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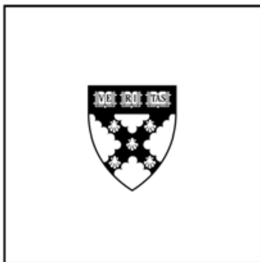

Mexico's financial crisis of 1994-1995

Aldo Musacchio

Working Paper

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Mexico's financial crisis of 1994-1995

Aldo Musacchio

Abstract

This entry explains the causes leading to the Mexican crisis of 1994-1995 (known as "The Tequila Crisis"), and its short- and long-term consequences. It argues that excessive enthusiasm on the part of foreign investors, not based on Mexico's fundamentals, and weak regulation of the banking system led build the vulnerabilities that left Mexico exposed to a sudden change in investor appetite to invest in the country. Political violence in Mexico and changes in monetary policy in the United States then led to radical changes in investor perceptions of the future of the country and to a balance of payments and banking crisis. The chapter then explains how the crisis unraveled and describes the US bailout of the Mexican government in 1995. The chapter ends examining the subsequent development of the Mexican banking system.

Keywords for index: Financial crisis, banking crisis, Tequila crisis, Mexico, Carlos Salinas de Gortari, Miguel de la Madrid, NAFTA, bank privatization, foreign bank entry, FOBAPROA, EZLN, bailout, Luis Donaldo Colosio,

JEL codes: E44, F31, F32,

***This working paper will be part of the Encyclopedia of Financial Globalization

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Mexico's financial crisis of 1994-1995

The Mexican financial crisis of 1994-1995, also known as the "Tequila Crisis," refers to the crisis that started after Mexico's devaluation of the peso in December 1994. It precipitated the worst banking crisis in Mexican history (1995-1997), the largest depreciation of the currency in one year, from about 5.3 pesos per dollar to over 10 pesos per dollar between December 1994 and November 1995, and the most severe recession in over a decade (with GDP falling over 6%in 1995).

According to Obstfeld and Taylor (2004), there were two major waves of financial globalization in the twentieth century, one before 1914, and a second that began in the last three to four decades of the century, and peaked in the 1990s. The Mexican financial crisis was particularly important as the first global crisis of this second wave. It raised significant issues about international financial architecture and the role that international bailouts should play in the latest era of financial globalization.

Origins of the crisis

Mexico undertook large scale reform and deregulation of its economy in the second half of the 1980s. Among those reforms, President Miguel de la Madrid's (1982-1988) decision to liberalize trade and international capital flows were crucial to foster Mexico's integration with the developed world. His government reduced import tariffs rapidly as part of the Uruguay round of trade negotiations under the General Agreement on Tariffs and Trade (GATT). Furthermore, de la Madrid pursued a series of reforms that facilitated the inflow of portfolio capital and foreign direct investment into the Mexican economy and the expansion of its

domestic financial system. Then, in the early 1990s, the administration of President Carlos Salinas de Gortari (1988-1994) commenced negotiations for a foreign trade agreement with the United States, later known as the North American Free Trade Agreement (NAFTA), and further liberalized the financial system, privatizing the largest commercial banks and deregulating the banking system.

Trade liberalization

Since the Great Depression, the Mexican government followed a strategy of import substitution industrialization (ISI). Under ISI the Mexican government instituted a series of policies and regulations to protect domestic industries from international competition. This approach installed not only high import tariffs, but also non-tariff barriers on the importation of foreign goods, and provided subsidies to aid Mexican industries. Under this model, the country's producers had no incentive to export manufactures because they enjoyed a captive domestic market with little or no competition. The Mexican model of development, based on ISI, continually ran into trouble in the 1970s and 1980s. Except for auto manufacturers and maquiladoras, companies operating under the ISI model did not export much and it was hard for them to get enough foreign exchange to pay for imported capital equipment and intermediate goods. Moreover, severe shortages of foreign exchange also could jeopardize the foreign debt service of the Mexican government, generating damaging exchange rate crisis. In fact, the country had balance of payments crises, i.e., had to devalue its currency, in 1954, 1976, and 1982.

Between 1979 and 1981 the Federal Reserve Board raised interest rates in the United States to record levels to contain inflation in that country, with European central banks also raising rates simultaneously. . This interest-rate increase perversely affected Mexico and other

developing countries across the board and was even more damaging because it was accompanied by a rapid decline in commodity prices (Cardoso and Helwege, 1992). This combination of external shocks led to the decline in export receipts, an increase in the cost of servicing debts denominated in foreign currencies, and pressures over the exchange rate. In August 1982 the administration of José López Portillo (1976-1982) announced a moratorium on Mexico's foreign debt service and started a process of renegotiation that was not finalized until 1989, under President Carlos Salinas de Gortari. Moreover, as Mexico suspended payments, investors around the world panicked, leading to an increase in interest rates that pushed other countries in Latin America to also suspended payments on their debts. The crisis led the countries in distress to request financial support from the International Monetary Fund and the World Bank (Stallings and Kaufman, 1989). These institutions, rather than just bailing out the countries, made loans and technical support contingent on a series of economic reforms. The reforms were aimed at achieving macroeconomic stability, reducing government intervention in the economy (i.e., promoting privatization, deregulating, and strengthening the protection of private property), and liberalizing the economy to international trade and capital.

