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**MEXICO'S FINANCIAL LIBERALIZATION AND REFORM,
A CRITICAL OVERVIEW**

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RÉSUMÉ

La récente libéralisation financière au Mexique fait l'objet de notre étude. Dans ce papier, nous posons un oeil critique sur la chronologie de la libéralisation financière. Nous sommes intéressés à examiner comment les réformes ont été faites, quelle a été la séquence suivie par les autorités pour l'application de ces réformes, est-ce que la séquence suivie est théoriquement correcte et justifiable et, finalement, quelles ont été les conséquences de ces réformes pour l'ensemble de l'économie?

Mots clés : libéralisation financière, taux d'intérêt, taux de change

ABSTRACT

Mexico's recent financial liberalization is studied in this paper, where a critical eye is laid on the chronology of the financial deregulation. We are interested in examining how the reforms were conducted, what was the sequence of the policies being applied, was the sequence correct and justifiable by the theory, and finally, what are the results for the economy at large?

Key words : financial liberalization, interest rates, exchange rate

A. INTRODUCTION

Mexico, the country that Alan Riding once called the distant neighbour, is now becoming more and more important to Canada, to the United States and to the global economy. The North American Free Trade Agreement, that has commenced on January first, 1994, is a clear evidence that the once troublesome economy of Mexico has come a long way into recovery. It is interesting to observe the structural adjustment path that this country has taken to emerge from its severe and calamitous financial crisis of the beginning of the 1980's.

In 1982, la crisis was devastating the economy. The Mexican government had to announce a moratorium on its' foreign debt, as it had run out of international reserves. High inflation, capital flight, collapse of security prices were just a few symptoms of the fainting economy. By the end of the year the government started to react by signing an agreement with the IMF. The agreement called for public deficit cuts, import compressions, and inflation and wage reduction. The imposition of these restrictive measures led the country into recession (Winters, 1993, p. 506). The Mexican government, however, was disposed to take action in order to correct the structural and macroeconomic disequilibria. It was, thus, imperative that Mexico make a strong and continuous commitment to achieve macroeconomic stability and enter the road of sustained economic growth.

From the end of 1982, Mexico has engaged in a major transformation of its economic structure. At the beginning the changes were slow and modest, however, from 1988 they accelerated and became more important in nature (Kalter and Khor, 1990). For this, Mexico is now achieving significant improvements in its financial performance. The "...inflation rate has

fallen markedly, output and employment have risen substantially, and financial savings have soared. Furthermore, the balance of payments has become stronger" (Loser and Kalter eds., 1992, p. 1).

It is, therefore, the goal of this paper to study the financial liberalization part of the structural adjustment undertaken by Mexico during the 1980's and up to now. We will review Mexico's financial deregulation with a critical eye on the chronology of events and on their effects overall. A detailed chronology of the process is given in Appendix 1. Appendix 2 gives a description of the Mexican financial system together with its financial instruments.

"Generally speaking, financial sector reforms aim at achieving greater flexibility of interest rates, and enhanced role for market forces in credit allocation, increased independence for the central bank, and a deepening of money and securities markets." (Khan and Sundararajan, 1991).

Various authors have worked with the appropriate sequencing of financial deregulation in order to avoid any adverse consequences to the financial institutions and to the economy at large (see inter alia Leite and Sundararajan, 1990a, 1990b; Caprio and Summers, 1993; McKinnon, 1988; Villanueva and Mirakhor, 1990). Leite and Sundararajan (1990a), for instance, have put forward a set of conditions for a smooth financial liberalization process. They suggest that interest rate liberalization have a better chance of success if the four following issues are taken into account before the liberalization:

- * Will there be adequate competition in the financial markets?
- * Are the money market and monetary policy instruments adequate to influence the marginal cost of funds to banks? And consequently interest rates?
- * Will the market-determined lending and deposit rates respond rapidly to shifts in monetary

policy and to developments in international interest rates and exchange rates?

- * Is the banking system sufficiently sound to face interest rate competition? Is the bank supervision mechanism sufficiently strong to anticipate the effects of liberalization and react to it in a timely and efficiently manner?

Furthermore, they say that macroeconomic stability normally constitutes the sine qua non condition for a successful structural adjustment in the financial and in the real sectors (Leite and Sundararajan 1990a, 1990b), point which is in accordance with Villanueva and Mirakhor (1990), Dornbusch and Reynoso (1989), and McKinnon (1988). This issue is of direct relevance to Mexico, as it was facing a dramatic debt problem and macroeconomic instability during the early 1980's. Note, however, that Caprio et al (1993), when analyzing financial liberalization, concluded that macroeconomic conditions may never be ideal for such a deregulation. They say that to maximize the benefits of financial reforms, countries should attempt reforms more aggressively during times of positive or neutral macroeconomic and political shocks. Nonetheless, they give some examples of countries who went through financial sector reforms in less favourable circumstances and achieved good results (Indonesia, Malaysia, Chile and to a certain extent the United States).

We will use Leite and Sundararajan's set of conditions as well as information on other countries' experiences, presented by other authors, to try to evaluate if Mexico's liberalization measures were preceded by the adequate provisions. First, however, the reasons why a financial deregulation should be undertaken are discussed.

B. THE ECONOMICS OF DEREGULATION

According to Khoury (1990, p. 54), a country should view its financial liberalization as an investment in its' financial well-being. He argues that a country that undergoes financial liberalization would probably benefit in the following ways:

- * Increased financial flexibility of firms and households.
- * Reduced transaction costs, improving the operational efficiency of the financial markets.
- * Improved allocation efficiency of the financial markets.
- * New capital attracted to financial intermediaries.
- * Banking institutions that are stronger and more competitive in a global market.
- * Better diversified bank portfolios.
- * A more effective monetary and fiscal policy.
- * A fairer market.

He analyses the liberalization experience of the United States, Canada, England, Australia, Japan, and Hong Kong and concludes that some of these countries have undertaken financial liberalization as a measure to stimulate their economies (p. 214). Dornbusch and Reynoso (1989), explain that growth in per capita income comes from two sources: accumulation of physical capital and more efficient use of resources. Financial liberalization affects both channels, influencing the availability of savings and also the intermediation of these savings to investments that offer higher returns. It is not difficult to see, then, why some authors associate financial

developments with more growth in the real sector¹ (see, for instance, Caprio and Summers, 1993; Caprio, Atiyas and Hanson, 1993).

Khoury (1990) cautions, though, that too much opening can make the economy vulnerable to world fluctuations in economic activity. Caprio and Summers (1993), argue that even though a country should liberalize its financial sector, governments must keep a certain level of control as perfect competition is not the best answer for the financial sector. The rationale behind their argument is that government intervention in financial markets should be reduced. However, they warn that a policy of total laissez faire is a dangerous one as the financial system has externalities of its own. They favour a gradual withdrawal of the government from financial markets and suggest that the role of government should be limited to providing stable macroeconomic conditions and ensuring that financial operations are safe and sound.

C. CHRONOLOGY OF DEVELOPMENTS: 1952 TO 1988

According to Ibarra (1988, pp. 110-111), during the 1952-72 period, the Mexican economy was growing and integrating itself into the world's financial markets. There were no restrictions on international financial flows and the national currency (the peso) was freely convertible. The exchange rate was fixed with respect to the U.S.A. dollar. Consequently, in order to stabilize the economy, authorities controlled inflation within a range similar to the American one. The intermediation function of the banking sector, however, was plagued by high

¹ Caprio and Summers (1993) report that Jung (1986) found that the causality (in the sense of Granger) between growth and finance goes both ways. Meaning that a better financial system causes growth and growth causes a better financial system.

regulations, ceilings on deposit rates and requirements to channel credit to a specific range of activities. While these policies favoured borrowers with direct access to the bank credit it discouraged financial savings in the formal markets. Furthermore, with a minor exception², no foreign banks could operate in Mexico. The relative openness of the Mexican economy combined with the highly regulated banking system and a fixed exchange rate, implied in an imperfect control by the Central Bank over money supply or interest rates. Monetary control, according to Coorey (1992, p. 38), was based mainly on quantitative credit controls rather than on market mechanisms. Thus, economic stability was dependent on fiscal policy, and the efficiency of the financial system to borrow from abroad. Ros (1992) argues that during the 1970's Mexico's macroeconomic objectives were met, by a large extent, by the country's unconstrained foreign credit. In other words by increasing its foreign debt.

"By 1976, external shocks, cumulative peso overvaluations, postponement of tax and banking reforms, agricultural stagnation, and the decreasing growth effects of industrial import substitution broke the delicate financial balance, setting the stage for a deep economic crisis" (Ibarra, 1988, p. 112). Kalter and Khor (1990), note that the Mexican government, then, started an adjustment program backed by the IMF. Program which Coorey (1992, p. 37) believes to be the foundations of the financial liberalization that took place after 1988.

According to the later, the most significant measures that were then undertaken were:

- a) the move from specialized banking to full-service banking (at the time the Mexican banking system was indeed highly fragmented and each bank was specialized in a very

² The Mexico branch of Citybank, Banco de México (1993).

- restricted scope of services: commerce, mortgages, and the financieras which financed mostly trade and commerce);
- b) the modernization of the securities market. The Securities Market Law (Ley del Mercado de Valores) was enacted in 1975 (De Angoitia, 1993); and
 - c) the formation of a domestic public debt market (the CETES³ were created in 1978, as an instrument for the government to issue domestic debt and to conduct open market operations⁴).

The year 1982 was a particularly difficult year for the Mexican financial system, at the peak of the debt crises, the commercial banks were nationalized. The years that followed were characterized by financial desintermediation. "The high implicit tax that reserve requirements and credit controls imposed on banks increased the cost of intermediation to such an extent that a parallel informal market for credit developed rapidly, particularly in 1987-88 when inflation picked up" (Coorey, 1992, p. 38). This parallel market helped further deteriorate the competitiveness of the commercial banks making monetary policy objectives more difficult to be attained.

³ See definition on Appendix 2.

⁴ "Open market operations can be conducted either in the primary market or in the secondary market. Many countries have used primary sales of some government securities -- either central bank securities or treasury bills -- as an instrument of monetary policy. By varying the timing and the volume of primary issues and by issuing them at market rates, it is possible to influence bank reserves and interest rates in the short run, which has provided an attractive alternative technique to influence short run interest rates and monetary developments, in the absence of active secondary markets in these securities. This has also served as a transitional device to foster the development of secondary markets. Once a genuine secondary market develops, monetary policy can be implemented by operating in these markets." (Leite and Sundararajan, 1990a, p. 13).

