the credit to GDP ratio went from 16% in 1957 to 33% in 1970.

As of the moment when the macroeconomic variables deteriorated, credit was moderated, as occurred in the 1970´s.[2] In 1973, inflation had already reached two digits (16.7%). In 1976, the proportion of credit to GDP was 32.2%, and, by 1977 it had dropped to 17.5% as a result of the effects of the peso devaluation in September 1976 and of high inflation[3]. The average annual inflation was almost 56% between 1977 and 1990, which led the bank credit ratio to the private sector, with relation to GDP, to remain stagnant until 1990, when it stood at 17.4%, slightly lower than what it was in 1977. The fact that the banks were nationalized from 1982 to mid-1991 did not help the expansion of credit; this had a repercussion in that practically no new loans were granted due to the existing fiscal imbalances. and that led the public sector to finance part of its deficit with bank deposits.

The factors mentioned above inhibited the expansion of bank credit, and it was not until the first part of the decade of the 1990´s, when progress was made in reducing inflation, the fiscal position of the public sector improved and the banks were reprivatized, that credit began to grow again. In this time lapse, the bank credit/GDP ratio went from 20.9% in 1991 to 38.7% in 1994. As analyzed in the following section, the expansion of credit occurred with no solid bases, because the macroeconomic instability that appeared as of the crisis in 1995 affected it severely.

Credit to the Private Sector and Annual Inflation
%, 1955-1994



* % of GDP
Source: International Monetary Fund, International Financial Statistics

1 This section considers historical statistics (International Financial Statistics) of the International Monetary Fund. The bank credit data is from Banking Survey item, those of the GDP at constant prices from the GDP 2000 series and those of Consumer Prices inflation. It should be mentioned that the IMF is beginning to report data on bank loans to the private sector in Mexico since 1948, while Banco de Mexico reports data as of December 1994.

2 For further details, see Mancera (1992).

3 It should be noted that Cordoba and Ortiz (1979) identify as a deflationary force which was manifested after the devaluation of the peso in 1976, the drop in demand, through the drop in private investment.

The crisis of 1995 and its long-term effects on credit activity[4]

The crisis of 1995 and the macroeconomic instability that characterized it had a huge adverse impact on the financing of the private sector. Thus, the severe deterioration of the macroeconomic environment was reflected in the 6.2% contraction of GDP in that year and the rise in the unemployment rate which rose from 3.2% in December of 1994 to 7.6% in August of 1995. Also observed was the important rally in inflation that went from 7.1% in 1994 to 52% in 1996. The higher inflation significantly increased nominal interest rates. Thus, the 28-day Cetes rate (which was used as a reference rate for granting credit at variable interest rates) rose from 18.5% at the end of 1994 to 74.75% in April 1995, while its annual average in 1994 was 14.1% and, in 1995, rose to 48.4%.

For several years, this instability affected total financing granted to the private sector both that of bank origin and of non-bank origin and it did so with important differences. In 1994, total credit represented 70.1% of GDP; five years later this ratio had dropped to less than 40%. Non-bank financing was the least affected and its proportion of GDP from 1994 to 1999 dropped from 27.3% to 21.5% and increased moderately to 23% in 2004. Since that year, its share has dropped slightly. In turn, bank credit showed a greater negative impact, both in terms of its reduction and in the number of years that were necessary for it to grow again. In 1994, it dropped 42.8% of GDP to 18% in 1999, and continued to drop to 9% in 2004. As of then, a new expansion phase has been observied in bank credit, which in 2009 stood at around 14% of GDP.

The adverse economic environment that was present due to the crisis of 1995 reduced families' and companies' payment capacity, and the rise in interest rates increased debtors' financing payments. These events led to accelerated growth of the banks' past-due loan portfolio. They had to use their loan-loss provisions and their capital, which affected their financial solvency and, as a result, their capacity to grant new loans.

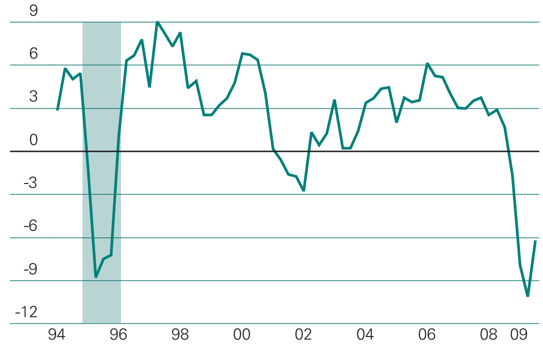
This required a deep financial reorganization process of the institutions, which reduced the financing balance to the private sector. This was achieved, among other factors, through the sale of the loan portfolio to the Bank Fund for the Protection of Savings and total or partial debt remissions and supports to reliable customers, as was the case of the Final Point program for housing loans. Also, the banks passed through an important process of recapitalization as well, to reinforce their solvency[5].

The evolution of loans by categories indicates that in 1994, consumer credit represented 3.4% of GDP and that of bank origin was 95.5% of that total (3.2% in relation to GDP). The crisis of 1995 made this ratio drop to 0.8% in 1999 with a marked adjustment in bank-originated credit.

4 As of this section and through the end of the text, reference is made of the data that Banco de Mexico publishes quarterly since the end of 1994 regarding the financing sources to the private sector of the country.

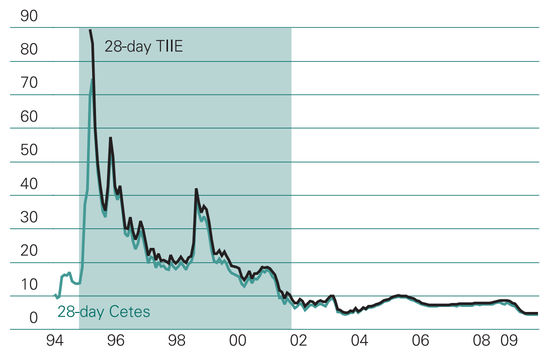
5 Among the factors that contributed to delaying the reactivation of bank credit after the crisis of 1995, Murillo (2003) notes the lack of persons that are credit worthy. When the crisis exploded, debtors in default and those that restructured their loans saw their credit history deteriorate, which took at least seven years to be cleared. So, debtors were left without any access to bank credit.

Quarterly GDP
Real annual % change



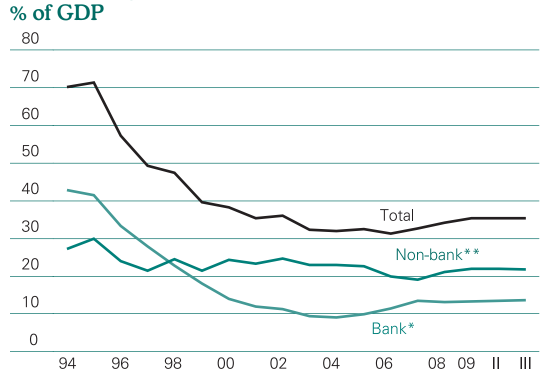
Source: BBVA Bancomer with INEGI data

Interest Rate
%



Source: BBVA Bancomer with Banco de Mexico data

Financing to the Private Sector
% of GDP



* Includes current and past-due loans of commercial banks and development banks

** Includes loans and financing granted by Financial Intermediaries of the country (Sofoles, Sofomes, leasing companies, factoring firms, credit unions, debt issues on the financial market of the country and Infonavit, among others) and the credit and financing that companies obtained abroad, be it from bank loans or by issuing debt on the international financial markets.

Total Is the sum of bank and non-bank loans

Source: BBVA Bancomer with Banco de Mexico and INEGI data

As regards bank loans for housing, in 1994, their balance represented 7.2% of GDP, while that of non-bank origin rose to 2.7%. The latter totally corresponded to loans granted by the Infonavit to workers affiliated to the IMSS (the Mexican Social Security Institute). The crisis of 1995 also reduced the balance and the relative importance of bank loans for housing and their proportion compared to GDP dropped to 1.6% in 2004. The significant contraction of housing loans was due to the high level of the past-due loan portfolio. This occurred because, through 1994, bank loans were documented at variable interest rates and the increases that they registered in 1995 led to a marked rise in past-due indebtedness.

At the end of 1994, the proportion of the total credit and financing balance to companies as a percentage of GDP was high (56.6%), and the bank credit/GDP ratio (32.2%) was higher than the non-bank (24.4%). Similarly to housing loans, the crisis in 1995 affected bank credit to a greater extent than that of non banks. Thus, at the end of 2005, the former represented only 4.9% of GDP, while the latter, 15.7%.

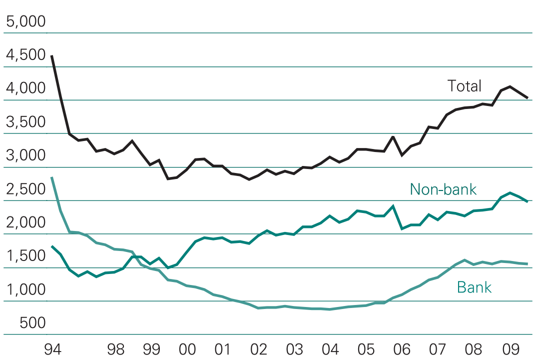
Expansion of Credit and Financing after 1995

Even though GDP once again grew after 1996, the environment did not lead to the reactivation of credit until some years later. Inflation returned to one-digit levels until April 2000, and it was necessary to wait a year and a half more so that, in November 2001, the 28-day IIER (equilibrium inter-bank interest rate, which is now used as a reference rate) was able to reach one-digit levels and remain at relatively low levels. Up to that moment, the demand for loans was limited, due to inflation and high interest rates.

In addition to GDP growth, progress in price stability, reduced reference interest rates and the partial recovery of real wages (from 1997 to 2000, the real wage index went from 73.9 a 80.7 units), the improvement in the legal framework of credit activity was also another factor that contributed to the growth of credit once again. Among the improvements to the legal framework on credit activity, of note is the Law on Mercantile Insolvency of 2000 (which substituted the old Law on Bankruptcies and Suspension of Payments) and the Tax Guarantees Ruling (Miscelánea de Garantías) of 2000 and 2003. This new regulatory framework set the bases for credit to grow once again with healthier bases, and the risk was reduced when the recovery processes of part-due loan guarantees was expedited and the protection of creditor rights was strengthened[6].

The evolution of credit and financing in real terms was better than in terms of its ratio to GDP. For example, since the second quarter of 2000 (2Q00), the real balance of non-bank financing was 4.1% higher that the one posted at the end of 1994, and from that date, its growth has been important. In 3Q09, it was 36.3% higher than the maximum that it had prior to the crisis. Moreover, the balance in real terms of bank credit to the private sector was reduced by more years

Financing to the Private Sector
Balances in billions of December 2008 pesos



Source: BBVA Bancomer with Banco de Mexico data

6 According to Gamboa and Schneider (2006), with the Mercantile Solvency Law , the time that a company remains in the process of insolvency decreased from 7.8 to 2.3 years and the frequency in which the degree of creditor preference is violated decreased from 29% to 2%. The average recovery rates also increased from 19 to 32 cents per each dollar.

and reached its lowest level in 1Q04, when it represented 30.8% of the balance in 1994. From that period to date, it has continued to increase and in 3Q09, its real balance was 54.4% of what it had registered in 1994.

The recent expansion in bank credit has even allowed replacing that of non-bank origin. This happened through the purchase of housing loan portfolios and acquiring car loan portfolios which some banks bought from Sofoles (limited-purpose financial associations) mortgage companies and automobile corporations. Another important case is that of credit granted by the banks to business consortiums in the country which, due to the international financial crisis had difficulties in renewing their financing abroad.

On the other hand, credit analysis, by its main categories, indicates that consumer credtit of non-bank origin grew in an accelerated manner after the crisis of 1995. In view of the lack of bank financing due to problems with the past-due loan portfolio and the lack of capital in the banks, department stores granted loans directly to their customers so as to maintain and boost their sales, in addition to the emergence of the Sofoles, some of which were the financial strength for automobile assembly companies. The favorable evolution of consumer credit and non-bank financing led to its relatively important growth in GDP, and in 2005, it was 1% of GDP. However, years later, this ratio dropped, among other aspects, because some automobile Sofoles sold part of the loan portfolio to the banks as a step to obtain fresh funds[7].

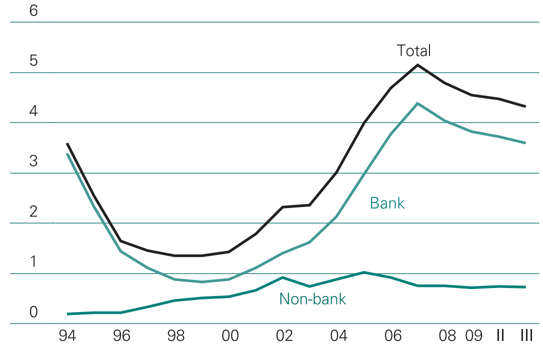
In 1999, bank consumer credit began its sustained high growth course. In fact, it was the first category in bank credit that began to grow. Its rapid expansion was due to the issue of bank credit cards (Banco de Mexico data indicate that, in 2Q02, there were 6.4 million credit cards in force and, by 2Q08, they had grown to 26.5 million) and from the reactivation of automobile loans as of 2002.

Following a long period during which consumer credit had contracted, the return of banks to this market coincided with the growth of employment in the formal sector, which expanded the market with customers that could receive consumer credit with limited credit risk. Also, real wages, after having contracted in 1995, began to recover as of 1998 and continued to do so through 2007. This allowed formal workers to increase their payment capacity. The combination of these factors explains the growth in bank consumer credit from 2000 to mid-2008.

Housing loans took longer to recover, because, after the crisis and from 1995 to 2003, the banks made important efforts to put their housing loan portfolio on a sound footing. This implied, among other aspects, that they would make some total or partial debt remissions and that loans would be restructured in Udis. In this lapse, the banks did not grant new housing loans through the mortgage Sofoles. Between 1994 and 2004, the loan balance of these Sofoles, as a ratio of GDP, rose from 0% to 1.3%.

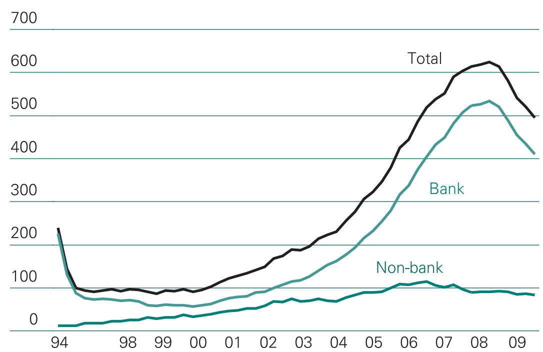
7 For a more detailed explanation of the loans to consumption expansion determinants and factors, wee Morales (2004).

Consumer Credit
% of GDP



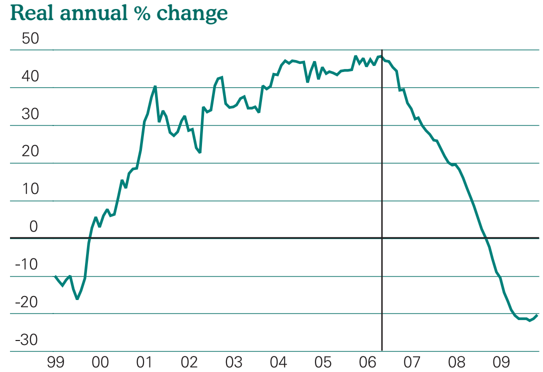
Source: BBVA Bancomer with Banco de Mexico and INEGI data

Consumer Credit
Figures in billions of December 2008 pesos



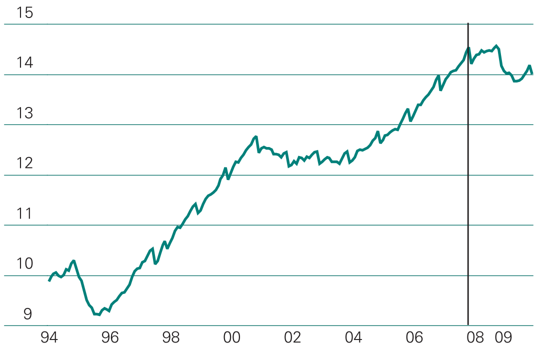
Source: BBVA Bancomer with Banco de Mexico data

Bank Consumer Credit
Real annual % change



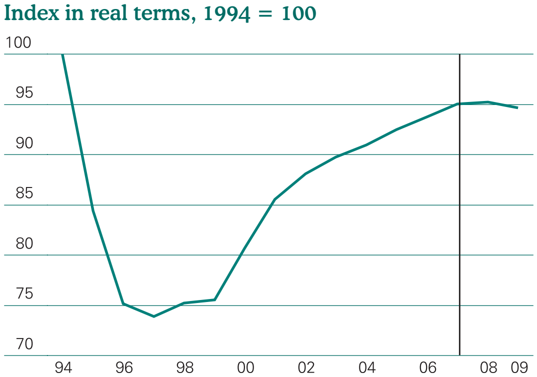
Source: BBVA Bancomer with Banco de Mexico data

Total Number of Workers Affiliated to the IMSS
Millions of persons



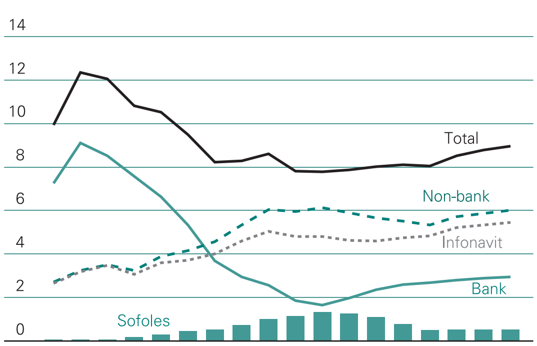
Source: BBVA Bancomer with IMSS data

Average Base Salary for Computing IMSS Dues and Benefits
Index in real terms, 1994 = 100



Source: BBVA Bancomer with IMSS data

Housing Loans
% of GDP



Source: BBVA Bancomer with Banco de Mexico and INEGI data

After the crisis of 1995, the Infonavit (Mexico's housing fund for workers) continued to grant loans and, as of 2001, it undertook a new loan assignation model that was more modern and efficient. Loans granted grew from 100,000 in 1996 to 200,000 in 2001 and almost 500,000 in 2008. Thus, the growing activity of the Infonavit and the important share of the mortgage Sofoles and Sofomes (multiple-purpose financial associations) allowed the ratio of the non-bank housing loan balance to go from 2.7% of GDP in 1994 to 6% in 2009 (5.5%from the Infonavit and 0.5% form the mortgage Sofoles and Sofomes).

The banks once again granted new housing loans after the 2003 Miscelanea de Garantías (a Bill of Guarantees) was approved. The new legal framework that the latter created allowed a more expedite recovery from past due loans and at a lower cost. Also, housing loans began to be granted at a fixed interest rate and at longer terms, which provided greater payment certainty, and unemployment insurance was added to the loan, as was life insurance. As of the second half of 2003, housing bank loans grew again. The expansion of their balance accelerated in 2005 and 2006, when some banks bought loan portfolios from mortgage Sofoles, and greater competition among financial institutions benefited the sector. This was reflected in the reduction of the interest rate on these loans, which was observed since the end of 2004.

At the same time, non-bank credit and financing to companies had a lower impact since the crisis of 1995 in real terms, being that these also were not reduced drastically. This occurred because the sources of non-bank funds were an important entrepreneurial financing option. Also, in certain quarters of 2004 and 2005, their real balance was already the same or higher than that registered at the end of 1994, which also occurred at the end of 2008 and in the first half of 2009.

Among the factors that influenced the lack of growth of bank credit to companies is the fact that not all companies meet the requirement of presenting trustworthy financial information for the credit to be granted to them[8]. This, to a great extent, could be replaced by the granting of guarantees. However, many companies lack these or the quality, which is difficult to evaluate, given the deficiencies in public property registries. These factors have had a bearing on the lower dynamism of credit granted to companies. It should be mentioned that in recent years there has been progress in the development and the use of programs of official guarantees for the banks to grant loans to micro, small and medium-sized companies. Important efforts have also been made regarding public registries. The local registries have undertaken a modernization effort to digitalize their files. Also, actions have been taken to centralize information by means of agreements between the Federation and the local governments, such as the Integral System of Registration Management (the SIGER for Sistema Integral de Gestión Registral)) and the creation of the Single Registry of Real Estate Guarantees (RUG for Registro Único de Garantías Mobiliarias)[9]. These efforts should continue.

8 For a more detailed explanation regarding the credit determinants for companies in Mexico, see Morales (2006).

9 In April 2009, a reform to the Commerce Code was approved, which includes learning from international experience regarding the registries of guarantees and by which very significant progress is made in this matter. Baley (2009) presents an analysis of the current situation of the Public Registry with regard to real estate guarantees, the main elements of a recent legal reform that creates the Single Registry of Real Estate Guarantees and an estimate of the impact of this reform through a game theory model.

The better performance of non-bank credit and financing to companies that was observed until 2005 was due to the fact that this and the banking system are substitutes. Factors such as the need for recapitalization by the banks that existed in the second half of the 1990´s, the presence of high reference interest rates, and the relatively easy access that many companies had to non-bank fund sources made it possible for non-bank credit not to be reduced and even to replace bank funds. Examples of the importance that the non-bank credit and financing acquired are: the expansion of supplier financing, the introduction of new stock market debt instruments, such as the stock certificates[10], and the greater ease that companies had for being able to issue debt abroad, derived from the investment degree that the country obtained in 2000, which expanded and reduced the price of external financing.

Evolution of credit in the recent economic slowdown

Bank consumer credit stopped growing during the first half of 2008 as a result of the reduction of formal employment and of real wages, as well as of the growing evidence of high over-indebtedness of some family segments due to the rapid growth of default of bank consumer credit as of 2006. Due to these factors, bank consumer credit went stagnant in the first half of 2008 and, in the second part of that year, it began to contract gradually. For their part, non-bank consumer credit showed a similar performance to that of banks, even though its stagnation symptoms occurred since 2007.

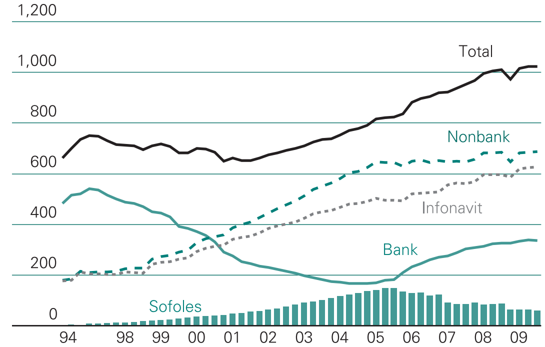
To the extent that formal employment will again grow in a sustained manner and real wages will increase, it is anticipated that the demand for consumer credit will increase again. Nevertheless, in 2009, the legal framework for consumer credit introduced standards that will prevent that, under the assumption that the rest of the conditions will not change, these loans will grow at rates as high as they did before, since the requirement that the institution granting the credit must analyze the customer's payment capacity and the institutions are prohibited from increasing the credit lines without the prior request or consent of the credit card holder[11] is stipulated in the law. These regulatory standards seek to reduce the credit risk associated with commercial policies that try to induce the expansion of short-term credit without considering quality.

With regard to housing loans, it is thought that the highest adjustment that these have had was due to that granted by the mortgage Sofoles and Sofomes resulting from the strong growth of their past-due loan portfolios and limited access to the securitization of their loan portfolios. This last has affected the financial health and the possibilities for expansion of these intermediaries. Independently of the expected benefits in 2010 from the economic recovery of the country, the immediate challenge of the Sofoles and Sofomes

10 Stock certificates were created in 2001. Their characteristics are set forth in Articles 61 to 64 of the Securities Market Law . They are credit instruments for circulation in the Mexican Stock Market and may be issued by private and public companies, as well as by local governments. These instruments have become the main debt instruments of corporations and are proof of the growth in medium- and long-term debt issues that has been observed in Mexico since 2004. For further details, see Castellanos and Martinez (2008).

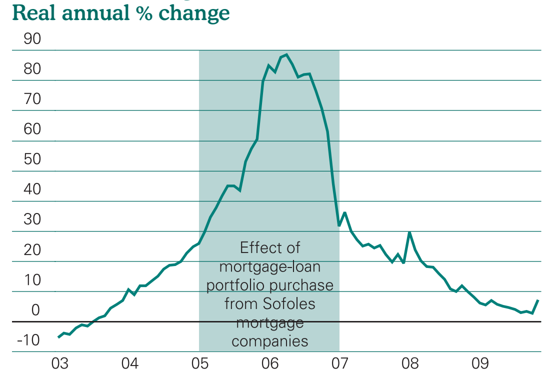
11 For further details see Article 18 Bis and Article 18 Bis of the Law for the Transparency and Ordering of Financial Services.