The balance of payments crisis of 1982 led to a radical transformation of the Mexican government's development model. Miguel de la Madrid, president of Mexico (1982–1988) for the Party of the Institutionalized Revolution (PRI in Spanish), became one of the leading reformers in Latin America. He adopted policies to deregulate many industries, started a massive program to privatize numerous government-owned enterprises, and began to liberalize trade across the board. For example, his administration unilaterally decreased the maximum import tariff from 100% to 20% and lowered other tariff and non-tariff barriers. The

administration also lifted restrictions on foreign investment in many sectors; in particular, allowing foreigners to own 100% of manufacturing businesses outside of major cities.

After 1988 President Salinas, also of the PRI, continued with economic reform and trade liberalization. In particular, his administration negotiated the North American Free Trade Agreement with the United States and Canada. Under NAFTA the government lowered tariffs even below the levels required for most-favored nation status, or eliminated them altogether, for trade within North America. NAFTA also opened up the country to foreign direct investment in most sectors (except sectors considered strategic like banking and energy) and developed a series of treaties to enforce transnational investment and trade contracts (Lederman, Maloney, and Servén, 2005 and Iyer, 2005).

Liberalization of Capital Flows

In 1989 the Mexican government finalized the renegotiation of Mexico's public and foreign debt with a group of international creditors, an event that allowed Mexican companies and banks to start borrowing again in financial markets abroad. Almost simultaneously the government changed the Foreign Investment Act to allow greater freedom for foreigners to invest in the Mexican stock exchange. (It created options to purchase B shares, with no controlling rights, or ownership in mutual funds that held A shares of Mexican companies.) After 1993 the capital account of Mexico was further liberalized and the government allowed the local stock market to trade foreign securities.[1]

The effects of these reforms can be gauged by looking at Mexico's balance of payments in Table 1. For instance, after 1991 net foreign direct investment went from over $2 billion

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[1] For a summary of some of the changes see Aspe Armella (1993), chapters II and III or Santín Quiroz (2001), chapters 2 and 4.

dollars per year to over $4 billion dollars per year. Portfolio inflows increased considerably after 1989, going from practically zero (due to controls) to $3.4 billion in 1990, $12.7 billion in 1991, and $18 billion in 1992. Debt flows also increased dramatically as Mexican companies started to finance expansion through foreign-currency loans. "Other investment liabilities," in the balance-of-payments accounts, which include debt flows among other things, show a dramatic increase in 1990 and 1991 as well.

[Table 1. Mexico's Balance of Payments around here]

The Mexican peg

One important component of the Mexican reform strategy was to fix the value of the Mexican peso to the U.S. dollar. This policy served at least three purposes. First, it provided foreign investors with assurance that their investments would not lose value under normal circumstances. This confidence also bolstered the booming import-export business in Mexico. Second, a fixed exchange rate allowed Mexican firms to borrow money in international markets to finance expansion in preparation for the opening of free trade with the United States in January 1995. Finally, a fixed exchange rate helped the Mexican authorities fight domestic inflation by forcing monetary policy to fluctuate according to balance of payments considerations, not political whims. Moreover, in an open economy with a fixed exchange rate, prices of imports were stable and Mexican products competing with imports had be priced to meet international competition.

A fixed exchange rate in a developing country like Mexico posses concerns, in that it must be sustained by the capacity of the central bank to enlist the foreign investors' trust in the currency and thereby accumulate reserves. In 1954, 1976, and 1982 Mexico had run into balance of payments problems that led to drastic depreciations of the currency. These depreciations were usually followed by a crisis and inflationary periods. Thus, the Mexican government, especially under Salinas, wanted to avoid such depreciation at all costs. In fact, the administration's development strategy was based on a premise of macroeconomic stability.

The Consequences of Financial Liberalization

There are two consequences of Mexico's financial reform of the late 1980s and early 1990s. First, privatizing and liberalizing the banking sector (e.g., lifting controls such as interest rate caps and quantitative limits on lending, and eliminating reserve requirements for banks) led to a major lending boom. Second, as Mexico deregulated finance and facilitated the entry of foreign capital, there was a major boom in the country's stock market and a large increase in foreign direct investment in the country.

Mexico's bank privatization

Beginning in 1989 the government of Miguel de la Madrid started a major privatization of the banking sector. The process had to be done in stages because President López Portillo had just nationalized most commercial banks in 1982. According to Gustavo del Ángel and César Martinelli (2009), before 1982, the Mexican government had had an implicit contract with commercial bankers in which regulation and antitrust rules favored incumbent banks in exchange for their financing budget deficits and sustaining macroeconomic stability. This contract operated relatively well during periods of stability, but during periods of exchange rate crisis, such as in 1976 and 1982, it was hard for the government to monitor the foreign exchange

operations of bankers. Therefore, the only credible action to try to keep bankers and, especially, bank owners in line was the threat of nationalization. In 1982, banks and bankers participated in speculation against the Mexican peso, and the government decided to exercise that threat. In September of that year President López Portillo expropriated most private banks (except for foreign-owned Citibank) without much thought of the consequences. Yet, according to Del Ángel and Martinelli, this was a rational reaction to the government's imperfect ability to monitor bankers' actions. Other explanations emphasize political reasons for the nationalization (Loaeza, 2009). In any event, nationalization produced a concentrated banking system that lent according to political priorities rather than on the basis of creditworthiness.

The administrations of de la Madrid and Salinas privatized the largest banks in stages, and by 1992 they had privatized most commercial banks. An immediate boom in credit followed. Total loans as a percent of GDP rose from 24% in 1991 to 38% in 1994 (see Table 2). Loans to the private sector (including consumer, mortgage, commercial, and interbank credit) went from 20% to 30% of GDP. The growth in consumer credit was particularly pronounced as commercial banks competed to gain a larger share in this market. It had been relatively untapped while banks were under government control.