The years of Miguel de la Madrid (1982-1988), as president of Mexico, were years where Mexico saw consecutive stabilization and structural adjustment policies being tried out. Some have failed but some have formed a necessary and important base for the reforms undertaken under the presidency of Carlos Salinas de Gortari (1988-1994) (Kalter and Khor, 1990, pp. 22-24). Probably one of the most important measures taken by the presidency of de la Madrid was the so called Pacto de Solidaridad Económica (the Economic Solidarity Pact). This accord, which was signed on December 15th, 1987, by government, the industrial sector and by union leaders, had the intention of reducing the inflation rate by controlling prices and wages. Aspe (1992) defined this non-orthodox stabilization program as consisting basically of:

- * a strengthened commitment to the permanent correction of public finances,
- * a restrictive monetary policy,
- * agreements on the setting of reference prices and on the wage contracting mechanism, and
- * the thorough trade liberalization.

The program was very effective in reducing the inflation rate, see figure 1. However, as mentioned by Kalter (1992), it affected real GDP growth, which remained at 1.5% and contributed to a substantial rise in real interest rates (probably due to the increase in uncertainty), see figure 1.A.

Figure 1: Mexico's Interest and Inflation Rates, 1978-1993
Percentage and quarterly

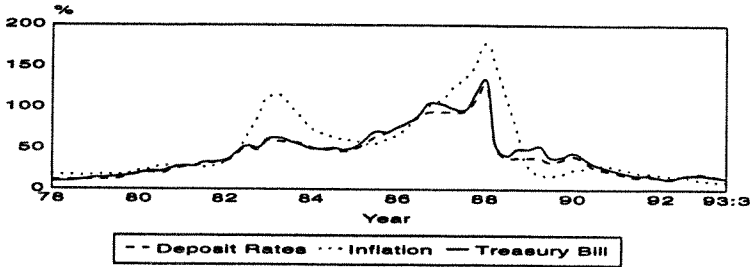
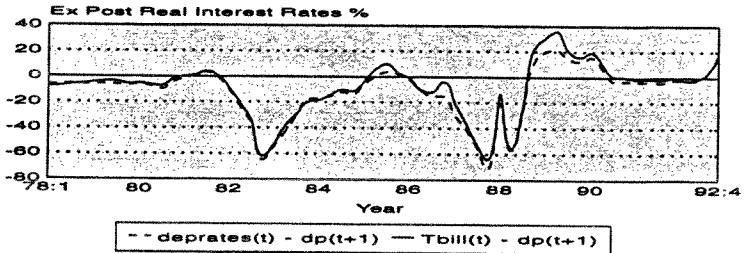


Figure 1.A: Ex Post Real Interest Rates
Three-month instrument (deposit rates and T.bills) minus the inflation rate observed in the sub-sequent quarter



On December 1988, under President Carlos Salinas de Gortari, the government accelerated the reforms initiated in the de la Madrid's administration. Barnes (1992), summarized the Salina's economic strategy as being: macroeconomic stabilization, structural reforms and the reduction of poverty. "The stabilization strategy was based on macroeconomic programs that included tight fiscal and monetary policies, a revised wage and price control agreement between the government, business and labour, and the strengthening of the balance of payments" (Barnes, 1992, p. 3). Moreover, he notes that the structural reform was aimed at increasing productivity and improving market performances. These reforms were based on: trade liberalization, foreign

investment promotion, privatization of state enterprises, deregulation, and fiscal and financial sector reform.

Many of the proposed reforms were included in the Pacto de Estabilidad y Crecimiento Económico (Pact of Stability and Economic Growth) or PECE by its Spanish acronym or simply, the Pacto. The salient features of the Pacto are that it asked for more radical adjustments in public finances and that it implemented structural reforms in the fiscal, budgetary, financial and commercial areas (Aspe, 1992). This program also called for the deregulation of the economy and the divestiture of public sector enterprises.

The success of the Pactos in reducing inflation rates proved the government's serious commitment to the stabilization of macroeconomic conditions. As a result, confidence by foreign and domestic investors was regained (see figure 2 and table 1). Successful domestic reform programs were also essential in preparing Mexico for the big challenge of refacing the international capital markets (see section C.2.2).

D. FINANCIAL LIBERALIZATION: 1988 TO THE PRESENT

Starting from late 1988, the Mexican authorities have undertaken major reforms, specially on the financial system⁵. These reforms were to continue the more global strategy of structural adjustment, which aimed at ending Mexico's remaining economic problems, in order to allow it to pursue stable economic growth. The new policies included a medium term solution to the debt problem.

1. Interest Rate Deregulation and Changes in the Reserve Requirement System

Beginning on October 1988, the Mexican government engaged in a series of liberalization policies to help increase banks' intermediation functions as well as to make them more efficient. The government eliminated quantitative restrictions on the issuance of banker's acceptances. Banks saw then an increase in their available resources, they were allowed to invest freely from these resources, condition on maintaining the 30% liquidity ratio in the form of government debt instruments (CETES and BONDES⁶) and interest bearing deposits at the Bank of Mexico (Coorey, 1992, p. 38).

1989 was marked by continuous reforms, the most significative of which, were probably:

⁵ Financial markets are fragmented into four main industries: banking, investment services, securities markets and insurance (Key, 1989, pp. 597-599).

⁶ See definition on Appendix 2.

- * The elimination of controls on interest rates and maturities on all traditional bank instruments and deposits;
- * The reserve requirements on bank deposits were replaced by a 30% liquidity ratio similar to that applicable to bankers' acceptances. Government paper held to satisfy the liquidity ratio would earn market interest rates and would be fully tradable;
- * Restrictions on bank lending to the private sector were removed;
- * The role of providing preferential credit was limited to development banks and trust funds;
- * Mandatory lending at below-market interest rates to the public sector by commercial banks was discontinued; and
- * Greater degree of managerial flexibility was given to banks.

As a consequence of the reforms, banks were now allowed to set their own rates on deposit and credit operations. These measures gave banks more "breathing space" and helped increase the competition among them. Furthermore, as noted by Coorey (1992, p. 38), the government shifted its financing from mandatory subsidized lending to open market operations through the selling of bonds. This measure had the impact of reducing interest rate distortions and of improving the effectiveness of open market operations. He also notes, however, that "the requirement to hold government paper had a negative effect on the yields of these instruments and constituted an implicit tax on the financial system." The problem is that it creates a forced demand for government paper, making interest rates on these securities be at an artificial level, that is lower than if there was no intervention.

It is important to remark that the Mexican government was then preparing the market for the privatization of the commercial banks, which was to take place from 1990. The liberalization

of the interest rates prior to the privatization of banks had the intention of differentiating banks in order to increase their competitiveness and market value. The issue of the privatization of the commercial banks will be discussed in greater detail in section C.5.

Note here that one of Leite's and Sundararajan's (1990a) points for a suave financial liberalization is indeed the increased competition in the financial markets. They argue that, there will be significant distortions in the level, structure and responsiveness of interest rates if their liberalization is not accompanied by adequate policy changes to ensure a certain level of competition in the market. According to these authors, in order to have increased competition it is important to have the "interest rates liberalization accompanied by a properly phased freeing and homogenization of various portfolio regulations" (1990a, p. 9). To accomplish that, some necessary measures are: the elimination or reduction of selective credit policies at below market interest rates; the introduction of legislation to allow for more competitive banking; the provision of adequate incentives for borrowers to behave in an interest-sensitive fashion (by eliminating "soft" budgets of state enterprises, for example). Notice that these policies are also in accordance with the idea of a more general liberalization, and even with the idea of the integration of financial markets⁷.

Coorey (1992) notes that in August 1991, the commercial banks started to have problems with the required liquidity constraints. The problems arose basically from two sources: first from an increase in the liquidity constraint level. This increase came from the noticeable expansion of

⁷ See for instance, Grandmont (1992, pp. 41-46), who shows the importance for the European Community of having the proper regulations when integrating the European banking system. Folkerts-Landau and Mathieson (1989, pp. 7-11) who show the implications of increased financial liberalization on the integration of European financial markets.

foreign short term borrowing by the commercial banks, which made the authorities impose a liquidity constraint on foreign currency deposits of up to 50%, depending on deposit maturities (the ratio could be satisfied by holding specified high quality currency instruments, such as U.S. Treasury bills). Second from the enlarged demand for private credit that steamed from the reduction of nominal interest rates (see figure 1). The decline in interest rates came from the reduction of the public debt, which contributed to the improvement of the balance of payments due to the positive effects that it had on the confidence of investors in the country (El-Erian, 1990, p. 27). It is relevant to note here the importance of the Brady Deal, signed by Mexico in principle on July 23th, 1989 and implemented on March 28th, 1990. According to Claessens et al (1993), one of the main contributions of the Mexican Brady Deal was the reduction of uncertainty, which encouraged a positive macroeconomic response. The reduction of uncertainty diminished Mexico's country risk premium, see figure 2 and table 1. As a consequence, interest rates fell sharply, and private investment and growth recovered. (A further examination of Mexico's Brady Deal and its implications will be discussed in section 2.1).

