

# The Mexican Crisis of 1994: An Assessment

*Ariel Buira<sup>1</sup>*

From the middle of the eighties Mexico undertook a far-reaching process of macroeconomic stabilisation and structural economic reform intended to improve its prospects by allowing economic activity to be determined increasingly by market forces.

This process included the strengthening of public finances, deregulation of economic activity, privatisation, financial reform, the restructuring of its external debt, trade liberalisation and the signing of NAFTA. After almost a decade of low growth and high inflation, these policies allowed economic activity to recover (averaging 3.1% between 1989 and 1994) and in 1993 brought inflation down to single digit levels for the first time in more than twenty years. This performance, which earned the country international recognition, suggested that Mexico was ready to enjoy the fruits of economic growth with stability. Economic reforms had increased the country's attractiveness to investors and attracted unprecedented capital flows, which between 1990 and 1994 reached US\$104 billion.

Hence, it came as a shock, not only to Mexicans but also to most observers worldwide, that this model economy could fall into a crisis of the depth and magnitude of that of last December.

The severity of the financial crisis, which was felt well beyond Mexico's borders, has given rise to many questions. Several explanations have been proposed of how the devaluation crisis came about and how it could have been averted or its negative effects minimised. This paper will review the three main hypotheses that have been advanced. The first sees the problem as arising from an unsustainable external position. The second one considers lax economic policies as the underlying factors leading to the crisis. Finally, the third view holds that the crisis originated in a series of unpredictable political and criminal events that changed market sentiment towards Mexico. The paper presents some broad issues that the crisis raises as well as a conclusion.

## **I The Crisis as the Result of an Unsustainable External Position**

It has become a stylised fact that in exchange-rate-based stabilisation programmes the currency tends to appreciate, and Mexico's was no exception. Some

---

1. Opinions expressed in this paper are strictly personal.

# The Mexican Crisis of 1994: An Assessment

*Ariel Buira*<sup>1</sup>

From the middle of the eighties Mexico undertook a far-reaching process of macroeconomic stabilisation and structural economic reform intended to improve its prospects by allowing economic activity to be determined increasingly by market forces.

This process included the strengthening of public finances, deregulation of economic activity, privatisation, financial reform, the restructuring of its external debt, trade liberalisation and the signing of NAFTA. After almost a decade of low growth and high inflation, these policies allowed economic activity to recover (averaging 3.1% between 1989 and 1994) and in 1993 brought inflation down to single digit levels for the first time in more than twenty years. This performance, which earned the country international recognition, suggested that Mexico was ready to enjoy the fruits of economic growth with stability. Economic reforms had increased the country's attractiveness to investors and attracted unprecedented capital flows, which between 1990 and 1994 reached US\$104 billion.

Hence, it came as a shock, not only to Mexicans but also to most observers worldwide, that this model economy could fall into a crisis of the depth and magnitude of that of last December.

The severity of the financial crisis, which was felt well beyond Mexico's borders, has given rise to many questions. Several explanations have been proposed of how the devaluation crisis came about and how it could have been averted or its negative effects minimised. This paper will review the three main hypotheses that have been advanced. The first sees the problem as arising from an unsustainable external position. The second one considers lax economic policies as the underlying factors leading to the crisis. Finally, the third view holds that the crisis originated in a series of unpredictable political and criminal events that changed market sentiment towards Mexico. The paper presents some broad issues that the crisis raises as well as a conclusion.

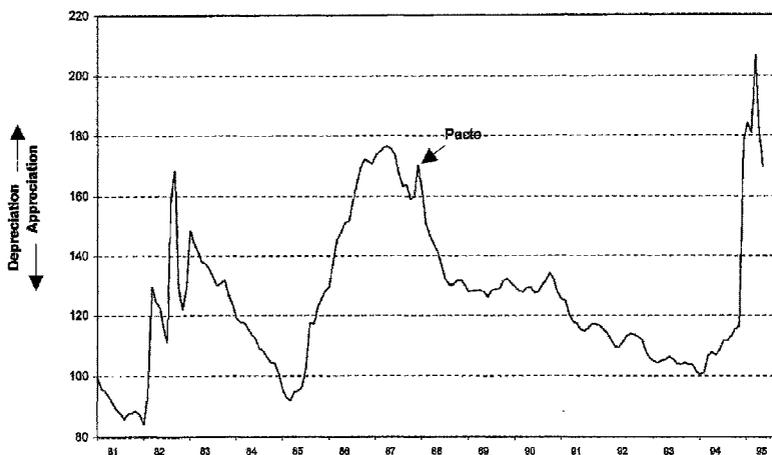
## **I The Crisis as the Result of an Unsustainable External Position**

It has become a stylised fact that in exchange-rate-based stabilisation programmes the currency tends to appreciate, and Mexico's was no exception. Some

