

CHAPTER - VI

FOREIGN PORTFOLIO INVESTMENT AND THE MEXICAN EXPERIENCE

A Brief Introduction to Mexican Economy

Mexico is a volatile developing country¹ moving from one type of economic crisis to another since 1976 through 1982 debt crisis and recent peso crisis of 1994 accompanied by political changes and elections.

Like many countries in the early 1950s Mexico pursued an import-substitution industrialization policy, accompanied by a heavy dose of government control. The government kept Mexican markets relatively closed to foreign competition, restricted foreign direct investment, and tightly regulated domestic financial markets. Despite the inherent problems of a substantially closed, regulated economy, Mexico's gross domestic product (GDP) grew at an average annual rate of about 6.6 percent from 1950 to 1970. This period of Mexico's development has been referred to as stabilizing development. During the early 1970s, the first cracks began to appear in Mexico's highly managed economy. Mexico began to experience a slowdown in economic growth, as inefficiencies generated by its inward-looking development strategy took hold. The world recession and the hike in oil prices that hit in 1973 made matters worse for Mexico. At that time, Mexico was a net importer of oil².

By 1972 Mexico was on the road to higher inflation. The public sector deficit, which was slightly more than 2 percent of GDP in 1971, began to grow, financed by an inflation tax and external borrowing, and reached 9.1 percent of GDP in 1976³.

First Economic Crisis of 1976

In attempting to avoid the needed structural change and slowdown in growth, Mexico pursued expansionary fiscal and monetary policies. Ultimately,

however, expansionary policies without real fundamental change simply generated inflation, large fiscal deficits, and weakening business confidence. In 1976, a balance-of-payments crisis erupted and led to 40 percent devaluation in the peso, which had been fixed at 12.50 old pesos per dollar since 1954. Mexico was ready for structural change in 1976, but huge oil discoveries appeared to lift fiscal and foreign exchange constraints, at least for the foreseeable future. Mexico's economic bubble burst when oil prices began to fall in mid-1981. In 1982, the government devalued the currency by more than 260 percent, declared a moratorium on debt payments, and forced the conversion of dollar denominated bank deposits into pesos at an unfavorable, below-market exchange rate⁴. It may be said that economic crisis started with the oil crisis of 1973 but discovery of oil and overconfidence of policy makers about continuity of increase in oil prices led the authorities to follow expansionary policies funded by external debts. The total debt stock had reached \$57.378bn. in 1980 and net transfer of external debt had reduced to a very small figure of \$618million because of outflow on account of interest amounting to \$6.068bn against a net debt inflow of \$6.686bn (Table I). Thus the heavy debt burden coupled with high current account deficit landed the country to debt-crisis in 1982.

	1970	1980	1989	1990	1991	1992	1993	1994	1995	1996
Total Debt										
Stocks										
(EDT)	...	57,378	93,841	104,442	114,068	112,265	131,572	140,006	166,104	157,125
Long-term debt(LDOD)	5,967	41215	80,088	81,809	85,445	81,780	90,528	96,824	112,976	113,778
Use of IMF credit	0	0	5,091	6551	6,766	5,950	4,787	3,860	15,828	13,279
Short-term debt	...	16,163	8,662	16,082	21,857	24,535	36,257	39,323	37,300	30,068
Total Debt										
Flows										
Disbursements	1,375	11,581	5,182	14,229	9,701	12,761	17,436	16,130	44,152	31,325
Principal repayments	1,017	4,894	6,253	4,012	5,359	13,275	16,117	12,706	15,679	29,064
Net flows on debt	358	6,686	-288	17,637	10,117	2,164	13,041	6,489	26,451	-4,971
Interest payments(INT)	...	6,068	9,310	7,304	8,186	7,538	8,101	9,237	11,209	11,722
Net transfers on debt	...	618	-9,598	10,333	1,931	-5,374	4,940	-2,748	15,243	-16,693
Total Debt service paid										

Sources : Global Economic Prospects 1998-99, World Bank.

Debt Crisis of 1982

On August 22, 1982, Mexico's official debt crisis began. On that day, the Mexican government requested a three-month extension for all Mexican public-sector debt that was scheduled to come due within the next 90 days. A miscalculation on the part of both Mexico and its foreign lenders that the hike in oil prices in the 1970s would be sustainable had led forecasters on both sides of the equation to project Mexico's balance of payments for 1981 and 1982 in excessively optimistic terms. Consequently, Mexico was able to overextend itself in both spending and foreign indebtedness. As a result of debt crisis and subsequent rescheduling and debt swapping, though Mexico was saved from bankruptcy each year between 1983 and 1988, Mexico had to transfer about 6 percent of its GDP to other countries. This transfer made Mexico a new capital exporter, and compounded its pre-existing problem of being "over-leveraged," thereby sharply limiting its capabilities for domestic investment and consumption⁵. This necessitated drastic economic reforms in Mexico, which have been discussed in the subsequent paragraphs.