Table 2. Commercial Bank Lending as a Percentage of GDP (at Year End)

Year	Total Loans as % of GDP[1]	Private Sector Lending as % of GDP[2]	Private Sector Lending (Excluding Fobaproa) as % GDP[3]
1991	24%	20%	20%
1992	29%	24%	24%
1993	35%	28%	28%
1994	38%	30%	30%
1995	32%	27%	24%
1996	26%	22%	16%

1997	21%	15%	8%
1998	21%	14%	8%
1999	18%	13%	6%
2000	16%	12%	7%
2001	15%	11%	7%
2002	15%	11%	7%
2003	14%	11%	8%

1. Includes all performing loans. Declared non-performing loans and rediscounts not included.

2. Total Loans, minus loans to government entities.

3. Total Loans, minus those to government entities and the value of Fobaproa and IPAB bonds held in the loan portfolio.

Source: Haber (2005), Table 9.

Both the privatization and the credit boom carried a series of problems. Haber (2005) argues that the bank privatization failed because of the incentives the government provided to maximize the price investors paid for privatized banks. The government obtained high bids for the banks by offering unusual privileges to winning investors. Among the perks was a lack of a competitive system: four banks controlled 70% of all bank assets, the banking sector was closed to foreign competition, and the government restricted the entrance of foreign banks into the market. Foreign banks could either own a small percentage of the equity of any commercial bank or operate small banks focused on investment and private banking operations. Moreover, the bidding process for privatization of the banks did not take into account bidders' experience in the banking sector. Thus, Haber argues, the winners had little hands on experience running commercial banks. Most were financial groups with experience in the stock market. Finally, the Mexican government delayed the adoption of international banking standards and allowed banks to lend or buy securities without keeping an appropriate amount of reserves against loan losses.[2]

The weak regulation of banks proved to be one of the main handicaps in the system for at least two reasons. First, regulators allowed banks to misreport the riskiness of their loan

[2] See Haber (2005), pp. 2329 and 2330.

portfolios. Haber notes that "one of the most lenient of Mexico's bank accounting rules was that when a loan was past due, only the interest in arrears was counted as non-performing." That meant that "the principal of such loans could be rolled over, and counted as a performing loan." This practice allowed banks to misrepresent the safety of their balance sheets and let them avoid the painful process of reporting losses every time loans were non-performing. (See Figure 2 for the difference between the reported non-performing loans and an approximation of the actual levels.) In this sense, banks were overstating the soundness of their balance sheets.[3]

Second, the Mexican bank regulator, the National Banking Commission (*Comisión Nacional Bancaria*) was ineffective at monitoring bank behavior because its officials were inexperienced and had only precarious instruments to gauge the finances of commercial banks. Both the poor accounting standards and the lack of technology to monitor the banks' activity made it hard to calculate the riskiness of the banking system. Finally, the commission "lacked the authority and autonomy to properly supervise banks" (Haber, 2005; p. 2332).

Under these circumstances perhaps depositors in Mexican commercial banks could have done the monitoring themselves if they had been afraid of losing their money. Yet depositors were not tracking bank operations because of the favorable deposit insurance scheme that the Bank of Mexico, the central bank, had put into place in the 1980s. Bank deposits in Mexico were insured by a trust fund known as FOBAPROA (the Spanish acronym for the Fund for the Protection of Bank Savings). Haber (2005) explains that the problem with the incentives that FOBAPROA provided was that the Bank of Mexico "explicitly stated that it was not only

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[3] Op. cit.

guaranteeing all deposits (including inter-bank deposits), it was also guaranteeing virtually all bank liabilities…with the exception of subordinated debt" (p. 2333).[4]

In sum, the incentives that the Mexican government put into place for privatizing the banking system led to excessive risk taking. Banks underreported their non-performing loans, expanded aggressively into the mortgage and consumer loan business without much information (credit bureaus were created right after privatization), and borrowed in dollars to finance some of their expansion. All of these conditions put the system in a delicate position if any external shock were to occur.

Investor Enthusiasm

The early hype about Mexico's reform and liberalization was partly a consequence of the investment community's enthusiasm towards Mexico and willingness to invest in the country. Interest rates in the United States fell during the recession of the early 1990s and foreign investors began to look for high yields in other markets. By this time the investment community shared the belief that Mexico's reforms would lead the country to grow faster. Salinas and his team of technocrats (most of whom studied in American universities such as Harvard, Stanford, Chicago, and Yale) were not only seen as competent, but were connected with top officials in foreign governments or in multilateral financial agencies, as well as with managers of large investment funds abroad. The following two quotes perhaps summarize the investor hype in 1993:

[4] The Mackey Report on the bank bailout under FOBAPROA explained that: ''Based on Section IV of Article 122 of the Law of Credit Institutions, and considering that it has been a tradition that the Mexican financial authorities try to protect investors from any loss in case of insolvency of Credit Institutions, the FOBAPROA's Technical Committee has decided to continue with such tradition, for this reason it has been agreed that FOBAPROA will endeavor to honor all of the liabilities charged to financial institutions that participate in the fund, provided that they are derived from their operations, excluding liabilities arising from subordinated debentures, liabilities resulting from illicit, irregular, or bad faith operations.'' (Mackey, 1999; p. 53).