---

1. Opinions expressed in this paper are strictly personal.

**Chart 1 Mexico's Real Exchange Rate**  
(1970 = 100)



Source: Banco de México

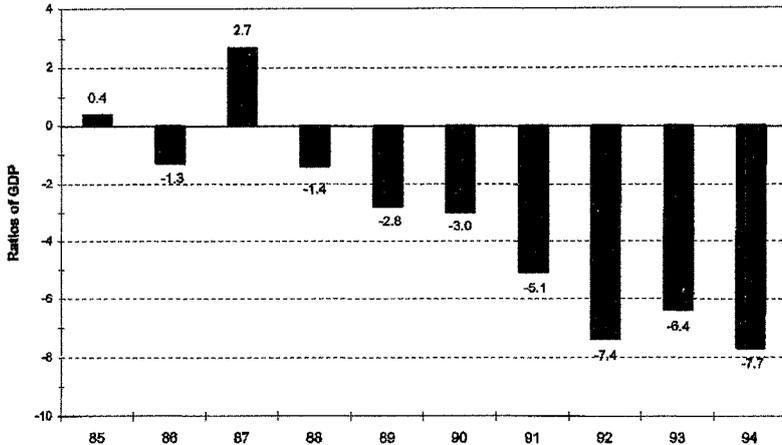
observers have argued that the real appreciation of the peso led the Mexican currency to become overvalued. In their view, this overvaluation of the peso, by hurting the competitiveness of Mexican exports and encouraging imports, gave rise to expanding current account deficits. As the degree of overvaluation increased over time, the external imbalance grew larger and became more difficult to finance. Eventually, the situation became unsustainable and the exchange regime finally collapsed. Proponents of this thesis point to the following to support their view:

- The substantial real appreciation of the peso that followed the launching of the stabilisation programme, known as the “Pacto”, in December 1987. (See Chart 1.)
- Mexico’s increasing current account deficit, which averaged 6.7% of GDP between 1991-1994 and reached 7.8% in 1994. (See Chart 2.)

While the logic of the above argument is indisputable, the following paragraphs will argue that this is not an accurate description of developments in the Mexican economy, since other factors had a determinant influence on events over this period.

In 1986, nearly two years before the first Pacto was introduced, a sharp reduction in the price of oil, Mexico’s main export, had caused a loss of revenues of some US\$9 billion (approximately 6% of GDP). At a time when the public sector’s

Chart 2 Mexico's Current Account Balance



Source: Banco de México

deficit was close to 15% of GDP, the adjustment required in the face of such a shock led the authorities to allow the peso to depreciate by 60% in 1986. These events threw the Mexican economy into a severe recession, causing aggregate output to decline by almost 4%. The acceleration of the peso's depreciation rate not only helped the country cope with the lesser availability of foreign exchange and with the negative impact that trade liberalisation could have on some sectors, but it also gave rise to a current account surplus in 1987, turning Mexico into a net exporter of capital. As recovery was under way, the collapse of stock markets throughout the world in October 1987 hit the Mexican market heavily, causing a new crisis of confidence and a 20% devaluation in the controlled market rate. The sharp decline in the nominal value of the peso during 1986 and 1987 meant a real depreciation of over 40% that brought the currency to a substantially undervalued level and accelerated inflation.

The Pacto was a concertation mechanism aimed at breaking the inflationary inertia through wage and price guidelines. It also included the strengthening of public finances and the use of the exchange rate as a nominal anchor for the evolution of prices. Moreover, at that time Mexico engaged in a comprehensive structural reform of economic activity which through far-reaching privatisations, deregulation, further trade liberalisation, financial reform, a restructuring of the public sector's debt with foreign commercial banks and the redefinition of the role

of the State would change Mexico's economic fundamentals over the following years. Within a short period, economic activity began to recover after years of stagnation, while inflation was substantially reduced. At the same time, economic efficiency improved, the country became an important net recipient of foreign capital, and following the opening of the economy and the rapid expansion of trade, productivity increases accelerated. These changes were bound to be reflected in an important appreciation of the equilibrium real exchange rate.

The "unsustainable external position explanation" of the Mexican crisis rests on the idea that large current account deficits coupled with an appreciating currency provide a clear indicator of an overvalued currency and are therefore a prelude to a devaluation. While this is a case which often arises - particularly when authorities follow expansionary monetary and fiscal policies - it is obvious that a current account deficit does not necessarily reflect an overvalued currency. Indeed, there is ample international and historical evidence that a country can run large current deficits for prolonged periods without major strains on its foreign exchange markets or concerns over its currency being overvalued.<sup>2</sup>

Regardless of the level of the exchange rate, a current account deficit will appear whenever domestic savings fall short of investment. Obviously, this gap may emerge as a result of increased investment opportunities or from a decline in the savings rate. In Mexico's case, both factors played a role. Structural reform not only improved the efficiency of the economy, but it also created new profitable openings for investment, well in excess of what could be financed by domestic sources. The response of international markets to the increased investment opportunities triggered an unprecedented flow of foreign capital into the country. Moreover, the reduction in US interest rates that began at the end of 1990, coupled with the liberalisation of capital flows and improved investment opportunities following the approval of NAFTA, added to the surge in external resources pouring into Mexican markets.