TABLE 1: MEXICO'S COUNTRY RISK PREMIUM

YEAR AND QUARTER	MEXICAN T.BILLS (1)	LIBOR (2)	U.S. T. BILLS (3)	COUNTRY RISK	
				(1)-(2)*	(1)-(3)**
1984:1	49.7	10.304	9.13	39.396	40.57
1984:2	49.12	11.49	9.84	37.630	39.28
1984:3	50.24	11.949	10.34	38.291	39.90
1984:4	48.21	10.014	8.97	38.196	39.24
1985:1	51.28	9.031	8.18	42.249	43.10
1985:2	61.26	8.258	7.52	53.002	53.74
1985:3	70.49	8.143	7.10	62.347	63.39
1985:4	69.78	8.151	7.13	61.629	62.65
1986:1	75.99	7.908	6.89	68.082	69.10
1986:2	81.66	7.106	6.13	74.554	75.53
1986:3	91.11	6.274	5.53	84.836	85.58
1986:4	105.52	6.143	5.34	99.377	100.18
1987:1	103.85	6.375	5.53	97.475	98.32
1987:2	98.8	7.149	5.73	91.651	93.07
1987:3	96.25	7.222	6.03	89.028	90.22
1987:4	113.38	7.964	6.00	105.416	107.38
1988:1	134.47	6.984	5.76	127.486	128.71
1988:2	52.06	7.481	6.23	44.579	45.83
1988:3	41.12	8.419	6.99	32.701	34.13
1988:4	48.93	9.019	7.70	39.911	41.23
1989:1	49.24	9.812	8.53	39.428	40.71
1989:2	52.87	9.779	8.44	43.091	44.43
1989:3	38.71	8.929	7.85	29.781	30.86
1989:4	39.15	8.616	7.63	30.534	31.52
1990:1	44.38	8.404	7.76	35.976	36.62
1990:2	37.98	8.463	7.77	29.517	30.21
1990:3	30.18	8.166	7.49	22.014	22.69
1990:4	26.5	8.221	7.02	18.279	19.48
1991:1	22.94	6.874	6.05	16.066	16.89
1991:2	19.54	6.171	5.59	13.369	13.95
1991:3	17.58	5.843	5.41	11.737	12.17
1991:4	17.05	5.053	4.58	11.997	12.47
1992:1	13.9	4.246	3.91	9.654	9.99
1992:2	13.69	4.084	3.72	9.606	9.97
1992:3	16.75	3.469	3.13	13.281	13.62
1992:4	18.14	3.625	3.08	14.515	15.06
1993:1	17.31	3.258	2.99	14.052	14.32
1993:2	15.57	3.215	2.98	12.355	12.59
1993:3	13.75	3.255	3.02	10.495	10.73

(1) Rate of return on 90 days Mexican Treasury Bills (CETES).

(2) 90 days Libor rates.

(3) Rate of return on 90 days U.S. Treasury Bills.

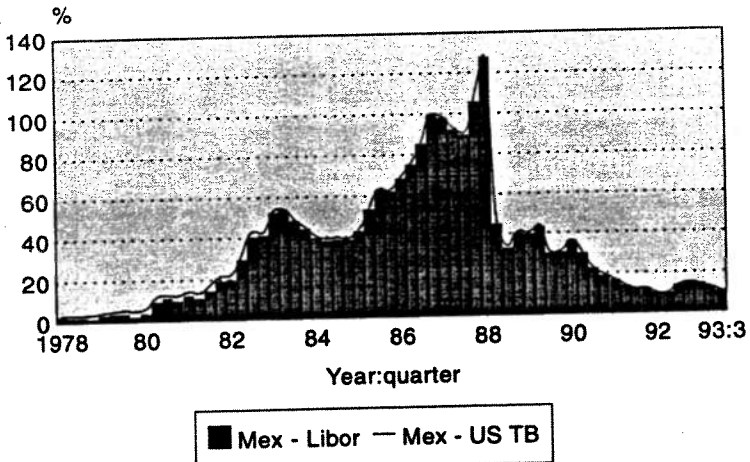
(*) Country risk premium = $\frac{1 + CETES}{1 + Libor} - 1$

(**) Country risk premium = $\frac{1 + CETES}{1 + US T.B.} - 1$

source: Author's calculations based on IMF's International Financial Statistics data, and estimation procedure following the directives of the Ministry of Economics and Public Service of Argentina (1993).

Because of the liquidity requirement problems that the commercial banks were facing, in August, 1991, the CETES rates fell to about 16% and the deposit rates increased to around 50% to 60% (Coorey, 1992). The Mexican authorities then took measures to reduce the liquidity coefficient on domestic currency deposits from 30% to 25%, and then in September suppressed the liquidity constraint. The idea behind zero marginal requirement is to reduce the spread between interest rates and to increase the amount of available resources. It is expected that Mexico experience a reduction in its banking spread. Interest rates, then, reflect more the market risks and the improved inter-banking competition rather than the previously profitability set for the nationalized banks.

Figure 2: Mexico's Country Risk Premium Percentage



source: See table 1 for calculations.

2. Changes in Structure of Government Debt

It is important at this stage to take a look at what is happening with Mexico's international debt. In a paper by Khor and Rojas-Suárez (1991), they show that interest rates in the Mexican domestic market are cointegrated with implicit yield derived from the secondary market for Mexican external debt. These authors also demonstrated that although the latter variable causes the former (in Granger terms), the inverse relationship did not hold.

The policy implication of their findings is that in order for Mexico to have permanent decline in domestic interest rates, the Mexican government must create an atmosphere of confidence in the international market. This can only be achieved through an appropriate exchange rate policy and the improvement of economic fundamentals, which will eventually affect the perception of international investors about the country's creditworthiness.

After the debt crisis Mexico saw its access to international capital markets diminish considerably. This forced and restricted the government to largely finance its fiscal deficits through the sale of government bonds to the domestic market. The composition of the debt was then changing from international to domestic. Rojas-Suárez (1992) reports that this change resulted in sharp increases in the real interest rates of government bonds. Which, in turn, increased the inflation rates. She continues to explain that the crowding out of private investment that resulted from the increased financing of government deficits through the domestic market, and from the massive transfer of real resources negatively affected the economic activity and helped build inflationary pressures and contributed to capital flights.

A period of stabilization and of repeated debt rescheduling followed from 1983 to 1987⁸. During this time the Mexican domestic public debt was constituted (80% to 90%) of CETES (which yielded market determined interest rates). Coorey (1992) notes that from 1988 the Mexican authorities started to diversify the composition of their domestic debt, and that since then there has been a rapid growth and diversification of the market for government debt⁹. "The development of this market aided the process of liberalization by providing the public sector with an alternative to forced lending from the banking system. It also has expanded the range of financial assets available to private investors..." (Coorey, 1992, p. 39).

Finally in 1989 future expectations about the debt problem changed. They became positive, and optimistically affected consumer confidence, private investment and contributed to capital inflows. Albeit factors such as the improvement of economic conditions and the reduction of inflation contributed to the changes in expectations, the negotiation of the Mexican Brady deal was clearly a turning point.

2.1 Mexico's Brady Deal

As stated above the importance of the debt-relief package, known as the Brady Deal was profound. Mexico was the first country to benefit from a debt and debt service reduction (DDSR) under the Brady initiative. The final package, of the agreement reached on July 23, 1989, was

⁸ For a complete examination see, *inter alia*, El-Erian, 1992.

⁹ The domestic debt diversified and today it is mainly composed of four instruments: CETES, BONDES, Ajustabonos, and Bonos de la deuda pública (Coorey, 1992).

implemented on March 28, 1990. Claessens et al (1993) estimated that the complete package delivered a debt reduction of US\$12 billion, in discounted value terms.

According to these authors and to Ortiz (1991) the deal permitted Mexico to reembark in the trail of growth. Claessens et al (1993) demonstrate by the use of econometric techniques, that the debt reduction had a positive macroeconomic effect. The main determinant was surprisingly not the "debt overhang"¹⁰ but the increased confidence in government policy.

The confidence-building effect of the negotiation was probably as important as the financial effects of the reduced resource transfers on the restriction of economic growth. The mere announcement of the agreement precipitated a decline of domestic interest rates of about 20 percentage points (from nominal levels of about 55%) as well as some capital inflows. Ortiz (1991, p. 302)

Claessens et al (1993) are, however, categorical in saying that the debt relief program would not have been effective, in increasing investors' confidence, if there were no successful domestic reforms prior to the debt relief package. Moreover, Szymczak (1992) added that the comprehensiveness of the Deal convinced international investors that this was a once-and-for-all operation. This facilitated the acceptance of the view that Mexico was, once again, in a position to responsibly meet all obligations of debt-service and debt maturity on contracted debt as well as on new debt.

¹⁰ Debt overhang refers to benefits to growth of a reduced tax burden (Claessens et al, 1993).

2.2 Mexico's Return to International Capital Markets

As we have seen, another important move for the reduction of interest rates in the domestic market is the acceptance of the creditworthiness of Mexican securities in the international markets. Mexico's re-entry into the international capital markets showed that the sustained policies of macroeconomic stabilization and market oriented structural reforms (including the negotiations of the North American Free Trade Agreement) were regarded as credible. Hence, an increase in the confidence of international investors followed.

June 1989 marked the end of many years of Mexican exclusion from voluntary international capital market financing, by the issue of a \$100 million five year note by Bancomext. This was "the first unsecured¹¹ voluntary public sector issue by a Mexican borrower since 1992" (Szymczak, 1992, p. 65). In order to be accepted, this first instrument had a very high yield (820 basis points over the yield on comparable maturity U.S. Treasury bonds). Its objectives, however, were met as it paved the Mexican way back into international capital market financing (and this for the public and for the private sector).

Szymczak (1992) notes that financing costs have declined over time as Mexican securities became more acceptable by international investors. Mexican securities now face a much lower yield premium above "risk-free" paper and the borrowers were able to increase bond maturities. Moreover, Mexico has diversified its international capital financing options by making increasing use of, among others: equity-linked debt instruments, short-term debt instruments, equity and equity derivatives.

¹¹ Unsecured or unenhanced bonds are those without collateralization or convertibility options. "Conversion rights provide for conversion into equity in the borrowing enterprise at a prespecified price" (Szymczak, 1992, p.66).

According to Khor and Rojas-Suárez (1991), the improved Mexican credibility in the international markets helped decrease the implicit yield derived from the secondary market for Mexico's external debt from 25% (in early 1990) to 16% (in mid 1991).

"In June 1990, the Mexican Stock Market (BMV) was granted the status of an 'Offshore Designated Securities Market' by the Japanese financial authorities. This allows Japanese brokerage houses to deal with securities listed in the BMV" (Szymczak, 1992, p. 71). Szymczak (1992) also notes that similar agreements were concluded with American and British authorities, and that Mexican brokerage houses have been allowed to open foreign subsidiaries and thus be able to trade Mexican securities abroad. Furthermore, from December 1990, Moody's Investors Services started rating Mexican bonds. Interestingly, he notes, the market seems to have ignored Moody's ratings, giving Mexico more favourable terms, what contributes to lower cost borrowing.

Therefore, the increasing confidence of international investors in Mexican securities made possible the decline in the country risk premiums (see figure 2). As international interest rates on Mexican securities decrease domestic interest rates also drop (see figure 1).

Moreover, the return of capital inflows, through international capital financing, permitted the funding of new investment projects. These projects help increase Mexico's infrastructure and industrial base. Consequently, the country's international competitiveness is enriched, what affects its creditworthiness.