Housing Loans
Balances in billions of December 2008 pesos



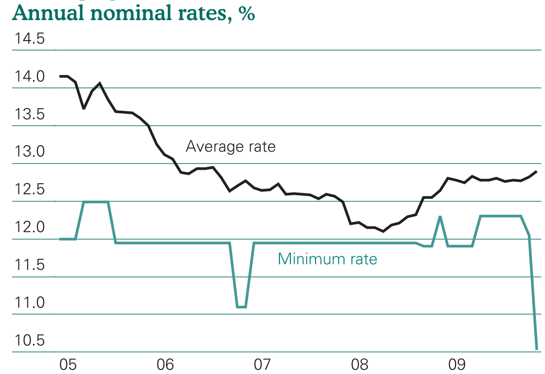
Source: BBVA Bancomer with Banco de Mexico data

Bank Housing Loans
Real annual % change



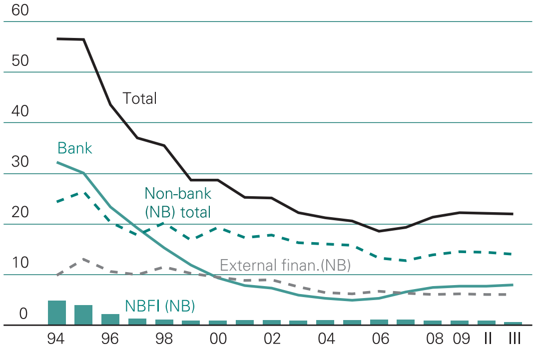
Source: BBVA Bancomer with Banco de Mexico data

Mortgage Loans Interest Rate
Annual nominal rates, %



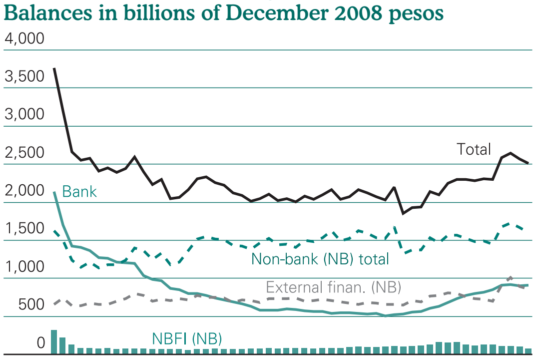
Source: BBVA Bancomer with Banco de Mexico data

Credit and Financing to Companies
% of GDP



Source: BBVA Bancomer with Banco de Mexico data

Credit and Financing to Companies
Balances in billions of December 2008 pesos



Source: BBVA Bancomer with Banco de Mexico data

consists in whether they can maintain their financial strength so that they can continue with their lending activity.

The availability of bank credit and Infonavit activity has allowed housing loans to continue to grow. The Infonavit is facing the challenge of continuing to increase the number of loans that it has granted. Also, it not only has to surpass the granting of 500,000 loans in 2008 but also a higher number if it wishes to meet the goals that its current financing plan set for granting between 570,000 to 620,000 new loans in 2014. In the case of the banks, the challenge consists in improving the conditions of their loans so that, once the economic recovery materializes, they will be more accessible to a more numerous group of the population and will once again grow at high rates.

As to bank loans to companies, the belief is that they replaced non-bank credit, which contracted due to the increased risk perception and to the greater difficulties that companies experienced on the international financial markets to refinance their liabilities through debt issues. The replacing of non-bank credit with that of banks is seen if it is considered that, in 4Q05, the latter represented 4.9% of GDP and the former 15.7%. For 3Q09, the relative importance of bank credit increased to 8% of GDP, while that of the non-banks dropped to 14%.

To the extent that a higher proportion of funds of bank and non-bank origin flow to providing loans to companies, credit activity will be collaborating for the country's GDP growth rate to increase. The banks have advanced in this heading to a large extent, when they increased the amount of the funds that they have destined to corporate loans.

Similarly, the banks and other financial entities have also increased the amount of funds that are channeled to micro, small and medium-sized companies (MIPYMES for their Spanish initials). They have done this, as it has been mentioned, with the support of the guarantee plans that official institutions grant. In the case of the banks, the balance of loans to MIPYMES as a ratio of GDP in 2005 went from 0.4% to 0.9% in 2008. It should be mentioned that total credit and financing (bank plus non-bank to companies of all sizes) in those years rose to 20.6% and 21.4% of GDP, respectively.

The challenge that all the financial entities are facing is to cause a higher amount of funds to be channeled to companies in general and to the MIPYMES in particular. The effort that must be made requires, among other things, the increase in official funds to be used as a guarantee for the development of flexible loan products that will limit the credit risk and create a favorable environment of sustained GDP growth and low interest rates.

Conclusions

The evolution of the different credit categories following the crisis of 1995 was not homogenous. For example, the performance of credit to families has been favorable. Thanks to consumer credit, a larger proportion of families was able to acquire durable consumer goods (automobiles and others) and thanks to housing mortgage loans, homes have begun to form net worth. Credit and financing to companies have also shown important progress from the minimum levels that these reached as a result of the crisis of 1995. To the extent in which greater financing will continue to be channeled to companies, support will be provided to growth of employment and GDP in the country.

The sustained expansion of all credit categories requires an efficient regulatory framework that will lead to competition among institutions and will set preventive measures to reduce risks. The first point has been covered by the introduction of the obligation that the financial entities report the Total Annual Cost or TAC of loans. This has been reinforced by the modification that the authorities made to the methodology for estimating the TAC. To the extent that customers are better informed, they will be able to make better decisions to their benefit. Also, behind a correct decision in the financial field is the financial education of customers. In this sense, and so as to reinforce the benefits for the well-being of customers, financial education efforts must continue, because informed customers and with knowledge of financial products demand better conditions of the loans they undertake.

As regards the prevention of credit risks, the current regulatory framework has made important progress by introducing stricter rules for the rating of loan portfolios and the creation of loan loss provisions to face risks. Examples of this are the modifications that were introduced to the provisions for credit cards in 2009. The timely constitution of loan-loss provisioins amply recognizes the risk factors, curbs their adverse effects and preserves the financial health of the financial institutions.

Thus the competition among the institutions given by well-informed customers with knowledge of financial products, the existence of an efficient risk prevention plan and a propitious macroeconomic environment for growth and stability are the factors that will allow credit and financing of all types to continue growing for the benefit of their users.

References

Baley, I. (2009). "*El Registro de Garantías Mobiliarias y su Impacto en el Mercado de Crédito Garantizado*" ("*The Registering of Real Estate Guarantees and its Impact on the Guaranteed Credit Market*"). Professional Thesis in Economics and Mathematics. Instituto Tecnológico Autónomo de México.

Gamboa, M. and F. Schneider (2006). "*Bankruptcy Reform, Litigation and Resolution of Distress*". Unpublished work document, Harvard University.

Castellanos, S. G. and L. Martínez (2008). "*Development of the Mexican Bond Market*". Bond Markets in Latin America: On the Verge of a Big Bang?" E. Borensztein, K. Cowan, B. Eichengreen and U. Panizza (eds.), MIT Press, pp. 51-58.

Córdoba, J. and G. Ortiz (1979). "*Aspectos deflacionarios de la devaluación del peso mexicano de 1976*" ("*Deflationary Aspects of the devaluation of the Mexican peso of 1976*"). . Banco de Mexico 1979-09 Research Document.

Mancera, M. (1992). "*Discurso pronunciado en el acto de recepción del Premio Rey Juan Carlos de Economía, instituido por la Fundación Celma Prieto*" ("*Speech upon the Reception of the King Juan Carlos Economics Award, established by the Celma Prieto Foundaiton*".)

Morales, F. J. (2004). "*El Crédito al Consumo: Principales Determinantes y Factores de Expansión*" ("*Consumer Credit: Main Determinants and Factors for Expansion*") Bank Topics. BBVA ERD August 2004.

Morales, F. J. (2006). "*Determinantes del Crédito a Empresas en México*" ("*Credit Determinants for Companies in Mexico*") . Bank Topics. BBVA.ERD June 2006.

Murillo, J. A. (2003). "*Consideraciones sobre la Reactivación del Crédito Bancario en México*" ("*Considerations on the Reactivation of Bank Credit in Mexico*"). La Banca en América Latina. Lecciones del Pasado. Retos del Futuro. (The Banking System in Latin America. Lessons from the Past. Challenges for the Future.) Del Angel, G. (compiler). Research and Economic Instruction Center.

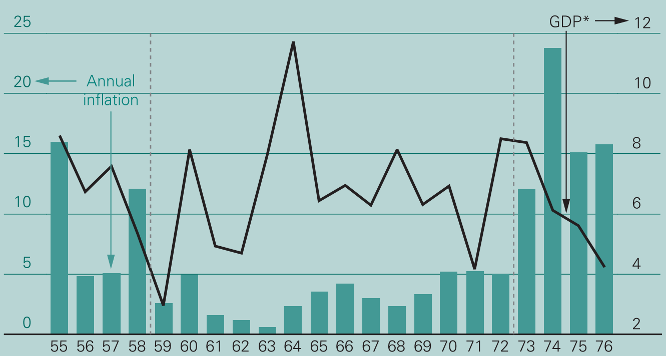
Credit to the Private Sector from the End of the 1950s to the Beginning of the 1970s[1]

A review of the behavior of the main economic variables in Mexico between 1955 and 1975 illustrates the importance of stability and economic growth in the evolution of credit to the private sector. From 1955 to 1958, credit granted to the private sector as a percentage of GDP was relatively low and on average it was 18.2%. This coincided with a situation in which for two of those four years, inflation was two digits: 16% in 1955 and 12.1% in 1958.

As of 1959 this figure began to increase and reached levels of around 33% between 1970 and 1972. Over the course of all these years inflation was in the single-digits and remained at relatively low levels, averaging close to 3% from 1959 to 1972. Furthermore, peso-dollar parity remained stable, given the nature of the system, which was based on a fixed exchange rate. In 1973, inflation again increased, reaching the two-digit level at 12%. It was not until 20 years later, that is, in 1993, that inflation again dropped to a single digit, at 9.8%, which at that moment signified a temporary return to stability.

Inflation and GDP

1955-1976



* Real annual % change

Source: International Monetary Fund, International Financial Statistics

In terms of economic activity, from 1959 to 1972 GDP posted sustained growth and at high rates. During that period, on average, the GDP growth rate was 6.7%. Given the tremendous dynamism in the Mexican economy, in real terms GDP more than doubled during the years in question, In this period, formal employment in private sector companies also increased, from almost 1.2 million workers affiliated to the Mexican Social Security Institute (IMSS) in 1960 to 3.1 million in 1970, which is equivalent to an annual growth rate of almost 10%.

Credit to the Private Sector and Inflation

1955-1988

* % of GDP

Source: International Monetary Fund, International Financial Statistics

The favorable macroeconomic environment that lasted many years, and in which a low inflation rate coexisted with strong growth in economic activity and employment, led to an increase in credit to the private sector during the 1960s, which continued up to the first half of the 1970s. The strong weakening of the macroeconomic environment that occurred as of 1976, characterized by the devaluation of the peso, high inflation, contraction or low growth of GDP, for many years affected credit to the private sector.

This situation prevailed until the end of the 1980s, during which time in some years inflation came to reach three digit levels. In conclusion, long-term macroeconomic stability favors credit activity and if there are particularly long periods marked by high inflation, this strongly inhibits financing. Beyond the specific conditions of the financial sector, maintaining a favorable macroeconomic environment is an indispensable condition for the healthy and long-lasting development of credit activity.

1 The statistical information on credit to the private sector, GDP, and inflation comes from the International Monetary Fund, International Financial Statistics, while the data on formal sector employment is from the Sixth State of the Nation Report, 1994, Carlos Salinas, Appendix, p. 422, on Obligatory Affiliation of Employees to Social Security.

TAC: Total Annual Cost of Financing

The Total Annual Cost (TAC) is a measurement of the cost of financing for users of financial services. Its advantage is that it incorporates in a single unit all the costs and expenses inherent to the credit. Because it is an annual percentage, it allows for simple and immediate comparisons to be made between the different credits available. Thus, the public can choose the alternative that is most in its interest. The TAC is used mainly for mortgage loans and consumer credit. Due to its importance, in this article we will discuss the components that are included to calculate the TAC, the modifications that have recently been introduced in the original formula, and an appraisal.

As of November 17, 2009, new Banco de México provisions[1] entered into effect on how to calculate the TAC. Some precisions were made, particularly to facilitate its interpretation and to promote greater uniformity in the way in which the TAC is presented in informational materials, contracts, and account statements, particularly in dealing with credit cards. Two of the changes were particularly important. The first is that excluded from the formula for calculating the TAC are the value added tax corresponding to commissions, premiums, and ordinary interest, and the discounts, allowances or any other amount that the client has the right to receive when he or she fulfills the conditions established in the credit agreement. The second is that in housing loans, support or subsidies from the government or housing promotion agencies that are used to pay off the credit will be considered as payments made by the client.

In general, in the case of credit institutions, limited-purpose financial companies, regulated or unregulated multi-purpose financial companies, savings and loan associations, financial entities that act as trustees in trusts that grant credit to the public, companies that habitually grant credit to the public, and other incorporated entities that habitually grant credit to the public, which offer credits directly or through a third party, for amounts below the equivalent of 900,000 UDIS (approximately 3,958,742 pesos) [2], as well as guaranteed housing loans of any amount, the TAC will be calculated with the methodology, formula, components, and assumptions that are described below.

The TAC is the numerical value expressed in percentage terms that is equal to the sum of the present value of the credit dispositions with the sum of the present value of the loan payments, considering the time intervals with which they are made[3], that is, it is the variable i, which satisfies the following equation:

$$\sum_{j=1}^{M} \frac{A_j}{(1+i)^{tj}} = \sum_{k=1}^{N} \frac{B_k}{(1+i)^{sk}}$$

In which M = total number of credit dispositions; j = Consecutive number that identifies each credit disposition; A_j = Amount of the j-th credit disposition; N = Total number of payments; k = Consecutive number that identifies each payment; B_k = Amount of the k-th payment; t_j = Interval of time, expressed in years and fractions thereof that transpired between the date in which the agreement entered into effect and the date of the j-th credit disposition; and sk = Interval of time, expressed in years and fractions thereof that transpired between the date in which the agreement entered into effect and the date of the k-th payment. It should be explained that dispositions ($A_{j)}$ and payments (B_k) will be expressed in the same currency or account unit and that, when the previous equation has more than one solution, the dispositions establish that the TAC will be the positive value nearest to zero.

With regard to revolving credits associated with credit cards, in the calculation of the TAC, it will be assumed that the client has the total amount of the line available at the beginning of the term of the loan and that the amount available after each payment of the period in question will be immediately used again. In addition, specific assumptions are established with regard to the amount of the credit line, the interest rate, and the minimum payment that will be used in the calculation of the TAC for purposes of publicity and information, agreements, and account statements. Of particular importance is the fact that the entities must classify their products, both those of general as well as private use, within one of the following categories, based on their characteristics, and considering the corresponding amount: a) a classic type credit card or equivalent: P$15,000.00; b) gold-type credit card or equivalent: P$35,000.00, and c) platinum-type credit card or equivalent: P$65,000.00.

1 Circular letter 21/2009 replacing the content of Circular letter 15/2007
2 1 UDI = 4.398602 Pesos. Source: Banco de México (date of consultation: February 17, 2010).
3 In financial terms the TAC can also be considered as a real interest rate.

As was previously mentioned, in relation to guaranteed housing loans or housing loans associated with government subsidies or financial support from housing agencies that are used to amortize the loan, the new dispositions stipulate that they will be considered as payments made by the client. Included within this assumption will be, among others, payments made with employer fees deposited with the National Workers' Housing Fund Institute (INFONAVIT) and with the subsidies from the National Housing Commission (CONAVI). In calculating the TAC that is used for information concerning guaranteed housing loans, the average value that corresponds to each classification range of the type of housing announced by *Sociedad Hipotecaria Federal* (SHiF) (the Federal Mortgage Association) should be considered, along with the conditions that the entities establish for term credits and the appraisal closest to 15 years and 80%, respectively. Finally, when, after the credit has been granted, the entities report on the TAC applicable to the rest of the life of the loan, they should calculate it using the formula, components, and assumptions considered in the provisions, considering the information valid at the moment when the calculation is made, as well as the unpaid balance, the remaining term on the loan, and payments to be made, without considering the payments already made.

In the information in which, in accordance with the applicable dispositions, the TAC is to be included, the following stipulations should be adhered to:

i) It should appear as a single value (maximum or minimum amounts should not be referred to) calculated in accordance with the dispositions;

ii) It should be expressed in percentage terms rounded off to one decimal;

iii) It should incorporate the phrase "Without VAT", immediately after the numerical value that corresponds to the TAC, and

iv) In publicity and information, immediately after the word "TAC" the word "AVERAGE" should be included.

The offers of preapproved or prequalified credits or loans that the entities make to certain individuals should include the TAC specified in the proposal. When dealing with credit cards, in publicity and information in which it is obligatory to report the TAC, the average interest rate weighted by the balance in annual terms should also be included, as well as the annual commission on the product, followed by the phrase "Without VAT."

The following categories are exempt from the application of these provisions: guaranteed housing loans that are granted to housing promoters, real estate developers, construction companies, and home builders or trusts, to enable them to build housing for subsequent sale; business or corporate loans, of any amount, for clients to whom a loan was previously granted for an amount equal to or higher than the equivalent of 900,000.00 UDIS (approximately 3,872,773 pesos); lease financing; financial factoring; commercial discount line; and on sight letters of credit.

The TAC is a useful and important measurement for users of financial services because it provides simple and complete information of the cost of a loan in a percentage figure. In this sense, it provides the user with initial useful information for choosing credit in a more informed and responsible fashion. However, it should be considered as an initial reference, especially when promotional materials are consulted, in which it appears as a maximum reference for the product that is being promoted, since the payment performance of the debtor tends to influence the interest rate that is being offered. Therefore, the TAC published in his or her account statement can differ from the figure that appears in such public sources.

Finally, it is important to mention that as of December 1, 2009 the TAC will appear in the financial statements of the debtor's loans.

References

Circular letter 15/2007, Banco de México, November 29, 2007.

Circular letter 21/2009, Banco de México, September 3, 2009.

Explanation of the calculation of the Total Annual Cost (TAC), Banco de México, 2009.

Credit and Total Annual Cost, Banco de México, 2009.

Regulatory Changes and Consumer Protection in Mexico and Other Countries

This article will review the new regulations that are being promoted in Mexico and other countries to protect consumers of financial services, in light of the global financial crisis experienced in 2008[1]. Last year, legal modifications were introduced in order to strengthen the powers and responsibilities of the Banco de México (Banxico) and the National Commission for the Defense of Users of Financial Services (CONDUSEF)[2].

In accordance with the modifications to the Law on Credit Institutions (LIC)[3], the CONDUSEF will establish the requirements and procedures to conclude contracts between banks and their clients. In addition, it can define what activities are at variance with healthy practices in the supply and sale of financial services and operations on the part of the credit institutions, and sanction violations of the law with fines.

Furthermore, in the modifications to the Law for the Transparency and Classification of Financial Services (LTOSF for *Ley para la Transparencia y Ordenamiento de los Servicios Financieros*)[4], the CONDUSEF is authorized to issue legal provisions concerning the characteristics and terms of the contracts, account statements, and disclosure in relation to the characteristics of the credit institutions' services and lending and savings operations. In terms of account statements and receipts from bank operations, of particular importance is the requirement to including relevant information on commissions charged for different items, interest charged, balances, credit limits, warnings on operating risks, and the Total Annual Cost (TAC) (see box on TAC: Total Annual Cost of Financing). The CONDUSEF can also establish educational programs and others dealing with financial culture.

The law also empowers the Banco de México to issue provisions of a general nature to regulate interest rates, commissions, and advance payments for the transactions undertaken by the regulated financial institutions[5] with their clients. With regard to financing, loans, or revolving credits associated with credit cards, different provisions were established to limit both the supply of credit, as well as interest rates, commissions, and minimum payments associated with the products. Based on its authority in this regard, the Banco de México issued regulations to prohibit charges of different commissions. These regulations prohibit commissions from being jointly charged in the same period for handling accounts and for not maintaining a minimum balance in demand deposit accounts or for the cancellation of deposit accounts, credit or debit cards, Internet banking services, and the domiciliation of payments for goods and services[6].

This strengthening of the measures to protect users of financial services has been one of the most important effects of the international financial crisis. Authorities of several countries and the international financial institutions have organized different work groups to improve protection for users of financial services, both on a general level as well as in relation to products, since the previous regulations allowed for situations viewed as unfavorable for the client.

In the United States two new bills were approved that will enter into force during 2010 although the exact details are still uncertain. The first is a regulation on credit cards that seeks to avoid the excesses made by some credit card issuers during the preceding expansive period through changes in the commissions charged and in the payment conditions[7]. The second bill creates a new protection agency for consumers of financial products, in order to concentrate the task of consumer protection that previously fell on numerous agencies, and to eliminate the possibility of choosing the most lenient state regulatory policies, imposing new equal minimum standards for all the states[8].

In Colombia, in June 2009 a financial reform was approved that contemplates, among other points, measures related to the consumer protection system and to clients' rights and obligations. It stipulates that consumers are entitled to receive, from the institutions being monitored, products and services that fulfill the standards of security and quality, in accordance with the conditions offered and the obligations assumed by the credit institutions in the corresponding contract. Users are also to receive transparent, clear and verifiable information and advertising regarding the products or services that each financial institution offers. In addition, they can demand swiftness and effectiveness in providing the service. They are also entitled to know the costs that are generated by each service offered by the monitored financial institution. Finally, the credit institutions

1 September 15, 2009 was the one-year anniversary of the Lehman Brothers investment bank's declaration of bankruptcy and the beginning of a sharp weakening of the main global financial and economic indicators.

2 Created in 1999 with the aim of promoting, advising, protecting, and defending the rights and interests of financial service users vis a vis financial institutions, to impartially arbitrate their differences, and provide equitable treatment in the relations between them.

3 *Diario Oficial de la Federación*, (Official Gazette of the Federation), Mexico, June 25, 2009.

4 Op. cit.

5 Credit institutions, limited-purpose financial institutions, regulated multi-purpose financial companies and non-bank banks.

6 For more details, see Circular Letter 17/2009, Banco de México, July 21, 2009.

7 Credit Card Accountability Responsibility and Disclosure Act of 2009 (H.R 627).

8 Consumer Financial Protection Agency Act 2009 (H.R.3126).

must have a Financial Consumer Defense department, in charge of protecting users from possible irregularities and abuses in which the institutions could incur.

In the United Kingdom, in July 2009, a bill was introduced to reform the financial markets involving measures aimed at increasing the markets' financial capacity. The legislation aims to improve client access to simple and transparent products, with special emphasis on mortgages and consumer credit, and in investment and savings accounts, enabling consumers to act collectively to obtain compensations in the event of generalized complaints, enhancing protective measures for depositors[9] . In order to advance in the strategy of offering simple and transparent products, the authorities raised the need to evaluate the success of measures previously implemented to standardize pensions. An important disadvantage in undertaking detailed regulation of financial products is the fact that the government designs the products, and this is not a function for which public authorities are adept and which could restrict financial innovation. Therefore, the government feels that the regulation should leave the design of products to the financial services industry without at the same time compromising consumer protection. Authorities also recognize that there is room for products that are more expensive, more complex, or less accessible than the basic instruments offered.

More recently, in November 2009 in Uruguay, it was announced that the Banco Central de Uruguay (BCU) will be in charge of providing greater protection to consumers and will increase stability and efficiency in the financial system. Efforts will be made to strengthen the role of the central bank's Superintendence of Financial Services, created in the 2008 with broad regulatory and control powers over financial services and agents, including banks, insurance companies, securities firms, and pension fund management companies[10].

In contrast with the previous cases, the European guidelines on consumer protection date from prior to the crisis. All the countries of the European Union (EU) are regulated by decrees that oversee different aspects of consumer protection, specific products, or investors[11]. However, the European Commission has begun public consultations related to the mortgage markets[12], responsible practices for requesting and granting credit[13], the use of credit records[14], and the packaging of investment products[15] . As a result, it is expected that the following steps in the field of consumer protection could lead to a stricter regulatory system in these four areas.

In conclusion, as a result of the financial crisis experienced during 2008, many countries have sought to strengthen the regulatory framework for the protection of users of financial services. For starters, due to their ubiquity, credit cards deserved special attention on the part of the regulators. The comparison among regulations concerning credit cards in Mexico, the United States, and Spain suggests similarities among the measures adopted.

References

"ABC de la Reforma Financiera", Presidency of the Republic, Colombia, June 27, 2009.

Circular letter 17/2009, Banco de México, July 21, 2009.

"Credit Card Accountability, Responsibility, and Disclosure Act of 2009" (H.R 627)

"*Consumer Financial Protection Agency Act 2009*" (H.R.3126)

Directive on the prevention of the use of the financial system for the purpose of money laundering and financing of terrorism (2005/60/CE and 2006/70/CE), European Union, 2005 and 2005.

Directive on consumer credit agreements (2008/48/CE), European Union, 2008.

Payment Services Directive, SEPA (Single Euro Payments Area, 2007/64/CE), European Union, 2007.

9 For more details see "Government plans for the reform of financial markets", Press Notice, HM Treasury, 08 July 2009 (http://www.hm-treasury.gov.uk/press_65_09.htm) and "Reforming Financial Markets" Presented to Parliament by The Chancellor of the Exchequer by Command of Her Majesty, HM Treasury, July 2009.

10 For such purposes, the Inter-American Development Bank approved a US$4 million loan to help the BCU to improve its regulation and financial supervision with the aim of providing better protection to consumers and strengthening the stability and efficiency of the financial system.

11 The most important are: 1) The directive on consumer credit agreements (2008/48/CE) that seeks to harmonize obligations on the level of information, terms and the formal requirements of the right of waiver as well as some quantitative limitations on commissions; 2) the directive on the prevention of the use of the financial system for money laundering and financing of terrorism (2005/60/CE and 2006/70/CE), which seeks to control capital fraud movements and the generation of profits with such capital; 3) the directive on payment means, SEPA (Single Euro Payments Area, 2007/64/CE), which was launched on November 2, 2009 with cross-border domiciled debt; and 4) the Mifid directive (Markets in Financial Instruments Directive, 2004/36/CE), for protection of investors, in place since November 2007. For further details, see *Situación Consumo* (Consumer Watch) (2009)

12 For further details on the European Commission consultation on the mortgage market, see http://ec.europa.eu/internal_market/finservices-retail/credit/mortgage_en.htm

13 For further details on the European Commission consultation on responsible practices in requesting and granting credit, see http://ec.europa.eu/internal_market/finservices-retail/credit/responsible_lending_en.htm

14 For further details on the European Commission consultation on the use of credit records, see http://ec.europa.eu/internal_market/finservices-retail/credit/history_en.htm

15 For further details on the European Commission consultation on the packaging of investment products, see http://ec.europa.eu/internal_market/finservices-retail/investment_products_en.htm#update_PRIPs

Mifid Directive (Markets in Financial Instruments Directive, 2004/36/CE), European Union, 2004.