The increased availability of foreign capital fuelled aggregate expenditure (in investment and consumption) and contributed to a reduction in national savings, thus widening the external disequilibrium. In fact, the inflow of foreign capital had only two possible uses: an increase in imports or an accumulation of international reserves. Logic dictated resorting to both. Had the choice been to sterilise inflows fully and accumulate international reserves, an opportunity to expand

---

2. Singapore ran current account deficits averaging more than 10% of GDP between 1970 and 1982 while its currency appreciated 46% in nominal terms vis-à-vis the US dollar; from 1985 on, these deficits turned into increasing surpluses and yet, as of 1994, the Singapore dollar had appreciated an additional 31%. More recently, Thailand during the period 1988-1993, and Malaysia between 1990 and 1993, have run current account deficits averaging more than 6% and 4.5%, respectively, while their currencies have remained fairly stable. Finally, in recent years the US dollar has depreciated substantially in relation to the Japanese yen, the German mark and other European currencies, yet there is broad consensus that in terms of PPP the dollar is undervalued. Nonetheless, the depreciation of the dollar has been accompanied by a large current account deficit for the last 14 years.

domestic productive capacity would have been lost. Furthermore, this sterilisation would have entailed enormous costs. On the other hand, not to sterilise and allow capital inflows to feed an expansion of aggregate demand would have meant added pressure on the price level and an even larger current account deficit.

A careful analysis of the data demonstrates that, in fact, it was the massive inflow of foreign capital received since 1990 which gave rise to the expansion of the current account deficit, an important accumulation of international reserves, and the appreciation of the currency.

As Chart 1 shows, the appreciation of the peso's real exchange rate took place in two stages: a first one, which extended throughout 1988 and was followed by a period of real exchange rate stability that lasted for about two years; and a second one stretching from the end of 1990 to January 1994.

The first phase of peso appreciation can be attributed to the use of an exchange-rate-based stabilisation strategy and is consistent with the stylised facts presented above. Additionally, it must be recalled that the peso started to appreciate from a grossly undervalued level, and that this appreciation was inevitable as the exchange rate moved towards equilibrium. This phase seems to have ended at the beginning of 1989. The second phase of peso appreciation, between the end of 1990 and early 1994, is largely attributable to changes in fundamentals. It reflects an equilibrium movement and should not be regarded as a misalignment since:

(a) This appreciation was the result of the price of non-tradables growing at a higher rate than that of tradables. This happens when technical progress is greater in industries that produce tradable goods. The rising productivity of labour in this sector tends to raise wages throughout the economy. Since the price of tradables is determined in international markets, the non-tradables sector faces increasing wage costs that are reflected in the prices it charges, and the exchange rate appreciates.<sup>3</sup>

This phenomenon took place in Mexico in the early 1990s. The opening of the economy to foreign competition starting in 1985 forced firms in the tradables sector to upgrade their technologies in order to compete successfully in an open environment. This pressure was lower in those sectors that produce non-tradable goods and services, such as health, housing, transportation and personal care. At least part of the peso's appreciation is the natural outcome of this process.

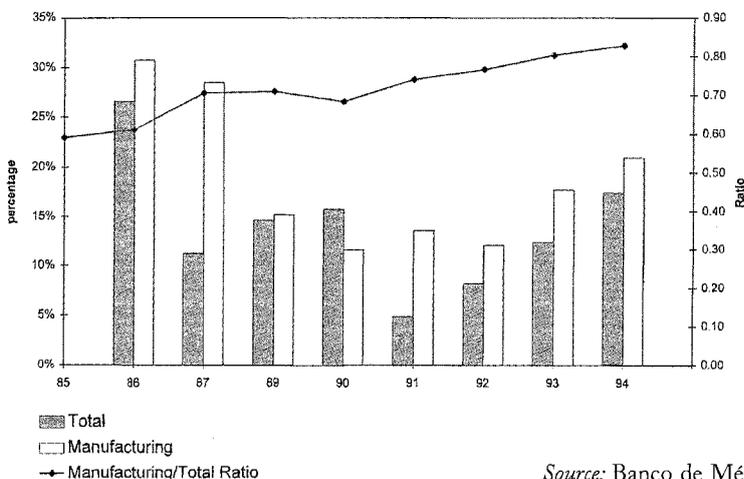
(b) Another fundamental determinant of the real exchange rate is the sign and size of capital flows. In particular, when a country is exporting capital its currency tends to become weaker. On the contrary, with external capital flowing