"At the moment we're pretty unambiguously optimistic about investment in Mexico," said A. Peter Monaco, portfolio manager for the Scudder Latin America Fund, which ha[d] more than $500 million in Mexico.[5]

"There is no other country in the world where I can buy government securities that yield so much and are safe," said Robert Beckwith, a mutual fund manager at Fidelity Investments, which maintain[ed] large holdings of Mexican government stock.[6]

This investor enthusiasm led to a bubble-like dynamic in which, as investors moved their money to Mexico and invested in Mexican assets, the value of those assets went up together with the returns to investors. The more money went to Mexico, the higher the returns. In fact, growth rates in the Mexican economy did not justify such hype. In 1992 the growth rate was around 3%, and in 1993 it was not higher than 2%. Investors, however, were betting on Mexico's future. Table 1 shows the sizable increase in portfolio inflows into Mexico in the years before 1994.

[Insert Table 3 around here]

The problem was that as easily as money went into Mexico it could come out since much of the enthusiasm was based on expectations. Any event that triggered expectations to change from positive to negative would spark a massive sale of Mexican assets and capital flight. Investors had incentives to follow the herd—whichever way it was moving money. Most fund managers were paid bonuses according to their performance relative to a benchmark index.

[5] *The New York Times*, April 12, 1993, taken from Pill (2002).
[6] *The New York Times*, April 22, 1993, taken from Pill (2002).

Thus, managers investing in Mexico tended to be compensated according to whether they had better returns than an emerging market bond or stock index. If a significant mass of investors went to Mexico, everyone had to follow to make at least close to the returns everyone else was making. In the same way, if most investors took their money out of Mexico, there was no incentive for any single investor to stay. A rapid outflow of capital could lead to a depreciation of the exchange rate, lowering the price of Mexican assets and returns. Any international fund manager heavily invested in Mexican assets who did not sell when everybody was selling and fleeing Mexico, was likely to lose his or her job as these assets were likely to underperform the benchmark index investment firms used to judge the performance of their fund managers.

The System under Stress in 1994

A series of events in 1994 (see Table 4) changed investor expectations about Mexico and triggered capital flight. This capital flight forced the central bank to raise interest rates, drove the banking system into a collapse as borrowers could no longer pay loans, forced the devaluation of the peso, and destabilized the economy

First, macroeconomic figures showed that households were not increasing their savings and that gross fixed investment was not increasing, despite the increase in foreign borrowing. As Table 3 shows, domestic savings in Mexico fell from close to 18% of GDP in 1989 to 15% of GDP in 1994. This happened while Mexicans increased their foreign borrowing from around 0% of GDP in 1990 to over 4% in 1993. That is, foreign borrowing was not used to increase investment; aggregate demand rose because the government boosted its consumption. Because Mexicans were not increasing savings or investment, it was harder to justify the expectation of future growth. Still, the hype and credit boom could be sustained as long as all investors had positive expectations about the country.

[Table 4 around here]

Second, 1994 was a turbulent year for Mexico in general (see Table 4). On the morning of January 1, 1994, a group of rebels, called the Zapatista National Liberation Army (EZLN in Spanish) after a Mexican Revolutionary hero, took control of some of the largest towns in the southern state of Chiapas. In February, the U.S. Federal Reserve began to gradually increase interest rates. In March, Luis Donaldo Colosio, the presidential candidate of the ruling party, the PRI, was murdered at a public rally. And his assassination was just the beginning. A series of other political assassinations, kidnappings of high profile executives, an ongoing rise in U.S. interest rates, and violence in Chiapas continued to affect investors' perception of Mexico and led to a sizable movement of capital out of the country. These exoduses depleted the country's reserves of foreign exchange, a factor that also worsened investors' confidence in Mexico's exchange rate peg.

Third, the Mexican authorities' reaction to the capital flight was to try to borrow their way out of the crisis to accumulate foreign reserves and strengthen the peso. The Mexican government issued debt indexed to the value of the U.S. dollar to entice foreign and domestic investors to keep their money in Mexico. Even if this effort was successful at keeping the exchange rate stable during 1994, Mexico was experiencing a credit boom, and inflation exceeded that of the United States, Mexico's main trading partner. Therefore, pressures on the peso peg increased during 1994. As Table 5 shows, most estimates of the real exchange rate indicated significant appreciation—that is, goods imported into Mexico were growing cheaper

and Mexican exports were growing more expensive abroad, worsening the foreign deficit. With a worsening foreign deficit, Mexico had to borrow more to maintain the exchange rate. Investors were justifiably nervous because any large-scale reversal of capital flows could trigger a depreciation of the peso.

Against this backdrop of political and economic instability, Mexico held an election in 1994. After the assassination of the PRI's original candidate, his replacement, Ernesto Zedillo, won the election by a large majority, promising to pacify the country. Yet, Zedillo chose a new economic team, defying investor expectations that Pedro Aspe would continue as Minister of Finance. This increased the speed of capital flight even more towards the end of November of 1994. By December 20 the central bank tried to carry out a gradual depreciation by widening the band in which the exchange rate was allowed to fluctuate. The administration discussed the plan to gradually depreciate the peso in a meeting with high profile entrepreneurs and union leaders. It is not clear if information from this meeting leaked or not, but a panic propagated rapidly through financial markets on that day. In two days investors took $5 billion out of Mexico. The magnitude of the capital outflow and the panic that started in financial markets led the government to float the peso.