3. Institutional Reforms

Starting in December 1989 the Mexican government initiated a series of reforms aimed at improving the domestic financial system. Five laws governing financial institutions were then changed. Coorey (1992, p. 39) describes these measures as being intended to increase competition and reduce market

segmentation by expanding the scope of permissible activities for different types of financial institutions and by allowing a greater degree of integration in the provision of financial services. In addition, the reforms eliminated government regulation of insurance premiums and policies, deregulated and simplified the operations of mutual fund societies, strengthened the supervision and regulation of bank and nonbank financial institutions, and relaxed restriction against the participation of foreign investors in the capital of some nonbank financial institutions.

The laws that followed in 1990 were also very important in nature. It was then that the Mexican authorities decided to allow the privatization of commercial banks and to establish the framework for the formation of integrated financial groups. These institutional modifications permitted the financial system to improve its capabilities and to be more competitive (see appendix 2 for a specific description of the Mexican financial system). Moreover, as we can see from figures 3 and 4, these laws were necessary to deal with the expansion of the quasi-money balances (this point will be further discussed in section F). The important issues of regulation and of bank supervision were also enhanced.

Figure 3: Mexico's Broad and Narrow Monetary Aggregates, 1970:1-1992:1
In percentage of GDP

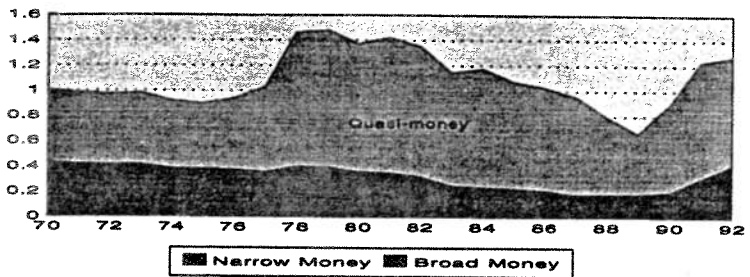
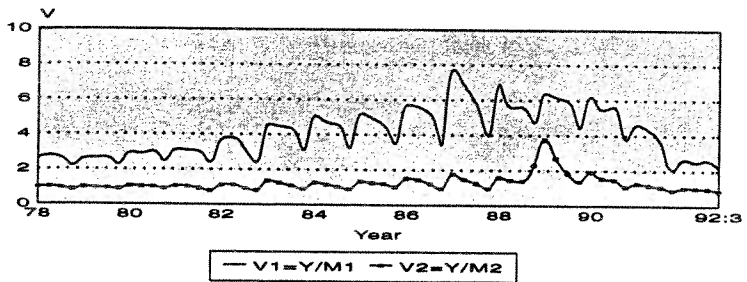


Figure 4: Mexico's Income Velocity of Money, 1978:1-1992:4
 $V = Y/M$



4. Exchange Rate Reforms

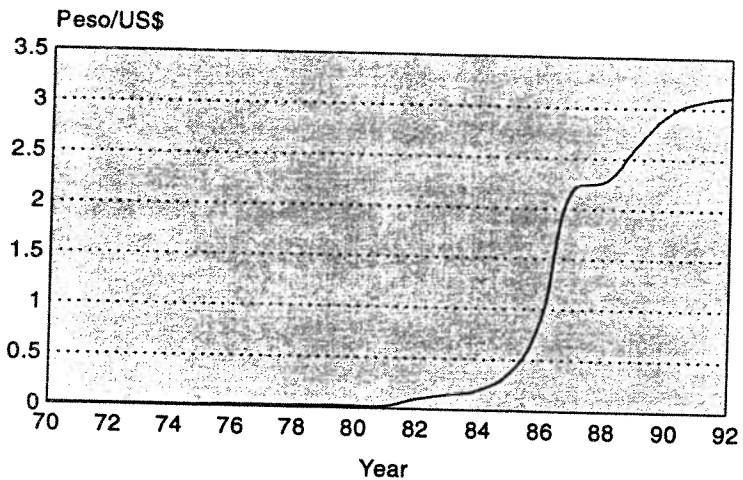
As explained by Rojas-Suárez (1992), a proper policy of exchange rate depreciation was necessary for Mexico in order to solve the credibility problem facing the government. She explains that in order to have a permanent reduction of the inflation rate, Mexico needed a strong balance of payments. This led Mexican authorities to pay close attention to the management of the exchange rates.

Mathieson and Rojas-Suárez (1993) report that from late 1988 the Mexican government introduced an economic program to improve the credibility of the exchange rate policy. The program had two main features: first the announcement of a fixed rate of depreciation of the exchange rate at 1 peso per U.S. dollar a day from January 1989 to May 1990, and second the intensification of the fiscal adjustment that started in 1983. As credibility was being gained, the Mexican authorities started to reduce the depreciation of the exchange rate to 0.80 peso per U.S. dollar a day in May 1990, then to 0.40 peso per U.S. dollar a day in mid-November 1990. In November 1991, the depreciation was further reduced to 0.20 peso per U.S. dollar a day, and on January 1st, 1993, the New Peso was introduced (one new peso was worth 1,000 of the old pesos), see figure 5.

The Mexican experience with preannounced depreciation was somewhat different from the Southern Cone Countries¹.

First, although Mexico and the Southern Cone countries preannounced their exchange rate adjustments, the financial liberalization of domestic markets in Mexico was accompanied by an increase rate of depreciation of the Mexican peso. Second, and perhaps more important, Mexico further tightened its fiscal and monetary policies to enhance the credibility of the exchange rate policy and made them consistent with a long-run rate of inflation below the observed rate. Mathieson and Rojas-Suárez (1993, p. 27).

Figure 5: Mexico's Exchange Rate, Peso per U.S. Dollar



Source: International Financial Statistics (IMF)

Note: On January first, 1993, the new peso (valued at 1,000 old pesos) was instituted

5. The Privatization of Commercial Banks

From June 1991 to July 1992 the Mexican Government auctioned 18 commercial banks¹² for a value of more than US\$13 billion (more than tree times book value) to private groups of Mexican investors (Barnes, 1992).

As we have seen, the guidelines for the divestiture of the banks were established in the presidential decree of September 1990. In an article by Barnes (1992), a member of the Mexican

¹² Note that since the nationalization of commercial banks in 1982, the number of banks has been reduced from 60 to 18 in 1988.

Privatization Committee, he notes that the Mexican Authorities prepared the mechanics of privatization before starting the process. For this author, the success of the Mexican bank privatization could be summarized in nine points (or lessons):

- * Macroeconomic stabilization and economic growth allowed for a stronger financial deepening and a better bank privatization.
- * Bank privatization must be complemented by the structural transformation of the economy, to improve the efficiency and productivity.
- * Financial reform must aim to strengthen competitive economic conditions and to enhance the efficiency of the financial sector. The liberalization has to include operational and legal reforms.
- * The privatization of banks can be carried out only after having a solid and well defined legal structure.
- * Legal reforms should lead to structures that encourage solid and efficient financial intermediation.
- * To encourage ample participation and to ensure fairness, the privatization process must be trustworthy -- with clear objectives, precise rules, and transparent procedures.
- * The mechanics of the privatization process should be consistent with the legal framework and specific guidelines of the banking system.
- * The proceeds of privatization should be in cash, which should be used to permanently reduce government outlays.

- * Common sense rules should be followed, such as selling the small banks first, ensuring economic certainty and confidence, centralizing management of the privatization program, and ensuring honesty and transparency in the process.

According to Barnes (1992), the Mexican privatization of banks consisted of 4 main stages:

1. The preparatory phase, consisting of:
 - a) qualification and selection of the bidders by the Committee;
 - b) writing each bank's sale prospectus;
 - c) announcing the auction and its rules.
2. In the second stage the qualified bidders had access to the process and to information on the banks to be auctioned.
3. The closed-bid auction itself was the third phase of the process.
4. Finally, the sale itself.

Coorey (1992), explains that controlling 51% blocks of shares were sold by auction to groups of individuals with Mexican citizenship. The remaining 49% was floated in secondary offerings to institutional investors, companies, funds, and foreign investors (subject to certain ceilings). He also notes the interesting feature of horizontal integration (in the form of financial groups) that seemed to happen with the sale of the commercial banks. This author is expecting that the new financial groups will pass through a period of adaptation and of rationalization, where they will eliminate many activities which are duplicated and by so doing reduce costs and become more efficient.

5.1 Problems Facing the Privatized Banks

Prior to the auction of the banks the Mexican government restructured the debt of some commercial banks. Coorey (1992, p.40) noted the following:

In July 1991, the Mexican Government restructured some \$1.2 billion of interbank credit lines belonging to the six largest Mexican banks. The restructuring enhanced the market value of these banks and facilitated their privatization by reducing the outstanding value of such debts by about 30 percent on average.

The revamping of these banks' financial conditions, before privatization, made these institutions have a higher price at the auction. What could possibly explain the worries suggested by Griffith (1993, p. 42) that "[s]ome analysts fear too much money was paid for the banks during privatization..."

In her article, Griffith (1993) shows 3 other problems facing Mexican banks after their privatization: first, non-performing loans, which rose from 3% in 1991 to 6% in 1992. Second, the fear of Canadian and American competition resulting from NAFTA's higher competition, higher quality of services, higher technologies (automation), and more efficiency in banking operations. Finally the trouble by at least 3 big banks to meet new net capital requirements. Moreover, it is a worrisome fact for Mexican banks to have such high levels of foreign currency denominated loans, especially U.S. dollars. In the unfortunate event of a subit devaluation of the peso, these borrowers will see their debts increase by the devaluation factor, what could generate further non-performing loans for the banks.

The literature on financial liberalization recognizes very clearly the problems facing Mexican banks as being the results of improper initial conditions for the financial reform (see Caprio et al, 1993).

In explaining the importance of the appropriate initial conditions, these authors give the example of Korea's successful financial liberalization where a great deal of attention was paid to borrower net worth and to the initial conditions of bank portfolios, not to mention the slow pace of the process itself. Mexico's problem with non-performing loans would suggest that authorities probably did not pay enough attention to the condition of bank portfolios. Even though the government restructured part of the banks's debt, it seems that it was not enough. The restructuring of these debts influenced prices to be higher, as mentioned by Griffith, but it also affected the future expectations of banking profits to be higher. It is normal to assume that the investors who paid a higher price were interested in receiving higher profits from a better structured bank, but was the system ready to provide that? The answer is — No.