---

3. A well-known example of this phenomenon has been provided by Japan. Over the last three decades the yen has appreciated substantially while the international competitiveness of its products (at least up to recent weeks) has remained high, based on the important productivity gains in its export industries.

into the country, the increased supply of foreign currency in domestic financial markets inevitably leads to a real appreciation. In the years prior to the restructuring of Mexico's external debt, the country was a net exporter of capital, and therefore the real equilibrium exchange rate was necessarily weaker. The reduction of the external debt service and the growing investment opportunities created by structural reform made Mexico a favourite destination of foreign investment, turning the country into a large importer of capital. The huge injection of resources received by Mexico between 1990 and 1994 created strong upward pressures on the peso, leading it to appreciate. However, the same outcome would have been obtained regardless of the prevailing exchange regime. The fact that Mexico was using a preannounced exchange rate band as part of its strategy to reduce inflation is irrelevant since, even under a clean floating exchange regime, large inflows of capital would have strengthened the currency. Whether through nominal appreciation or by domestic inflation exceeding the rise of external prices, a real appreciation of the currency is the inevitable result of sizeable capital inflows.<sup>4</sup> As far as a shift in anchor is concerned, recall that in 1991 the speed at which the band widened was increased and that the inner intervention band was abandoned towards the end of 1993.

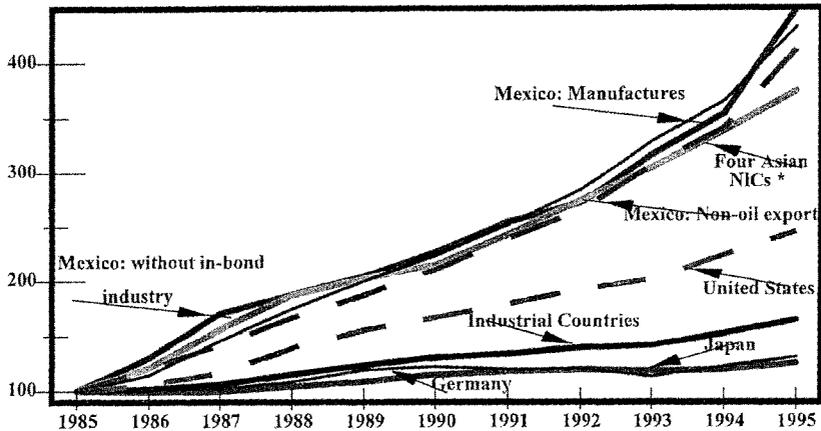
**Chart 3 Mexico's Merchandise Exports**  
(Rates of Growth and Share of Manufacturing)



Source: Banco de México

4. In Chile, a country that has not used the exchange rate as an anchor for prices, a smaller surge in capital inflows has caused an important appreciation of the Chilean peso.

Chart 3a Export Volume (1985 = 100)



\* Hong Kong, Korea, Singapore and Taiwan

Source: Banco de México and IMF World Economic Outlook

(c) Currency appreciation, unless compensated by substantial improvements in total factor productivity, will reduce competitiveness, hurt export performance and stimulate imports. As a result of structural reform and trade liberalisation, Mexican labour productivity in manufacturing increased on average 6.7% annually in the four years 1991 to 1994. Indeed, productivity had been increasing throughout this period and reached 8% in 1994. The latest IMF consultation report shows that, despite the appreciation of the peso, Mexican unit labour costs in dollar terms were on average 2.2% lower in 1994 than in 1992, providing evidence that Mexican competitiveness was not eroded by the peso's appreciation.

Over the period 1992-1994, manufacturing exports increased on average 17% per year and their share in total exports reached 83% in 1994, compared to a mere 37.6% in 1985.<sup>5</sup> Moreover, exports of manufactures to the United States were 21% higher in 1994 than in the previous year (see Charts 3 and 3a). This strong performance of exports of manufactures provides a clear indication of their competitiveness. Note that even before NAFTA became effective, rates of growth of Mexican exports had greatly exceeded those of international trade (6.9% per year between 1989 and 1993) as well as the expansion of major Mexican markets (i.e. US imports increased on average 5.7% per annum). In fact, as a result of this impressive performance, Mexican exports were rapidly increasing their share in markets as competitive as those of the United States.