Economic Reforms (1982-1994)

After the financial collapse of 1982, the newly elected President De La Madrid was forced to undertake radical reforms as the price of financial survival. He placed the emphasis on correction of macro economic imbalances by means of large loans from the IMF under extended fund facility scheme and from other international institutions. However the economic growth during this period was dismal. The GDP growth was negative in the initial two years following the debt crisis i.e., -0.6% in 1982 and -4.2% in 1983. The growth however picked up a little bit in subsequent year i.e., 3.6% in 1984 but again declined to 2.5% in 1985 and once again became negative -3.7% in 1986 (Table II). This instability was mainly caused for lack of investment at home as Mexico was burdened with repayment of earlier debts and it was a net exporter of capital during all these years. In 1989 for example the net outflow of capital on debt account was \$9.598bn (Table I). For the first time in almost five decades the per capita growth rate was negative for a sustained period of time. It was clear that Mexico needed some further reforms in its policy for foreign investment to come over the debt service burden and to increase investment in the country to achieve sustainable growth and to create employment. A new government was formed in 1988 and the

new President, Salinas De Gortari embraced the economic programme with enthusiasm in the next phase of reforms and had by then (till early 1994) succeeded in dismantling most of the rationalist economic projects through privatization, decontrol and external liberalization. Conceding the potential benefits of freer trade and less government involvement in the economy, the government of Mexico embarked on a market liberalization program. (Kate Gillespie and Hildy J. Teegan 1995)⁶

The structural reforms of the 1980's was expected to have good medium term prospects. The entry into force of the NAFTA on 1st January 1994 deepened the reforms and made them difficult to reverse. Mexico adopted an outward oriented and private sector led reform strategy. Its key elements were a sustained turn around in the government's fiscal accounts, an inflation stabilization programme, an external public debt reduction programme and opening the economy to the international competition. Successful structural reforms enabled Mexico to regain international creditworthiness as indicated by the dramatic reversal of capital flows from a net outflow of \$ 7.553 billion in 1989 to a net inflow of \$ 13.034 billion 1993 (Table III).

During the period 1982-1993 Mexico underwent two sets of adjustment programmes in accordance to World Bank prescriptions and IMF conditions. In 1984 Mexico had reached the limit of its external borrowings and between 1982 and 1985 its economy was almost bankrupt. During the first phase of adjustment in 1981-1982 to 1985-1986 emphasis was placed by large loan from IMF and other international institutions.

During the next phase of structural reforms (1986-1992) Mexico like India opted for deregulation, de-bureaucratization and liberalization programme based on a market friendly economy.

Foreign Investment flows to Mexico in 1991 reached \$ 9.16 billion and \$ 9.758 in 1992 and a whopping high of \$ 18.686 billion in 1993 before declining to \$ 15.493 billion in 1994 when the peso crisis crept into the economy. These figures of foreign investment inflow were much higher than just \$2.156 billion in 1980. Inflation came down to 18% in 1991-1992. The average GDP growth of 2.5% in 1981-1982 almost doubled. Carlos Salinas De Gortari who became President of Mexico in 1988, took reform process by leaps and bounds (then called Salinas' Shock Therapy). Mainly American capital flooded into the country as the credibility of the reform soared.

Inflation went down rapidly to a mere 7% in 1994. During his regime famous North Atlantic Free Trade Agreement or the NAFTA was signed which came into effect from 1st January 1994. It had the effect of increase in the international trade with US and massive investment in the border districts of Mexico, known as the Maquiladoras, a kind of assembly plant (to be discussed in subsequent paragraph)

Until the Mid-1980's foreign investment played a small role in the Mexican economy and was concentrated mainly in the Maquiladora sector. As recently as 1985 foreign investment amounted to only about 5% of Mexican gross fixed investment. After the introduction of economic stabilization and trade liberalization programs in 1985, the stock of FDI in Mexico more than doubled to \$ 30.3 billion at the end of 1990. About 20% of that total was invested in just the last two years of the period. Moreover, the rapid growth in 1989-1990 seems to have encouraged new investors, for example Japanese firms who reportedly committed \$ 3 billion to future projects. In addition, cheap labour, proximity to US market and the prospect of a NAFTA, all reinforced the investment allure of Mexico.