It is important to mention that for Villanueva and Mirakhor (1990) institutional reforms should be in the forefront of the financial sector reforms. For them, a strong supporting infrastructure that provides adequate information flow, credit appraisal and rating, and legal and accounting systems, and the development of equity markets should be in place before reforms are attempted. As the Mexican banks moved from the public sector to the private sector, the managers of these institutions were probably not ready to face the new challenges of fiercer competition and of new credit assessment techniques. Caprio and al (1993) are very clear in defining the banks' stock of human and managerial capital as essential for a successful reform, and McKinnon (1988) says that bank officers must be able to distinguish borrowers in different risk classes.

On the problem of non-performing loans Leite and Sundararajan (1990, p.11) caution that "[i]f many institutions are too weak -- with a large share of nonperforming loans and high operating costs --

then, without adequate bank supervision machinery, unexpected failures of individual units can lead to systemic crisis."

The problem therefore, seems to be that reforms were made too fast and without the appropriate initial conditions on the part of the banks and on the part of the authorities responsible for banking supervision and regulation. McKinnon (1988) and Villanueva and Mirakhor (1990) are categorical in saying that although economic stability is one of the pillars of a successful financial reforms, banking supervision and control are essential elements that cannot be neglected.

The difficulty some Mexican banks have in meeting the appropriate capital requirements, of having non-performing loans and of having loaned so many U.S. dollar denominated loans, bring into the discussion the important concepts of deposit insurance, "moral hazard"¹³ and banking supervision¹⁴. Although it seems that the Mexican banks are not in a very bad position, and that some numbers have being exaggerated (see Griffith, 1993) the problem exists. One cannot simply ignore the possibility of bank failure, specially after the Savings and Loans problem in the U.S.A. and the recent collapse of banks in Venezuela that lead to a huge capital flight.

The Mexican banking industry will need some time and money to adjust. But the question is, will it have enough time, as the NAFTA Agreement calls for opening the market by the year 2000? Or enough money, to be able to give the same services and compete with the big American and Canadian

¹³ *Moral hazard* is referred to being the decision of banks to undertake risky lending in the presence of deposit insurance. (Villanueva and Mirakhor, 1990, p.510).

¹⁴ Although the evaluation of these subjects are beyond the scope of this paper, the interested reader is referred to McKinnon (1988), Villanueva and Mirakhor (1990), Baglioni and Marotta (1992), and Talley (1993).

banks? But the room is not so dark. Although the NAFTA Agreement incites more competition it also "protects" the Mexican banking system, see Appendix I, part VI-A.

On the good side, Griffith (1993) shows that Mexican banks are expected to have a high growth rate, as the credit needs of the private sector tends to be high for some time. She explains that there is a lot of room for growth because "few Mexicans have home mortgages, and less than 8% of all purchases are paid for with credit cards" (p. 42). Moreover, she says, the Mexican banking institutions will benefit from a newly created insurance fund. This fund "is similar to the FDIC system in the US, [where] banks must pay a fee of 0.3% of all deposits" (p. 42). According to her, this measure will bring more stability to the system.

E. EFFECTS OF FINANCIAL LIBERALIZATION

As we have seen, most of the financial liberalization occurred during the period of 1989-91. This part of the Mexican economic history, however, was also characterized by significant economic adjustment programs and an increase in economic activity. It becomes, therefore, difficult to differentiate the effects of the financial reform from those resulting from these economic adjustment programs as there is probably a phenomenon of causality feedback¹⁵ between them and the improvement of the economy. Moreover, the financial reforms have been introduced just recently

¹⁵ The causality feedback operates as follows: the successful economic adjustment programs will cause an amelioration of the economic system, which will facilitate the success of the financial reforms, which will improve the economic condition and promote the adjustment programs. The successful adjustment programs will influence the success of the financial reforms which influences the adjustment programs and they help improve the economic conditions. So the three factors cause one another.

making it too early to evaluate their effectiveness and their success. Thus, with these ideas in mind, some results which are believed to be directly related to the financial liberalization will be presented in this section.

As it is shown in figure 1.A, real interest rates were very negative during the period of financial desintermediation, specially during the period of the debt crisis and nationalization of banks (1982-84) and during the 1986-87, when the inflation rate was very high.

They appear to have risen sharply to high levels before the financial liberalization, and then to have increased again immediately after interest rate deregulation in early 1989, before reaching a peak in the middle of that year ... Measured interest rates appear to have increased in the first half of 1988 mostly because there was a sharp deceleration of inflation during this period (...). To the extent that the turnaround in inflation was largely unanticipated and expectations took some time to adjust, the measured real rate is likely to overstate the true real rate in 1988... Thereafter they declined steadily from 36 percent in mid-1989 to about 6 percent by mid-1991 as financial intermediation improved and the economic adjustment program gained credibility. (Coorey, 1992, p. 42)

Coorey (1992) believes that the financial liberalization only had the effect of increasing interest rates temporarily. Although it is too early to see the full impact of financial reforms, our view is that so far, financial liberalization affected interest rates in the sense that they became less volatile, specially after 1990. Note from figure 1.A how real interest rates seem to have emerged from the very deep levels of the 1980's. In our opinion there will be two adjustment periods, the first being due to the change in inflation and the interest rate liberalization (period of 1988-90). The second will arise from

the "new" banking system and its new corporate philosophy (period of 1992-95). The second stage might take a little longer to return to equilibrium because banks will have to adjust their personnel, infrastructure, and mentality not only to the new market reality, especially after the devaluation of December 1994, but also to be able to compete with the foreign banks, as prescribed by the NAFTA agreement.

From figure 3 we can observe how the behaviour of financial savings have changed after the deregulation of interest rates and the lifting of credit ceilings (in early 1989). The ratio of narrow money¹⁶ (M1) to GDP tended to decrease from 1970 to 1990 and to increase thereafter. The ratio of broad money (M2) to GDP started to decline in 1979 and decreased until 1989 when it increased very rapidly. This rapid expansion of broad money followed by a slower growth of narrow money indicate that the increase in the monetary aggregates is mainly due to an expansion of bank deposits (Coorey, 1992).

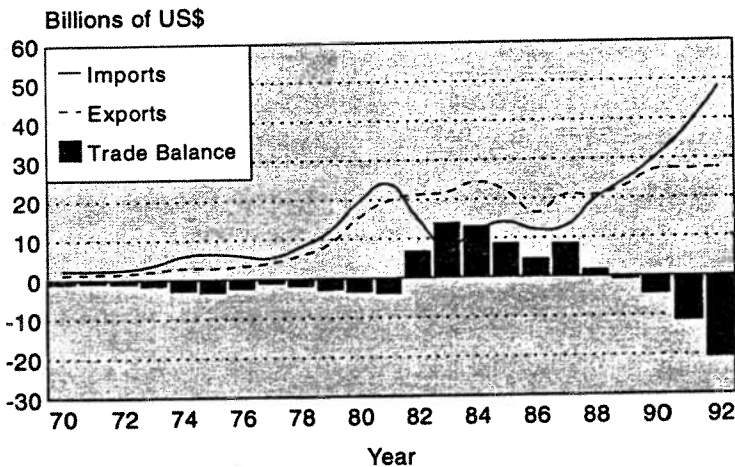
Figure 4 shows us that the income velocity of narrow money had a fairly stable tendency, except for the little pick in 1989 when interest rates were liberated. For broad money one finds a downward trend in the income velocity after 1989. Normally that would suggest that money is growing at a faster rate than income. However, the view that agents are facing a higher increase in wealth than in income, which would reflect the higher savings rate, is preferred. This theory is explained by Tseng and Corker (1991), who analyzed financial liberalization in Asian countries. So, the better financial economic atmosphere that reigned in Mexico affected the financial situation of its agents. The agents have increased their savings in the form of time deposits, as their wealth increased. Moreover, as

¹⁶ *Narrow Money (M1)*: Currency held by the public plus demand deposits (checkin accounts).
Broad Money (M2): Narrow money plus time and savings deposits (quasi-money).

inflation is becoming less of a threat, agents may prefer to place their money in more liquid assets, such as time and savings deposits instead of spending it right away on durable goods.

Another aspect of financial developments in Mexico has been the fact that the country is back on the international capital markets. With the success of the economic policies Mexico was able, once again, to borrow from abroad. As shown in figure 2, its country risk premium has been falling since 1988. The increase in investors's confidence resulted in important foreign capital in-flights. As we can see from figure 7, foreign direct investment has been increasing since 1988 and portfolio investment is

Figure 6: Mexico's Trade Balance



source: Author's calculations based on International Financial Statistics (IMF)

attaining levels never seen before¹⁷. Because Mexico has decided to partially sterilize these capital inflows, it was able to develop its industrial base. As we can see from figure 6, from 1989 Mexico is experiencing a negative trade balance. Note, however, that since 1988 both imports and exports have been rising. This coupled with the increase in foreign direct investment suggests that de facto the industrial base has been widening and the country is probably importing equipment and materials to build its industries. The danger, however, would come from the fact that Mexicans were importing too many non-productive goods, such as consumer goods, and that the trade deficit, as a percentage of GDP has been on the rise. If this situation persists, the only way to finance the trade deficit is through capital account surpluses. So, if the market decides to correct the situation, a massive devaluation of the peso could become eminent.

¹⁷ The large increase in capital inflows to Mexico has forced the government to partly sterilize these inflows. In Griffith (1993), Mr. Mancera Agauayo, Mexico's Central Bank president, explained that they have decided to use partial sterilization, by issuing treasury bills to reduce the amount of money in the market. In explaining why they chose to partially sterilize he notes that not sterilizing would create inflation, and by completely sterilizing no money would be left to expand the industrial plant.

The problems associated with high capital inflows are several. They are, however, beyond the scope of this paper. The interested reader is referred to Corbo and Hernández (1993).