Table 5. Real Exchange Rate Indices (1990=100)

	Relative to the United States			Relative to the world[1]	
	CPI[2] based	WPI[3] based	nominal wage based	CPI based	ULC[4] based
1988	106.3	101.9	126.9	102.3	121.2
1989	107.5	106.6	113.1	102.3	104.8
1990	100.0	100.0	100.0	100.0	100.0
1991	88.4	86.5	83.3	90.3	91.9
1992	80.2	78.0	73.8	83.0	84.8
1993	75.0	72.5	69.5	79.3	83.8
1994[5]	78.6	75.1	73.5	88.0	90.4
1995	134.1	131.5	167.4	-	-

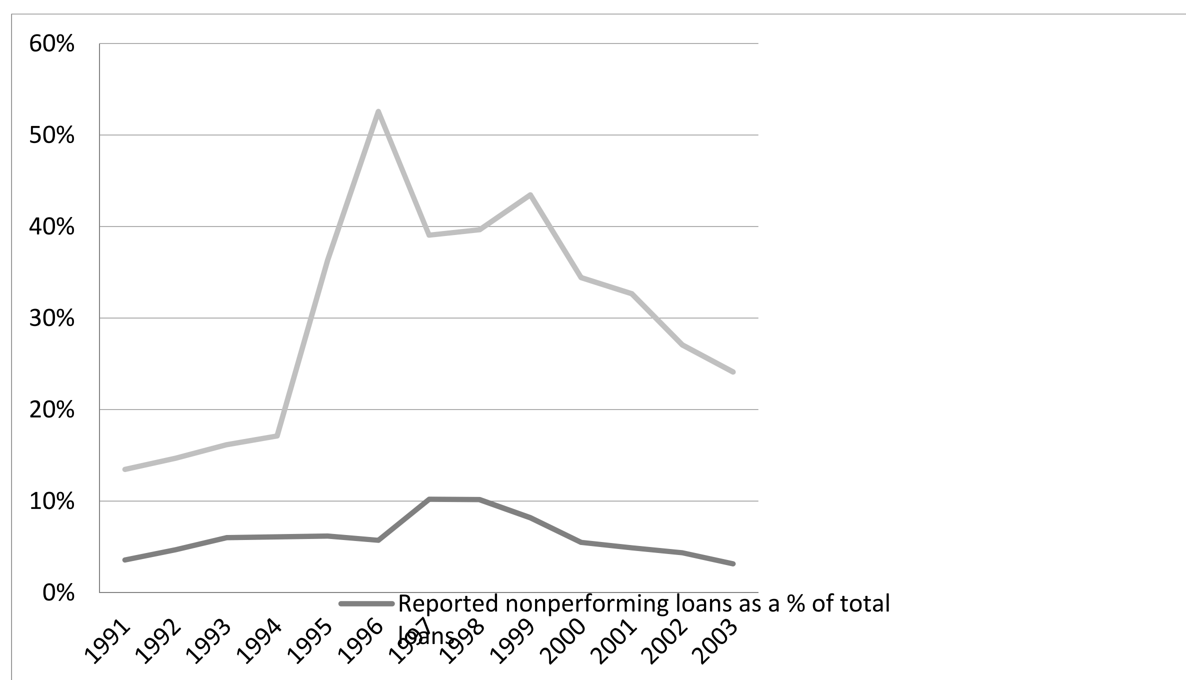
Notes: The real exchange rate is defined as the ratio of the domestic currency price of foreign goods

to domestic goods. Thus a fall in the real exchange rate index indicates an appreciation.
[1] The world is defined as a GDP-weighted group of 133 countries for the CPI-based measure and as a trade-weighted group of Mexico's six largest trading partners (the US, Germany, Japan, Canada, the United Kingdom and France, accounting for approximately 85% of total Mexican trade in manufactures) for the ULC-based measure.
[2] Consumer price index, measuring the price of a broadly based consumption basket including manufactured goods and services.
[3] Wholesale price index, measuring the 'factory gate' prices of manufactured and intermediate goods.
[4] Unit labour costs, measuring nominal wage growth net of gains in labour productivity.
[5] The exchange rate used for 1994 is an average of January through November. It therefore excludes the devaluation of 20 December and the consequences of the subsequent float on 22 December.
Source: Huw Pill, "Mexico (C): Reform and Crisis, 1987-1995," Harvard Business School Case Study No. 9-797-050, last revised on October 15, 2002, exhibit 9.

Consequences of the 1994 Crisis

A marked recession and a sizeable banking crisis followed the depreciation. As investors left the country, interest rates in Mexico increased rapidly, pushing many consumers and businesses who had borrowed funds from commercial banks or from foreigners to default on their loans.

Figure 2. Total Non-Performing Loans as a Percentage of Total Loans in the Mexican Banking System, 1991-2003



Source: Adapted from Haber (2005), Table 2.

Note: Reported nonperforming loans (NPL) includes only past due interest until at least 1997. After 1997 this figures include the principal as well. Yet NPLs cleaned as part of the FOBAPROA bailout program are not included in this reported figure. Total nonperforming loans are estimated as the sum of the declared NPL, rediscounts, restructured loans, and the total sum of the FOBAPROA bonds. For details on the methodology see Haber (2005).

The fragility of the banking system became clear as defaults increased rapidly in 1995. As Figure 2 shows, the percentage of nonperforming loans as a percentage of total loans of Mexican commercial banks increased steeply. As a consequence, the central bank and the National Banking Commission began a major bailout and cleaning of the system. The bailout can be summarized in the three major programs. First, the government created a trust fund named PROCAPTE (funded from the FOBAPROA deposit insurance fund and with funds from the central bank). "This trust fund lent the banks capital sufficient to maintain a 9% capital ratio in exchange for five-year subordinated debentures from the bank. In the event of non-payment, the debentures were convertible to ordinary stock that could be sold by the government" (Haber, 2005, p. 2341). Banks were not allowed to pay dividends or issue further debt until they repaid these funds. Second, the government opened a special dollar credit window to help banks pay for their dollar-denominated debt.