Table-II

Aggregate performance of the Mexican economy									
	1980	1981	1982	1983	1984	1985	1986	1987	1988
GDP (real growth in percent)	8.3	8.8	-0.6	-4.2	3.6	2.5	-3.7	1.5	1.1
Gross fixed investment (as percent of GDP)	24.8	26.4	23.0	17.5	17.9	19.1	19.4	18.9	n.a
Public financial deficit (as percent of GDP)	7.5	14.1	16.9	8.6	8.5	9.6	16.0	16.1	12.3
Current account (as percent of GDP)	-4.3	-5.8	-3.7	3.8	2.5	0.7	-1.0	3.1	-2.1
Stock of total foreign debt (US billion)	50.8	74.9	87.6	93.8	96.7	97.8	100.5	105.6	107.0
Foreign debt(as percent of GDP)	27.7	33.5	54.4	66.6	55.4	53.8	74.3	75.6	77.0
Net foreign resource transfer (as percent of GDP)	-2.5	-7.4	2.8	5.3	6.6	6.1	6.5	5.5	6.4

Source: Banco de Mexico (1989), Indicadores Economicos, April.

Maquiladorization

A maquiladora is an assembly plant set up under the Border Industrialization Programme instituted by the Mexican government in 1965 'to provide employment for Mexican citizens in the cities along the U. S. border.

In 1964, the United States ended the 22-year-old bracero programme, which had legalized the flow of approximately four million Mexicans across the

border to work on US farms. That same year, the Mexican Minister of Industry and Commerce toured production facilities in Asia, where US firms were setting up assembly operations in a variety of different countries and industries. The following year, the minister announced a new programme called the Border Industrialization Programme (BIP) to encourage inward foreign investment for the establishment of assembly plants called maquiladoras (Wilson, 1990 pp.36-7).

The government of President Carlos Salinas de Gortari issued a new maquiladora decree in 1989, which further simplified the process of certifying a maquiladora enterprise and encouraged establishment of maquiladoras in the interior of the country. Maquiladoras were now permitted to sell up to 50 per cent of their production in Mexico, as long as they paid the regular duties on imported components. It is not surprising, therefore, that the number of maquiladoras and the number of workers in maquiladoras rose sharply after 1982 (Wilson, 1990 pp.37-42).

In addition, the value of maquiladora exports from Mexico to the United States under tariff items 806.30 and 807.00 increased from \$2.9 billion in 1982 to \$8.7 billion in 1987 (Scheinman, 1990). Whereas initially maquiladora exports had tended to be mainly in unsophisticated, high labor-content industries like toys, apparel, and the assembly of printed circuit boards, by the late 1980s a significant portion of maquiladora exports had shifted toward more sophisticated automotive and electronics products. Assembly became more sophisticated with the introduction of advanced equipment and other types of factory automation. Work in the maquiladoras shifted toward a higher percentage of higher value-added jobs, including those geared toward installing and maintaining the new automation equipment, and the lower value-added jobs in the older apparel and electronics factories were increasingly shunned by male workers (Scheinman, 1990).

By the late 1980s, many non-US foreign firms were setting up maquiladoras to supply their markets in the United States, particularly in consumer electronics, as more and more US firms either sold out or exited the consumer electronics markets (Hart, 1993). Japanese firms in particular had a great incentive to set up maquiladoras because the exports of Japanese maquiladoras were likely to be less susceptible to anti-Japanese trade measures than exports from Japan or other Asian countries (Rohter, 1987).

The maquiladoras of Mexico are dependent upon a US-Mexican regime, which started with the Mexican Border Industrialization Programme and the US 806.30 and 807.00-tariff legislation. The maquiladoras are globalizing to the extent that non-US and non-Canadian MNCs want to locate in Mexico to gain access to North American markets under the NAFTA⁷.

Sectoral Distribution of FDI in Mexico (1990-1996)

Foreign direct investment in Mexico is mainly concentrated in manufacturing and service sector and primary sector has received very minimum amount of FDI (See Table-III). The total FDI flow in 1990 was \$2.4 bn. of which \$1.19bn. was invested in manufacturing sector; \$1.02bn. was invested in service sector and investment in primary sector was a low of \$157 million only. In 1996 the total FDI inflow increased to \$6.122bn. of which \$3.5bn. went to service sector and the share of primary sector came down to \$94 million only which was lower than 1990 figure.