Figure 7.a: Foreign Direct Investment (FDI) in Mexico 1975:1 to 1993:2
 In Billions of U.S. dollars

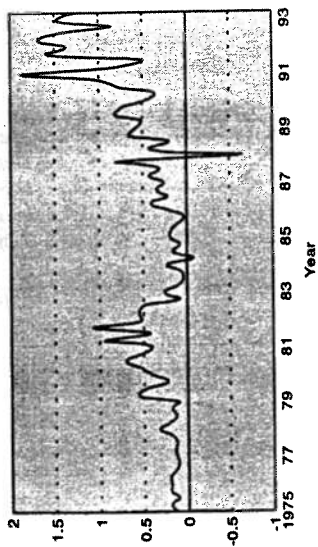


Figure 7.b: Portfolio Investment (PI) in Mexico 1975:1 to 1993:2
 In Billions of U.S. dollars

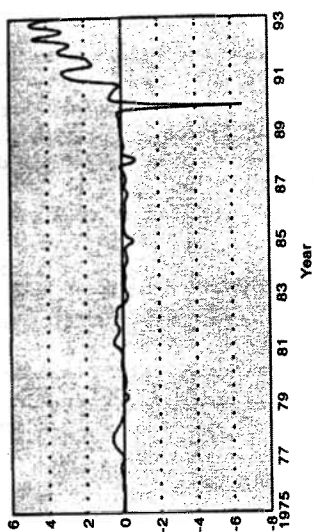


Figure 7.c: Other Capital Investment (OCI) in Mexico 1975:1 to 1993:2
 In Billions of U.S. dollars

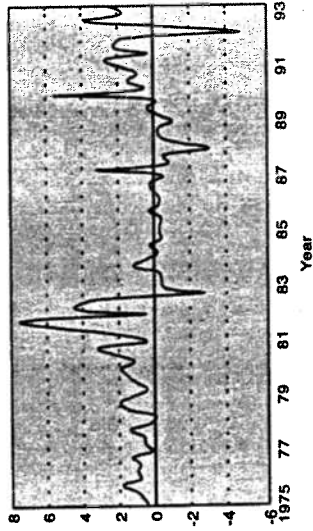
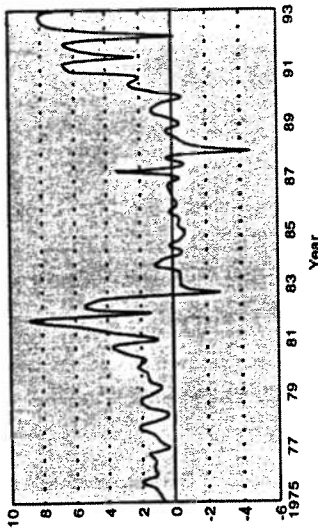


Figure 7.d: Total of FDI, PI, and OCI in Mexico 1975:1 to 1993:2
 In Billions of U.S. dollars



source: International Financial Statistics (IMF)

F. THE CURRENCY CRISIS

1994 was a hectic year for Mexico. In the beginning of an electoral year and in a country where the PRI (Revolutionary Institutional Party) ruled for over 60 years, the assassination of its presidential candidate, Luis Donaldo Colosio, shocked the nation and forced the PRI to pick a candidate at the last minute. Political confusion and uncertainty, then, started to shake domestic and foreign investors' confidence on the political future of the country. The country's credibility further deteriorated after Luis Massieu, leader of the PRI party, was murdered.

Despite the political turbulent year, Ernesto Zedillo (PRI), was elected president and had its inauguration on December 1. As this new administration was getting underway, everything seemed to indicate that the year plagued with political turmoil was to be left to be forgotten in the past, and that Mexico would be back on business, as usual.

Just 19 days after Mr. Zedillo took office, however, foreign and domestic investors' confidence was still not reestablished. To test the new government's ability to control the exchange rate, its political power, and to try to determine if there was an economic base to support the value of the peso, the first speculative attack on the peso was launched by international investors. Chaos struck again, and the Mexican authorities were forced to devalue the currency by 15%. As the market perceived that there was no economic fundamentals to support the overvaluation of the peso, no structured plan to support the currency, and a new and unknown administration, high volumes of capital left Mexico in a blink of an eye. These severe domestic and international capital outflows, which were known as the "tequila effect," were responsible for an 80% peso devaluation, in less than a month, for the resignation of the finance minister, Jose Serra Puche, and for the brisk increase in domestic interest rates. Moreover, Mexico was forced to plead the U.S. government and the international financial community for help. An international rescue package was structured by the American government, the Federal Reserve

Bank and the U.S. Treasury with up to US\$40 billion in loan guarantees and US\$18 billion in credit lines to Mexico. Canada, the IMF, the IBS and some international banks also provided some assistance to Mexico.

The big lesson to be learned from the Mexican experience is that economics and politics have an new playmate in the development game: international financial markets. The speed at which capital can go in and out of a country is amazing. Moreover, foreign capital, and international market makers can construct or destruct the economic and political stability of a country.

G. CONCLUSION

As we have seen, Mexico has accomplished a great deal of reforms in its financial sector in the last years. The reforms were, in general, successful. Mexico's success was due to clearly defined financial liberalization strategies, which were executed in an ordered way. For instance, the removal of credit ceilings and the deregulation of interest rates, in early 1989, allowed banks to differentiate themselves and increase their competitiveness. This measure improved the position of banks before their privatization. Recall that Leite and Sundararajan (1990a) are specific in saying that improved competition in the financial system is an essential criteria that must be in place before the financial reform.

Mexico followed a clear path to financial liberalization. It started by improving the fundamental conditions of the economy through stabilization and macroeconomic adjustment programs. As soon as the reforms were set in motion and the economy started to adjust, deregulation policies were implanted. These policies of deregulation tackled serious problems such as international trade and financial services. A distinct feature, hence, of the Mexican economic reform was the speed at which the changes were implemented.

In retrospect, however, one can see that the Mexican authorities have, to some extent, failed to provide the economy with the necessary fundamental requirements for a sustained economic development. The lifting of capital restrictions before the complete stabilization of the economy was a dangerous bet. On the positive side, Mexico profited from high foreign capital inflows, as capital helped accelerate the reforms. The negative side, however, was the political instability and the mistakes

in economic policy, which allowed for a current account deficit of close to 8% of GDP in 1994. Mexico tried to give investors a developing country's return on investment while offering a developed country risk. When investors lost their trust in the country and pulled their money out, the economic authorities were forced to take strong measures to prevent the collapse of the economy.

Although it is normal to expect the privatized banks to face transitional problems, their portfolio problem is serious. The currency crisis of the end of 1994, came to disrupt the fragile banking position, posing new challenges. The "tequila effect" will probably result in the acceleration of the process of mergers and acquisitions, the faster authorization for foreign banks to enter the domestic market, and in the improvement of the banks' managerial capabilities.

Despite the instability created by the currency crisis of 1994, the financial reforms have been successful in some fronts. As a result, Mexico has made monetary policy more effective, has increased real interest rates levels, has augmented financial intermediation, and increased competition in the financial sector. As a consequence of the sounder financial system, foreign direct investment poured into Mexico, helping improve and diversify the economic base and hence the economy. Even with the currency crisis of 1994, the future seems promising. Mexico has wisely benefitted from the overshooting of the peso depreciation to boost its exporting sector and it is expected that the Zedillo government will be able to restore economic growth within two years.

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**APPENDIX 1: MEXICO'S FINANCIAL
LIBERALIZATION: A CHRONOLOGY¹⁸**

I. FINANCIAL AND MONETARY REFORMS:

1982 Nationalization of the private banks (September).

Liberalization of the sale of CETES (treasury bills with maturity date of mostly 28 to 90 days).

1983 Consolidation of the nationalized banks reducing their number from 60 to 29.

1985 A Banking law replaces temporarily the Nationalization law, allowing the government to sell up to 34% of shares of the nationalized banks to the private sector.

Number of banks is further reduced from 29 to 19.

1986 Creation of a Banking Restructuration Fund, the Fondo de Apoyo Preventivo a las Instituciones de Banca Múltiple (FONAPRE).

The government starts to issue and sell the Pagaré de la Tesorería de la Federación (PAGAFES).

1987 Stock market crisis (October).

Fiscal reform on investment.

34% of the shares of 15 of the nationalized banks are sold to the private sector.

Government starts to issue and sell bonds with maturity of one to two years, the Bonos de Desarrollo del Gobierno Federal (BONDES).

1988 Beginning of the financial liberalization; changes on credit contingencies on high priority sectors and changes in reserve requirements.

¹⁸ Sources: Banco de México (1993), Exchange Arrangements and Exchange Restrictions: Annual Report, IMF, various issues, Griffith (1993), OCDE (1992), Kalter and Khor (1990), Coorey (1992) and Loser and Kalter, eds., (1992)

Beginning of interest rates deregulations (October/November).

1989 Controls on interest rates and maturities on all traditional bank instruments and deposits are eliminated (April).

Banks are authorized to pay interest on short-term deposit accounts.

The reserve requirements on bank deposits are replaced by a 30% liquidity ratio similar to that applicable to banker's acceptances¹⁹. (At the time, banks were required to channel at least 50% of these deposits to the public sector, inclusive of reserve requirements).

Government paper held to satisfy the liquidity ratio earn market interest rates and are fully tradable.

Restrictions on bank lending to the private sector are removed.

Mandatory lending at below-market interest rates to the public sector by commercial banks is discontinued.

Banks are given a greater degree of managerial flexibility and the autonomy of bank boards is expanded.

The role of providing preferential credit is limited to the development banks and trust funds.

Reduction of restrictions of proprietorship of banks (August).

The Nacional Financiera Sociedad Anónima (NAFINSA) becomes the SME Bank.

Modification of 5 financial laws.

Government issues and sells the Bonos Ajustables del Gobierno Federal (Ajustabonos), and the Bonos de la Tesorería de la Federación (Tesorobonos).

1990 Separation of the Comisión Nacional Bancaria (CNB) and of the Comisión Nacional de Seguros y Finanzas (CNSF) (January).

Closing of the Aseguradora Nacional Agropecuaria (ANAGSA) (February); it is replaced by the Agropecuaria Aseguradora Mexicana (ASMEX).

¹⁹ Note here that according to OCDE (1992), this reform took place in April 1990, but for Coorey (1992) the same reform took place in April 1989.

Law on financial holdings.

Modification of the constitution authorizing the privatization of the banks. Up to 30% of a stock of a bank may be held by foreign investors with the exception of foreign governments and government owned entities. Corporate rights of foreigners would be similar to those of national investors. Any one individual may own up to a maximum of 5% of the equity of a bank; this maximum may be increased to 10% with the prior authorization of the Government. Institutional investors may hold up to 15% of bank shares; financial holding companies are exempted from this maximum.

The banking law establishes a controlling mechanism through a new requirement reserve level (July).

Emission of regulation for the stock market.

Beginning of the program of merger/closing of the development banks.

Emission of directives concerning the dismantlement of the nationalized banks (September).

1991 Emission of prudential rules (classification/provision of loans) (March).

Emission of directives concerning banking capitalization (May).

Commercial Banks are no longer required to maintain a liquidity coefficient for their liabilities in pesos. A financial mechanism was put in place to oversee for a smooth transition, and thus to avoid market imbalances (September).

9 banks are sold to the private sector (June to November).