Table 6. The Cost of Bank Bailouts in the 1980s and 1990s

Year	Country	Cost as a Percentage of	
		GDP	Total Loans
1982	Argentina	13.0	42.5
1985	Chile	19.6	22.5
1985	Colombia	6.0	40.0
1988-1992	Norway	4.5	5.5
1989	US Commercial Banks	1.5	3.9
1991	US Savings and	5.1	7.8

	Loans		
1991-1993	Sweden	4.5	5.5
1991-1993	Finland	8.2	9.7
1994	Venezuela	13.0	57.2
1998	Mexico	14.0	30

Source: Rojas-Suárez and Weisbrod 1996:11; *The Times*, July 24th 1998, taken from: Osvaldo Santín Quiroz, *The Political Economy of Mexico's Financial Reform*. Ashgate: Aldershot, 2001. pg 224.

Note: The cost of the bailout as a percentage of total loans for Mexico was approximated by looking at the total shares of FOBAPROA loans to total loans in large commercial banks

Finally, the government assisted banks in cleaning their balance sheets of nonperforming loans using the funds from FOBAPROA. It essentially exchanged bonds for non-performing loans. On paper, the banks were still in charge of collecting interest and principal repayments for those loans, but in practice this mechanism became a simple way to write off loans and pass them on to the government. When banks fell into serious financial distress, the National Banking Commission intervened, cleaning up their balance sheets using FOBAPROA funds, and then selling the banks to new investors, usually foreign banks. This process was usually finished after Congress approved a reform to banking law in 1997, which allowed foreign investors to own and operate a controlling share of commercial banks in Mexico. Of the 27 commercial banks that operated in Mexico in 1995, the National Banking Commission had intervened in 7 by 1996. [7]

The extent to which FOBAPROA funds were used to bail out banks can be gauged by looking at two figures. First, as indicated in Figure 2, funds obtained from FOBAPROA account for the difference between total nonperforming loans (NPLs) and reported NPLs—almost reaching 50% of all loans--. Second, Table 6 shows the total cost of the bailout as a percentage of GDP, compared with other major bailouts of the time. At 14$ of GDP, the Mexican bailout was the most expensive of those included in the table for the 1990s.

[7] For a more detailed explanation of how the FOBAPROA bailout worked see Haber (2005), pp. 2340-2341.

The problem with nonperforming loans and bank fragility worsened between 1995 and 1998 in other ways. La Porta and Zamarripa (2003) show that the incentives put in place by the bailout made bankers more prone to take risks. As it became clear to bankers that the FOBAPROA would absorb bad loans, they started to make loans to themselves. These authors find that 20 percent of all large loans from 1995 to 1998 went to bank insiders and their related companies. These loans often were not backed by collateral and had a higher probability of default than similar loans made to nonrelated parties.

Crisis and the US Bailout

In 1995, Mexico underwent the worst recession in its history and capital flight continued, both destabilizing financial markets and causing further depreciation of the peso (see Tables 1 and 3). Several mutual and pension funds from the United States and other countries that had some of their capital locked in Mexico saw its value fall even further this year. Moreover, as the Mexican economy continued to collapse, there was contagion to other emerging markets. The press started to refer to the contagion of the Mexican crisis to other emerging markets in 1995 as the "tequila effect." Robert Rubin, treasury secretary of the United States, warned in 1995 that a further collapse of the peso and of the Mexican economy "could bring down economies around the world."[8] That year President Bill Clinton and a Treasury Department team including Rubin and undersecretary Lawrence Summers orchestrated a large scale standby loan for Mexico. The idea was to open a line of credit to Mexico large enough to stem any speculative attack that could further destabilize the peso and the Mexican economy. The credit line was for $50 billion, of which the U.S. Treasury provided $20 billion; the remainder came from the IMF ($18 billion), the Bank for International Settlements ($10 billion), and private banks (about $3 billion). The

[8] David E. Sanger, "Mexico Repays Bailout by U.S. Ahead of Time, " *The New York Times*, January 16, 1997.

Mexican government used only approximately $13 billion from the U.S. Treasury and repaid the money rather quickly. The loan did help to stabilize the Mexican economy.[9] Rubini and Setser (2004) argue that "Mexico was a success: It repaid the United States ahead of schedule, regained market access quickly, rebuilt the reserves it had blown defending an overvalued exchange rate peg, and generally pursued prudent macroeconomic policies" (p. 183).

This kind of international bailout, nonetheless, sparked much criticism. Critics argued that the bailout created moral hazard and that after the Mexican experience other countries might expect to receive a similar bailed out, especially from the IMF. The bailout, the critics argued, undermined incentive to maintain macro discipline and, particularly, discipline in the management of foreign debt, e.g., in the case of Argentina in 2001).[10] Rubini and Setser (2004) state that "the US Treasury was uncomfortable making large bilateral loans to avoid financial meltdowns in emerging economies" and that "many Europeans were uncomfortable with the size of the IMF's lending to Mexico and with the precedent of bailing out holders of traded securities." That is why US Officials defended the bailout in Mexico "as a pragmatic response to unique circumstances, not as a model for all future crisis." American and European authorities, according to these authors, preferred a model in which there was a bond restructuring so that the private sector also bared part of the burden.