"Government plans for the reform of financial markets", Press Notice, HM Treasury, 08 July 2009 (http://www.hm-treasury.gov.uk/press_65_09.htm)

Law on Credit Institutions, *Diario Oficial de la Federación* (Official Gazette of the Federation), June 25, 2009, Mexico.

Law for the Transparency and Classification of Financial Services, *Diario Oficial de la Federación* (Official Gazette of the Federation), June 25, 2009, Mexico.

Law for the Protection and Defense of Users of Financial Services, *Diario Oficial de la Federación* (Official Gazette of the Federation), June 25, 2009, Mexico.

"Reforming Financial Markets" Presented to Parliament by The Chancellor of the Exchequer by Command of Her Majesty, HM Treasury, CM7667, July 2009.

Situación Consumo, Economic Research Department, BBVA Finanzia, Second half of 2009.

"Uruguay intensificará regulación y supervisión de mercados financieros con asistencia del BID", ("Uruguay will intensify regulation and supervision of the financial markets with the assistance of the Inter-American Development Bank) Fator Brazil, November 14, 2009 http://www.revistafatorbrasil.com.br/ver_noticia.php?not=97426

A Comparison of the Standards for Credit Cards in the United States, Spain, and Mexico

USA: (Credit Card Accountability, Responsibility and Disclosure Act -2009)	Spain: Circular letter 8/1990 and New Directive 2008	Mexico: (Law on Credit Institutions, LTOSF and Condusef Law, 2009)
Only allows interest rates to be increased on the outstanding balance in the following cases: 1) Expiration of the promotional period; 2) Variation in the benchmark index; 3) A more than 60 day delay in payments.	8/90 standard 6 section 8: interest rates can be increased with "reasonable advance notice" Directive: All modifications will be announced before the changes take effect	Interest rates can be modified without the need of prior announcement or notification to the client only in the following cases: 1) Variations in the level of the benchmark rate, and 2) Expiration of a promotional interest rate.
The rates will have to be reestablished at their previous levels if in the following six months payments are made on time	Directive: Establishes the obligation to announce any type of late interest payments as well as the modalities for their adaptation and the charges for unpaid late interest.	Not regulated
Double cycle billing and universal default are prohibited.		Not regulated
Overdraw charges (exceeding the authorized limit) are prohibited, except with the previous authorization of the client	Applied to the maximum amount exceeded in the monthly liquidation period (industry practice)	It is prohibited to charge any commission for overdrafts or attempted overdrafts.
Interest rates cannot be increased during the first year after the credit card account is opened.	Not regulated	Not regulated
Promotional interest rates must be in effect for at least six months.	Not regulated	Promotional interest rates that are lower than ordinary maximum interest rates can be offered, provided that their terms and conditions are clearly specified.
Punitive fees for making electronic payments or automated telephone payments are prohibited.		Not regulated
In general, retroactive rate increases are prohibited	It is prohibited	Interest can only be charged on unpaid daily balances corresponding to the period for calculation of interest of the account statement in question.
Payments first go to the balance with higher interest rates	Directive: Report on order of payment assignments	Not regulated
		A single ordinary maximum interest rate should be agreed upon and, if applicable, a single maximum moratorium interest rate.
		The Banco de México, through provisions of a general nature, will determine the minimum payment that will be charged on loans associated with credit cards.
The obligation was established to provide advance notice of any increase in interest rates and changes to the contracts • Notification in writing at least 45 days in advance • Right of the client to cancel the card	Obligation of prior notification, although in a shorter time frame, with 15 days as a minimum in Spain. Right of waiver (refounding: Law 1/2007 and in the Directive) and of cancellation.	Obligation of prior notification, although there is a 30-day advance notification requirement to modify interest rates. The Condusef will establish, through provisions of a general nature, the requirements and procedures for terminating operations, as well as the steps for liquidation and cancellation on the part of the corresponding financial institution.
The requirement was established to provide greater disclosure and circulation of information on the rates and terms that the Federal Reserve will review: • Publication on the Internet of contracts and their delivery to the Federal Reserve Board • Reporting on the consequences of minimum payments • Information on a toll-free telephone number	Obligation to publish rates in the Banco de España and in list of notifications. Directive: To regulate all information that should be provided to the consumer including the minimum amount	Requirement of greater disclosure and circulation of information on rates and terms: Publication on the Internet of the contracts or agreements and their delivery (Condusef). Determination of the minimum payments (Banco de México). References to the assistance, access, and facilities necessary to attend to clarifications (Condusef).
New requirements and certain prohibitions will be established on credits provided to minors (under the age of 21)	Regulated by the Civil Code. Minors cannot accrue debt.	
The need to consider the payment capacity of the consumer in order to grant credit cards or increase credit limits	Obligation to evaluate the consumer's solvency (C4/2004 of the Banco de España and in the Directive)	Credit cards will only be granted with a prior estimate of the applicant's payment capacity and the credit limit on the card can only be increased for clients whose behavior indicates compliance with their credit commitments, with the client's explicit acceptance of the offer that is being made.

Source: BBVA

Changes to the Rules for the Creation of Loan Loss Provisions for Consumer Credit through Credit Cards

New methodology to determine reserve provisions for credit cards

This past August 12, the National Banking and Securities Commission (CNBV) issued several modifications to the methodology for rating the revolving consumer credit portfolio, with the aim of bringing its regulations into line with the established recommendations on an international level in the corresponding section of the Basel II accords. The most important change concerns the parameters that are used to estimate loan loss provisions for credit cards so that they better reflect the projected loss. For example, the time frame for estimating the projected loss was modified, it will now be longer, 12 months, and it will be estimated on the basis of a representative sample of the banking system. This article will explain the way in which these provisions will be created, the modifications that were recently incorporated, and an appraisal of these changes.

The new methodology to create loan loss provisions for the "consumer credit portfolio in relation to credit card operations" requires that the amount of provisions to be created for each credit (R_i), will be equal to the result of the multiplication of the probability of default (PI_i), the severity of the loss (SP_i), and the exposure to default (EI_i).

$$R_i = PI_i \text{ X } SP_i \text{ X } EI_i$$

The previous variables depend on different characteristics of the individual credits granted, such as the age of the account, the balance to be paid, payments made, the credit limit, and the minimum payment required, as is detailed below:

a) Probability of default

If ACT < 4 then:

$$PI_i = \frac{1}{1 + e^{-[-2.9704+0.6730\ ACT+0.4696\ HIST-0.0075\ ANT-1.0217\%PAGO+1.1513\%USO]}}$$

If ACT > 4 then:

$$PI_i = 100\%$$

In which ACT = Number of defaults in consecutive periods immediately prior to the date of the calculation; HIST = Number of defaults in the past six months; ANT = Number of months that have transpired from the opening of the account to the date of the calculation of the provisions; % PAGO = Payment made / Balance due; and% USO = Balance due / Credit limit.

b) Severity of the Loss

If ACT < 10 then:

$$SP_i = 75\%$$

If ACT > 10 then:

$$SP_i = 100\%$$

c) Exposure to Default

$$EI_i = S * \text{Max}\left\{\left[\frac{S}{\text{Credit Limit}}\right]^{-0.5784}, 100\%\right\}$$

In which S is the amount of the total debt that the loan holder (or debtor) has with the institution at the close of the month. The amount will include all the obligations related to this credit that the loan holder has with the institution and exclude uncollected accrued interest on the credits that are in the past-due loan portfolio.

For purposes of calculating the exposure to default, S will assume the value of zero when the balance at the close of the month is less than zero. When the institutions, in accordance with loan management policies, *de facto* prevent debtors from making additional drawdowns on their credit lines, the exposure to default on these credits will be calculated as follows:

$$EI_i = S * 100\%$$

In addition, given that they are restructured credits, the debtor's payment record will be maintained, respecting the need for historical information for calculating the previously mentioned variables.

Credit card operations that simultaneously show a balance to be paid and a payment made equal to zero will be considered inactive and their loan loss provisions will be obtained based on the credit limit:

$$RI_i = 2.68\% * (\text{Credit Limit - Balance in Favor})$$

Once the loan loss provisions for the credit card portfolio have been created in accordance with the new methodology, they will be classified by risk grades A, B-1, B-2, C, D, and E. Loan loss reserves with grades A and B-1 will be considered as general loan loss provisions and the others as specific provisions. For inactive operations, the loan loss provisions to be created will correspond to 2.68% of the credit limit and will be rated with a B-1 grade.

The CNBV ruled that banks can increase the loan loss provisions based on the new methodology in accordance with one of the two following procedures:

1) By recognizing in the net worth recorded in the balance sheet at September 30, 2009 at the latest, within the result of previous fiscal years, the initial accumulated financial effect derived from the application of the new methodology for rating the consumer loans portfolio corresponding to credit card transactions,

2) By creating 100% of the amount of the loan loss provisions in a period of 24 months, as of the end of the month in which the resolution entered into effect.

Both procedures require that the decision adopted and its effects be revealed in detail and explicitly in the financial statements as well as any public communication by the institution. In addition, the banks can only release the loan loss provision surpluses, depending on each case and in accordance with the established accounting criteria, that they maintain when the provisions that they had created are greater than 100% of the amount of the loan loss provisions to be created according to the new rules. Finally, the banks that use an internal methodology authorized by the CNBV to rate their credit card portfolio can recognize the general provisions as part of their complementary capital.

In relation to the two previous procedures to increase loan loss provisions, it should be noted that immediate recognition charged to net worth is preferable for institutions with a relatively good current level of profits. At the same time, the gradual creation of such provisions in a two year period is preferable for institutions with a relatively low level of profits.

Main differences with regard to the previous methodology

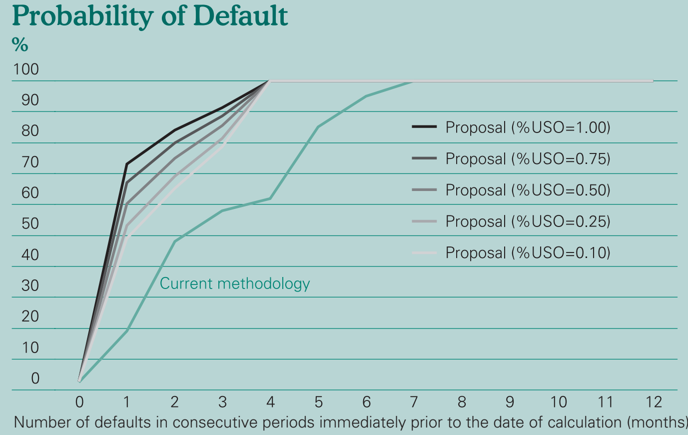
Under the previous methodology, the loan loss provisions should only reflect the projected 6-month credit card loss, that is, in a shorter period of time than the new regulation. Furthermore, in order to determine the projected loss of each of the credits in the portfolio, the CNBV estimated a general application model using a historic database of 11 banks of the system that account for more than 85% of the market. In contrast:

- The previous methodology generated the provisions through the application of different percentages according to the number of billing periods that reported defaults. Despite being simple to implement and easy for the bank to generate the necessary resources to face bankruptcy when this is imminent, there is the disadvantage that, given that the speed at which the portfolios weaken is different between banks, the methodology prepares the institutions differently to face the projected loss resulting from the current portfolio.

- Although the new methodology adopts a focus based on risks, the banks' internal models usually assign a projected loss in terms of different credit rating levels that take into account the client's socio-demographic characteristics (origination score) and/or use patterns (performance score). Therefore, they use many more dimensions to generate a better estimator of the probability of default.

The new methodology generates greater loan loss provisions when the number of missed payments is greater than four months, due to the differences in the calculation of the probability of default and exposure to default.

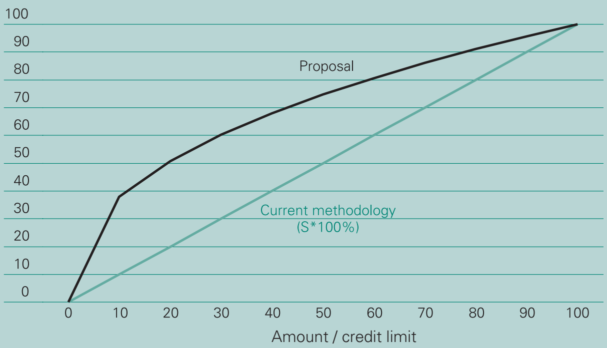
Probability of Default



Note: ANT=90, Hist=6, and %PAGO=0
Source: BBVA Bancomer

Exposure to Default

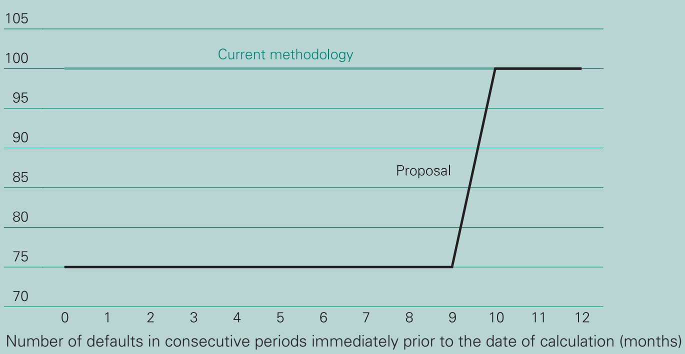
%



Source: BBVA Bancomer

Severity of Loss

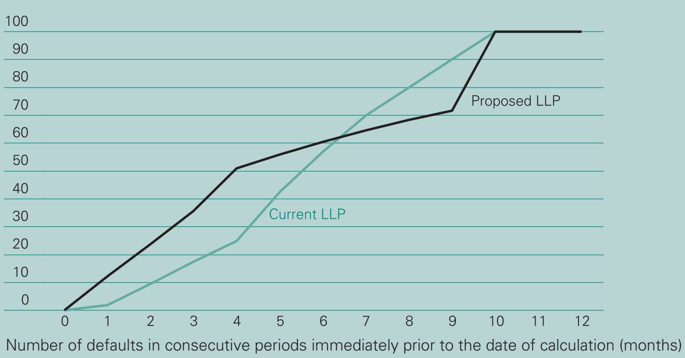
%



Source: BBVA Bancomer

Loan Loss Provisions (PI*SP*EI)

%



Source: BBVA Bancomer

Expected impact on the loan loss provisions of the banking system

According to the analysis made by the Mexican Bank Association (ABM for *Asociación de Bancos de México*), the new methodology will result in a significant increase of almost 16.28 billion pesos (55%) in the amount of loan loss provisions created, compared with the previous regulation. As a percentage of the performing loan portfolio, the provisions will increase from 11% to 17%. This percentage is even greater than what is required on average by the home offices of the banks with foreign participation (14%).

Impact of the New Methodology

Millions of pesos

	Total	% of the portfolio
Provisions with previous methodology	29,674	11%
Provisions with new methodology	45,951	17%
% increase	55%	

Note: April 2009 data
Source: "*Cambios a la metodología de calificación de cartera de consumo revolvente (TDC)*" ("Changes in the methodology for rating the revolving consumer credit portfolio (credit cards)"), ABM presentation, July 2009.

The new regulation for the creation of loan loss provisions for consumer credit through credit cards is moving forward to bring domestic regulations more in line with international criteria in terms of the time frame and the manner of estimating the projected loss. This will necessarily bring about an increase in loan loss provisions and as a result, will provide greater strength to the Mexican financial system. However, the previous regulation explicitly allowed loan loss provisions to be created based on the portfolio's performance, which provided an incentive for better loan origination. In this sense, it would be advisable for bank institutions to continue advancing in more robust methodologies for estimating projected losses shown by their credit practices, and to move to obtain the authorities' approval of these methodologies, which will allow for the creation of loan loss provisions in the system more in accordance with the specific performance of the institutions.

Bibliographical References

ABM, "*Cambios a la metodología de calificación de cartera de consumo revolvente (TDC) Circular Única de Bancos*" ("*Changes in the methodology for rating revolving consumer credit (credit cards), Only Bank Circular Letter*") presentation, July 2009.

CNBV, "Resolución que modifica las disposiciones de carácter general aplicables a las instituciones de crédito" ("Resolution that modifies provisions of a general nature applicable to credit institutions"), *Diario Oficial de la Federación*, (Official Gazette of the Federation), August 12, 2009.

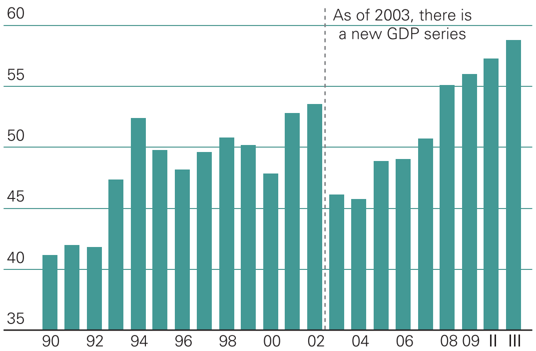
CNBV, "*Parametrización de circular de reservas para cartera de tarjeta de crédito: presentación a ABM*" ("*Parametrization of the Circular letter on reserves for the credit card portfolio: presentation to the ABM*"), December 2008.

Acknowledgements

For the preparation of this article, we would like to acknowledge the valuable commentaries and suggestions offered by Ricardo Calderón, Edgar Castillo, and José Ángel Juárez (BBVA Bancomer), as well as Humberto Alarcón (ABM).

Evolution of Financial Savings in Mexico

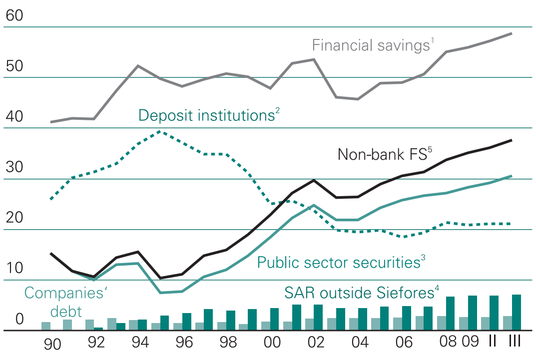
Financial Savings*
M4a - bills and coins in the hands of the public
% of GDP



* Includes savings in all types of instruments, bank and non-bank

Source: BBVA Bancomer with Banco de Mexico and INEGI data

Financial Savings by Entity Receiving the Funds
% of GDP



1 Includes savings in all types of instruments, bank and non bank and is defined as M4a - bills and coins in the hands of the public.

2 Total deposits (demand + term) of the commercial banks + deposits of development banks and deposits of commercial bank agencies abroad + deposits in savings and loan associations.

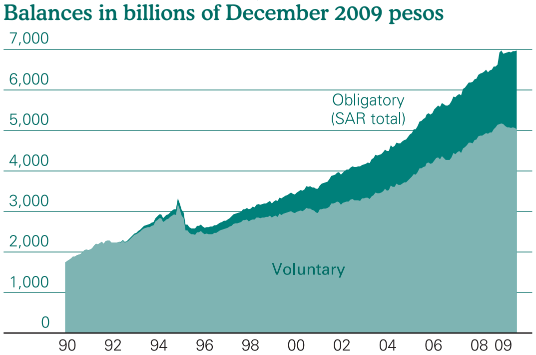
3 Federal Government Securities + IPAB bonds + bonds issued by other entities, such as government-owned companies, states and municipalities.

4 To avoid double accounting of funds, the funds of the Retirement Savings System in Siefores.

5 Public Sector Securities + SAR outside the Siefores + debt issued by companies.

Source: BBVA Bancomer with Banco de Mexico and INEGI data

Financial Savings by Components
Balances in billions of December 2009 pesos



Source: BBVA Bancomer with Banco de Mexico data

Financial Savings (FS) have shown sustained growth since the beginning of the 1990´s: they rose from 41.2% of GDP at the end of 1990 to 58.8% at the end of the third quarter of 2009 (3Q09). Financial savings can be classified in different ways; in this section two important ones are shown. The first refers to the receiving entity of funds (deposit institutions, public or private sectors that issue bonds and others). The second indicates whether the savings are obligatory as a result of the savings for retirement system (SAR for its Spanish initials), or voluntarily, which are savings based on families' and companies' own decisions. In this article, in addition to making reference to the performance of financial savings, based on the previous classifications, the factors that explain their growth are also analyzed.

I. Classification of Financial Savings (FS) by entity receiving funds

The bank instruments that comprise FS, as per the classification by entity receiving funds, include the following headings: i) savings in deposit institutions (commercial banks, development banks, savings and loan associations, and savings obtained by commercial bank agencies abroad)[1]; ii) debt issued by the public sector, (federal government debt , IPAB bonds, bonds issued by government-owned agencies, states and others); iii) debt issued by private companies; and iv) the funds of the Savings for Retirement System (SAR) that are not part of the Specialized Investment Associations for Retirement Funds (Siefores).[2] In this classification, the direct savings receiving entities are the deposit institutions, the public sector, private companies, and the SAR savings that certain public institutions receive directly[3].

Based on this classification of financial savings, it can be seen that savings in traditional bank instruments have lost relative importance: their share of GDP went from 25.8% in 1990 to 21.1% as of 3Q09. On the other hand, FS in non-bank instruments grew from 15.3% to 37.7% of GDP in that same lapse of time[4].

II. Classification of Financial Savings as Voluntary and Obligatory

FS can also be divided or classified as voluntary or obligatory. This classification has the advantage of separating savings in terms of the motivation that the participants have for saving.

II.1 Obligatory Financial Savings

Obligatory FS consists in all the funds of the SAR or Total SAR. The SAR is obligatory saving, because it is based on contributions that, by Law, private companies and public sector entities must make with

1 Financial savings forthcoming from deposit institutions include demand and term deposits, and to avoid double accounting of funds, it excludes the inter-bank deposits.

2 In this classification of the FS non-bank component, the Siefores were not included to avoid double accounting of the funds. This is due to the fact that those investment associations invest funds to acquire debt from the public and private sectors. If the balance of the Siefores is incorporated in the FS, the same debt securities would be accounted twice: the first time would be within the total balance of the type of corresponding debt, and, the second would be within the holdings of these securities in the investment portfolios of the Siefores.

3 Among the public institutions that directly receive the funds from the SAR are the Infonavit, the Fovissste, and, also, the IMSS and the ISSSTE at the time when the SAR funds were deposited in the account that these last two institutions had with Banco de Mexico.

4 FS in non-bank instruments include those made in debt of the public and private sectors, plus the SAR funds that are not deposited in the Siefores, such as the housing funds, the IMSS and ISSSTE accounts in Banco de Mexico, and the ISSSTE Pension Bond.

pre-determined periodicity and amount in favor of their workers. This began to operate in 1992 when the obligatory contribution of the SAR was introduced from 2% of workers' salary to their fund or individualized retirement subaccount. On that date, also established was that the obligatory contribution to the Housing Fund of the workers, that already existed, was to be incorporated with the SAR, by channeling it to an account denominated as a housing subaccount. This system was modified in 1997. when the Retirement Fund Administrators (Afores) were created, entities managed by the Siefores and that only received funds from workers affiliated to the IMSS (the Mexican Social Security Institute). Also, in 2008, it was permitted for workers affiliated to the ISSSTE (Institute of Social Security Service for State Workers) to channel the retirement funds initially to PensionIsste and, after three years, to the Siefore of their choice[5].

The total obligatory savings are constituted by the balance of the retirement and housing funds of the workers affiliated to the social security system of the IMSS (private sector) or the ISSSTE (workers at the service of the State). The retirement funds are deposited in the Siefores (retirement subaccount and, in time, in the accounts that the IMSS and the ISSSTE had in Banco de Mexico. In turn, the housing funds are channeled to the housing subaccounts managed by the official workers' housing fund institutes (Infonavit and Fovisste).

Obligatory FS are showing increasing importance in the total savings of the country, given that the flow of new contributions surpasses, by far, decreases in funds under the retirement heading. Since 1992, the proportion of SAR funds grew from 0.5% of GDP to 16.3% in 3Q09. This has allowed increasing long-term savings, and, together with macroeconomic stability, it has increased demand for long-term debt issues of companies and of the public sector. The rise in the internal availability of funds, due to obligatory FS, has made it possible for investment to flow and increase with greater ease, without the need to recur to external financing, which is a stimulus factor for long-term economic growth of the country.

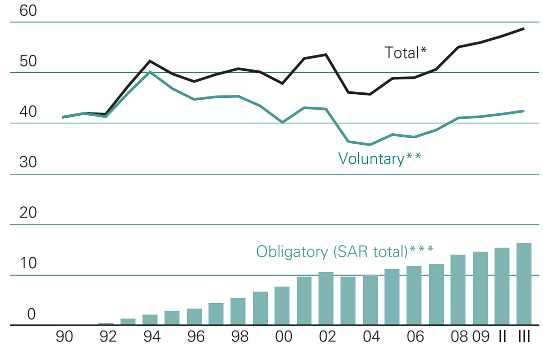
II.2 Voluntary Financial Savings

Voluntary FS are those which economic agents decide to make directly of their own will and based on their available income, so as to have funds to use to face contingencies (precaution motive) or to dispose of in old age beyond a pension (life cycle motive). Among the factors that determine these savings is the income level (which will provide the capacity to save), the incentives that exist to realize them (real interest rates), characteristics of the instrument toward which they are channeled (term vs. liquidity of the funds) and other characteristics of the instrument (bank term deposits vs. debt investment associations that are not for retirement)[6].