5. This led total exports to increase by 12.6% per annum, despite the stagnation of oil exports.

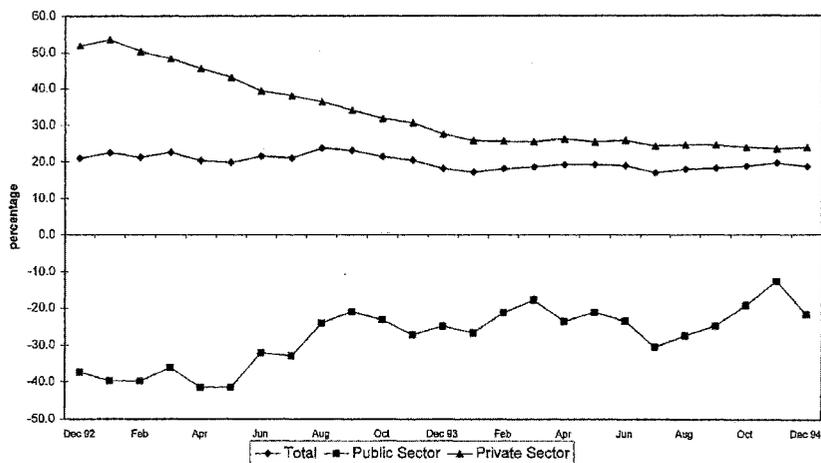
In view of these facts, it would be hard to sustain that the currency was overvalued.<sup>6</sup>

- (d) Finally, the overvaluation argument appears even weaker if one considers that in 1994 the real exchange rate depreciated by 14% in real terms prior to the crisis.<sup>7</sup> If there was little reason to believe that the peso was overvalued in 1992, the accumulation of reserves by the central bank throughout 1993 and up to February of 1994, and its depreciation in 1994 makes this argument even less persuasive.

## II The Mexican Crisis as the Result of Inadequate Economic Policies

An alternative view would attribute the crisis to the lax monetary and fiscal policies followed by the Mexican authorities. In this view, the balance of payments

**Chart 4 Mexico's Domestic Financing\***  
(Nominal Annual Growth Rates; adjusted to eliminate the effect of exchange rate variations)



\* Includes Total Credit From the Banking System, Government Securities, Commercial Paper and other Private Sector Paper

Source: Banco de México

6. Admittedly, imports were also increasing at very high rates. As already mentioned, in 1987 the large undervaluation of the peso represented an important protection for the import-competing industries. Thus, as the first phase of peso appreciation reduced exchange rate protection, imports surged in 1988. Over this period and in the following two years imports of consumption goods more than doubled their share in total imports from a very low level, on average 5.1% in 1983-1987, to 12.3% in 1990. However, this substantial increase proved to be a once and for all adjustment to the opening of the economy as their share levelled off at around 12%, a relatively low level by international standards.

7. Based on consumer prices from 133 countries, using GDP weights.

crisis would be the result of excess demand fuelled by a large credit expansion coupled with the authorities' reluctance to raise interest rates and thus check the expansion of credit, while the public deficit increased in the run-up to, and the immediate aftermath of, the presidential election. However, as will become clear, this view is not supported by the facts.

After 1990 Mexico's financial markets experienced an abundance of loanable funds due to: (a) the strengthening in public finances; (b) the rise in confidence following the restructuring of the external debt in 1990; (c) financial deepening following the liberalisation of interest rates and the elimination of reserve requirements on bank's peso liabilities; and (d) the use of privatisation revenues to retire public debt (US\$23.6 billion between 1989 and 1993).

The increased availability of funds eased the budget constraint of individuals and firms and created an incentive for commercial banks to expand credit. Banks had no trouble in finding demand for these resources because: (a) economic reforms had created abundant investment opportunities; (b) there was pent-up demand for plant and equipment following a decade of low investment; (c) improved expectations caused an upward revision of perceived permanent incomes that led to an increase in consumption; (d) there was a wealth effect associated with higher values of both the stock market and real estate; and (e) there were pent-up demands for durable goods and housing after a decade of low growth. These factors combined gave rise to a sharp increase in credit that, in the circumstances, could be easily satisfied. As a result, investment recovered, consumption increased, while private sector savings dropped. Note, however, that positive growth rates of private savings have been observed since 1993.

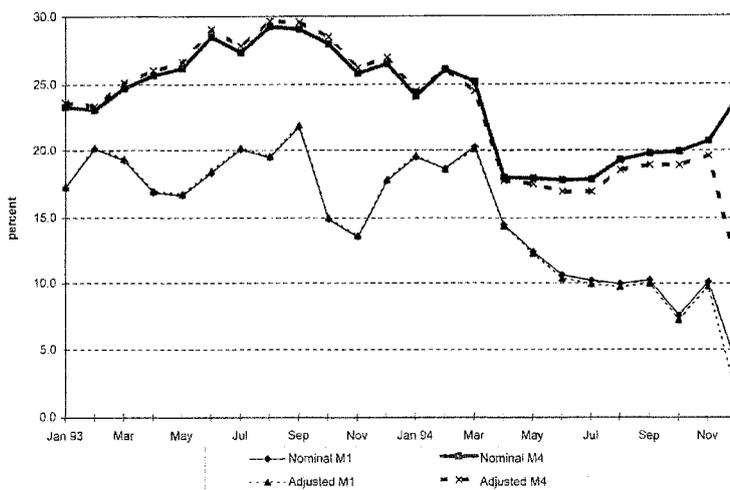
In terms of flows, beginning in 1991 and continuing until early 1993, the domestic private sector - rather unusually - turned into a net debtor of the commercial banks. However, the slowing down of the economy in 1993 and deteriorating employment opportunities made the net indebtedness of the private sector rather burdensome. Consequently, a process of adjustment of its balance sheet position got under way in the second half of 1993. Furthermore, in response to the rapid growth of non-performing loans, commercial banks adopted a more prudent policy regarding credits to firms and persons. This process continued in 1994. Chart 4, based on data from the 1994 Annual Report of the Bank of Mexico, clearly shows the slower pace of credit to the private sector in 1994.<sup>8</sup>