In the end the Mexican crisis created some minor changes in the international financial architecture. Yet those changes were minor and could not avert the Asian financial crisis of 1997-1998 and the Argentine default of 2001 and haircut of 2005. After the Mexican crisis and international bailout the G-7 issued a communiqué at the Halifax Summit (in the summer of 1995) that highlighted the need to emergency funding facilities at the IMF that had "upfront

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[9] "Vindication of the Mexican Bailout" in *The New York Times*, January 18, 1997.

[10] A good example of that view appears in Vasquez (2002).

access and faster procedures." This led to the creation, in 1997, of the supplemental reserve facility at the IMF. Moreover, the communiqué also suggested the need to double the "resources available through the backup credit line that the G-10 countries provide to the IMF" and "an IMF quota review to increase the IMF's lending capacity." By 1996, the G-10 issued a report that focused on improving the sovereign debt restructuring mechanisms, including collective action clauses on sovereign debts, and suggesting that the IMF should be prepared to lend into arrears on bonded debt (Rubini and Setser, 2004).

What did Mexico gain in the long term?

After the recession of 1995 and the banking crisis of 1995 to 1997, the country ended up with a more stable economy. In the 15 years that followed there were no financial or exchange rate crises generated by the mismanagement of Mexico's economy. Trade with the United States and other countries expanded rapidly, and the business cycle of Mexico synchronized with that of the United States. In fact, Mexico became one of the single largest recipients of foreign direct investment among emerging markets, and saw GDP per capita (US$ PPP) grow from $8,000 in 1995 to approximately $15,000 by 2008.

On the downside, Mexico's synchronization of business cycles with the United States came at a time when the northern neighbor underwent two major recessions (in 2001 and 2008). Therefore, Mexico's growth by 2008 had not been as fast as investors expected before the crisis of 1994-1995. Moreover, the benefits of foreign investment were focused in the northern and central regions of the country. The south remained the poorest area of the country, with the lowest wages and per-capita income, and the lowest levels of education.

Finally, the crisis left Mexico with a banking system controlled by foreign banks. By 2008 foreign banks controlled about 80% of assets of the commercial banking system, including the

largest Mexican banks. Policymakers in Mexico had expected the entry of foreign banks to capitalize the system and make loans more efficiently. Perhaps a less explicit goal, but something that was expected of efficient banks, was an increase of loans to the private sector. Yet as Haber and Musacchio (2008) show, foreign banks were extremely risk averse and reduced their participation in the commercial credit business. The retreat of banks from commercial credit can be gauged in Table 2, which shows a steep decline in total private credit to GDP after 1997, when the Mexican government allowed foreign banks to enter the market. Mexico thus ended up with a more efficient and stronger banking system --at least better capitalized--but one that was lending less to the private sector and had some of the most expensive fees and commissions in the world.

Moreover, Beck and Martínez Peria (2010) show that between 1997 and 2005, when foreign banks acquired the largest Mexican banks, the number of deposit and loan accounts per capita declined in Mexico. This decline was more accentuated in poorer municipalities. Finally, these authors show that even if the share of municipalities with bank branches increased after foreign acquisitions, it was mostly rich municipalities that benefited from this expansion of bank outreach.

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Table 1. Mexico's Balance of Payments, 1988-1995

	1988	1989	1990	1991	1992	1993	1994	1995
Merchandise Exports	30.7	35.2	40.7	42.7	46.2	51.9	60.9	79.5
Merchandise Imports	-28.1	-34.8	-41.6	-50.0	-62.1	-65.4	-79.3	-72.5
Trade Balance	**2.6**	**0.4**	**-0.9**	**-7.3**	**-15.9**	**-13.5**	**-18.5**	**7.1**
Services: Credit	6.1	7.2	8.1	8.9	9.3	9.5	10.3	10.3
Services: Debit	-6.3	-7.9	-10.3	-11.0	-12.0	-12.0	-12.9	-9.4
Balance on Goods & Services	**2.4**	**-0.3**	**-3.1**	**-9.4**	**-18.6**	**-16.0**	**-21.1**	**8.0**
Income: Credit	3.0	3.2	3.3	3.5	2.8	2.7	3.3	3.7
Income: Debit	-10.1	-11.3	-11.6	-11.8	-12.0	-13.7	-15.7	-16.3
Balance on Goods, Serv. & Inc.	**-4.6**	**-8.4**	**-11.4**	**-17.6**	**-27.8**	**-27.0**	**-33.4**	**-4.6**
Net transfers	2.3	2.5	4.0	2.7	3.4	3.6	4.0	4.0
Current Account	**-2.4**	**-5.8**	**-7.5**	**-14.9**	**-24.4**	**-23.4**	**-29.4**	**-0.7**
Direct Investment	2.0	2.8	2.5	4.7	4.4	4.4	11.0	7.0
Portfolio Investment: Assets	-0.9	-0.1	-7.4	-0.6	1.2	-0.6	-0.6	-0.7
Portfolio Investment: Liabilities	1.0	0.4	3.4	12.7	18.0	28.9	8.2	-10.1
Other Investment: Assets	-0.9	-1.1	-1.3	-0.4	4.4	-3.0	-5.1	-5.3
Other Investment: Liabilities	-5.8	-0.9	11.2	8.7	-0.9	4.1	2.3	-2.6
Financial Account	**-4.5**	**1.1**	**8.4**	**25.1**	**27.0**	**33.8**	**15.8**	**-11.8**
Errors and Omissions	-3.2	4.5	1.2	-2.3	-0.9	-3.1	-4.0	-2.9
Overall Balance (chg. In reserves)	**-10.1**	**-0.2**	**2.2**	**8.0**	**1.7**	**7.2**	**-17.7**	**-15.3**