Voluntary FS are included in all the traditional deposits of the development banks, of the commercial banks, of these banks' agencies abroad, as well as debt issued by private companies and by the public sector that has not been channeled to the Siefores[7].

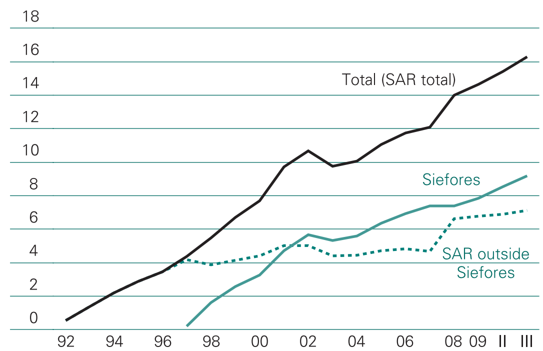
5 For further details see the First Government Report.
6 For further details of the savings determinant factors in the world, see Edwards (1995) or Loayza, Schmidt-Hebbel and Serven (2001). For further details on the voluntary savings determinants in Mexico, see Morales (2007).
7 To the extent that part of these funds are channeled to the Siefores, those funds would no longer be voluntary savings.

Financial Savings
% of GDP



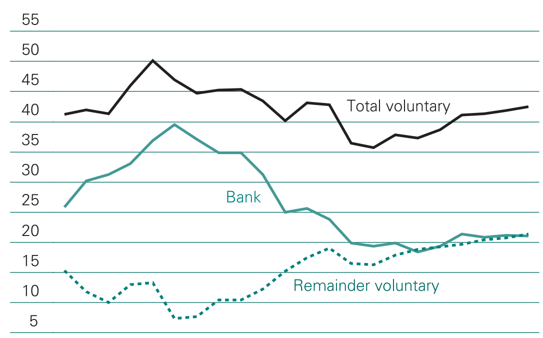
* M4a - bills and coins in the hands of the public. Considers the monetary aggregates that incorporate savings in financial instruments issued by the public sector.
** Includes bank deposits, (resident commercial banks, commercial bank agencies abroad, development banks and savings and loans associations), holdings of debt securities issued by private companies and entities of the public sector (federal government bonds, IPAB, of States and municipalities, and of government-owned companies that do not form part of the investment portfolios of the Siefores.
*** It includes retirement funds in Siefores of workers affiliated to the IMSS and the iSSSTE, SAR funds, Infonavit and Fovissste housing, and in time, the concentrating account of the IMSS in Banco de Mexico.
Source: BBVA Bancomer with Banco de Mexico and INEGI data

Obligatory Financial Savings
% of GDP



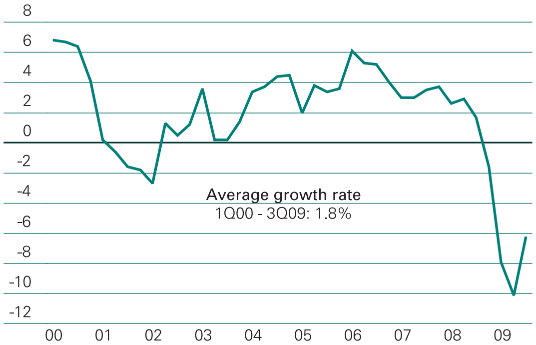
Source: BBVA Bancomer with Banco de Mexico and INEGI data

Voluntary Financial Savings
% of GDP



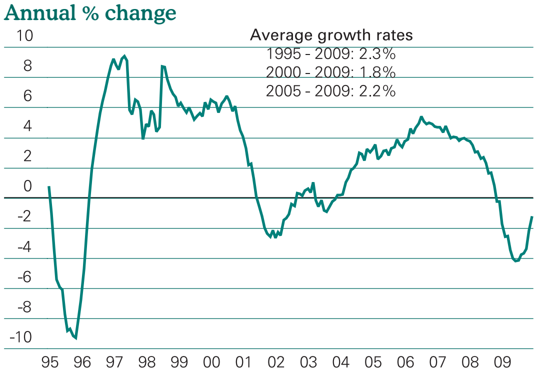
Source: BBVA Bancomer with Banco de Mexico and INEGI data

Gross Domestic Product
Real annual % change



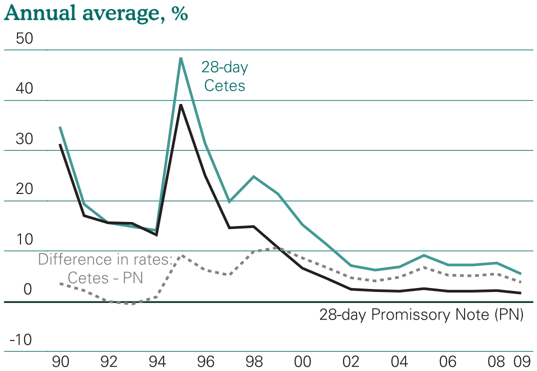
Source: BBVA Bancomer with INEGI data

Total Number of Workers Affiliated to the IMSS
Annual % change



Source: BBVA Bancomer with IMSS data

Nominal Interest Rate
Annual average, %



Source: BBVA Bancomer with Banco de Mexico data

Voluntary savings have barely increased their share of GDP in the last 20 years. At the end of 1990, the voluntary FS balance represented 41.2% of GDP and, in 3Q09, the balance was a little higher, 42.5%. The economic crisis of 1995 affected voluntary FS for several years. Despite this, the performance of voluntary savings improved from 2000 to 2008. A low growth rate of voluntary FS implies the possibility of important future restrictions for the economy, to the extent in which the limitation of available funds can exist to grant new loans to projects which, for different reasons, cannot be financed with obligatory savings[8].

In order for high rates of sustained expansion of credit to be present and be channeled toward sectors of activities different from those considered by obligatory savings, it is indispensable for voluntary savings, both bank and non-bank, to also grow at high rates. This would avoid the possibility that, in view of high demand, the financing of internal credit would be carried out at high Interest rates or appeal excessively to funds from abroad.

It is possible that the limited growth of voluntary FS might be influenced by the low growth of income in the country, the slow growth of formal employment (and, therefore, the relatively great importance that informal employment has acquired), and the reduced growth of real wages. This, in turn, would be associated with low productivity levels.

Furthermore, and within the context of limited growth of voluntary FS, the lower interest rates of bank institutions might explain why voluntary FS in non-bank instruments have had great acceptance among savers.

Voluntary FS in non-bank instruments have shown a favorable performance, in particular since 1999. It should be mentioned that the majority of the savings instruments that constitute them, pay similar interest rates to those paid by 28-day Cetes, and these are channeled to form the investment portfolios of debt mutual funds or are placed on the financial market as repos.

For their part, funds attraction in the development banks has also grown in real terms. The performance of the collection of funds by the banks seems to indicate that it is directly related to the credit operation of the development banks.

The component of demand deposits by the commercial banks has shown favorable performance, which contrasts with the performance of term deposits. This deposit component by the banks has been boosted by economic activity and by the employment level of the country. This would indicate that the reduction of the cost of opportunity of maintaining real balances, due to lower interest rates and lower inflation than in the past, has been a factor that has had a positive influence in the performance of demand deposits or in liquid instruments.

Part of the explanation of the limited performance of bank term savings is due to the substitution which, since 1999, the public sector

8 The SAR funds are channeled toward specific ends, based on the investment regime that regulates them (Siefores) or to the granting of housing loans (Infonavit and Fovissste). That is, access to the SAR funds is restricted by its regulatory framework.

made of external debt for internal debt. This offering of public debt securities on the financial market of the country was channeled toward repos or to debt mutual funds, which are substitute savings instruments of bank term savings. This factor, together with higher interest rates, which these non-bank savings instruments have paid, explains why term deposits have not had a favorable evolution.

In an inverse process to that which began in 1999, as of May 2007, bank term deposits once again increased, in view of public sector security holdings in the hands of foreigners, which decreased the supply of public sector debt in the internal market. This allowed that part of the internal funds would now be directed to term savings in the commercial banks. This rise in term deposits was reinforced in October 2008, given that a certain group of savers in debt mutual funds channeled their funds toward bank term deposits.

From November 2008 to November 2009, the last datum available, term deposits have been reduced due to various factors, among which the following are significant: low interest rates, the recovery of debt mutual funds and the effects of the economic recession of 2009 in savings capacity in traditional instruments.

III. Outlook and Challenges of Financial Savings

The future financing of economic growth of the country requires that FS continue to grow at high rates in all their modalities and categories. Obligatory FS, given the legal and institutional framework on which they depend will continue their dynamic growth. It is also important for the economy that voluntary FS also grow at high rates and that the growth of term deposits in the commercial banks be reinforced. This will strengthen the increase in credit granted by the banking sector. The above will be achieved to the extent in which the expansion of term deposits is boosted by its own advantages and not as a result of the existence of situational factors that only allow its transitory growth. In this sense and in order to boost the expansion of all types of savings, it is important that the financial entities develop long-term savings instruments and, if possible, that these data can have some type of fiscal advantage. These aspects will increase the savings growth rate and will make it possible for the future economic growth rate of the country to be higher.

References

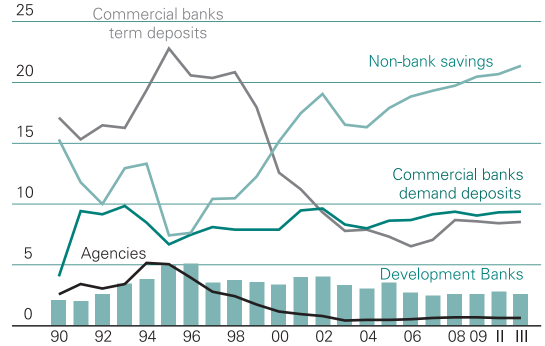
Edwards, S. (2005). "*Why are savings rates so different across countries?: An international comparative analysis*". NBER, Work Document # 5097. April, 1995.

Loayza, N. Schmidt-Hebbel, K. and L. Serven (2001). "*Una revisión del comportamiento y de los determinantes del ahorro en el mundo*" ("*A review of the performance and determinant factors of savings in the world*"). Central Bank of Chile. Work Document # 95. May, 2001.

Morales, F. J. (2007). "*Principales determinantes del ahorro voluntario en México*" ("*Main determinant factors of voluntary savings in Mexico*"). Bank Topics. BBVA ERD. January, 2007.

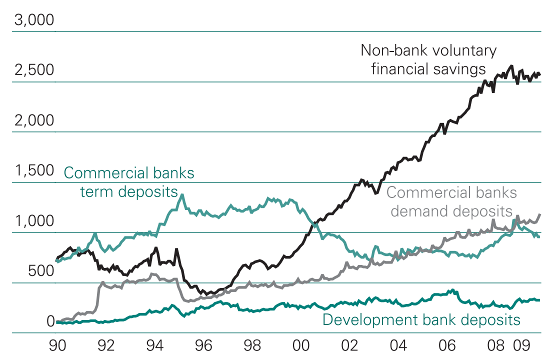
First Government Report. Presidency of the Republic. 2007.

Bank and Non-Bank Voluntary Savings
% of GDP



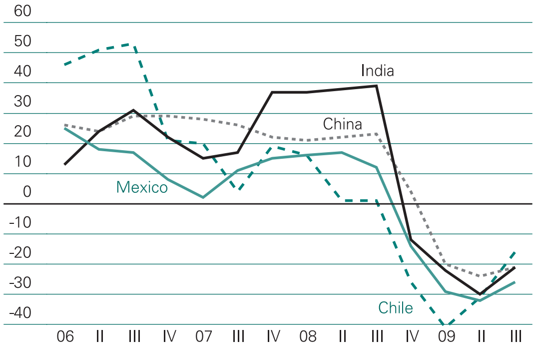
Source: BBVA Bancomer with Banco de Mexico and INEGI data

Voluntary Financial Savings
Balances in billions of December 2009 pesos



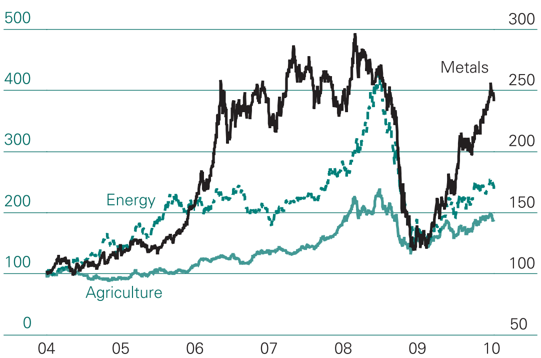
Source: BBVA Bancomer with Banco de Mexico data

Exports
Annual % change



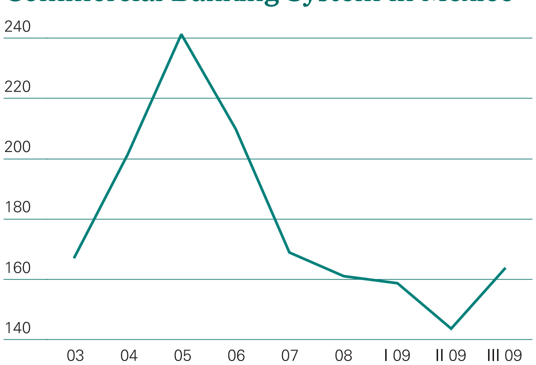
Source: World Trade Organization

Raw Materials Price Index UBS Bloomberg
January 2004 = 100



Source: UBS Bloomberg

Coverage Index* of the Commercial Banking System in Mexico



* Loan-loss reserve estimates for credit risk as a percentage of past-due loans

Source: National Banking and Securities Commission (CNBV)

The international crisis in the emerging economies

During 2009, economic activity in the emerging countries faced a significant slowdown as a result of the international crisis, which originated in the developed countries and spread to the emerging countries through two channels, the financial and the real.

The financial channel was affected through significant adjustments in the exchange rate and in an increase in aversion to risk in the stock markets and the fixed-income markets. Various analysts and financial authorities considered that the bankruptcy of Lehman Brothers in September 2008 and the uncertainty regarding the authorities' response in view of the breakdown of U.S. financial institutions led to a massive change in investors' portfolios, which concentrated on financial assets considered as being of lower risk. As a consequence, capital flows toward the emerging economies, among them Mexico, were suddenly reduced, leading to a depreciation of the local currencies versus the dollar, rises in the interest rate on medium- and long-term government bonds, a greater deterioration in the stock market indexes and a higher cost in companies' external financing[1].

However, the greatest impact on the emerging economies occurred through the real sector of the economy. In view of the reduction of wealth and the credit restriction of households in the developed economies, the demand for goods and services, both domestic as well as imported, was reduced, leading to an unprecedented collapse in international trade, with severe effects for various economies. The drop in the production of goods and services resulted in lower requirements of intermediate goods, such as raw materials. Prices of raw materials were substantially reduced in view of the lower demand. The more open emerging countries with greater trade relations with the developed economies battered by the crisis were the most affected. The reduction in exports, the drop in prices of raw materials and reduced remittance flows adversely affected consumption and private investment. In view of the lack of demand for financing and the increase in credit risk, the credit growth profile was moderated. Overall, the emerging economies with greater exposure to the dynamism of the developed economies initially suffered a reduction in foreign demand, which was later transferred to a reduction in domestic demand, consequently accelerating the decline in economic activity.

Good bases and conditions in the Mexican banking system to face the crisis

The banking system in Mexico has maintained a solid financial position during the recent global crisis despite the contraction of the economy. Some banks that were more concentrated in the credit segments that turned out to be most affected, such as consumer credit, managed to maintain an appropriate level of solvency (see Inset Box on Solvency of the Banking System in Mexico). Among the main conditions that have allowed maintaining this position are the following:

1 For more details, see Mexico Watch fourth quarter 2008, pages 18 and 19.

1. **Banks in Mexico did not invest in assets linked to the U.S. mortgage market.** Many of these assets were labeled as "toxic" due to their inadequate risk assessment and their deficient origination standards. The situation of the banking system in Mexico contrasts with that presented by a large number of banks and other financial institutions in the developed countries. Thus, the Mexican banks were not directly affected when those assets deteriorated during the crisis.

2. **The banking institutions maintained high capitalization levels prior to the start of the crisis, even surpassing international parameters and the requirements of local regulations.** The capital levels and preventive loan loss reserves reached their highest levels between 2005 and 2007. Although these variables showed a reduction during the crisis, both maintained healthy levels. The coverage index[2] was maintained at around 150 per cent, when a level above 100 per cent indicates loan-loss provisions adequate to cover the total past-due loan portfolio. Additionally, the capital index remained above 15 per cent, when international standards require 8 per cent. In the case of this last index, an important improvement is observed as of the first quarter of 2009, reaching its maximum level since 2003 in the second half of 2009. Therefore, despite the crisis, Mexican banks have managed to increase their capital.

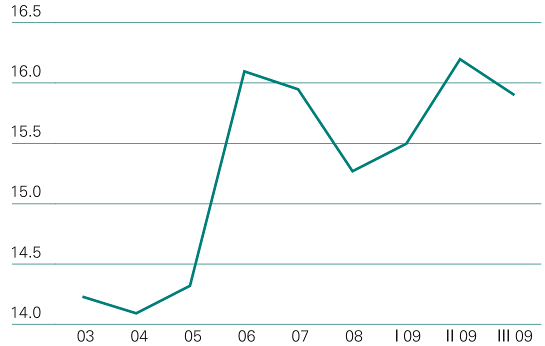
Moreover, compared with other countries, Mexico maintains a greater financial strength. For example, the banking systems of the developed countries where the crisis originated show a lower capitalization level. Such is the case of the United States and the United Kingdom. When a comparison is made among the emerging countries, it is seen that Mexico surpasses the majority of these in terms of the capitalization level of their banks[3]. Furthermore, compared with other countries in Latin America, Mexico is only behind Brazil and Argentina.

3. **The funding of bank credit was derived from internal sources and denominated in the local currency.** Loans to borrowers were also provided in local currency. Together with the existence of a capital surplus, domestic funding allowed bank credit to be maintained despite the fact that the international financial markets were practically closed during the crisis. Moreover, funding and the provision of credit in local currency made it possible for the depreciation of the peso versus the dollar not to alter the financing conditions of borrowers or create currency mismatching in bank balances.

4. **Adequate regulation and supervision.** The National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores (CNBV) has maintained a prudent supervision and regulation. For example, when calculating basic capital, the CNBV adjusts net worth in terms of total investment in financial entities and in companies related with the institution, even though the capital requirements of Basel II allow reducing 50 per cent of these investments in

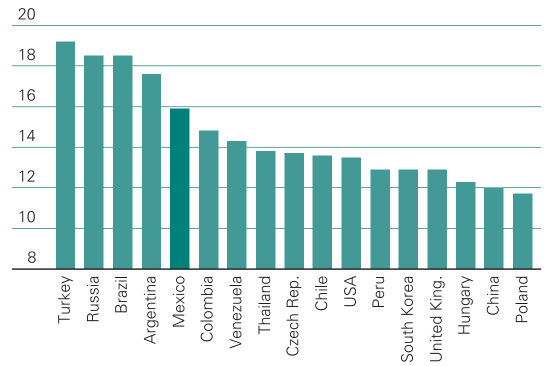
2 The coverage index is defined as the reserve estimate for loan-loss risks as a percentage of the past-due loans portfolio.
3 For the international comparison, we have selected the emerging countries with sufficient statistics and 2008 GDP greater than US$100 billion.

Capital Index of the Commercial Banking System in Mexico



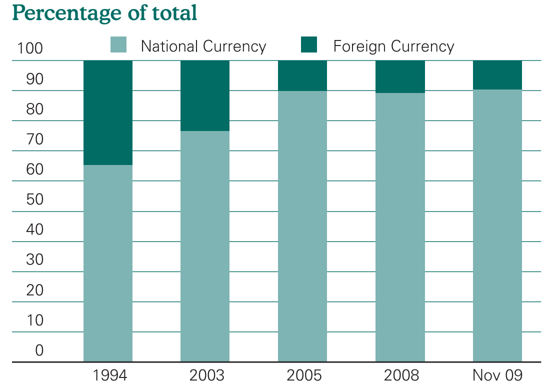
Source: National Banking and Securities Commission (CNBV)

Capitalization Index, 2009*



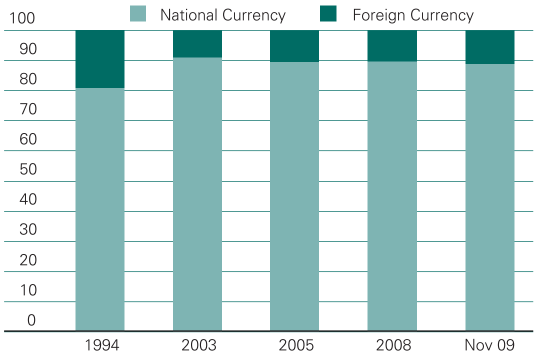
* Latest available data in the year
Source: International Monetary Fund

Structure of Financing Granted by the Commercial Banks to the Non-bank sector
Percentage of total



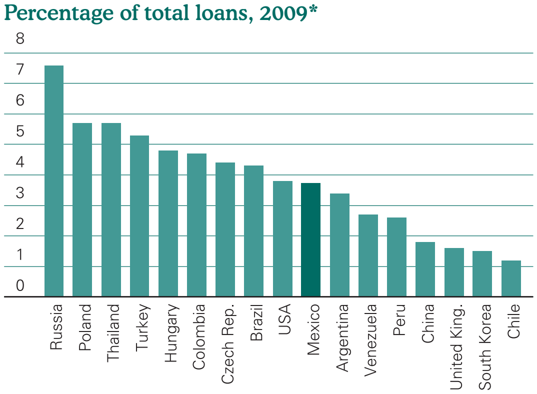
Source: Banco de Mexico

Structure of Bank Deposits
Percentage of total



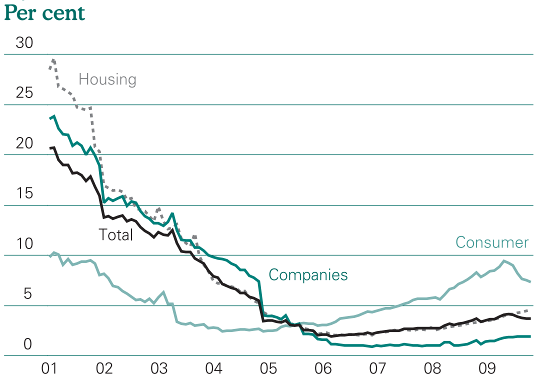
Source: Banco de Mexico

Past-due Loans
Percentage of total loans, 2009*



* Last data available in the year
Source: International Monetary Fund

Past-due Indebtedness Index* by Credit Component
Per cent



* Past-due loan portfolio over total loan portfolio to the private sector
Source: Banco de Mexico

calculating basic capital and reducing the remaining 50 per cent in calculating complementary capital. Moreover, recently the CNBV implemented an increase in the loan loss provisions for consumer credit (See Box Inset on Changes in the Rules for Establishing Loan Loss Reserves for Consumer Credit through Credit Cards).

Limited Effects in Past-due Indebtedness

In terms of the past-due payment rate, the banking system in Mexico maintains a healthy level of 3.7 per cent through November 2009. This places it at a better level than that of the emerging countries of Eastern Europe and of several Latin American countries that were even less affected by the crisis in their real activity than Mexico. The past-due indebtedness level is at acceptable levels, considering the magnitude of the contraction of the economy and the fact that the bank penetration level in Mexico was reactivated through the provision of consumer credit even though credit information on the clients was in the process of integration and was limited.

In the case of the countries of Eastern Europe, a great part of these financed bank credit to the private sector through external resources and provided the loans in a foreign currency. This led to a mismatching of currencies, which later caused increases in the past-due loan portfolios and abrupt drops in credit as a consequence of the crisis. For example, in Poland the percentage of loans denominated in a foreign currency is greater than 30 per cent and in Hungary it is at levels above 60 per cent.

In Mexico, the highest past-due indebtedness of the commercial banking system is seen in the consumer credit component, followed by the housing component and finally on loans corresponding to companies. Consumer credit seems to have suffered more past-due indebtedness due, among other reasons, to the lack of collateral, higher interest rates and the fact that borrowers of the most recent harvests maintained high levels of indebtedness and were in sectors that were highly affected by the crisis, such as manufacturing. Nevertheless, the past-due indebtedness index of this component shows improvement as of June 2009, reaching a level of 7.4% in November. The housing component is at acceptable levels, below 4.6%, while the component of loans to companies seems to have stabilized, maintaining itself at levels of 1.9% as of July 2009.

The limited past-due indebtedness rate, together with the strength of the Mexican banking system made it possible for it not to require support from the public sector. In contrast, the banking system in several developed economies required the help of their governments in view of their significant losses and lack of liquidity. The restriction of liquidity occurred when the funding sources of the banking institutions closed. The bank clearing agencies and investors restricted financing in view of the uncertainty regarding the banks' financial position and the lack of clarity on U.S. government supports. The banks' losses were the result of their exposure to assets related with the U.S. mortgage market and the rise in past-due loan indebtedness as a result of the slowdown of its economy and the drop in housing prices[4].

4 Recently some of the banks that received support have begun to return the aid to their governments. Among these are: Bank of America; Citigroup, Goldman Sachs, ING, JP Morgan Chase, Morgan Stanley and Wells Fargo.