Following the assassination of the ruling party's presidential candidate, Luis Donaldo Colosio, on 23 March 1994, a large loss of international reserves did occur. Clearly this loss was the result of increased uncertainty and not of expansionary policies. It preceded the sterilisation measures the Bank of Mexico had to

---

8. Moreover, credit to the private sector in 1994 appears to include an important element of refinancing of interest obligations. This is quite likely given the high level of interest rates charged on loans.

**Chart 5 Mexico's Monetary Aggregates**  
(Annual Growth Rates)



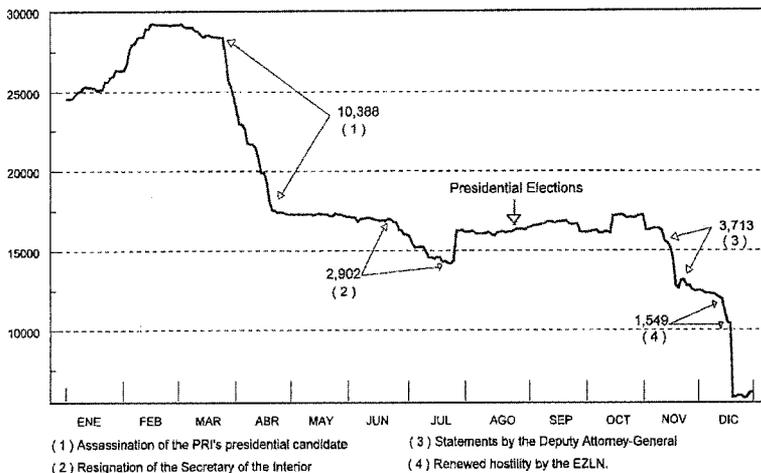
Source: Banco de México

undertake in order to compensate the otherwise vastly contractionary effect international reserve losses would have had on the Mexican economy.

In the aftermath of this tragic event, an 8% nominal depreciation of the exchange rate within the band was allowed, interest rates increased sharply and Tesobonos were issued. Even though the change in the composition of short-term public debt helped maintain stability in financial markets, this strategy involved a degree of risk, particularly as short-term dollar-denominated debt approached the level of international reserves, and thus has been severely criticised. However, a fair assessment should consider that some two-thirds of deposits in the banking system were very short-term and that when fears of devaluation arise, there is no interest rate high enough to compensate investors for the increased perceived risk. Recall that the substitution of Tesobonos for Cetes had been resorted to successfully just before the NAFTA vote in November 1993. At the time, once the uncertainty about the outcome of the vote was removed, the Tesobonos were converted back into Cetes and the exchange rate and interest rates swiftly returned to their previous trend values.

Nominal and real interest rates remained high during 1994. For instance, the 28-day Cetes interest rate - the money market's leading rate - doubled from 9% to 18% in the aftermath of Mr. Colosio's assassination, with other interest rates rising accordingly. Even after their later reduction by some 4 percentage points as

**Chart 6 Mexico's Stock of Net International Reserves in 1994**  
(Millions of dollars)



Source: Banco de México

calm returned to markets and inflation declined, high real interest rates gave rise to repeated complaints by the private sector.

Rates of growth of monetary aggregates in 1994 were significantly lower than in the previous year (Chart 5). Since the aggregates include items denominated in foreign currencies, the appropriate measurement of their growth requires that the effect of the depreciation of the peso on the value of the stock of domestic currency be eliminated. When this is done, not only is the alleged acceleration nowhere to be seen, but in fact credit expansion is seen to decline in relation to 1993. Indeed, the fact that interest rates were rising along with the quantity of money in 1994, rather than falling, suggests that currency growth responded to demand shocks. This is borne out by econometric estimates,<sup>9</sup> which have found little evidence of a relaxation of monetary policy in 1994.

Finally, the available data suggest that fiscal policy in 1994 continued to be fundamentally sound. Although the non-financial public sector showed a cash deficit of 0.3% of GDP compared to a surplus equivalent to 0.7% of GDP in 1993, when non-recurrent revenues from privatisation are included the fiscal deficit turns into a cash surplus of 0.1% of GDP. Though somewhat less restrictive than in 1993, these results can hardly be considered an indication of loose fiscal policies.