Source: International Monetary Fund, International Financial Statistics

Table 2. Mexico's Macroeconomic Indicators, 1989-1999

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Real GDP growth and inflation											
GDP (% real change per year)	4.1	5.2	4.2	3.6	2.0	4.5	-6.2	5.1	6.8	4.9	3.9
GDP deflator (% change; avg)	26.8	28.2	23.5	14.8	9.6	8.5	37.9	30.7	17.7	15.4	15.1
GDP and its components											
Nominal GDP (US$ billions)	239	283	339	393	436	456	310	360	434	456	520
Private consumption (% of GDP)	70	70	71	71	70	70	67	61	61	64	63
Government consumption (% of GDP)	8	8	9	10	11	12	10	9	10	10	11
Gross fixed investment (% of GDP)	18	18	19	20	20	20	16	18	20	21	22
Stockbuilding (% of GDP)	4	4	4	4	3	3	3	13	16	9	6
Exports of G&S (% of GDP)	16	16	14	12	12	13	24	30	28	28	28
Imports of G&S (% of GDP)	16	17	17	18	16	18	21	28	28	30	30
Estimated gross national savings rate (% of GDP)	17.8	17.2	16.0	15.0	15.9	15.3	19.2	20.0	19.7	19.3	20.1
Exchange rate and Financial Market Indicators											
Exchange rate LCU:US$ (end of the year)	2.6	2.9	3.1	3.1	3.1	5.3	7.6	7.9	8.1	9.9	9.5
Money market interest rate (%)	47.4	37.4	23.6	18.9	17.4	16.5	53.2	33.6	21.9	26.9	24.1
Stockmarket index	418.9	628.8	1,431.5	1,759.4	2,602.6	2,375.7	2,778.5	3,361.0	5,229.4	3,959.7	7,129.9
% Chg in the dollar value of stockmarket index	71.1	34.6	118.3	21.2	48.4	-46.8	-18.5	17.8	51.1	-38.0	86.7

Source: Adapted from the Economist Intelligence Unit, Country Data: Mexico, accessed on December 15, 2009.

Table 4. Chronology of Major Events During the Mexican Crisis, 1994-1995

1994	**Major Event**
January 1	NAFTA comes into effect; Chiapas rebels seize six towns (Zapatista Army of National Liberation).
February 4	U.S Federal Reserve raises federal funds rate 25 basis points, having left the rate unchanged at 3% since September 1992. Peace negotiations go sour.
March 22	U.S. Federal Reserve raises rates another 25 basis points.
March 23	Mexican presidential candidate Luís Donaldo Colosio is assassinated.
April 18	U.S. Federal Reserve raises rates another 25 basis points. Zapatista Army of Nat'l Liberation breaks peace talks.
May 17	U.S. Federal Reserve raises rates by 50 basis points.
August 16	U.S. Federal Reserve raises rates by another 50 basis points.
August 21	Victory for PRI candidate Ernesto Zedillo in the Mexican presidential election.
September 28	José Francisco Ruíz Massieu, Secretary General of Mexico's ruling PRI party, is assassinated.
March-September	Wave of kidnappings; more than 150 entrepreneurs kidnapped.
October	President's popularity in decline.
November 15	U.S. Federal Reserve raises rates by 75 basis points.
November 18	$1.6 billion leaves Mexico on this day. ($3 billion in all leaves during November.)
November 23	Mexican Deputy Attorney General resigns, alleging a cover-up of the murder of his brother, PRI Secretary General Massieu.
November 30	New cabinet is announced; stock market starts to decline (a slide that continued until 1995).
December 1	New Mexican government under Zedillo takes office.
December 15	WSJ publishes interview with the new Finance Minister Jaime Serra Puche; $855 billion leaves Mexico on that day.
December 19	Further violence in Chiapas.
December 20	Banco de Mexico announces 15% shift in the intervention limits for the peso, an effective devaluation of the currency.
December 20-21	Banco de Mexico leaks privileged information to business and labor leaders; $4.6 billion leaves Mexico in two days (almost half of the foreign exchange reserves)
December 22	Banco de Mexico withdraws from the foreign exchange market, allowing the peso to float against all other currencies; peso-dollar exchange rate shoots up to $4.80
1995:	
January 11	President Clinton announces support for Mexico
January 15	Direct talks begin between Mexican government and Zapatista rebels
January 26	Mexico signs letter of intent accepting IMF conditionality in return for a loan of $7.8 billion.
January 31	U.S. announces a $50 billion loan package for Mexico, consisting of $20 billion from the U.S., $18 billion from the IMF (including the $7.8 billion mentioned above), $10 billion from the Bank for International Settlements, and $3 billion from private commercial banks.
February 21	Mexico and U.S. sign loan agreement; military attacks against the Zapatista Army of Nat'l Liberation resume.
March 3	Mexican authorities take over a private bank (Banpaís) as crisis grips the domestic financial system.
March 9	Mexican government announces a new reform and stabilization plan.

Source: Adapted from Huw Pill, "Mexico (C): Reform and Crisis, 1987-1995. HBS Case No 797-050. October 15, 2002, p. 11 and various newspapers in Mexico.