A slowdown in credit below the deterioration of the economy

As a consequence of the recent financial crisis, credit posted a downward adjustment, However, the average of the real growth of credit in 2009 shows that its reduction was more moderate compared with the decline in GDP.

The slowdown in credit in Mexico has been lower than that observed in other emerging economies, such as some in Eastern Europe, which have shown a deterioration in credit growth more significant in relation with their economic activity. The decline in credit in Mexico has even been lower than that observed in countries whose economies were less affected.

In Mexico, the supply of bank credit was maintained during the crisis, although with more selective criteria, the result of an increase in the risk premiums. In terms of GDP, the credit level has been maintained and not reduced as has occurred in other emerging economies or in other similar recessive episodes.

The solvency of the Mexican banking system has made it possible for the granting of bank credit to continue growing at high rates and with healthy conditions. The fact that the capital level of the banks in Mexico considerably surpasses the regulatory level and reaches relatively high levels internationally, leads us to believe that there is room for continued dynamic granting of credit. Thus, the capitalization bases of the Mexican banking system are set for a greater credit demand resulting from the expected economic recovery to be satisfied, and the banking system can contribute and facilitate the recovery of the economy.

References

Banco de México (2009), "*Reporte Sobre el Sistema Financiero*" ("*Report on the Financial System*".)

Bank for International Settlements (2006), "*International Convergence of Capital Measurement and Capital Standards*".

Comisión Nacional Bancaria y de Valores (National Banking and Securities Commission), "*Boletín Estadístico Banca Múltiple*", 2003 a 2009 ("*Statistical Bulletin Multiple Banking*", 2003 to 2009).

Diario Oficial de la Federación (2007), (Official Gazette of the Federation) "*Reglas para los requerimientos de capitalización de las instituciones de banca múltiple y las sociedades nacionales de crédito, instituciones de banca de desarrollo*" ("*Rules for the capitalization requirements of multiple banking institutions and national credit associations, development banking institutions*") November 23, 2007.

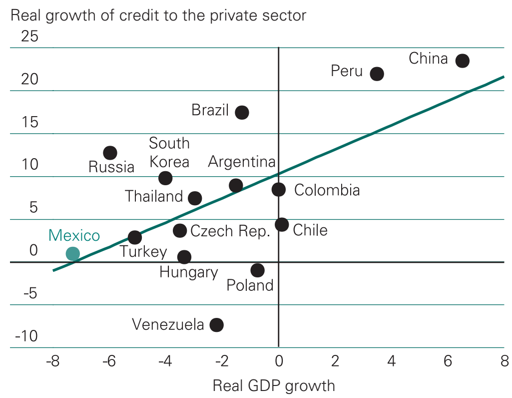
International Monetary Fund (2009), "*Informe sobre la Estabilidad Financiera Mundial*" ("*Report on Global Financial Stability*"), October 2009.

Support to the Banking Sector*

	% of GDP
Austria	32%
Belgium	75%
France	21%
Germany	31%
Ireland	274%
Italy	2%
Netherlands	37%
Spain	28%
Switzerland	15%
United Kingdom	64%
United States	27%
Portugal	15%

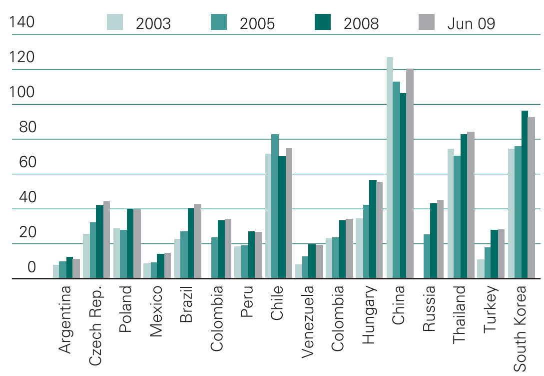
* Includes recapitalizations, guarantees on toxic assets & amounts approved for guarantees on debt and purchase of assets
Source: IMF, European Commission, Finance Ministries, Bloomberg, and BBVA

GDP and Credit to the Private Sector
Real annual % change, 2009



Source: BBVA Bancomer based on national sources

Bank Credit to the Non-financial Private Sector
% of GDP



Source: IMF, ECB and national sources

Trends in Supervision and Regulation on an International Level

As a result of the recent crisis, international financial authorities have begun to work on a new regulatory framework that would minimize the risk of a similar situation occurring in the future. Among the most important measures on which a consensus has been achieved are the following:

To strengthen capital requirements through the following measures.

- Improving the quality, consistency, and transparency of basic capital and harmonizing its definition on an international level. The predominant components of basic capital would have to be common shares and retained profits.
- Introducing a procedure of counter-cyclical capital requirements so that the financial institutions can increase their capital above the minimum level during periods of expansion and they can use this surplus in periods of slower growth.
- Introducing a leverage ratio as a complement to the Basel II capital program.

The actions to improve the definition of basic capital and introduce a leverage ratio have shown important progress and there are now concrete proposals that will be evaluated during 2010. It is expected that the proposals on counter-cyclical capital policies will be developed between the end of 2009 and mid-2010.

To introduce a minimum global liquidity standard by the end of 2009. This new regulatory procedure includes a liquidity coverage ratio to ensure that global banks have enough liquid assets in periods in which their funding sources are under stress.

To reduce the risks and negative economic effects associated with institutions "too big to go bankrupt." With this in mind, the following actions will be implemented:

- In the next 12 months, the Financial Stability Board (FSB) will develop measures to reduce these institutions' systemic risk. Among the measures that have been mentioned are points related to capital, liquidity, and additional prudential requirements, in addition to reducing the complexity of the group and supporting the self-sufficiency of the subsidiaries.
- For the largest international financial institutions, the development of a contingency plan will be required to preserve their ongoing operations, to promote the maintenance of key functions, and to facilitate a rapid resolution in case it is necessary.

To strengthen accounting standards. The International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) are working to homogenize accounting standards. Among the issues that they are discussing are the methodology to establish loan loss provisions and the manner of entering the deterioration of assets, the procedure for entering off balance sheet instruments into accounts, and the valuation model for financial instruments.

To improve practices for determining salaries and other payments made to officers of financial institutions based on the Principles for Sound Compensation Practices issued by the FSB. Among these principles are the following:

- The Shareholders' Committee will evaluate and monitor the payment policies in the company.
- Variable compensation should be related to the institution's overall performance and its maintaining a robust capital base.
- The compensatory structure will seek to maintain its policies in line with risks and include payment reimbursement and postponement plans.
- Making salary payments transparent and strengthening supervision over them.

To expand supervision of the financial system. Specifically, the aim is that:

- Hedge funds be registered with the authorities, information be provided for the purpose of evaluating systemic risk, and that supervision criteria be adjusted to some degree of regulation, which is still under discussion. The legislation to establish the registration of these funds is moving forward, most notably in the United States and the European Union.
- Credit rating agencies implement the Code of Conduct Fundamentals of the International Organization of Securities Commissions (IOSCO). The European Union and countries such as Japan and South Korea have implemented legislation in this regard. The United States and Canada have also proposed measures that are expected to be approved in 2010.
- National authorities evaluate the systemic importance of the financial institutions. The International Monetary Fund (IMF), the Bank for International Settlements (BIS), and the FSB have formulated a document on analytical and conceptual procedures to evaluate systemic importance, which also includes a discussion on general lines of action.

To strengthen the operation of the over-the-counter (OTC) derivatives markets through the following measures:

- The capital requirements should recognize the risks of OTC derivatives and create incentives to transfer them toward clearing agencies and organized markets.
- Improving the standards of the clearing agencies by mid 2010 and coordinate their international application. With the aim of improving the standards of the clearing agencies, in October 2009 the European Commission issued its proposals which are expected to become legislation in 2010.

To relaunch securitization under a sound program The characteristics of this procedure are the following:

- In terms of capital, to increase securitization risk weight so that in the process of assessing the financial institutions' risks, the operation of these types of instruments is internalized better.
- To require that the banks undertake a more rigorous assessment of securitizations rated externally, with higher capital requirements in case this does not occur.
- To improve public disclosure of the exposure to securitizations in the balance sheet, the backing of special securities, and the assumptions in the valuation.
- To increase the disclosure of information on the part of the originator, particularly in relation to core assets.
- To examine ways to align the incentives of issuers and investors. To consider the alternative of making it obligatory for the institutions issuing the securitizations to maintain a part of the exposure to the core asset.

To adhere to international standards.

- The IMF and the World Bank's Financial Sector Assessment Program (FSAP) exercises will be used to globally identify the countries that do not comply with international standards of cooperation, exchange of information, and sound standards. This analysis will be focused on the areas that generate greater concerns due to weaknesses in their level of compliance and systemic importance.
- It is expected that by February 2010 an initial evaluation of the countries will have been made and the areas of greatest concern identified.
- Tools will be implemented to promote adherence and cooperation between areas, which are also expected to be ready in February 2010.
- An evaluation system is being created so that the member countries of the FSB can evaluate each other, based, among other information, on evaluations from the IMF and the World Bank.

The year 2010 will be important for materializing better supervision and regulation on a global level that strengthens the institutions and reduces the risks for the international financial system. Even though there is a clear need to reduce the risks for financial stability, it is important that the efforts in this regard ensure that the effects on the supply of credit and its cost are minimized. The Mexican banking system is well prepared to assume the improvements in the regulatory framework. The issues currently being discussed point to greater capital requirements on an international level and a more carefully designed and integrated supervision, together with regulations that monitor all the financing processes. There will be incentives for better risk assessment. This will also imply standards for the creation of loan loss provisions and stricter accounting entries.

Bibliographical References

Financial Stability Board (2009), "*Improving Financial Regulation*", September 25, 2009.

Financial Stability Board (2009a), "*Overview of Progress in Implementing the London Summit recommendations to Strengthen Financial Stability*", September 25, 2009.

Financial Stability Board (2009b), "*FSB Principles for Sound Compensation Practices, Implementation Standards*", September 25, 2009.

Financial Stability Board (2009c), "*Progress since the Pittsburgh Summit in Implementing the G20 Recommendations for Strengthening Financial Stability*", November 7, 2009.

Bank for International Settlements (2009), "*Comprehensive response to the global banking crisis*", September 7, 2009.

Bank for International Settlements (2009), "*Guiding principles for the review of accounting standards for financial instruments issued by the Basel Committee*", August 27, 2009.

Financial Stability Forum (2009), "*Principles for Sound Compensation Practices*", April 2, 2009.

Solvency of the Mexican Banking System

As a result of the recent global crisis, the solvency of some banks in different countries deteriorated, and consequently, in some cases their respective governments felt the need to apply different measures to provide liquidity and in specific cases to capitalize the institutions in order to safeguard savings, reduce risks of a bank run, and prevent an intensification of the reduction in international financing. Fortunately, however, this has not been the case in Mexico.

On an international level, different measurements have been applied to gauge the solvency of the banking system. There are the measurements for basic capital and complementary capital proposed by the Bank for International Settlements (BIS), the tangible capital reported by the Banco de México (2009) and the common capital calculated by the Federal Reserve System (2009) in the recent Supervisory Capital Assessment Program (SCAP), among others[1].

Each of these institutions incorporates different components in their capital measurements. For example, the Banco de México considers that a more precise measurement of solvency should eliminate subordinate debentures and deferred assets from regulatory capital. The Federal Reserve, meanwhile, in its assessment of the capital levels of U.S. banks used a measurement that eliminates preferred stock, hybrid instruments, and minority investments in subsidiaries from basic capital.

For purposes of assessing the solvency of the Mexican banking system this article will present a stricter manner of measuring capital than what is commonly used in the country and which is in line with the best international practices. The base for this estimate is grounded in Standard and Poor´s methodology (2009 and 2007). The proposed capital measurement adjusts this calculation for investments in subsidiaries and other financial companies. However, it does not consider hybrid capital instruments, as occurs in the methodology of the Federal Reserve, since this component is not statistically relevant for the case of Mexico[2]. The National Banking and Securities Commission (CNBV) and the BIS subtract investments in subsidiaries and other financial companies from net worth to obtain the basic capital of the bank institutions. In relation to hybrid instruments, the financial authorities have not considered them as capital in their recent calculations of solvency given their limited capacity to absorb losses. Thus, the best applicable international practices are being followed.

Based on this methodology, adjusted capital is determined as follows:

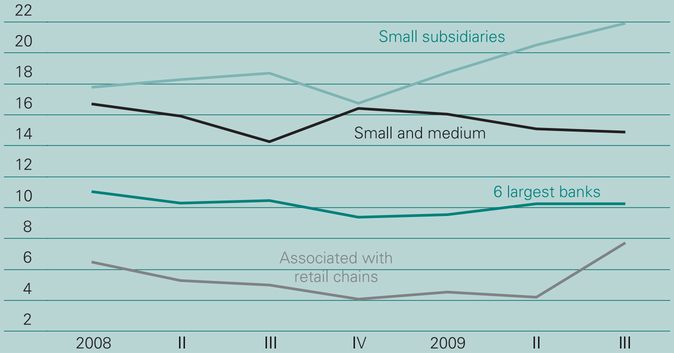
Total net worth
\+ Minority interest
\- Revaluation of reserves (valuation of securities available for sale, valuation of cash flow coverage and conversion of foreign operations)
\- Intangible credit and goodwill
\- Deferred taxes
= **Adjusted common capital**
\- Permanent investments in stocks (in other companies and subsidiaries)
= **Total adjusted capital**

Adjusted capital as a percentage of risk-weighted assets indicates that the different types of banks maintain healthy capital levels. Even though this measurement is much more punishing than the basic capital index, in all cases it remains above four percent, the regulatory minimum for basic capital on an international level.

1 **Basic capital**: capital stock (ordinary stock) plus provisions created by non-distributed earnings and other surpluses minus the following elements: intangible assets, capital increase due to exposure to securitization, 50% of the investments in non-consolidated financial subsidiaries with the banks and 50% of the investments in the equity of other banks and financial institutions (at the discretion of the local authorities). Source: Basel Committee on Banking Supervision, Bank for International Settlements.
Complementary capital: undeclared reserves plus reserves corresponding to asset revaluation, generic loan loss provisions, hybrid capital instruments, and subordinated term debt minus the following: 50% of the investments in financial subsidiaries not consolidated with the banks and 50% of the investments in the equity of other banks and financial institutions (at the discretion of the local authorities). Source: Basel Committee on Banking Supervision, Bank for International Settlements.
Tangible capital: results from eliminating subordinate debentures and deferred assets that in a limited manner can be included in regulatory capital from the calculation of net capital. Source: Banco de México Report on the Financial System.
Common capital: basic capital minus preferred stock, hybrid capital instruments issued through trusts, and minority investments in subsidiaries.
Source: Supervisory Capital Assessment Program (SCAP), Federal Reserve

2 Standard and Poor's methodology includes only the hybrid instruments that in its view could act as capital when the issuer is under stress. In the case of Mexico, only those hybrid capital instruments with a greater than 20-year maturity are incorporated, which are not important in the market.

Total Adjusted Capital
% of risk-weighted assets



Notes:
Banks associated with retail chains: Azteca, Famsa, Bancopper, Fácil and Wal-mart.
Small subsidiaries: American Express, Bank of America, Barclays, Credit Suisse, Deutsche Bank, ING, JPMorgan, Prudential, RBS, Tokyo-Mitsubishi, UBS and Volkswagen.
The 6 major banks: BBVA Bancomer, Banamex, Banorte, HSBC, Santander and Scotiabank.
Small and medium-sized: Afirme, Amigo, Autofin, Banregio, Bansi, Compartamos, Consultoría Internacional, Del Bajio, Inbursa, Interacciones, Invex, Ixe, Mifel, Monex, Multiva, Regional and Ve por Mas.
Source: BBVA Bancomer with CNBV data

Banks associated with retail chains posted the lowest capital levels. This appears to occur as a result of their concentration in consumer credit. This credit category experienced the strongest decline during the crisis, among other reasons because:

- Debtors from the most recent boom periods were one of the groups most exposed to the crisis and, as a result, experienced the most vulnerability. They were in sectors such as manufacturing and maintained high debt levels.
- This type of credit is not backed by collateral, and
- It had the highest interest rates.

However, an important improvement occurred in the third quarter of 2009 in these banks' adjusted capital levels, which rose from 4.2 to 7.7 percent.

The adjusted capital of the six largest banks remained very stable and only experienced a slight setback in December 2008 to then return to its previous level. The high levels of capital in the small subsidiaries indicate that their operations are tied to investment services, which were not as affected as traditional banking operations.

In conclusion, the capital calculation proposal presented here maintains the assumption that banks in Mexico have maintained high levels of solvency despite the severity of the crisis. The method for estimating capital is stricter, aligned with international standards and adapted to the country's particularities.

Bibliographical References

Banco de México (2009), "*Reporte sobre el Sistema Financiero*" ("*Report on the Financial System*").

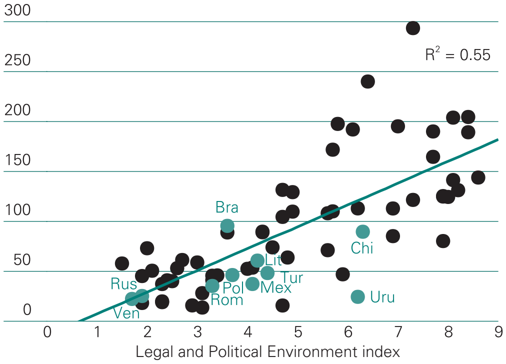
Federal Reserve System (2009), "*The Supervisory Capital Assessment Program: Design and Implementation*".

Standard and Poor´s (2009), "*Methodology And Assumptions Risk-Adjusted Capital Framework For Financial Institutions*".

Standard and Poor´s (2007), "*Financial Institutions Group Provides More Transparency Into Adjustments Made To Bank Data*".

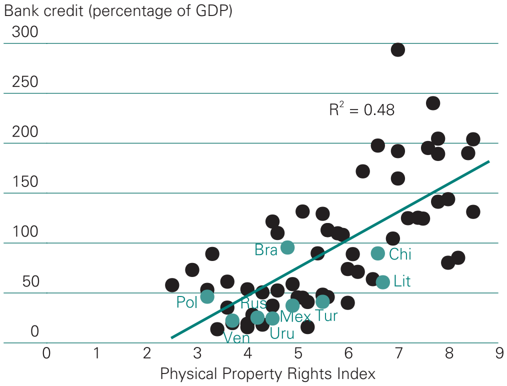
Some Factors that Contribute Toward a Greater Penetration of Banking Services

Bank Credit and the Legal and Political Environment Index, 2007



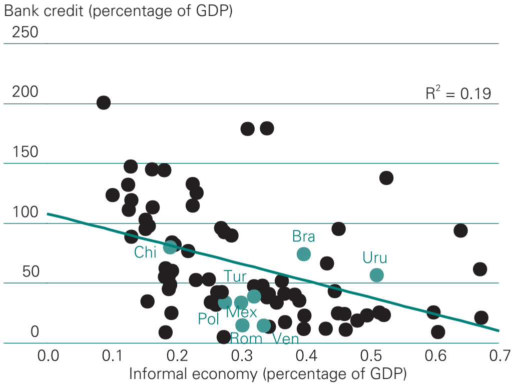
Source: World Bank and International Property Rights Index. The graph highlights the countries in the sample with a per capita GDP close to that of Mexico (countries with a per capita GDP greater or lower by 25 per cent of Mexico's per capita GDP).

Bank Credit and Physical Property Rights Index, 2007



Source: World Bank and International Property Rights Index. The graph highlights the countries in the sample with a per capita GDP close to that of Mexico (countries with a per capita GDP greater or lower by 25 per cent of Mexico's per capita GDP).

Bank Credit and the Informal Economy, 2000



Source: World Bank and Schneider (2004). The graph highlights the countries in the sample with a per capita GDP close to that of Mexico (countries with a per capita GDP greater or lower by 25 per cent of Mexico's per capita GDP).

It has been some years that the relationship between economic growth and the financial system, particularly the banking system, has captured the attention of various analysts and researchers. As a result, there is a growing amount of literature that shows that the operation of markets and financial intermediaries has had an important impact on long-term economic growth. On one hand, those countries with financial systems that operate well have been able to grow in a sustained manner during several decades. Moreover, improvements in the operation of the financial systems accelerate the economic growth rate. This is due to the fact that the markets and the financial intermediaries move savings, determine the most profitable projects and grant them financing, supervise the use of the financing granted and provide mechanisms to group and diversify risks. For this reason, and due to the preponderance of the banking system, in this section we analyze the determining factors of the growth of bank credit through some estimates from the data panel, taking as reference a broad representative sample of countries in recent years. In addition, we quantify how much this type of credit could increase in Mexico if improvements are made in essential determining factors considered in the literature. (See Inset of review of the literature regarding determining factors of the penetration of credit).

Methodology

For this analysis, we constructed a data panel of countries, which allows relating bank credit in terms of GDP, with essential variables that determine its penetration, such as the size of the informal economy, the legal environment, property rights, unequal distribution of income, inflation, etc., so that the differences between countries can be determined as well as the temporary effects of some variables. Moreover, bank deposits as a percentage of GDP were included, since this is a variable that approaches the sustainability of resources and the per capita GDP level. This last variable is usually added as a control variable related to the level of development of the economy. The greater part of the macroeconomic variables are available for the 1997 to 2007 period for 52 countries, while those of an institutional type are available for only one year. It should be noted that the crossing of variables between credit as a share of GDP and the explanatory variables considered are suggestive in terms of their statistical relation, except in the case of the proportion of income in the hands of the percentage of the poorest population.

An appropriate estimate method for analyzing a data base such as this is that of the FGLS, (feasible generalized least squares) which corrects through heterosedasticity and self-correlation of order 1 within each country (table of results of the regression of the panel, Column B to H). Ordinary minimum squares are not consistent in an estimate of this type due to the presence of self-correlation of errors. However, its results are presented as proof of variance inflation factors (VIF), which rule out this possibility.

The informal economy and inflation variables are significant and have a negative effect on the level of bank credit. The coefficients of the variables of property rights, legal environment, per capital GDP, deposits and debtor information are significant and show that these variables have a positive effect on bank credit. The coefficients with the greatest weight are those variables of property rights, legal environment, per capita GDP, deposits and debtor information.

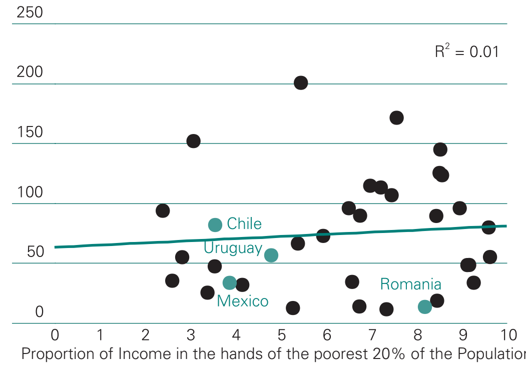
With the aim of ensuring the consistency of the previous results, the following exercises were carried out. First, a transversal cut estimate was done, using the average for each variable between 1997 and 2007. The coefficients showed the same signs as the previous estimate and the magnitude of the coefficients was very similar in both estimates. Second, an alternate data base was used on credit in the financial institutions. This base is formed with data provided by the different geographic units of the BBVA Economic Research Department and contains information on 40 countries. Its credit calculation includes only loans by bank and non-bank financial institutions, and has as an advantage that a credit measurement is obtained only on credit granted through traditional loans. However, its restriction against the other calculation is in the number of countries. Due to the limited availability of variables such as legal environment, property rights and bank capital, the number of countries available for the regression exercise is quite limited. Moreover, the definitions of credit are not fully comparable, which limits, to a certain extent, comparison of the results. However, the fact that the coefficients maintain the same signs and the coefficients are not too distant from the previous estimates is proof of the soundness of the results. Third, alternate control variables were used, such as the income of 40 per cent of the poorest population as a percentage of the income of 40 per cent of the wealthiest population, the current account, the public sector's fiscal balance and the percentage of past-due loans. The estimates showed that the coefficients of the variables presented in the previous table do not change significantly and that the alternate control variables are not significant.

The following, using the previous methodology, calculates how much bank credit would grow under two hypothetical cases. **The first is that Mexico would achieve levels similar to those of Chile in the informal economy, the legal environment and property rights**. Chile was taken as a base due to its similarity with Mexico in terms of per capita GDP, trade opening, geographic area and its important recent economic development. **The second case considers that Mexico would achieve levels in its legal environment and property rights equal to the average of a group of countries similar to Mexico in terms of per capita GDP but with a higher level of bank credit.**

Simulation No. 1

First, the level of bank credit will be measured in relation to GDP in Mexico if advances are seen in the country in terms of the informal economy, property rights and the legal environment. To this end, a hypothetical scenario is constructed of the level of bank credit in case Mexico were to have a situation similar to that of Chile in these variables.

Bank Credit and Proportion of Income in the Hands of the Poorest 20% of the Population, 2007



Source: World Bank. The graph highlights the countries in the sample with a per capita GDP close to that of Mexico (countries with a per capita GDP greater or lower by 25% of Mexico's per capita GDP).

Comparison in Selected Variables between Mexico and Chile

	Mexico	Chile	% Differ.
1. Informal Economy (percentage of GDP)	30.1%	19.8%	-34.2%
2. Physical property rights index	4.9	6.6	34.7%
3. Legal and political environment index	4.1	6.3	53.7%

Source: BBVA Bancomer

Bank Credit in Mexico
% of GDP

	2007*	Simulation 1
1. Informal Economy	19.2%	20.0%
2. Physical property rights	19.2%	22.4%
3. Legal and political	19.2%	22.9%

* Includes, the banking system, non-bank financial intermediaries (Sofoles and Sofomes) and Infonavit (Workers Housing Fund Institute)
Source: BBVA Bancomer

For this analysis, it was decided to take the specification contained in column G of the table of results of the regression of the panel, since the coefficients of its variables show the expected signal, are significant and are within a moderate range, in addition to being among those with the highest R^2.[1]

Based on this estimate, the elasticity of Bank Credit/GDP is calculated in terms of the variables: informal economy, physical property rights, and legal and political environment.