	(US \$ million)						
Sectors	1990	1991	1992	1993	1994	1995	1996
Total	2 400	6 012	7 397	4 535	11 503	8 403	6 122
Primary	157	80	120	213	104	142	94
Manufacturing	1 199	3 088	4 013	1 281	6 153	3 902	3 498
Services	1 019	2 710	3 079	3 092	5 232	4 308	2 530
Source: UNCTAD, based on data provided by ECLAC, Unit on Investment and Corporate Strategies, WIR 1998, pg.256.							
a. Includes unspecified FDI.							
b. Including imports of capital goods by in-bond processors, starting from 1994 but not including re-invested earnings or intra-firm loans.							

Shift in Funding of Current Account Deficit from Debt to Equity

The role of external finance/foreign capital was very minimum in the Mexican economy till the 1970's. The net resource flow in the year 1970 was only \$689 million of which \$358 million in the form of long term debt and \$323 million in the form of FDI and a very small amount of \$8 million in various forms of grants from various international agencies. There was a leap frog jump in the year 1980 when the net resource flow increased to \$8.991 billion i.e. almost 13 times over a period of 10 years since 1970. Long-term external debts increased to \$6.821 billion and FDI to \$2.156 billion. It may be pertinent to

mention here that both India and China were greatly lagging behind during the period of 1970's & 1980's in their respective inflow from FDI. After the 1982 debt crisis Mexico had to undergo severe economic pains in the decade of 1980's and it remained a net exporter of capital to outside world in order to meet its obligations from debt repayments as agreed under 'Braker & Brady Plans' for debt rescheduling in the aftermath of debt crisis.

However, structural reforms introduced by Salinas Administration yielded good results and Mexico became a net importer of capital towards the end of 1980's and the beginning of 1990's. FDI inflow during the reform period was \$4.7 billion in 1991 and increased to \$10.972 billion in the year 1994. Portfolio investment which was only \$5.63 billion in 1990 increased to \$14.297 billion in the year 1993 which drastically came down to \$4.521 billion in the year 1994 and reversed to 1990 level at a meagre amount of \$520 million in the year 1995 after the Peso Crisis in December 1994 (Table IV). Thus we notice that there was substantial increase in the equity flow during the reform period which amounted to \$56.3 billion between 1990-94 as against the debt flow of \$20.571 billion during this period. Within the total equity flow, FDI amounted to \$27.15 billion and FPI \$29.15 billion. During 1992-94 the excess flow of Portfolio Investment was one of the major causes of Peso Crisis, which we have discussed in detail in the later paragraphs.

The volatileness of portfolio investment is also evident from the fact that there was practically no decline in FDI flow in the year 1995 after the Peso Crisis and the net flow on this account was \$9.526 billion, which was close to \$10.972 billion in the year 1994. On the other hand foreign portfolio inflow, which increased to \$14.297 billion in 1993 came down to \$4.521 billion in 1994 and to an all time low of \$520 million in 1995. The inflow on account of long-term debt, which had come down to a negligible amount of \$54 million in 1992 increased to \$16.329 billion in the year 1995. This massive inflow of long-term debt was arranged by IMF as a bailout programme to meet the Peso Crisis of December 1994. To sum up it may be said that the economic reforms created a conducive environment for Foreign Investment in the country, which helped in reduction of external debts and building up comfortable foreign exchange reserves. However, policy errors for maintaining a higher current account deficit and high valued peso under fixed exchange rate led to a reversal of portfolio investment, which consisted mainly of government bonds namely 'tesobonos'.

Table – IV

Aggregate Net Resource Flows and Net Transfers (Long-Term)

(US\$ million, unless otherwise indicated)

	1970	1980	1989	1990	1991	1992	1993	1994	1995	1996
Net Resource Flows	689	8,991	1,615	12,475	13,383	9,825	21,234	20,168	26,406	15,884
Net flow of long-term debt(ex.IMF)	358	6,821	-1,459	9,224	4,171	54	2,494	4,628	16329	4,314
Foreign direct investment(net)	323	2,156	3,037	2,634	4,762	4,393	4,389	10,972	9,526	7,619
Portfolio equity flows	0	0	0	563	4,404	5,365	14,297	4,521	520	3,922
Grants (excluding technical coop)	8	14	37	54	46	14	53	47	31	30
Memo:technical coop.grants	6	44	66	81	90	113	117	110	127	135
Net Transfers	46	3,043	-7,553	5,361	4,669	1,638	13,034	11,212	15,854	4,646
Interest on long-term debt	283	4,580	7,916	5,800	6,223	5,875	5,854	6,556	8,053	8,338
Profit remittances on FDI	359	1,368	1,252	1,314	2,492	2,312	2,346	2,400	2,500	2,900

Sources : *Global Economic Prospects 1998-99, World Bank.*

Analysis of Economic Growth and External Sector Change during the Reform Period (1982-1994)