Deregulation of stocks market's commission (November).

Banks were authorized to pay interest at market rates on balances held in checking accounts.

1992 Banks were released from the obligation to buy ten-year BONDES (part of the financial mechanism put in place in September 1991) (April).

The Banco de México restricts commercial banks to accept foreign currency deposits to no more than 10% of their total deposits (April).

The compulsory liquidity coefficient for deposits in foreign currency, which went from 0 to 50% according to the maturity of deposits, was replaced by a 15% requirement (April).

A new "deposit account of monthly savings" was introduced. Its objective is to constitute 12, 24 and 36 months deposits for small savers. Interest rates are linked to those of CETES (August).

The Banco de México allowed banks to accept deposits in foreign currency in two new tranches: a first tranche of up to 4% of the deposits in pesos and in foreign currency taken by commercial banks in the 3 month period immediately preceding the month in question, to be used exclusively for granting export credits and/or for sales of domestic capital goods. A second tranche, of up to 6% of deposits taken in the 3 months immediately preceding October 1992. This limit will be in place until February 1996, and then will gradually decrease until it is cancelled in February 1998 (November).

Bank's net capital requirements are raised from 7% to 8%.

1993 The Banco de México established a system to determine interbank interest rates in the domestic market. With the introduction of a new reference interest rate, TIP (Tasa interbancaria promedio), the domestic financial market draws closer to major international markets. The new interbank rate is similar to LIBOR, since both are determined by credit operations between banks at a given moment; therefore, they reflect current market conditions (January).

The Executive submitted to Congress a Constitutional amendment proposing central bank independence, (with the objective of preserving the purchasing power of the currency). The proposal would ensure the central bank's independence in two ways: Firstly, by giving the Banco de México complete freedom to manage its own credit. Secondly, by providing the central bank with administrative autonomy (May).

Several changes are proposed to the General Law on Auxiliary Credit Organizations and Activities. Their objective is to stimulate the growth of these intermediaries by deregulating their activities. Other reforms were in the following laws: General Law on Insurance Institutions, Stock Market Law, Federal Law on Bonding Institutions, Credit Institutions Law and the Law Regulating Financial Groups (May).

Reform to the legal framework concerning Treasury Bills aimed at allowing CETES to be issued with maturities beyond one-year at interest rates to be agreed (May).

II. FOREIGN EXCHANGE REFORMS:

- 1982 Withdrawal of the Mexican Central Bank of the foreign exchange market; depreciation of the peso (February).
- Daily depreciation of the peso, 4 cents per day (March-August); Introduction of a double exchange rate system and forced conversion of the "Mex-dollars" (August); creation by decree of the dual exchange rate system (December).
- Total control on foreign exchange (September).
- 1983 Central Bank of Mexico starts a mechanism for the settlement of private debt due to foreigners. Creation of a fiduciary fund to cover foreign exchange risk (FICORCA), this fund was to manage the settlement mechanism (February).
- 1984 The daily peso depreciation is augmented to 17 cents a day (December).
- 1985 The daily peso depreciation is augmented to 21 cents a day (May).
- Devaluation of the controlled exchange rate of 20% and the announcement of a managed float system to be implemented from August on.
- 1987 Withdrawal of the Mexican Central Bank from the foreign exchange markets; the free floating exchange rate depreciates by 32.8%.
- End of the intervention of the Central bank on the free market (November).
- Devaluation of the controlled exchange rate by 21.8% (December).
- 1988 Fixed exchange rate is introduced in March.
- 1989 Modification of the rules concerning the foreign exchange rate, to a daily depreciation of the peso in regard to the USA dollar in a fixed amount previously announced of 1 peso (January).
- 1990 The daily depreciation of the peso is reduced to 80 cents (May), and then to 40 cents (November).
- 1991 The Controlled Exchange Rate Market was eliminated. A band within which the market rate would fluctuate was defined, and the daily depreciation of the peso is reduced to 20 cents (November).

- 1992 The responsibility for administering the Trust Fund for the Coverage of Exchange Risks (FICORCA) was transferred to the Trust Fund for the Administration of External Financing (FAFEXT) (May).
FICORCA was abolished on March 1994.

The government announced that a new currency, the new Mexican peso, would be introduced on January 1st, 1993. One new peso would be equivalent to 1,000 of the former Mexican pesos (June).

The daily depreciation of the selling intervention point was increased from MEX\$0.20 to MEX\$0.40 per US\$1.00 (October).

III. INTERNATIONAL DEBT REFORMS:

- 1982 Mexico declares a moratorium of 90 days on the payment of the principal of its public external debt. Beginning of the renegotiation of the due payments from August 1982 to December 1984 (August).
Signature of the rescheduling of 98% of the past due external public debt from August 1982 to December 1984.
- 1986 Establishment of an agreement with the international commercial banks for the rescheduling the debt and for a reduction of the cost of the debt and the obtaining of "fresh money."
Beginning of the swaps to finance foreign investment (May).
Rescheduling with the Paris Club of the payments due from September 1986 and May 1988.
- 1987 Signature of the agreements concluded in 1986 with the international commercial banks (March).
Suspension of the swaps program (November).
- 1988 Renegotiation of the public external debt (December).
- 1989 Accord with the Paris Club to restructure the payments of interest and principal, in order to reduce capital out-flows (May).

Mexico returns to voluntary international capital market financing through the placement of Bancomext bonds. These unenhanced bonds had a maturity of two and a half years and paved the way back into international financing for the Mexican government and for private companies.

Announcement of an accord with the commercial international banks on the rescheduling of the international debt, accord which includes a program of swaps and a partial cancellation of the debt (July).

1990 Signature of the accord with the international commercial banks for the reduction of the external public debt (February).

IV. FOREIGN DIRECT INVESTMENT REFORMS:

1984 Emission of liberal directives on the interpretation of the law of 1973 on foreign investment. The national commission on foreign investment announces the sectors into which majority foreign participation will be allowed (foreign participation was up to then limited to 49% of the capital). Simplification of the procedures (February).

1986 Reduction of the restrictions on investment in the petrochemical sector. Introduction of the "neutral capital" concept.

1988 New simplification on the funding and procedure of foreign investment.

1989 Important liberalization of the law of 1973: the activities in the petrochemical, banking, and insurance sectors are partially opened to foreign investment (May).

Liberalization of foreign ownership of up to 100% on companies having a maximum value of US\$ 100 million. Also allows foreigners to invest in the Mexican Stock Exchange on specially designed fiduciary funds (May).

The Bank of Mexico authorized Brokerage firms to provide services of custodianship and management of Federal Treasury bills (CETES) for nonresident investors.

1992 New Federal Antitrust law.

V. FINANCIAL SERVICES UNDER THE NORTH AMERICAN FREE TRADE AGREEMENT²⁰

1991 Canada, the United States and Mexico agreed to negotiate a free trade agreement (February).

Formal negotiations of the North American Free Trade Agreement (NAFTA) began in June of 1991 and was concluded after 14 months of intense negotiations.

1992 A final agreement is reached on August 12, 1992.

Some of NAFTA's goals are:

- * The elimination of barriers to trade
- * The promotion of conditions of fair competition
- * An increase of investment opportunities
- * The establishment of effective dispute resolution procedures.

In addition to the gradual elimination of tariffs, duties and other barriers to trade in goods, NAFTA incorporates agreements on trade in services, financial services, investment, intellectual property and dispute resolution.

1994 The NAFTA became effective on January 1st, 1994.

A. Brief summary of NAFTA's main provisions regarding financial services²¹ :

Each Nafta country must grant "national treatment" and "most-favoured-nation" treatment to participants from other NAFTA countries. Market access is limited to individuals or companies that already engage in their country of origin in financial services. It may also be limited to subsidiaries rather than direct branches.

²⁰ A detailed investigation of NAFTA's influence on Mexico's financial services is beyond the scope of this paper. However, the interested reader is referred to Musalem, Vitas and Demirgüç-Kunt (1993) and Banco de México (1993).

²¹ Source: quoted from Musalem, Vitas and Demirgüç-Kunt 1993, pp. 54-55.

Mexico is allowed to impose on US and Canadian participants individual and aggregate market share limits. These will be stated as a proportion of the total capital in each sector and will be phased out by the year 2000. The whole issue will, however, be revisited if US and Canadian participants acquire a combined market share in excess of 25%.

In banking, the aggregate limit will rise from 8% in 1994 to 15% by 1999. The single-institution limit will be 1.5% throughout the transition period. Both during and after the transition period, acquisitions of Mexican banks will be subject to an individual, per institution limit of 4%.

In the securities industry, the aggregate limit will increase from 10% in 1994 to 20% by 1999. The single-institution limit will be 4% throughout the transition period. Within two years of entry into force, Mexico will decide whether to authorize new types of limited-scope securities firms that would be subject to lower capital requirements.

In the insurance sector, the aggregate limit will rise from 6% in 1994 to 12% by 1999. The single-institution market limit will remain 1.5% throughout the transition period. US and Canadian insurance companies that enter joint ventures with Mexican firms will be permitted to expand their equity participation on an accelerated schedule, reaching 51% in 1998 and 100% in 2000. Moreover, these investments will not be subject to either individual or aggregate limits.

The provision of cross-border financial services includes both the concept of the "mobility of provider" and the concept of "mobility of consumer". Each NAFTA country must permit its citizens and residents to purchase financial services from providers located in other NAFTA countries. Except for insurance companies, Mexico may require that a Mexican subsidiary must be wholly owned by the

US or Canadian parent institution. Mexico may also deny access to Canadian or US banks or securities firms that are affiliated with industrial or commercial corporations.

These are various provisions for the creation of limited-scope financial institutions that would be subject to less onerous capital requirements and less restrictive market share limits. Warehousing, bonding, foreign exchange and mutual fund management will not be subject to market share limitations.

The right to provide new financial services and to transfer information for data processing is also covered in the proposed agreement. No requirement to employ nationals in key positions will be allowed.

Finally, the proposed NAFTA does not constrain the right of each country to impose regulatory or restrictive measures for prudential reasons, in pursuit of monetary, credit or exchange rate policies, for balance of payments reasons or for taxation and social security purposes.

APPENDIX 2: MEXICO'S FINANCIAL SYSTEM²²

I. THE STRUCTURE OF THE FINANCIAL SYSTEM

Institutional financial intermediation in Mexico is carried out by:

- a) The banking system
- b) Auxiliary Credit Organizations and activities
- c) Stock brokerage firms
- d) Insurance companies and
- e) Bonding institutions.