Elasticity of bank credit/GDP with regard to:

1. Informal economy -0.12
2. Physical property rights 0.49
3. Legal and political environment 0.36

Below, we calculate the percentage change that would be required in Mexico in the variables of: the informal economy, the property rights index and the legal environment, in order to have a level similar to that of Chile. The results are shown in the first chart.

Using elasticity, the percentage change is calculated of the bank credit/GDP ratio resulting from an improvement in each variable. As a result, bank credit levels in Mexico would be as shown in the second chart.

We have that in 2007 bank credit in Chile was around 75% of GDP. As of 1990, it has taken that country an average period of 8 years to increase the level of bank credit by 10% of GDP.

It is advisable to take into account that improvements in the variables of the informal economy, the property rights index and the legal environment along the order of 34.2, 34.7 and 53.7 per cent, respectively, are an important challenge. As shown in the table of the countries in

1 Column H was used only for the analysis on the effect of the legal and political environment variable.

Comparison of Selected Variables between Mexico and Some Countries

	Informal economy		Legal and political environ. index[1]		Physical propertyrights index[2]	
	1990 level	% chge. 90-00	2007 level	% chge. 07-09	2007 level	% chge. 07-09
Brazil	37.8	5.3	3.6	16.7	4.8	4.2
Chile	18.2	8.8	6.3	4.8	6.6	6.1
Lithuania	26.0	16.5	4.2	31.0	6.7	3.0
Mexico	**27.1**	**11.1**	**4.1**	**0.0**	**4.9**	**10.2**
Poland	20.3	36.0	3.7	43.2	3.2	50.0
Romania	26.0	32.3	3.3	36.4	3.6	36.1
Russia	27.0	70.7	1.9	63.2	4.2	14.3
Turkey	22.1	45.2	4.4	9.1	5.5	10.9
Uruguay	35.2	45.2	6.2	4.8	4.5	15.6
Venezuela, RB	30.8	9.1	1.7	17.6	3.7	21.6

1 Judicial independence, trust in the courts, political stability and corruption
2 Legal protection of property rights, difficulty to register a property and accessibility to bank credit
Source: Schneider (2000, 2002, 2004) and 2007, 2008 and 2009 Reports of the International Property Rights Index

the sample with a per capita GDP similar to that of Mexico[2] we see that only one country (Russia) among ten has managed to show an improvement in the legal environment index of over 53.7 per cent, although two others (Poland and Romania) show improvements of more than 35% in this indicator; and only two countries (Poland and Romania) recorded an improvement of over 34.7% in their property rights index. However, the countries with the greatest improvements are also among those with the lowest levels in the sample. The improvements mentioned were achieved within a period of three years, between 2007 and 2009. Moreover, we observe that no company in the sample has been able to reduce its informal economy levels between 1990 and 2000[3]. Mexico is the only country in the sample that has not been able to improve its legal environment index.

2 Countries with a per capita GDP greater or lower than 25% of per capita GDP in Mexico in 2007.
3 According to Schneider, F. (2000) this increase in the informal economy in a great number of countries is due to the increase in the tax burden, contributions to social security and greater regulation.

Determinant Factors of Bank Credit
Results of the panel regression

	A OLS	B FGLS	C FGLS	D FGLS	F FGLS	G FGLS	H FGLS
Informal economy	-0.202	-0.173**	-0.0214	-0.317*	-0.246*	-0.146*	-0.100
	(-0.65)	(-1.87)	(-0.17)	(-3.06)	(-2.48)	(-3.91)	(-1.54)
Physical property rights	-0.468	8.096*		2.457*		3.756*	
	(-0.17)	(8.85)		(2.28)		(10.54)	
Legal and political environment			7.678*		2.834*		3.277*
			(7.96)		(3.18)		(4.92)
Bank interest rate	-0.0468	0.0265	-0.0869	0.231*	0.182*	-0.248*	-0.538*
	(-0.21)	(0.24)	(-0.77)	(6.30)	(4.85)	(-4.13)	(-4.40)
Inflation	-0.208	-0.346*	-0.388*	-0.106*	-0.102*	-0.005	-0.024
	(-0.76)	(-5.72)	(-4.81)	(-2.72)	(-2.93)	(-0.17)	(-0.59)
Per capita GDP	0.00135*	0.00189*	0.00156*	0.000704*	0.000552*	0.00109*	0.0009*
	(2.09)	(19.06)	(11.64)	(5.23)	(3.38)	(21.66)	(6.17)
Debtor information	1.177	1.719*	1.024*			3.533*	3.809*
	(0.89)	(7.31)	(3.67)			(21.88)	(12.52)
Deposits over GDP	0.887*			1.061*	1.053*		
	(7.34)			(41.69)	(35.28)		
L. Deposits over GDP						0.765*	0.701*
						(21.66)	(19.04)
Constant	18.84	9.631	22.21*	8.993	9.641**	6.237*	7.308*
	(0.78)	(1.23)	(2.93)	(1.18)	(1.77)	(2.31)	(2.21)
Observations	83	176	176	333	333	86	86
Adjusted R^2	0.645	0.602	0.602	0.558	0.560	0.602	0.650

* $p < 0.05$ ** $p < 0.10$
Note: t Statistics in parenthesis
L Indicates it is behind one period
Source: BBVA Bancomer

Comparison of Mexico with Other Countries

	Mexico	Chile	% Differ.
1. Informal economy (% GDP)	30.1%	19.8%	-34.2%
2. Physical property rights index	4.9	6.6	34.7%
3. Legal and political environment index	4.1	6.3	53.7%

	Mexico	Cntries*	% Differ.
1. Informal economy (% GDP)	30.1%	30.5%	1.3%
2. Physical property rights index	4.9	5.9	20.4%
3. Legal and political environment index	4.1	4.6	12.2%

* Average of the four countries similar to Mexico in terms of per capita GDP with the highest levels of bank credit /GDP: Brazil, Chile, Lithuania and Turkey.
Source: BBVA Bancomer

Bank Credit in Mexico
% of GDP

	2007*	Simulation 2**
1. Informal economy	19.2%	19.2%
2. Physical property rights	19.2%	21.1%
3. Legal & political environment	19.2%	20.0%

* Includes banks, non-bank financial intermediaries (Sofoles and Sofomes) and Infonavit
** Four countries similar to Mexico
Source: BBVA Bancomer

Simulation No. 2

An alternative scenario would be achieving the legal and property rights environment level of the average of the four countries similar to Mexico in terms of per capita GDP with the highest level of bank credit/GDP ratio. Those countries are Brazil, Chile, Lithuania and Turkey.

The percentage change that Mexico would have to experience in the variables of the informal economy, the property rights index, and the legal environment in order to have a level similar to those countries are, 1.3%, 20.4% and 12.2%, respectively.

As was described previously, elasticity is used to calculate the percentage change in the bank credit /GDP ratio resulting from the improvement of each variable in the previous levels. Thus, the levels of bank credit in Mexico were as shown in the chart.

Conclusions

The results of the exercises show that there is room for improving the penetration of bank credit in Mexico, which could be bolstered by essential reforms to improve its operation, such as the reduction of the informal economy, the improvement of the legal environment and of property rights. In this section we have quantified each of these aspects based on what was observed in a broad sample of countries. Although it is true that a greater availability of credit could spur and accelerate the recovery of the economy, an improvement of the environment toward one that encourages feedback, would result in greater economic growth.

A Brief Review of the Literature on Determining Factors in Credit Penetration

Different studies on the causes and consequences of bank crises suggest that macroeconomic and political stability has a positive effect on credit penetration. Monetary and fiscal policies affect the tax requirements of financial intermediaries and the availability of financial services, since when the government has high financing requirements it displaces private investment, increasing the required yields on government debt and absorbing the savings that the financial system mobilizes (Bencivenga and Smith, 1992; Huybens and Smith, 1999; Roubini and Sala-i-Martin, 1992 and Roubini and Sala-i-Martin, 1995). In addition, countries with lower and stable real interest rates and inflation levels experience higher levels of banking and securities market development (Boyd, Levine and Smith, 2001), while high levels of these two variables are associated with a greater probability of systemic bank crises (Demirgüç-Kunt and Detragiache, 1998 and 2005). In turn, political turbulence can produce macroeconomic instability and weaken business conditions. Civil wars destroy capital and infrastructure, and can be followed by expropriations by military coup d'etats. Corruption and crime increase the costs of doing business and create uncertainty in relation to property rights, especially in low income economies (Detragiache, Gupta and Tressel, 2005).

With regard to the quality of legal infrastructure and information, the empirical evidence suggests that companies are more able to access external financing in countries where law enforcement is stricter (La Porta, et.al, 1997; Demirgüç-Kunt and Maksimovic, 1998; and Beck, Demirgüç-Kunt and Maksimovic, 2005). In addition, effective legal systems allow for more flexible conflict resolution mechanisms, which increases companies' access to financing (Djankov, McLiesh and Shleifer, 2007 and Beck, Demirgüç-Kunt and Levine, 2005) and reduces interest rate spreads (Demirgüç-Kunt, Laeven and Levine, 2004). Protection for creditors also seems to positively contribute to the growth in financing for the private sector (Djankov et. al., 2007 and Singh, Kpodar and Ghura, 2009).

Another important ingredient for credit penetration is the availability of timely and good quality information, since it helps to reduce information asymmetries between debtors and creditors. The empirical evidence in this regard shows that the volume of bank credit is significantly greater in countries where more credit information is shared (Jappelli and Pagano, 2002; and Djankov, McLeish, and Shleifer, 2007). At the same time, companies report fewer obstacles to financing when there is better credit information, even in low income countries (Love and Mylenko, 2004; Detragiache, Gupta, and Tressel, 2005; Djankov et.al, 2007, and Singh, Kpodar and Ghura, 2009).

In research regarding the determinant elements of credit, another series of factors that has received the attention of different analysts concerns informality and poverty. The small companies and poor households (in Mexico a high percentage of which correspond to the informal sector) face many obstacles to access financing. The social and physical distances in relation to the formal financial system are important elements in explaining the level of credit. It is likely that the poor do not know anyone in their social network who is familiar with available financial services. The lack of education can make it difficult for many of them to overcome the problems associated with filling out requests for such services. The amount of the transactions that they conduct can lead to a situation in which bank employees are not interested in helping them. Financial institutions are often located in the largest and wealthiest localities, so that physical distance can also be an important factor (Beck and De la Torre, 2006). A recent study that analyzes data on a company level in 26 transitional economies in Eastern Europe and Central Asia, with the aim of examining the relationship between informality and bank credit, finds evidence that informality is significantly correlated with less access to and use of bank credit (Dabla-Norris and Koeda, 2008). Specifically, the use of bank credit by companies is positively correlated with the quality of the legal climate and negatively related to weaknesses in how taxes are administered. At the same time, deficiencies in tax administration are positively associated with the use of informal credit and the probability that companies will report that the lack of availability of financing is an important obstacle in conducting their operations. In particular, an efficient and properly operating legal system increases access to bank credit on the part of financially opaque companies operating in the informal sector, while reducing the use of informal credit among formal companies. Finally, the weakness in tax administration increases the use of informal credit to a greater extent among informal companies than formal companies.

Bibliographical References

Beck, T., Demirgüç-Kunt, A., & Levine, R. 2005. "*Law and Firms' Access to Finance*". American Law and Economics Review 7, 211-252.

Beck, T., A. Demirgüç-Kunt, & M. S. Martinez Peria. 2007. "*Banking Services for Everyone? Barriers to Bank Access and Use around the World*". World Bank Policy Research Working Paper 4079, World Bank, Washington, DC.

Bencivenga, V.R., & Smith, B.D. 1992. "*Deficits, Inflation and the Banking System in Developing Countries: The Optimal Degree of Financial Repression*". Oxford Economic Papers 44, 767-790.

Boyd, J.H., Levine, R., & Smith, B.D. 2001. "*The Impact of Inflation on Financial Sector Performance*". Journal of Monetary Economics 47, 221-248.

Dabla-Norris, E. & J. Koeda, "*Informality and Bank Credit: Evidence from Firm-Level Data*". IMF Working Paper WP/08/94, April 2008.

Demirgüç-Kunt A., & Detragiache, E. 1998. "*Financial Liberalization and Financial Fragility*". Policy Research Paper 1917, World Bank.

Demirgüç-Kunt, A., & Detragiache, E. 2005. "*Cross-Country Empirical Studies of Systemic Bank Distress: A Survey*". In Davis, P. (ed.), Financial Instability, Asset Prices, and Credit. National Institute Economic Review, forthcoming.

Demirgüç-Kunt, A., Detragiache, E. & Tressel, T. 2006. "*Banking on the Principles: Compliance with Basel Core Principles and Bank Soundness*". World Bank mimeo.

Demirgüç-Kunt, A., Laeven, L., & R. Levine 2004. "*Regulations, Market Structure, Institutions, and the Cost of Financial Intermediation*". Journal of Money, Credit, and Banking 36(3), 593-622.

Detragiache, E., Gupta, P., & Tressel, T. 2005. "*Finance in Lower-Income Countries: An Empirical Exploration*". International Monetary Fund Working Paper, WP/05/167.

Djankov, S., McLeish, C. & A. Shleifer. 2007. "*Private Credit in 129 Countries*". Journal of Financial Economics, forthcoming.

Guiso, L., Sapienza, P., Zingales, L. (2002). "*Does local financial development matter?*". National Bureau of Economic Research Working Paper No. 8922.

Huybens, E., & Smith, R. 1999. "*Inflation, Financial Markets, and Long-Run Real Activity*". Journal of Monetary Economics 43, 283-315.

Jappelli, T., & Pagano, M. 2002. "*Information Sharing, Lending and Defaults: Cross-Country Evidence*". Journal of Banking and Finance 26:10, 2017-45.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R.W. 1997. "*Legal Determinants of External Finance*". Journal of Finance 52, 1131-1150.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R.W. 1998. "*Law and Finance*". Journal of Political Economy 106, 1113-1155.

Levine, R. 2005, "*Finance and growth: Theory and evidence*". In Handbook of Economic Growth, ed. P Aghion, S Durlauf, 1A:865-934. Amsterdam: North-Holland Elsevier.

Love, I., & Mylenko, N. 2004. "*Credit Reporting and Financing Constraints*". World Bank Policy Research Working Paper 3142.

Rajan, R., & L. Zingales, 1998, "*Financial Dependence and Growth*". American Economic Review, Vol. 88, No. 3, pp. 393-410.

Roubini, N., & Sala-i-Martin, X. 1992. "*Financial Repression and Economic Growth*". Journal of Development Economics 39, 5-30.

Roubini. N., & Sala-i-Martin, X. 1995. "*A Growth Model of Inflation, Tax Evasion, and Financial Repression*". Journal of Monetary Economics 35, 275-301.

Schneider, F. (2000). "*Increasing Shadow Economies all over the World — Fiction or Reality?*". Journal of Economic Literature, 38(1), 77-114.

Schneider, F. (2004). "*The Size of the Shadow Economies of 145 Countries all over the World: First Results over the Period 1999 to 2003*". Journal of Population Economics, 2007, 20 (3), 495 - 526.

Singh, R. J., Kpodar, K. & Dhaneshwar Ghura, 2009, "*Financial Deepening in the CFA Franc Zone: The Role of Institutions*". IMF Working Paper WP/09/113, May 2009.

Tressel, T. & E. Detragiache, 2008, "*Do Financial Sector Reforms Lead to Financial Development? Evidence from a New Dataset*". IMF Working Paper WP/08/265, December 2008.

The Correspondent Bank Model in Mexico

Some recent studies indicate that one fourth of the homes in developing countries have some kind of financial savings in formal bank institutions. Even though many people, particularly the very poor, cannot absorb debt nor benefit from a loan, the large majority can benefit from savings, payment and transfer services. The access to financial services implies the connection to the national payment system through an account that will allow the user to make transactions, receive and pay back loans, save and withdraw money from a savings and loan association and use the funds to pay for what he needs. This account for transactions is not only an entry door to a broad range of financial services, it also provides him with a financial history and a base for administrating his financial life.

The fundamental limitation for persons to have bank accounts is due to the cost that it represents for the banks to establish and maintain branch networks in order to reach the population furthest away from the urban centers and that is located dispersed throughout the country. To achieve universal access, the banks must adapt their systems to an environment where a large number of low value operations are conducted and to create more flexible and ample networks of retail establishments where the customers can comfortably deposit or withdraw funds from their accounts for daily transactions.

What are the general characteristics of the bank agency model?

A network of "commission agents", "correspondents" or "bank agents" mainly constitutes a technological platform that allows a bank to delimit the risk of this type of operations. Technology permits a bank and its customers to interact at a distance in a sure way through existing local retail establishments, through the issue of cards for its customers, with security mechanisms and the equipping of the local store (the "correspondent", "commission agent" or "bank agent") with a point of sale terminal (PST), managed by the bank and connected to it through a telephone or cordless or satellite technology line

Thus, when a customer wishes to make a deposit in a store, by just passing his card through the PST, he establishes direct communication with the bank. Automatically, the bank withdraws the equivalent amount from the account of the bank agent so as to finance the deposit and issues a receipt in paper for the customer through the PST. The commission agent keeps the cash in compensation for the amount that was withdrawn from his bank account. When a customer wishes to withdraw money from his account, the procedure is reversed. Thus, in retail establishments, the cards issued by the banks are used not only to purchase products but also to deliver and receive cash through the correspondent banks.

However, at some time, the manager of the store must go to the bank to balance the funds in his cashbox. In reality, the bank customers have delegated to the store manager the task of going to the bank to balance the net cash needs of the community. Due to this, the store gets a commission based on the amount of transactions. The main commercial decision that the correspondent bank must take into account is to know how frequently he has to go to the bank, a

Functions of the Commission Agent in the Correspondent Bank Plan

Functions
1. Offers a direct service to the customer (including the physical space and the handling of the point of sale terminal.
2 Acts as an intermediary in bank transactions through its own balance, transforming the cash of the cashier into money in the bank and vice versa.
3 Goes to the bank periodically to once again balance the amount of cash that he keeps in his cashier with the money from his bank account.

Source: BBVA Bancomer

decision based on the cost of the working capital and the physical security of the money kept in the store, on one hand, and, on the other, the cost of having to go to the bank with greater frequency.

The forming of a commission agent presents a series of technological and operating difficulties for the bank. The main challenge is to determine how this new channel harmonizes with the goals of the bank regarding the segmentation of customers, the services proposal, and the strengthening of the brand. This challenge is particularly significant when it is sought to establish agents to offer services to persons who do not have bank accounts, since to achieve this, the banks require overcoming the barriers due to the scarce financial education of these possible customers, working out adequate products for their needs and economic means, finding efficient ways to promote them, providing access to them and establishing a mechanism to verify the customers' identity, since many of them lack formal identification documents.

In its most basic way, a retail establishment acting as commission agent is a transaction channel that allows the customers of the bank to deposit cash in their account or to withdraw money from it, as well as to carry out various electronic operations, such as consulting the account balance or recent movements and transferring money between accounts. The confidence in the transactions that are made through the commission agents is mainly guaranteed through the provision of adequate technology, with the backing of a contract agreement signed between the agent and his bank, which specifies both the way in which the technology is to be used, and the respective functions and responsibilities of each party.

But the bank must also support this process with four basic elements. In the first place, the bank must provide basic financial education to its customers that will permit them to assume personal responsibility in two fundamental aspects: the need of not sharing their bank card and maintaining their personal identification number secret, and reading the receipts issued by the PST prior to leaving the store, so as to confirm their veracity.

In the second place, the bank must provide clear and transparent information to its customers regarding the responsibilities of the commission agent and of the bank, the services that the commission agent may provide and those that he cannot, the costs of the commission for each transaction and if said amounts are paid in cash to the commission agent or if he charges these directly to the bank, as well as the process that he must follow to present a complaint or a claim. Also, the customer must be informed that it is possible that on certain occasions for some agents or correspondents, transactions cannot be made with cash (for example, if the agent has no cash or is left without the necessary balance in his bank account, if the connection in real time with the bank is interrupted or, even, when the company has run out of paper).

In the third place, the banks must establish a mechanism for receiving complaints and to compensate errors of its customers directly, with specific functions, responsibilities and terms. Customers who think that the process has not functioned adequately must be able to request clarification, to present a complaint or to demand compensation. The customers must not feel trapped in a technological labyrinth.

Finally, the bank must establish adequate internal controls that will allow it to keep a registry of the incidents of which it informs each one of its agents, so as to identify suspicious patterns and do the follow up on the quality of the service based on the complaints. It should also keep a "black list" of agents or correspondents that have been excluded from the system.

For the banks, the commission agents may comply with diverse strategic functions, such as decongestion of the branches, orientation toward a new customer segment, the expansion of geographic coverage and the creation of a virtual bank without its own infrastructure. The potential to improve access to the financial services of the bank correspondent model fundamentally depends on who can act as a commission agent. In Brazil, where the regulators allowed a large variety of retail establishments to act as correspondents, there are currently over 115,000 bank agents operating, the majority of which have opened in the last five years (see Box Inset on The Brazil Model). This network is 10 times greater than that of traditional bank branches and has resulted in the integration of all the municipalities of that country in the formal bank system. On the other hand, in India, the number of agents is much lower because the regulation restricts the capacity to act as an agent to postal offices, cooperatives and non-profit organizations. In the Philippines and Kenya, the payment services offered through mobile telephone operators are provided through their vast distribution networks of prepaid cards that also comply with the function of locations for deposit and cash withdrawals. This model is being adopted in Bolivia, Colombia, Pakistan, Peru, South Africa and Mexico.

For the financial authorities, the correspondent bank model also presents important challenges related with supervision and with the insertion of this plan within the financial system. In terms of supervision, it must be decided if both the banks and the correspondent banks are going to be monitored and to which authority the responsibility will fall. As regards the insertion of the plan within the financial system, of importance is adequate regulation on the use of a platform for electronic payment means, such as PST (point-of-sale terminals) and cellular phones, as well as of other regulations which contribute to mitigating the various operating risks, credit risks and money laundering, to which the model could be susceptible, such as cash theft, identity theft and errors or frauds associated with the receipts of the transactions.

How has the commission agents' plan evolved in Mexico?

The efforts made by the banks in Mexico, for some years now, to improve access to financial services by establishing branches, automated teller machines (ATMs) and PSTs are being complemented through bank agents. Since 2005, six banks (Banamex, Bancomer, Banorte, HSBC, Inbursa and Scotiabank) signed, with Telegrafos de Mexico (Telecom for its Spanish initials), mandate or commission agreements authorized by the National Banking and Securities Commission (CNBV for Comisión Nacional Bancaria y de Valores) to offer basic bank services (mainly receiving deposits in checkbooks and in credit and debit cards) through the 1,563 offices of the Telegraph Network that are linked with connectivity via land and, in some cases, through satellite. In this plan, Telecom acts as the customer's agent and for each bank transaction made, gives the customer a voucher

Some Risks in the Correspondent Banks Model

Risk	Explanation
Operating	• The obligation of applying on line the payments of service and credit entries requested by the customers requires validation of the information with the central systems. • Due to the rise of operations by the correspondent banks in retail establishments, it is possible that the frequency of cash transfer services will increase.
Credit	• It applies on cash transactions at the time that it is demanded that in each transaction the corresponding charge be made to the checking account of the Correspondent since this will generate a credit entry on the payment requested by the user.
Money laundering	• Many financial transactions are susceptible to this risk which refers to transactions, operations and activities through which an individual or a business entity participates, directly or indirectly in hiding or covering up monetary funds, goods or rights, derived from conducting some illicit activity, making them appear as legitimate and propitiating their free use.

Source: BBVA Bancomer

from Telecom. Other retail establishments can carry out mandates for the provision of services related with money transfers for deposit in a bank account or cash availability

The relationship between the Commission Agent and the customer, defined in the mandate accords, stipulates that the commerce should inform the customer, which is an entity that is not regulated by the financial authorities and, therefore, it is not authorized to assume obligations in the name of the banks. Despite these limitations, the mandate was already allowing the banks to complete their branch networks importantly. In the case of Telecom, for example, in 2005 there were 812 municipalities with presence of said entity, which still did not have bank branches.

The first natural stage of branch expansion has been for those banks having some type of relationship with self-service stores, be it forthcoming from some type of strategic association, or otherwise because of belonging to the same economic group. Other cases refer to specific accords among the banks and the self-service store chains that have been legalizing through the creation of regulated Multiple Purpose Financial Associations (Sofomes for their initials in Spanish). In the two options, bank branches have been opened in the interior of the commercial establishments, providing the requirements of the CNBV are met, regarding security and the banking operation.