9. See, for instance, John H. Rogers "Mexican Money Demand", a paper presented to the Federal Reserve Board of Governors on June 12, 1995.

### III The Crisis as the Outcome of Unpredictable Shocks

If Mexico's external position could not be said to be unsustainable, and the thesis of lax fiscal and monetary policies is unsupported, we are left with the initial question: What caused the Mexican crisis?

The crisis was fundamentally the outcome of a series of unpredictable political and criminal events, including the Chiapas uprising, that finally undermined the confidence of domestic and foreign investors, translating into a lower availability of foreign capital and eventually to a reversal of capital flows to an economy that was heavily dependent on them.

Before the assassination of the ruling party's presidential candidate a totally different set of issues was in the minds of investors and authorities. Given the large inflows of capital registered after the approval of NAFTA by the US Congress, there were strong market pressures for a revaluation of the nominal exchange rate and a reduction in interest rates. Inflation was declining and there were signs that a recovery of economic activity was in the making. At the time, during the first two months of 1994, the central bank had to sterilise large inflows of capital since the potential expansion of the monetary base would have occurred when seasonal demand is at its weakest.

The recurrence of crimes and other political events in 1994, such as had not been experienced by Mexico in two generations, dramatically altered prospects. These events translated into increased uncertainty and resulted in the loss of a sizeable fraction of the country's international reserves. Nevertheless, from the end of April until mid-November, the policy combination pursued was successful in preventing further reserve losses. (See Chart 6.) Capital inflows throughout the period were large enough to finance the current account deficit. Over that period, in the absence of political shocks or criminal events, there was no capital outflow, international reserves remained stable, and the central bank's domestic credit did not expand. It was only when new shocks hit that reserves were lost and the Bank of Mexico allowed net domestic credit to expand in order to satisfy the demand for base money by replacing the resulting loss of liquidity.

Faced with what appeared as temporary shocks attributable to circumstances beyond their control, the authorities decided to draw on the stock of international reserves rather than adjust policies significantly. Initially, it was felt that political uncertainties would be largely resolved by a clean electoral process. Later, as the elections had been credible and had produced clear-cut results, it became apparent that economic policies were to continue along the same broad lines. Thus, it was expected that confidence would be fully restored. Moreover, the medium-term prospects of the Mexican economy following its major structural reform and the coming into effect of NAFTA continued to appear very favourable. Thus, the use of a fraction of the central bank's international reserves to smooth out the effects

of the transitory shocks seemed an appropriate policy response. That is, after all, the purpose of holding reserves.

In hindsight, the policy combination turned out to be inadequate. At the time, however, it was not known that further political turmoil loomed ahead. Had the authorities known, they would in all probability have acted to avoid the sharp adjustment that followed. Unfortunately, perfect foresight is not available for guiding policy decisions. At the time that choices had to be made, erring on either side appeared to be costly. Higher interest rates would impede the recovery of activity and add to the difficulties of the financial system, while greater exchange rate flexibility would add to inflationary expectations, sacrificing progress made in stabilisation. If shocks were non-recurrent, as they seemed in the light of historical experience, those policy actions would be unwarranted. In a sense, the authorities made what appeared as a reasonable bet in the light of available information.

#### **IV Reflections on the Crisis**

The process of structural change that culminated in the passage of NAFTA and Mexico's admission to the OECD held for many a symbolism that went beyond their immediate economic significance: Mexico with what some foreign observers regarded as the "best economic management in the world" was leaving underdevelopment behind and entering the First World. A new economic power had appeared on the world scene. Expectations of sustained economic progress and prosperity rose rapidly not only in Mexico but abroad.

An excessive surge of optimism and overblown expectations, which official statements did not discourage, were to contribute in no small measure to the depth of the crisis that followed the devaluation as both domestic opinion and foreign investors felt not simply disappointed but deceived.

The Chiapas uprising had shown that Third World poverty prevailed in some regions of the country. Chiapas, together with the political assassinations, gave rise to a serious questioning of the stability of the political system. The devaluation was seen by many as a breach of faith. The ensuing disappointment may explain why the exchange rate adjustment, rather than restoring confidence in the country's ability to correct the external imbalance, gave rise to, or exacerbated, a confidence crisis of major proportions. The virulence of the reaction to the devaluation on the part of domestic investors and international institutional investment managers must also be given full consideration if the depth of the crisis is to be understood.

The current crisis is a reminder that while large current account deficits can be financed for prolonged periods when they are the result of a country's doing things "the right way", these deficits significantly increase the vulnerability of the economy to variations in international capital flows. Indeed, when an important fraction of the funds used to finance the deficit is composed of short-term,

volatile resources, the vulnerability is even greater. Although determining a sustainable deficit may not be an easy task, awareness of this vulnerability could lead authorities to limit the current deficit to a certain level.