Many of the institutions above are currently engaged in a process of formation of financial groups²³, that will increase the efficiency and productivity of financial activities in Mexico by offering several financial services in a single location. Each group must include at least three financial institutions. Two different kinds of groups can be formed: in the first case the group is headed by a holding company, and in the second case by a bank or brokerage firm. The creation of a financial group requires the prior authorization of the Secretariat of Finance and Public Credit. According to the legislation in place, two or more intermediaries of the same kind cannot form part of a group, except

²² Source: quoted from Banco de México (1993), pp. 113-117, unless otherwise indicated.

²³ This was made possible by the Act Regulating Financial Groups introduced in 1990 (Coorey, 1992).

for investment societies and insurance companies, provided that they cover different risks [13]²⁴. As of mid-May 1993, twenty-six financial groups were registered.

The regulatory authorities for the financial system are the Secretariat of Finance and Public Credit, which determines the rules for a part of the transactions made by banks and non-bank financial intermediaries; the Banco de México, which regulates the operation of the banking system and the transactions (mostly credit) of other financial institutions; and the National Banking Commission, the National Securities Commission and the National Insurance and Bonding Commission, which oversee compliance with the regulatory framework and monitor activities of intermediaries under their supervision, and that also have certain powers to establish policies and regulate transactions.

The Mexican banking system is made up of:

- a) the Banco de México,
- b) credit institutions,
- c) public trust funds, and
- d) the National Savings Trust (Patronato del Ahorro Nacional).

a) The Banco de México, in addition to regulating credit operations, is also responsible for controlling the issue and circulation of money, and credit and exchange transactions. It is the lender of last resort in the credit system, the government's banker, and its financial agent and adviser [14]²⁵.

²⁴ [13] This restriction will be eliminated if the bills submitted by the Executive to Congress on May 20, 1993 are approved (...).

²⁵ [14] ..., on May 17th, 1993 a Constitutional amendment was sent to Congress that proposes the independence of the central bank.

b) Credit institutions are divided into multiple service banks and development banks. At present, there are 19 [15]²⁶ multiple service banks in operation. During the first months of 1993, applications were presented for the establishment of several banks. It is expected that some of these will be authorized shortly. Development banks belong to the government, and offer second tier services to specific sectors of the economy that are considered priority for the country's development. Development banks are Nacional Financiera (NAFIN), the Banco Nacional de Comercio Exterior (BANCOMEXT), the Banco Nacional de Comercio Interior (BNCI), the Banco de Obras y Servicios Públicos (BANOBRAS), Financiera Nacional Azucarera (FINASA), and the Sistema Banrural (Banco Nacional de Crédito Rural and 13 regional banks).

c) Development Trust Funds extend loans to determined sectors of the domestic economy. The main trusts are FIRA (agriculture, poultry, fishery), FOVI (low income housing), FIDEC (commercialization and distribution) and FONATUR (tourism). CECOBAN, the financial system's clearing house, is a trust fund that complements the activities of the central bank.

d) The National Savings Trust fosters domestic savings by issuing national savings stamps and bonds, and by creating term deposits for the smallest savers who have limited access to other institutions [16]²⁷. It occasionally lends to development banks and development trust funds.

²⁶ [15] Excluding the Mexico branch of Citybank, N.A.

²⁷ [17] In August 1992 a new 'deposit account of monthly savings' was introduced. Its objective is to constitute 12, 24 and 36 months deposits for small savers. Interest rates are linked to those of CETES.

The Banking Fund for the Protection of Savings²⁸ (FOBAPROA) is a deposit insurance mechanism against any financial problems that might arise in multiple service banks. A similar insurance scheme exists for the Mexican Stock Exchange and brokerage houses.

With respect to auxiliary credit organizations and activities, by mid-May 1993 there were 31 public warehouses registered, 230 credit unions, 63 leasing companies, 2 authorized and some 300 requests for the establishment of savings and loan societies, 65 finance factoring companies, and some 56 exchange houses.

The financial system has 43 insurance companies and 18 bonding institutions registered. Companies operating on the stock market include the Bolsa Mexicana de Valores (Mexican Stock Exchange), the Securities Deposit Institution (INDEVAL), brokerage houses, stock-market specialists, investment societies, and investment society operating companies.

According to Elizondo Almaguer (1994), from 1989 to June 1994, the Mexican authorities have authorized more than 300 new financial institutions (99 finance factoring companies, 43 leasing companies and 165 exchange houses), 15 limited-scope financial societies, 17 savings and loan societies and 150 credit unions. Furthermore, he expects to see in the few years to come, 41 new financial institutions in operation in Mexico. Of these there are 20 foreign financial institutions; 14 banks, who were authorized in the past 2 years; and 7 banks, who are waiting for a positive answer.

²⁸ According to Coorey (1992, p. 46), the legislation enacted in 1990 extended the role of the FOBAPROA. "In addition to its traditional preventive role, it would provide 'express and direct protection to depositors' (Bank of Mexico (1991), p. 89." "All banks contribute a premium to this fund; although there is no formal deposit insurance in Mexico, this fund provides some safety net in emergencies" (Coorey, 1992, p. 46).

Aspe (1994) summarizes the financial status by saying that the number of banks in operation in Mexico went from 19 in 1988, to 30 in 1993 and in 1994 it is expected to be at 55 (by year end). Furthermore, he gives the following table on Other Financial Institutions in operation:

Table A.1: Other Financial Institutions

	Authorized 1989-1993	In Operation
Brokerage Houses	3	26
Insurance Companies	4	44
Leasing Companies	43	62
Finance Factoring Cos.	82	61*
Exchange Houses	164	373
Total	296	566

(*) The reduction is explained by 21 cancellations and 17 mergers.
source: Aspe (1994).

II. MAIN FINANCIAL INSTRUMENTS

A. Bank Instruments

CHECKING ACCOUNTS can be either interest-bearing or not.

TIME DEPOSITS, also known as non-negotiable certificates of deposit, have a monthly yield, and are available for one, three and six month terms.

PROMISSORY NOTES are issued for 1, 3 and 6 months, with a fixed rate of interest that is paid at maturity. They can be traded in the stock market.

Banks also issue "BANK BONDS", which are long-term credit instruments sold by auction initially to brokerage houses or to banking institutions.

B. Private Sector Financial Instruments

BANKERS ACCEPTANCES are bills of exchange issued by companies for a term of under one year. They are accepted by the credit institution that provided financing, which in turn sells them to investors with its guarantee. "They have a face value of 100.00 Mexican new pesos and are placed at a discount with the maturity specified by the issuer" (Mexican Investment Board, 1993, p. 13).

COMMERCIAL PAPER WITH BANK GUARANTEE, a highly marketable security for which each issuer is free to decide the term according to his needs. "Maturity varies from 15 to 360 days and these instruments are generally placed under par value. Firms sometimes issue dollar-indexed commercial paper if their activities generate a considerable inflow of dollars" (Mexican Investment Board, 1993, p. 13).

SHARES of debt and variable income investment societies, whose yield calculated on a daily basis according to the value of the investment society's portfolio.

"**OBLIGACIONES QUIROGRAFARIAS**" are unsecured debts with a maturity of up to three years; and "**OBLIGACIONES HIPOTECARIAS**" are debts secured by real estate.

BONOS DE PRENDA (Collateral Bonds) are commodities-backed bonds issued by firms. They have a yield equal to Treasury Bills (CETES) plus a premium. A

quantity of the commodities, valued at 40% in excess of the bonds's value, are deposited in warehouses, and a negotiable deposit certificate is issued. Face value is usually 100.00 Mexican new pesos. The bonds are placed under par value and they have a maturity of no more than 30 days (Mexican Investment Board, 1993, p. 13).

CEPLATAS are silver certificates issued by a trust and backed by 100 troy ounces of silver. The initial maturity term is 30 years subject to review.

CENTENARIOS are Mexican Independence Centennial commemorative fifty-peso gold coins weighting one troy ounce whose intrinsic value is related to world fluctuations in the price of gold. Centenarios and troy ounces of silver can also be purchased in the securities market. The silver troy ounces are coins minted by the Federal Government (Mexican Investment Board, 1993, p. 14).

C. Government Financial Instruments

CETES (Certificados de la Tesorería), or treasury bills are debt instruments issued by the Federal Government to finance Government spending and regulate the money supply. CETES are the most important money market instrument. They fulfil the function of implementing government monetary policy, and represent the majority of the money market's total instruments [they are briskly traded in the secondary market], the 28-day rate is the benchmark for interest rates in Mexico.

CETES, backed by the Federal Government, are auctioned weekly by the Banco de México. They have a par value of 10.00 Mexican new pesos and the different issues mature at 28, 91, 180 and 360 days (Mexican Investment Board, 1993, p. 15).

BONDES (Bonos de Desarrollo del Gobierno Federal), or Federal Government Development Bonds, with either one or two year maturity [17]²⁹. They earn interest every 28 days on their face value, the rate being linked to the higher of the yield on 28 day CETES, or the interest rates on a sample of bank promissory notes.

TESOROBONOS (Bonos de la Tesorería de la Federación), or Federal Treasury Bonds, have a yield pegged to the exchange rate. They are considered to be hedging instruments, because the investor is protected against any move in the exchange rate. "Tesorobonos auctions are held according to government financing needs and may not be placed weekly. They have a denomination of US\$100.00 or multiples thereof. They are usually placed under par value when maturity is less than 6 months and otherwise they pay periodic interests" (Mexican Investment Board, 1993, p. 14).

AJUSTABONOS (Bonos Ajustables del Gobierno Federal), whose value is indexed to the National Consumer Price Index. Currently, these are available with three or five year maturities.

²⁹ [17] There are also 10 year BONDES, issued in September 1991 to avoid an undesirable impact on the financial markets of the elimination of the liquidity coefficient to which banks were subject. These are held by banks and can only be traded with other commercial banks and the Banco de México (for further information see Section 6, [Chapter III, Banco de México, 1993]).

They yield a fixed "real" rate of interest established at the time of sale, payable every 91 days, based on the adjusted value of the instrument on the date interest is paid.

PAGARÉ PEMEX, Pemex Promissory Notes are short-term notes issued by Pemex (Petróleos Mexicanos), the state oil company. They have a face value of 100.00 Mexican new pesos and a term of maturity of one year. Interest is paid on monthly coupons based on yields of CETES and Bank Promissory Notes, whichever the higher (Mexican Investment Board, 1993, p. 15).

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