Despite the existence of these models, in February 2008, Congress approved a series of modifications to articles 46 Bis 1, 46 Bis 2, 92, 96 and 112 of the Law for Credit Institutions (LIC for its initials in Spanish) of which the aim is to make the bank correspondents plan in Mexico more flexible and clear. The banks will be allowed to sign contracts with third parties (they can be commercial establishments and of services, including other credit institutions or financial entities) to offer through them diverse basic financial services, such as: i) payments of diverse services, ii) cash withdrawals, iii) money deposits, iv) loan payments, v) fund transfers, vi) .payments of checks, and vii) consultation of balances and movements. In contrast with the mandate, under the new model, the correspondent agent always carries out the operations In the name and for the account of the bank, so that the funds that the customers deliver to him will be the responsibility of the bank from the moment they are received in the establishment. To this end, the establishment should keep a checking account that will allow him to compensate the different operations that his customers might request from him, in the previously described way (which reduces the risk of realizing a transaction in an erroneous account). Also, it is stipulated that the correspondents not have the possibility of determining the terms of the operations in which they intervene, nor obtain price or rate differentials for said operations. The correspondents are also prohibited from realizing bonded sales; that is, conditioning the realization of the banking operations requested by the customers for the acquisition of goods or services in their establishment.

The most recent modification to the correspondent bank plan occurred in June 2009, when the modifications approved by Congress to Article 46 Bis 1 of the LIC to set the limits to the operations of reception of money bank deposits (at sight, at term and in savings), and of the acceptance of loans and credits realized by the banks through the correspondents to reduce the risk of money laundering. The limit to the operations by individuals is of 1,500 UDIS (P$6,597.90) approximately)[1], while the limit to the aggregate operations by the commission agent is of 50% of the total amount for the operations realized in the period by the bank about which this is about.[2] Nevertheless, excluded from the application of such limits are the cases in which "i) the third party is an entity of the Federal Public Administration, State or Municipal; ii) that it is about operations relative to section XXVI Bis of Article 45 of this Law; and iii) the third parties with whom the contract is made be institutions of credit, stock markets or entities for savings and popular credit".[3]

The Law also considers faculties so the correspondents may, in turn, contract other persons or entities for the realization of services and bank operations, through the figure of "Commission Agent Administrator". These entities can be other banks, savings and loan entities. It is required that they have a good reputation and honorability, in addition to the necessary personnel and infrastructure.[4]

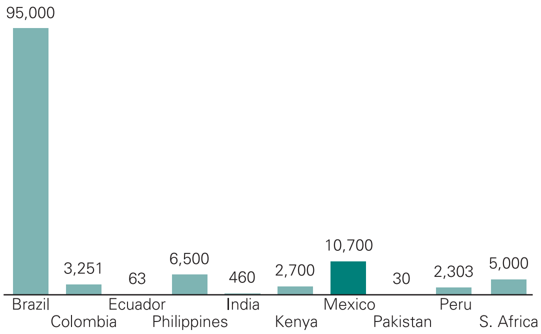
It is important to point out that the Law will take care of the protection of banking confidentiality and the prevention of money laundering in the operations that are realized through the Commission Agents, despite the fact that the banks will always be responsible before their customers of the operations realized. The CNBV may request the Commission Agents, through the loan institutions, information, including books, registries and documents regarding the services that provide them, as well as realizing inspection visits and decree the measures that the loan institutions must observe to assure the continuity of the services that the latter provide to their customers, the integrity of the information and compliance with stipulations of this Law.[5]

In a first stage, the banks have presented to the CNBV their strategic plans for operating correspondent situations, specifying the type of operations to be realized and the operators with whom they will establish the plan. Last December 4, 2009, ten banks obtained authorization from the CNBV to contract correspondent bank.[6] Telecom, an institution that for some years has been conducting various operations for bank customers, is one of the establishments with which some banks will establish correspondents under the new model. Other establishments that are expected to show some interest in the plan are the commercial chains and convenience stores with a relatively large number of daily sales and well-developed plans to handle cash and personnel.

According to some estimates of the Banco de Mexico published in the most recent Report on the Financial System, through the correspondents, in a few years, the coverage of the network of access

1 1 UDI=4.398602 pesos. Source: Banco de Mexico (consultation date: February 17, 2010).
2 For further details, see Article 46 Bis 1 of the LIC.
3 Section XXVI Bis of Article 46 of the LIC stipulates operations for issuing and putting into circulation any payment means that Banco de Mexico determines.
4 For further details, see "Reporte sobre el Sistema Financiero", Banco de Mexico, 2009.
5 For further details, see Article 46 Bis 2 of the LIC.
6 American Express, Banamex, BBVA Bancomer, Banorte, Compartimos, HSBC, Inbursa, Invex, Scotiabank and Wal-Mart. For further details on the type of operations authorized, see CNNExpansion.com (2009)

Number of Correspondent Agents in Selected Countries
Units, 2008



Sources: For Mexico "Report on the Financial System 2009", Banco de Mexico. The figure includes the commercial units that still do not offer services and that currently have commercial associations with banks under plans prior to the modifications to the Law for Credit Institutions of 2008. For the other countries: "Note on Regulation of Branchless Banking in Brazil". CGAP, February, 2008

to bank services could grow from13.97 distribution points for every 100,000 inhabitants in 2008, to almost 20 distribution points for every 100,000 inhabitants. The exact number of years to reach this goal will depend on the speed and ease with which the banks and the retail establishments develop the business models that will meet the requirements specified by the authorities and that generate trust among the users of the financial services..

To summarize, the correspondent bank model can contribute in various ways toward complementing the bank platforms to provide services. This includes technological and business decisions, both for the banks and for the authorities, so as to achieve the most beneficial results for society. Also, for the model to function, consumers must also assume a personal responsibility for not sharing their bank card and for maintaining their personal identification number secret, and to read the receipts issued by the PST (point of sale terminals).

References

Castellanos, S. G., Castellanos, V. C. and B. N. Flores, 2009, "*Factores de influencia en la localización regional de infraestructura bancaria*" ("*Factors that influence the regional location of bank infrastructure*"). Economía Mexicana Nueva Época, volume XVIII, number 2, Mexico, second half of 2009.

CNNExpansión.com (2009): "*Los Bancos ahora si hasta en la tiendita*" ("*Banks now even in the neighborhood store*"), Business, Tuesday, October 12, 2009.

El Financiero (2009): "*Entrega CNBV a Banorte primera autorización para corresponsalías*". ("*CNBV grants Banorte first authorization for correspondent banks*") Finances, Thursday, October 1, 2009.

Financial Access 2009: Measuring Access to Financial Services around the World, CGAP, 2009.

Huerta, E. "*Solicitan 10 instituciones la aprobación de la CNBV Preparan bancos expansión a través de corresponsales*" ("*Ten institutions request CNBV approval. Banks prepare expansion through correspondent banks*"). Milenio, October 12, 2009.

Mas, I. and H. Siedek, "*Servicios bancarios a través de redes de establecimientos minoristas*" ("*Banking services through retail establishment networks*"). Enfoque CGAP, Nº 47, May 2008.

Report on the financial system, Banco de Mexico, 2009.

Acknowledgements

In the preparation of this Inset section, we acknowledge the valuable comments and suggestions of Ruben Marquez (BBVA Bancomer) and of Arturo Arenas, Alberto Galvan and Flavio A. Torres Najera (ABM).

Brazil's Correspondent Bank Model

Brazil is one of the countries that has a long history in the external provision of bank services for economic agents through the "non-bank correspondent" model. The model was created during the 1970s so that through retail stores, transactions such as receiving loan applications, analysis of personal information and the credit record of those applying for loans, collecting payments on loans, and data processing could be carried out. Initially, the banks were forbidden to use correspondents in municipalities where there were bank branches.

Years later, the *Banco Central do Brasil* progressively expanded the correspondent model, by allowing them to provide more services and increasing the list of financial institutions that can contract them. The model was reformed in 1999 to make the payment of different government social assistance programs more efficient, such as the subsidies programs to combat poverty, the payment of pensions and other benefits for government workers. Specifically, the variety of services that the correspondent could provide grew to include receiving applications for opening accounts, deposit and withdrawal transactions, and the payment of various services. In the same year, the Caixa Económica Federal (Caixa), a government-owned bank, formed an alliance with around 9,000 lottery kiosks to form the non-bank correspondent venture on a large scale in that country.

After the prohibition of the use of correspondents in municipalities where bank branches already existed was eliminated in 2000, Caixa rapidly expanded its coverage to all of the country's municipalities. The total number of correspondent agents used by the banks in that year was 64,000. Subsequently, in 2003 as part of the government's financial inclusion policy, any financial institution authorized by the *Banco Central do Brasil* was allowed to contract any legally constituted entity as a correspondent to provide a wide range of services in any locality. At the present time, there are more than 95,000 registered correspondents throughout the entire country and in each of Brazil's 5,567 municipalities there is at least one correspondent that acts on behalf of some financial institution subject to regulation and prudential supervision, while in 1999, in contrast, there were 1,679 municipalities that lacked banking services.

The value of this plan to improve life in urban and rural localities through improved access to the payments system and basic bank services, is recognized and appreciated by agencies of both the government as well as the private sector. The plan has not only provided security and shown to be convenient for low-income families that receive government assistance, but has also served as a tool for economic development in isolated communities. Instead of making purchases in the cities to which they used to travel in order to receive their assistance payments, the beneficiaries now withdraw their cash, pay their bills, and buy goods and services locally.

It should be pointed out that most of the correspondents are commercial establishments, such as grocery stores, post offices, notary offices and lottery kiosks, but financial institutions can also act as bank correspondents. The main networks processed approximately 104 billion dollars involving 1.5 billion transactions undertaken in 2006. Despite the significant growth compared with the 190 million transactions in 2004, this number still represents only four percent of the 37 billion transactions operated in the bank sector.

According to data from the seven largest correspondent networks in Brazil, the payment of different accounts represents 70% of the transactions and 46.5% of the total value of the operations that all the correspondents undertake. This is followed by withdrawals and deposits (13.2% of the transactions and 25.6% of the total value) and credit operations (0.5 percent of the transactions and 12.0 percent of the total value). It is not necessary for the clients to have a bank account and they can conduct transactions in any of the bank's customer service windows, using cash or debit cards, although only bank account holders can receive payment transfers.

For the banks, the main reasons for using correspondents are to reduce costs (the agents have become the least expensive way to diminish congestion in their branches and avoid the fines that the authorities impose when clients have to wait in line for more than a certain amount of time) and increase the client base through an expansion of their activities through correspondents in less populated and geographically dispersed villages. Caixa and Banco Postal, which is a joint business venture between Banco Bradesco (the second largest private bank) and the postal service, operate the main correspondent networks. Banco Postal has opened more than five million new checking accounts since 2002, through 5,460 post offices. Four of the largest banks in the system have extensive transactions with correspondents, but some banks (among them the largest bank in the system, Banco Itaú) still refuse to use correspondents, due in part to the existence of operating risk. Some banks operate exclusively through correspondents, such as Banco Popular, Lemon Bank, and GE Capital.

The correspondent networks can be managed directly by the banks or by a third party, which is then recognized as a correspondent by the *Banco Central do Brasil*. The network administrator provides a wide range of services that include the selection of agents, training related to policies to combat money laundering and the financing of terrorism, maintaining point of sale terminals, software development, cash management, and marketing.

Despite the benefits for consumers of the extensive correspondent networks in providing financial services, the *Banco Central do Brasil* has identified different violations of consumer protection regulations on the part of the correspondents. These include charging additional fees and not providing information on the applicable rates for services, not disclosing their status as a mere intermediary between the bank and the client, providing cash advances to clients and loan guarantees (which are not allowed), the sale of client data to third parties, and the commission of fraud (for example, retaining clients' resources and not making the requested payments).

The correspondent bank model has been less successful in promoting savings and credit. Only two banks, ABN Amro and Banco Popular, have experimented in providing micro-credits through correspondents. But so far the results of the experiment have been quite limited, especially in terms of the default rates. According to the banks, the main reasons for this limited growth can be attributed to the regulatory policies concerning simplified accounts and micro-credits. It appears that there is a low level of compliance with the regulation that requires the banks to earmark 2% of their deposits to granting micro-credits. In addition, Brazilian banks have argued that the ceiling on interest rates for micro-credits is very low in light of: (i) the lack of complete databases with positive and negative information on the low-income population, (ii) high reserve requirements (approximately 45% of deposits) and (iii) high interbank rates. These difficulties, coupled with other challenges related to the high administration costs in the banking sector and frequent robberies at branches have led to a very high average spread in bank rates (that is, the difference between the applicable interest rate and the interbank interest rate).

Dissatisfied over the delay in granting credit, the government announced the possibility of closing Banco Postal, in order to establish a new government-owned bank to close the gap. However, as an alternative some analysts suggest improving business incentives so that the banks use the simplified accounts and the correspondents to provide credit to low-income clients, by reviewing the limits on transactions in simplified accounts and diminishing the reserve requirements related to these balances (demand and savings); approving the legislative bills that establish rules and legal security so that the credit bureaus can use positive and negative information from different sources, such as client databases of public service companies; and eliminating or modifying the regulatory limits for micro-credits.

In conclusion, the experience of Brazil's correspondent bank model suggests that it has been effective in providing access to the payment system in all of the country's municipalities. However, even though the number of establishments in which correspondents operate is more than 10 times higher than the number of bank branches that exist in the country, the model has been less effective in promoting savings and credit, which are activities in which a greater knowledge of the client is required. The experience also shows the importance of paying attention to risk factors in the correspondents' operations, so that an appropriate set of rules and regulations will tend to limit them. This suggests the need for the authorities to evaluate this model together with other regulations that cover bank activity in order to increase its efficiency.

References

Notes on Regulation of Branchless Banking in Brazil, CGAP, February 2008.

The Importance of Financial Education

The access to financial services and markets is important for many reasons. It is easier for households to form a habit of saving and with this the accumulation of assets. They are also allowed to form prevention habits through insurance and the formation of long-term savings for retirement. The current pension plans allow them to choose a desired voluntary savings amount and an adjustable investment portfolio in terms of their age and a selected risk/return. Small and medium-sized companies are allowed to complement their own resources with credit and with this facilitate their investment and growth plans. The benefits of a greater depth and coverage of banking activity[1] are reflected in greater levels of well-being for families and progress for countries. But for this, a greater financial education of the citizens is essential. In fact, the lack of a financial education is an important limiting factor toward greater access to banking services even in the more developed countries.

In this sense, the goal of a financial education is for users of financial services and investors to make informed decisions, in accordance with their needs and risk profile, so that they may make the best use of the benefits of financial services. Among the subjects included in financial education are the family budget and decisions on savings and investments so as to encourage habits consistent with savings and responsible credit decisions. For this, it has been proven useful to use basic financial mathematics and the use of calculators or simulations of specific situations for users.

Economic and Financial Education: an assignment that has already been undertaken several years ago in other countries

At the international level, it is seen that for more than a decade the designers of economic policy have given increasing importance to financial education as a pillar of stability for the financial markets. As financial markets become more sophisticated and households assume a growing proportion of responsibility and risk due to their financial decisions, a financial education is necessary to ensure sufficient levels of protection for the users of financial services, investors and consumers, as well as for the proper functioning of both the financial markets and the economy in general. For example, in the United States, the state governments finance dozens of training programs on financial subjects, directed both for the general population (for example, high-school level financial education courses), and for specific groups (for example, individuals with low income, buyers of first homes, etc.). Companies provide financial education for their employees, with an emphasis on how and how much to save for retirement.

In the United States, the National Council for Economic Education (NCEE) has been engaged in economic and financial education for more than 60 years; initially in the U.S. and gradually in other countries, including Latin America. This association has approached both students and professors, providing them with educational material and promoting the professional development of professors through workshops, academic courses and on-line programs. It also deter-

1 At the financial system level, depth and coverage are important determining factors in the volatility of the markets and household spending (Mankiw and Zeldes, 1991; Heaton and Lucas, 1999; Vissing-Jorgensen, 2002; and Brav, Constantinides, and Gezcy, 2002).

Some Activities of the Financial Culture Program of the Mexican Bank Association (ABM)

Activity
The Banking Convention was dedicated to financial education in 2008.
Creation of the Banking, Savings and Greater Bank Penetration modules, and the ABC of banking, at the Museo Interactivo de Economía (MIDE).
Design of a Children's Savings Program, in collaboration with the Ministry of Public Education, and active participation on the boards of financial education of the Under Ministry of Basic Education and the Under Ministry of Higher Middle Education. (Subsecretaría de Educación Básica and Subsecretaría de Educación Media Superior).
The signing of an agreement with the National Council for Economic Education of the United States to translate two books on financial education; Financial Health: my responsibility (for young people) and Family Education: for a financial education (for parents/teachers). Both books are available on the web page of the ABM.
The signing of an agreement with the daily newspaper El Financiero for the monthly publication of each one of the chapters of the books.
The signing of a framework agreement of collaboration with the UNAM (the National Autonomous University of Mexico) to bolster the formation of trainers.
ABM-FIRA agreement to provide information and knowledge in financial matters to producers and companies in the agricultural sector through a practical theoretical guide. Toward a better future for agriculture.
In coordination with Fundación Televisa (the Televisa Foundation), the publication of 600,000 issues of a children's story on savings that will be part of the Calendar of Values to be distributed throughout the country at the beginning of the 2008-2009 school year.
The signing of an agreement with the Secretaría de Gobernación (the Ministry of Internal Affairs) to include financial education capsules during the Sunday weekly broadcast of "La Hora Nacional" (The National Hour).
Collaboration during the First National Week of Financial Education 2008 (Primera Semana Nacional de Educación Financiera 2008) , organized by CONDUSEF.
Agreement between the IPN (the National Polytechnic Institute) and the ABM (Asociación de Bancos de México) to work toward financial education among the polytechnical community through 15 workshops for the formation of trainers.
The writing of the chapter for the book of memoirs of the cycle "Economía en mangas de camisa" ("Shirtsleeves Economy") organized by the MIDE and Banco de México.
Collaboration with the Instituto de Mexicanos en el Exterior (IME) (Institute of Mexicans Abroad) to prepare a brochure for migrants regarding savings and remittances (in English and Spanish versions).
The sponsorship of 10,000 students from low-income homes to have access to the Museo Interactivo de Economía (MIDE) (Interactive Museum of Economy) during 2009.

Source: "Programa de educación financiera de la Asociación de Bancos de México: Acciones y retos", ("Financial Education Program of the Mexican Banks Association: Actions and challenges," Presentation, April 25, 2008

mines educational standards, evaluates the results of the programs and advocates in favor of financial education. The educational material seeks to inform on the high costs of not having a strong bank penetration level and the importance of investing in a good education and good health care. In addition, it provides instruction in basic mathematics related with savings and credit.

In the United Kingdom, since 2003, the Financial Services Authority (FSA) heads an effort to promote a better understanding of the financial system among the population, upon the request of Parliament. As part of its work, the FSA has joined forces with key government agents and organizations, the financial services industry, employers, labor unions, the educational sector and non-government organizations to establish a program of action to improve the financial capabilities of the population in that country. It also conducted a comprehensive survey on the matter, which confirmed that a great part of the population is ill prepared to plan for the future and requires a much better understanding of the financial decisions it faces on a daily basis.

Based on this diagnosis, a plan was established with various actions, among which the following are significant: 1) in the schools, add to the curriculum, comprehensive high-quality personal finance courses; 2) in the workplaces, provide general financial education for workers through accessible resources and seminars; 3) provide young adults with guidelines for better management of their money; 4) redesign the information and communication strategies of the FSA so that these are better directed and more accessible to the population; and 5) provide advice to consumers with regard to money management.

In Mexico financial education is gaining weight in the public agenda

Motivated by the accelerated development of the financial markets, the growing number and complexity of financial products, the greater number of financial institutions, and because some diagnoses suggest that in Mexico there is a low level of financial understanding among consumers and that there is a positive correlation between a better comprehension of financial matters and income levels, the banking institutions in the country have implemented various actions to promote a financial culture and financial education[2].

The Mexican Banking Association (ABM for Asociación de Bancos de México) created a Program of Financial Culture in June of 2007. Through various actions, the ABM Program seeks to contribute toward the achievement in Mexico of various benefits associated with a greater and better quality of financial education, since it allows for a better understanding of financial concepts and products, develops abilities and confidence, and creates an awareness of opportunities and risks in decision making.

In the specific case of BBVA Bancomer, various efforts have been made through strategies of Public Awareness and Education. Within the area of Public Awareness, a significant achievement is the production of material in a joint effort with the Interactive Museum of Economy (MIDE for Museo Interactivo de Economía) for the develop-

2 Pilot plans are yet to be implemented to add basic concepts of economic and financial education to the formal educational programs.

ment of four workshops (savings, saving for retirement, credit cards and credit health). Recommendations have also been transmitted, as well as tips on Financial Education through the television program "De por vida con Bancomer" ("Throughout Life with Bancomer"). Furthermore, several interactive books for children have been developed, for example on the importance of saving and banking operations. Among the actions of the Education area, a particularly outstanding task is the outfitting of the infrastructure for holding large-scale workshops and a platform on the Internet to offer these courses on line.

In light of the financial crisis, credit is an area of special interest, and has become a critical objective in the economic policy of many countries. An example of this is that the Financial Markets Committee and the Insurance and Private Pensions Committee of the OECD prepared a series of good practices in financial education related with credit as guidelines for governments and other relevant public and private institutions interested in developing financial education programs. In Mexico, the modifications to the Law for the Protection and Defense of Users of Financial Services of 2009 empower the CONDUSEF (The National Commission for the Defense of Users of Financial Services) to establish educational and other types of programs on the subject of financial culture (See Box Inset on Regulatory Changes and Protection for the Consumer in Mexico and in Other Countries). Among the activities of the CONDUSEF is the annual celebration of the National Financial Education Week and the publication of various informational brochures and documents.

In conclusion, international experience and in Mexico suggests that to make progress in financial education a joint effort must be made among financial institutions, authorities in the sector, educational authorities, the communications media and civil society. These efforts must stress the importance of designing educational and special informational material to attend to the different needs of the population on the subject and thus contribute in the effort to promote a greater penetration of bank services.

References

Financial Capability in the UK: Delivering Change, Financial Services Authority, March 2006.

Financial Literacy and Consumer Protection: Overlooked Aspects of the Crisis, OCDE, June 2009.

Brav, A., Constantinides, G. M. and C. C. Geczy (2002), "*Asset Participation with Heterogeneous Consumers and Limited Participation: Empirical Evidence*", Journal of Political Economy, 110, 793-824.

Heaton, J. and D. Lucas (1999), "*Stock prices and fundamentals*", NBER Macroeconomics Annual 14, 213-242.

Mankiw, N. G., and S. P. Zeldes (1991), "*The Consumption of Stockholders and Non-stockholders*", Journal of Financial Economics, 29, 97-112.

Vissing-Jogensen, A. (2002), "*Limited Asset Market Participation and the Elasticity of Intertemporal Substitution*", Journal of Political Economy 110, 825-853.

Acknowledgements

For the preparation of this information, we appreciate the comments and suggestions of Uriel Galicia (BBVA Bancomer), and Arturo Arenas, José M. Domínguez and Betsy Alexandra Espinosa (ABM).

Activities of the BBVA Bancomer Program "Adelante con tu Futuro" ("Moving Ahead with Your Future") during 2009

Strategy of Public Awareness:	Strategy of Education:
Recommendations and tips on the television program "De por vida con Bancomer", with a TV audience of between 4 and 5 million viewers.	Outfitting of the infrastructure to hold large-scale workshops (20 classrooms in the country's 14 major cities, 18 mobile mechanisms for delivery of the workshops in companies, and on-line workshops on personal finances through www.adelantecontufuturo.com.mx.
Projection of savings and credit videos from Monday to Sunday at the MIDE (Museo Interactivo de Economía) for more than 108,000 visitors to the museum.	Launching of the first workshop on Mortgage Loans, with a participation to date of 886 persons (October 21).
Transmission of the live program with national coverage "No tires tu dinero" ("Don't Throw Away Your Money") from the Bancomer Center.	3,020 workshops held at different universities in Mexico City and throughout the country and at the CONDUSEF during the Semana Nacional de Educación Financiera 2009 (National Financial Education Week 2009) (October 19 to 23).
Publication of Newspaper articles in 119,000 weekly issues of several newspapers.	Launching of the Semana PyME del Taller Crédito Negocios PyMEs (The Small and Medium-size Businesses Week of the Workshop on Business Loans for PyMEs) with a participation during the event of 587 persons. (November 3 to 7).
Participation in electronic Bulletins on Credit Cards and AFOREs, with a base of more than 3 million clients.	Signing of agreements with universities to integrate financial education for young people about to enter formal economic activity. Tecnológico de Monterrey, UVM (University of the Valley of Mexico) and IPN (National Polytechnic Institute).
Three-month advertising campaign through the electronic media (Internet).	

Fuente: "Talleres interactivos de Finanzas Personales: Acciones 2009", "Interactive Workshops of Personal Finances: 2009 Actions", Presentation, BBVA Bancomer.

Advances and Potential of the Bank Penetration Level in Mexico

The indicators of the depth and coverage of the banking system published by the World Bank and the Consultative Group to Assist the Poor (CGAP) show that, compared with other countries and despite the fact that it has experienced significant growth not only in terms of loans granted and deposits received, but also in the construction of banking infrastructure and in transactions by electronic payment means, there is still great potential for Mexico to expand the access to financial services.

According to the most recent available international statistics compiled by the Consultative Group to Assist the Poor and the World Bank, the depth of the banking system, measured in terms of credit to the private sector as a proportion of GDP rose to 16.6% in 2008, while private sector bank deposits as a share of GDP were 13.6%. These figures are still low when compared with other countries, not only the industrialized but the emerging economies, even in the Latin American region (Tables 1 and 2).

In terms of coverage, that is, the distribution of financial services among the various groups of users, according to the same source: between 2005 and 2008, the number of bank branch offices for every 100,000 inhabitants in Mexico rose from 7.6 to 14 (83%), to reach position 60 among 126 countries (Table 3); and the number of automated teller machines per every 100,000 inhabitants grew from 16.6 to 40.15 (141%), to rank 49 among 112 countries (Table 4). As regards point of sale terminals, in 2008, the number of point of sale terminals for every 100,000 inhabitants in Mexico, rose to 432, ranking 52 among 91 countries (Table 5).