A country that becomes very attractive to foreign investors confronts a paradoxical situation. As inflows eventually translate into a growing current account deficit, the very same investors who were eager to bring in their capital will look at the size of the deficit and become nervous. Investors may over-react to any unfavourable development by withdrawing their funds and in this way may contribute to the emergence of a payments crisis. Thus, as capital inflows - a symbol of success - give rise to a current account deficit, they ironically become the country's weakness. Reducing the exposure of the country to the volatility of external capital, while sustaining a healthy level of investment, requires an increase of national savings. One way to accomplish this, which has proved its effectiveness in countries such as Chile, is through the development of pension programmes.

The liberalisation of cross-border flows led to the internationalisation of investment by institutional funds. This, in turn, generated a large supply of funds that tend to be yield-sensitive and which swiftly respond to changes in sentiment about the recipient economies. Abrupt and massive changes in capital flows leave policymakers and private agents little time to adjust. The December 1994 devaluation of the peso triggered a run on the country, a turn of events associated with the behaviour of mutual funds and domestic investors. The net result was a liquidity crisis of huge proportions as capital flows were not only interrupted but reversed. The depth of the crisis would call for massive external support and extreme economic measures.

The negative consequences of a reversal in capital flows may make desirable the adoption of measures to discourage the entrance of the so called "hot money". For prudential reasons, the Bank of Mexico had imposed a limit on the foreign currency denominated liabilities that commercial banks could take on. By narrowing this avenue for foreign capital to enter the country, the regulation may have had the effect of containing the growth of the current account deficit. In hindsight, perhaps additional restrictions could have discouraged short-term foreign capital inflows - for instance, limits on the acquisition of public debt instruments by non-residents. In fact, such a restriction had applied to foreign purchases of government paper from December 1980 to December 1990, a measure that was eliminated in the wake of the liberalisation sweeping the country at the time. Recall that Mexico further liberalised its capital account in 1993 as the OECD Codes of Liberalisation require the full elimination of all restrictions on capital movements.

Measures to discourage short-term capital, including the adoption of a floating exchange rate, might be looked at as a means to reduce the risks of a large current account deficit and of neutralising the effects of market imperfections. Indeed, in the event of a capital withdrawal, a difference may arise between the individual

and social costs. While investors may bear a market-imposed reduction in the value of their investment in an emerging market - which often accounts for a small proportion of their portfolio - a massive capital outflow may cause the financial collapse of an economy. Moreover, if a run on a country develops, investors who get out first increase the cost of getting out for others who react less quickly. This, in turn, places a premium on volatility, an undesirable result for all.

The Mexican crisis raises a number of issues for emerging countries that have undertaken internal reforms and external opening. For instance, can a danger level for the current account deficit be determined? What are the appropriate policies to cope with short-term capital movements and sudden changes in market sentiment? How is one to distinguish between temporary and permanent shocks? Is the blanket removal of restrictions on capital inflows always the good thing that it is presumed to be? Is it possible to sterilise massive capital inflows? Can a country be expected to offset capital inflows by running large fiscal surpluses?

## V Conclusion

Mexico suffered a series of far-reaching political shocks of a magnitude sufficient to jar the system, displace expectations and alter the economic outlook. The ensuing sudden halt in foreign lending and reversal of capital flows were bound to generate a financial crisis.

When a change in expectations arises from objects as disparate as political assassinations, the first in more than 60 years, and interest rate movements abroad, and there is no systematic monetary weakness that feeds it, there is some basis for suggesting that it is largely accidental in origin. Thus, the abrupt change in expectations, which in the context of NAFTA had perhaps reached unrealistic levels, may be seen as the cause of the crisis. What Alfred Marshall had written on bank failures may equally apply to investment fund managers: "Their trust had been ignorant, their distrust was ignorant and fierce. Such a rush often caused a bank to fail which might have paid them gradually".

## References

- Banco de México, "Informe Anual", 1994.
- Banco de México, "The Mexican Economy", 1995.
- Banco de México, "Report on Monetary Policy", April 1, 1994 - December 31, 1994.
- Banco de México, "Report on Monetary Policy", January 1, 1995 - December 31, 1995.

- Calvo, Guillermo A., Leonardo Leiderman and Carmen Reinhart, "Capital Inflows and Real Exchange Rate Appreciation in Latin America", *IMF Staff Papers*, June 1993, pp. 108-51.
- Dornbusch, Rudiger and Alejandro Werner, "Mexico: Stabilization, Reform and No Growth", *Brookings Papers on Economic Activity*, Vol. 1, 1994.
- International Monetary Fund, *International Capital Markets. Developments, Prospects and Policy Issues*, Washington DC, 1995.
- Krugman, Paul, "Dutch Tulips and Emerging Markets", In: *Foreign Affairs*, July/August 1995, pp. 28-44.