Table 1. Bank Credit to the Private Sector in Selected Countries in 2008

Position	Country	Value (% GDP)
1	The Netherlands	307.5
2	Singapore	245.8
3	Ireland	222.1
4	Hong Kong, China	198.5
5	Belgium	165.9
6	Sweden	156.1
7	St. Kitts and Nevis	153.7
8	New Zealand	150.6
9	Australia	145.1
10	Portugal	144.5
12	United Kingdom	142.9
24	South Africa	101.0
38	Canada	74.9
39	Spain	72.7
52	Chile	57.2
60	Costa Rica	50.8
62	United States	46.9
68	India	38.2
70	Nicaragua	36.1
71	Colombia	34.7
72	Brazil	33.6
87	Peru	25.2
95	Argentina	17.5
96	Ethiopía	16.9
97	Uganda	16.7
98	**Mexico**	**16.6**
99	Cameroon	14.3
100	Gabon	13.5
111	Puerto Rico	0.1
112	Congo Dem. Rep.	0.0

Source: Measuring Financial Access Around the World, CGAP, 2009

Table 2. Bank Deposits in 2008 in Selected Countries

Position	Country	Value (% GDP)
1	Algeria	565.1
2	Hong Kong, China	374.4
3	Lebanon	328.4
4	Singapore	307.5
5	The Netherlands	247.1
6	Panama	199.1
7	Luxembourg	196.2
8	St. Kitts and Nevis	173.3
9	Belgium	164.3
10	Japan	161.8
17	United Kingdom	113.0
20	South Africa	103.7
36	Canada	73.5
54	Spain	51.8
56	India	51.0
63	Chile	46.0
66	Kenya	44.0
69	Bolivia	42.5
70	Nicaragua	42.3
73	United States	39.8
84	Peru	31.1
89	Brazil	28.7
95	Argentina	20.7
105	Armenia	16.0
106	Azerbaijan	15.8
107	**Mexico**	**13.6**
108	Congo Dem. Rep.	11.6
109	Tadjikistan	10.9
112	El Salvador	4.9
113	Puerto Rico	0.1

Source: Measuring Financial Access Around the World, CGAP, 2009

Table 3. Bank Branches for every 100,000 Inhabitants in Selected Countries in 2008

Position	Country	Branches
1	Bulgaria	88.07
2	St. Kitts and Nevis	57.44
3	Mongolia	56.75
4	Portugal	55.88
5	Anguilla	55.07
6	Montserrat	54.23
7	Italy	52.96
8	Belgium	50.02
9	Denmark	46.66
10	Belarus	44.91
12	Spain	40.47
14	United States	35.43
33	Canada	23.72
48	Venezuela, RB	18.50
58	Kuwait	15.11
59	Chile	14.95
60	**Mexico**	**13.97**
61	St. Vincent & Gren.	13.94
62	Uruguay	13.87
65	Argentina	13.32
69	Brazil	12.19
78	India	9.27
84	Peru	7.48
86	Jamaica	7.19
99	Kenya	4.03
122	Honduras	1.54
123	Ethiopía	1.21
124	Afghanistan	1.13
125	Madagascar	1.02
126	Congo Dem. Rep.	0.34

Source: Measuring Financial Access Around the World, CGAP, 2009

Table 4. Automated Teller Machines (ATMs) for every 100,000 Inhabitants in Selected Countries in 2008

Position	Country	ATMs
1	Canada	202.78
2	Portugal	189.60
3	United States	169.23
4	Australia	159.30
5	Spain	157.10
6	Taiwan, China	133.59
7	United Kingdom	127.07
8	St. Kitts and Nevis	125.02
9	Austria	118.37
10	Brazil	110.19
26	Russia	65.60
30	Chile	55.56
34	Costa Rica	53.35
47	Serbia	41.31
48	Turkey	40.99
49	**Mexico**	**40.15**
50	Finland	38.74
51	Lebanon	38.55
52	Czech Republic	38.40
55	Panama	36.94
58	Argentina	33.04
59	Uruguay	30.57
63	Venezuela, RB	27.99
68	Colombia	26.31
69	Ecuador	26.01
80	Peru	17.67
91	Kenya	6.67
96	India	3.55
111	Afghanistan	0.18
112	Burundi	0.04

Source: Measuring Financial Access Around the World, CGAP 2009

Table 5. Point of Sale Terminals (PST) for every 100,000 Inhabitants in Selected Countries in 2008

Position	Country	PST
1	Austria	4,889.60
2	Anguilla	3,964.76
3	Australia	3,938.82
4	New Zealand	3,915.87
5	Greece	3,826.58
6	Spain	3,523.04
7	Turkey	3,045.97
8	Norway	2,827.43
9	Portugal	2,547.99
10	Italy	2,385.52
12	Canada	2,201.64
15	United States	2,156.46
23	Brazil	1,471.05
39	Germany	799.49
48	Guatemala	485.83
50	Chile	450.13
51	Mongolia	448.42
52	**Mexico**	**431.93**
53	Panama	426.52
54	Cabo Verde	308.37
56	Russia	275.41
57	Uruguay	275.09
59	El Salvador	249.59
74	Peru	39.81
77	Bolivia	32.52
87	Madagascar	1.85
88	Tadjikistan	1.65
89	Rwanda	1.03
90	Burundi	0.00
91	Costa Rica	0.00

Source: Measuring Financial Access Around the World, CGAP, 2009

Statistical Appendix

Financial Savings, balances in billions of December 2009 pesos

	2004	2005	2006	2007	2008	2009	I 09	II 09	III 09	IV 09
M4a	**5,197**	**5,786**	**6,274**	**6,745**	**7,421**	**7,562**	**7,383**	**7,388**	**7,426**	**7,562**
- Bills and coins in the hands of the public	371	400	446	475	512	537	483	479	466	537
= Financial Savings	4,826	5,386	5,828	6,271	6,909	7,025	6,900	6,909	6,960	7,025
I. Deposit Institutions	**2,059**	**2,206**	**2,210**	**2,408**	**2,697**	**2,686**	**2,592**	**2,568**	**2,515**	**2,686**
Resident commercial banks (demand + term)	1,676	1,755	1,811	2,003	2,265	2,254	2,170	2,140	2,094	2,254
Demand	845	950	1,034	1,135	1,173	1,224	1,115	1,123	1,104	1,224
Term	831	805	777	869	1,092	1,030	1,056	1,017	990	1,030
Commercial bank agencies abroad	48	50	59	80	87	74	85	75	74	74
Savings and Loan Companies (S&Ls)	12	14	16	18	19	18	19	19	19	18
Development Bank	323	387	323	307	326	340	318	334	328	340
II. Securities Issued by the Public Sector	**2,041**	**2,396**	**2,749**	**2,941**	**3,033**	**3,164**	**3,135**	**3,188**	**3,276**	**3,164**
III. Securities Issued by Private Companies	**254**	**260**	**293**	**338**	**345**	**331**	**334**	**319**	**322**	**331**
IV. SAR outside of Siefores	**471**	**521**	**572**	**580**	**831**	**841**	**836**	**830**	**844**	**841**
Financial Savings = I + II + III + IV	**4,824**	**5,383**	**5,825**	**6,267**	**6,906**	**7,022**	**6,896**	**6,905**	**6,957**	**7,022**
Instruments included in Financial Savings										
SAR TOTAL = Siefores + SAR outside of Siefores	1,058	1,217	1,393	1,490	1,797	1,964	1,827	1,856	1,927	1,964
Siefores	589	699	824	914	969	1,127	995	1,029	1,086	1,127
SAR outside of Siefores	471	521	572	580	831	841	836	830	844	841
Financial Savings without SAR total	3,766	4,166	4,432	4,777	5,109	5,058	5,069	5,050	5,030	5,058
Debt Mutual Funds	402	514	668	770	695	0	736	797	805	0

Financial Savings, real annual % change

	2004	2005	2006	2007	2008	2009	I 09	II 09	III 09	IV 09
M4a	**7.0**	**11.3**	**8.4**	**7.5**	**10.0**	**1.9**	**7.8**	**7.7**	**6.2**	**1.9**
- Bills and coins in the hands of the public	8.6	8.0	11.4	6.4	7.9	4.9	11.7	12.0	8.7	4.9
= Financial Savings	6.9	11.6	8.2	7.6	10.2	1.7	7.5	7.4	6.0	1.7
I. Deposit Insitutions	**5.4**	**7.1**	**0.2**	**9.0**	**12.0**	**-0.4**	**11.5**	**7.0**	**6.1**	**-0.4**
Resident commercial banks (demand + term)	6.3	4.7	3.2	10.6	13.1	-0.5	10.3	5.0	3.8	-0.5
Demand	3.8	12.4	8.9	9.7	3.4	4.4	7.2	6.5	7.2	4.4
Term	9.0	-3.1	-3.5	11.9	25.7	-5.7	13.7	3.3	0.3	-5.7
Commercial bank agencies abroad	13.4	4.4	18.3	34.7	9.0	-15.1	11.5	3.2	-10.7	-15.1
Savings and Loan Associations (S&Ls)	20.3	17.3	16.4	8.8	4.8	-1.1	2.2	-1.5	-1.7	-1.1
Development Bank	-0.7	19.8	-16.4	-5.1	6.4	4.1	21.3	24.3	31.0	4.1
II. Securities issued by the Public Sector	**7.5**	**17.4**	**14.7**	**7.0**	**3.1**	**4.3**	**-0.3**	**5.1**	**2.9**	**4.3**
III. Securities Issued by Private Companies	**11.0**	**2.4**	**13.0**	**15.4**	**1.9**	**-4.1**	**-4.7**	**-16.0**	**-16.5**	**-4.1**
IV. SAR outside of Siefores	**8.8**	**10.6**	**9.9**	**1.3**	**43.4**	**1.1**	**40.9**	**34.8**	**35.5**	**1.1**
Financial Savings = I + II + III + IV	**6.9**	**11.6**	**8.2**	**7.6**	**10.2**	**1.7**	**7.6**	**7.4**	**6.0**	**1.7**
Instruments included in Financial Savings										
TOTAL SAR = Siefores + SAR outside of Siefores	11.3	15.0	14.4	7.0	20.6	9.3	18.5	22.5	24.6	9.3
Siefores	13.4	18.6	17.9	11.0	6.0	16.3	4.4	13.9	17.1	16.3
SAR outside of Siefores	8.8	10.6	9.9	1.3	43.4	1.1	40.9	34.8	35.5	1.1
Financial Savings without SAR Total	5.7	10.6	6.4	7.8	7.0	-1.0	4.1	2.8	0.3	-1.0
Debt Mutual Funds	0.9	27.8	30.1	15.2	-9.7	nd	-10.5	-6.4	-3.4	nd

Financial Savings, % of GDP

	2004	2005	2006	2007	2008	2009	I 09	II 09	III 09	IV 09
Financial Savings	**45.7**	**48.9**	**45.1**	**50.7**	**55.1**	nd	**56.0**	**57.2**	**58.8**	nd
Deposit Institutions	**19.5**	**20.0**	**17.1**	**19.5**	**21.5**	nd	**21.0**	**21.0**	**21.2**	nd
Resident Commercial Banks	15.9	15.9	14.0	16.2	18.1	nd	17.6	17.7	17.7	nd
Development Bank	3.1	3.5	2.5	2.5	2.6	nd	2.6	2.8	2.8	nd
Rest (Agencies + SAPs)	0.6	0.6	0.6	0.8	0.8	nd	0.8	0.8	0.8	nd
Securities Issued by the Public Sector	**19.3**	**21.7**	**21.3**	**23.8**	**24.2**	nd	**25.4**	**26.4**	**27.7**	nd
Securities Issued by Companies	**2.4**	**2.4**	**2.3**	**2.7**	**2.7**	nd	**2.7**	**2.6**	**2.7**	nd
SAR outside Siefores	**4.5**	**4.7**	**4.4**	**4.7**	**6.6**	nd	**6.8**	**6.9**	**7.1**	nd
SAR Total	**10.0**	**11.1**	**10.8**	**12.1**	**14.0**	nd	**14.6**	**15.4**	**16.3**	nd
Siefores	**5.6**	**6.3**	**6.4**	**7.4**	**7.7**	nd	**8.1**	**8.5**	**9.2**	nd

Source: BBVA Bancomer with Banco de México and e INEGI data

Credit and Financing to the Private Sector, balances in billions of December 2009 pesos

	IV 01	IV 02	IV 03	IV 04	IV 05	IV 06	IV 07	IV 08	I 09	II 09	III 09
Total: All Categories	**2,919.7**	**3,043.2**	**3,165.6**	**3,381.7**	**3,582.2**	**3,724.9**	**4,021.0**	**4,288.9**	**4,352.3**	**4,260.9**	**4,171.4**
Bank	989.3	956.0	920.9	954.7	1,083.0	1,358.1	1,665.7	1,649.2	1,641.7	1,615.0	1,606.7
Non Bank	1,930.4	2,087.2	2,244.6	2,427.0	2,499.2	2,366.8	2,355.3	2,639.6	2,710.5	2,645.9	2,564.7
Total Consumer Credit	**147.4**	**196.3**	**231.4**	**317.5**	**440.4**	**557.6**	**636.1**	**601.7**	**560.3**	**539.6**	**512.3**
Bank	92.5	118.3	159.1	224.3	327.7	448.4	542.9	371.8	346.5	331.8	317.4
Non Bank	54.9	77.9	72.3	93.2	112.7	109.2	93.2	229.9	213.8	207.8	194.9
Total Housing Loans	**685.5**	**725.5**	**763.3**	**820.1**	**867.4**	**953.4**	**1,001.4**	**1,008.9**	**1,051.1**	**1,059.6**	**1,060.4**
Bank	244.2	215.2	180.3	173.1	216.5	279.1	319.8	337.9	345.1	349.8	349.2
Non Bank	441.3	510.3	583.0	647.0	650.8	674.2	681.6	671.0	706.0	709.8	711.2
Total Loans to Companies	**2,086.8**	**2,121.4**	**2,170.8**	**2,244.1**	**2,274.5**	**2,214.0**	**2,383.5**	**2,678.3**	**2,740.9**	**2,661.7**	**2,598.7**
Bank	652.6	622.5	581.5	557.3	538.8	630.6	803.0	939.5	950.1	933.4	940.2
Non Bank	1,434.1	1,498.9	1,589.3	1,686.8	1,735.7	1,583.4	1,580.5	1,738.8	1,790.8	1,728.2	1,658.5

Credit and Financing to the Private Sector, real annual % change

Total: All Categories	**-6.6**	**4.2**	**4.0**	**6.8**	**5.9**	**4.0**	**7.9**	**6.7**	**7.8**	**4.4**	**2.7**
Bank	-13.0	-3.4	-3.7	3.7	13.4	25.4	22.6	-1.0	2.5	-1.4	0.0
Non Bank	-3.0	8.1	7.5	8.1	3.0	-5.3	-0.5	12.1	11.3	8.3	4.4
Total Consumer Credit	**26.2**	**33.1**	**17.9**	**37.2**	**38.7**	**26.6**	**14.1**	**-5.4**	**-12.5**	**-16.6**	**-19.4**
Bank	27.6	28.0	34.4	41.0	46.1	36.9	21.1	-31.5	-22.7	-27.0	-18.4
Non Bank	23.7	41.8	-7.2	28.9	21.0	-3.2	-14.7	146.7	11.5	8.1	-20.9
Total Housing Loans	**1.9**	**5.8**	**5.2**	**7.4**	**5.8**	**9.9**	**5.0**	**0.7**	**1.9**	**1.8**	**1.3**
Bank	-18.7	-11.9	-16.2	-4.0	25.1	28.9	14.6	5.7	5.9	4.3	3.4
Non Bank	18.4	15.6	14.2	11.0	0.6	3.6	1.1	-1.6	0.0	0.6	0.3
Total Loans to Companies	**-10.7**	**1.7**	**2.3**	**3.4**	**1.4**	**-2.7**	**7.7**	**12.4**	**15.9**	**11.2**	**9.1**
Bank	-14.6	-4.6	-6.6	-4.2	-3.3	17.0	27.3	17.0	14.7	10.0	6.9
Non Bank	-8.9	4.5	6.0	6.1	2.9	-8.8	-0.2	10.0	16.5	11.9	10.5

Credit and Financing to the Private Sector, % of GDP

Total: All Categories	**35.3**	**36.1**	**32.4**	**32.1**	**32.5**	**28.8**	**32.5**	**34.2**	**35.3**	**35.3**	**35.2**
Bank	12.0	11.3	9.4	9.0	9.8	10.5	13.5	13.1	13.3	13.4	13.6
Non Bank	23.3	24.7	22.9	23.0	22.7	18.3	19.0	21.0	22.0	21.9	21.7
Total Consumer Credit	**1.8**	**2.3**	**2.4**	**3.0**	**4.0**	**4.3**	**5.1**	**4.8**	**4.5**	**4.5**	**4.3**
Bank	1.1	1.4	1.6	2.1	3.0	3.5	4.4	3.0	2.8	2.7	2.7
Non Bank	0.7	0.9	0.7	0.9	1.0	0.8	0.8	1.8	1.7	1.7	1.6
Total Housing Loans	**8.3**	**8.6**	**7.8**	**7.8**	**7.9**	**7.4**	**8.1**	**8.0**	**8.5**	**8.8**	**9.0**
Bank	3.0	2.5	1.8	1.6	2.0	2.2	2.6	2.7	2.8	2.9	2.9
Non Bank	5.3	6.0	6.0	6.1	5.9	5.2	5.5	5.3	5.7	5.9	6.0
Total Loans to Companies	**25.2**	**25.1**	**22.2**	**21.3**	**20.6**	**17.1**	**19.3**	**21.4**	**22.2**	**22.1**	**21.9**
Bank	7.9	7.4	5.9	5.3	4.9	4.9	6.5	7.5	7.7	7.7	7.9
Non Bank	17.3	17.8	16.2	16.0	15.7	12.2	12.8	13.9	14.5	14.3	14.0

Infrastructure and Number of Bank Cards, units

ATMs (automated teller machines)	nd	17,011	17,758	20,416	22,900	25,687	29,333	31,932	31,966	32,303	32,761
PSTs (Point of Sale Terminals)	nd	129,971	146,029	160,289	201,852	305,144	418,128	446,025	454,620	427,296	441,107
Branches	nd	7,849	7,768	7,788	7,972	8,404	9,230	10,743	10,658	10,480	10,485
Number of current cards (end of quarter, millions)											
Credit	nd	7.8	9.4	11.6	14.7	21.2	24.8	25.2	24.5	23.0	22.3
Debit	nd	32.4	32.2	31.8	36.1	51.7	51.9	56.9	58.4	59.9	62.5

Source: BBVA Bancomer with Banco de México data

Reforms to the Legal Framework Applicable to Multiple-Purpose Banking Institutions, 2009

No.	Subject	Scope of the reform	Modified legislation & regulat.	Of. Gazette of the Federation
1	Credit bureau	1. When a debtor makes a payment, the creditor will report it to the credit bureau within the five business days following the date of payment, without this affecting the obligation prior to this reform to file a monthly report on debts that have not registered movements. 2. In the case of creditors who might have transferred debts to third parties that do not use the services of a credit bureau, they will have to report the payments made to the credit bureau within 10 business days. 3. The use of information that a credit bureau has on a worker is prohibited for job-related purposes.	Law for the Regulation of Credit Bureaus	Jan. 20, 2009
2	Beneficiaries of deposits whose holder has passed away	Eliminates the previous maximum limit that can be received by the beneficiary or beneficiaries of bank deposits, in the event of the death of the account holder and requires the banks to deliver the total amount without the need of any inheritance or probate procedure.	Law on Credit Institutions	March 23, 2009
3	Personal data	It grants Congress the authority to legislate in the field of personal data protection in relation to information held by third parties.	Mexican Constitution	April 30, 2009
		It recognizes the individual's right to personal data protection, as well as to access, rectify, or eliminate such data, in the terms established in the Secondary Law that Congress must issue.		June 1, 2009

4	Bank system reform	**1. Strengthening teh standards on transparency and the protection of users of bank services:**
		• Account portability: enables the client to migrate from one bank to another.
		• Client profile identification in order that he or she can access suitable products. Compensatory and presumptive damages against the bank that, without the explicit consent of the client, provides him or her with services not in accordance with their profile.
		• In order to protect clients, the National Commission for the Defense of Users of Financial Services (CONDUSEF) can determine, on a regulatory level, those activities that are contrary to healthy practices in the sale of financial and bank products.
		• Sound standards: banks are required to comply with the provisions issued by the CNBV and the Banco de México to preserve their solvency and stability.
		• Natural disasters: the management of the accounts that the banks establish to collect financial resources earmarked to support communities that are victims of natural disasters must be in accordance with the rules and regulations issued by the CONDUSEF in relation to transparency and accountability.
		• Contact with clients: to offer financial products, only in the work place and within the agreed upon timetable.
		• Credit card:
		  • It is prohibited that those listed as additional names on the card be considered joint obligors of the card holder.
		  • The reform establishes the banks' obligation to undertake a prior estimate of the debtor's payment capacity.
		  • Raising the credit limit will require the cardholder's consent.
		  • Only a single maximum ordinary interest rate can be agreed upon and, if applicable, a single maximum moratorium interest rate.
		  • For interest rate increases that do not lead to variations in the benchmark rate or that result from the client's credit behavior, the client must receive advance notification at least 30 business days before the increases become effective.
		  • Commissions on overdrafts or attempted overdrafts are prohibited.
		• Financial education is incorporated as an aspect to be considered in standards that regulate advertising.
		2. Strengthening the authority and powers of the CONDUSEF through establishing its functions:
		• Preventive
		• Conciliatory
		• Corrective
			Law on Credit Institutions
			
			Law for the Transparency and Regulation of Financial Services
			
			Law on the Protection and Defense of Users of Financial Services
				June 25, 2009

5	Correspondent banks	The reform establishes the following limits to deposit operations that the credit institutions can receive or restore through correspondents: a) Cash withdrawals and payment of checks, up to the equivalent of 1,500 UDIs daily per client; b) Cash deposits, up to the equivalent of 4,000 UDIs daily per client, and; c) A correspondent, during the first 18 months, cannot conduct more than 65% of the total amount of the bank's deposit operations. Subsequently, the maximum limit will be reduced to 50%.	Law on Credit Institutions	June 25, 2009

Source: BBVA Bancomer

For further information please contact:

Economic Research Department Av. Universidad 1200 Col. Xoco 03339 México D.F. Tel. (52) (55) 5621 5994 Fax (52) (55) 5621 3297 www.bancomer.com

Economic Research Department BBVA Group

Chief Economist
José Luis Escrivá

Unit Heads
North America: Jorge Sicilia
Mexico: Adolfo Albo
Macroeconomic Analysis Mexico: Julián Cubero
United States: Nathaniel Karp

Spain and Europe: Rafael Domenech
Europe: Miguel Jiménez
Spain: Miguel Cardoso

Emerging Markets: Alicia García-Herrero
Emerging Markets Analysis: Sonsoles Castillo
South America: Joaquín Vial
Argentina: Gloria Sorensen
Chile: Alejandro Puente
Colombia: Juana Téllez
Peru: Hugo Perea
Venezuela: Oswaldo López
Asia exc. China: Ya-Lan Liu

Economic and Financial Scenarios: Mayte Ledo
Sector Analysis: Ana Rubio
Financial Scenarios: Daniel Navia
Cuantitative Analysis: Giovanni di Placido
Global Trends: David Tuesta

North America Economic Research Dept.

Jorge Sicilia j.sicilia@bbva.bancomer.com

Mexico
Adolfo Albo a.albo@bbva.bancomer.com
David Aylett david.aylett@bbva.bancomer.com
Fernando Balbuena fernando.balbuena@bbva.bancomer.com
Sara Gabriela Castellanos sara.castellanos@bbva.bancomer.com
Fernando González f.gonzalez8@bbva.bancomer.com
Carlos Herrera carlos.herrera@bbva.bancomer.com
Arnoldo López arnoldo.lopez@bbva.bancomer.com
Alma Martínez alma.martinez@bbva.bancomer.com
Fco. Javier Morales francisco.morales@bbva.bancomer.com
Juan Luis Ordaz juan.ordaz@bbva.bancomer.com
Eduardo Torres e.torres@bbva.bancomer.com

Macroeconomic Analysis Mexico
Julián Cubero juan.cubero@bbva.bancomer.com
Javier Amador javier.amador@bbva.bancomer.com
Liliana Castilleja liliana.castilleja@bbva.bancomer.com
Octavio Gutiérrez o.gutierrez3@bbva.bancomer.com
Ociel Hernández o.hernandez@bbva.bancomer.com
Cecilia Posadas c.posadas@bbva.bancomer.com
Pedro Uriz pedro.uriz2@bbva.bancomer.com

United States
Nathaniel Karp nathaniel.karp@bbvacompass.com
Hakan Danis hakan.danis@bbvacompass.com
Jason Frederick jason.frederick@bbvacompass.com
Jeff Herzog jeff.herzog@bbvacompass.com
Kristin Lomicka kristin.lomicka@bbvacompass.com
Marcial Nava marcial.nava@bbvacompass.com
Ignacio San Martín ignacio.sanmartin@bbvacompass.com

Art
Elisa Sánchez elisa.sanchez@bbva.bancomer.com
Fernando Tamayo fernando.tamayo@bbva.bancomer.com

Other publications

Country Watch:
Argentina
Chile
Colombia
Peru
Spain
Venezuela