Subsequent to the debt crisis in 1982 the macro economic parameters of the Mexican economy were in doldrums. The GDP growth rate during the period 1982-88 was practically zero as evident from Table V and VI. On the other hand the inflation was very high during all these years varying between 58.9% in the year 1982 with a lower end of 57.7% in 1985 and higher end of 131.8% in 1987 and 114.2% in 1988. It was only after the shock therapy of Salinas administration and with the introduction of structural reforms, the inflation came down to 20% in 1989 and 15.5% in 1992. Public sector borrowing which was 16.9% of the GDP in 1982 and 16% in 1986 and 1987 also came down to 5.6% in 1989 and there was a surplus of 0.5% in 1992 by way of massive privatization programme by the Salinas administration. However current account deficit, which was within manageable limits during the period 1982-88 increased substantially in the year 1991-92. There was increase in the Foreign

Exchange Reserve, which increased to \$25.1 billion in the year 1993 as against a low of \$0.8 billion in 1982. Thus there was an overall improvement in macroeconomic balances including higher rate of GDP growth, lower rate of inflation and a good amount of foreign exchange reserve and lower fiscal deficit. Thus it can be said that economic reforms and structural adjustments led to the improvement of the internal economic strength of the country.

Table – V
Economic Indicators for Mexico, 1982-94 (percentage and billions of dollars)

Indicator	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
GDP growth(%)	-0.6	-5.3	3.7	2.7	-3.7	1.8	1.4	3.1	3.9	3.6	2.6	2.0	4.5
Inflation (%)	58.9	101.8	65.5	57.7	86.2	131.8	114.2	20.0	26.7	22.7	15.5	9.8	7.0
Gross investment/ GDP (%)	35.5	20.2	20.7	22.2	18.3	18.8	21.2	21.6	22.8	23.6	25.0	..	..
Fiscal balance/ GDP (%) PSBR	-16.9	-8.6	-8.5	-9.6	-16.0	-16.0	-13.0	-5.6	-3.9	-1.5	0.5	..	..
Fiscal balance/ GDP (%) Prim	-7.3	4.2	4.8	3.4	1.5	4.7	8.0	7.9	7.8	5.3	5.6	..	..
Fiscal balance/ GDP (%) Oper	-5.5	0.4	-0.3	-0.8	-2.4	1.8	-3.6	-1.7	2.2	3.3	3.6	0.7	-0.1
Real EXR/G6 (1985=100)	117.6	121.4	100.7	100.0	133.1	134.2	109.5	104.8	102.7	92.1	84.7	78.9	..
XGS (billions of dollars)	26.0	27.1	30.0	27.4	21.9	27.6	29.1	32.9	38.4	39.6	41.4	..	..
MGS (billions of dollars)	20.1	12.8	16.2	18.4	16.3	17.2	24.9	31.1	41.2	48.7	59.7	..	..
External sector													
Capital account balance	..	..	..	..	..	3.8	-2.9	5.1	10.9	22.5	26.7	30.5	11.6
Overall balance of payments	..	..	..	..	..	6.7	-6.8	-1.1	3.4	7.6	1.9	7.1	-17.9
Current account balance(billions of dollars)	-6.3	5.4	4.2	1.1	-1.7	4.0	-2.4	-4.0	-7.5	-14.9	-24.8	-23.4	-29.5
External debt(billion of dollars)	86.0	93.0	94.8	96.9	100.9	109.5	100.8	95.4	97.4	101.7	113.4	..	..
Reserve excl. gold (billions of dollars)	0.8	3.9	7.3	4.9	5.7	8.0	6.0	6.5	10.1	17.9	19.4	25.4	6.3

.. = data not available.

Inflation: consumer prices, year over year.

Fiscal balances: Oper=operational (real); PSBR =Public sector borrowing requirements; Prim=primary.

XGS, MGS: exports and imports of goods and nonfactor services.

Real EXR/G6:Real exchange rate against six large industrial countries, deflated by wholesale prices.

Sources: IMF 1992, 1993 (growth, Inflation, trade, current account, reserves); World Bank 1993 (debt); IDB 1991, 1993 (investment, fiscal balances, real exchange rate); ECLAC 1993 (fiscal balances); Banco de Mexico 1993 (fiscal balances).

(World Economic Outlook May 2000)

Table – VI
Major Economic Aggregates

(US\$ million, unless otherwise indicated)	1970	1980	1989	1990	1991	1992	1993	1994	1995	1996
Gross national product(GNP)	37,864	188,340	242,310	254,080	305,840	354,010	391,770	407,760	273,020	321,260
Exports of goods & services(XGS)	...	24,685	47,752	54,570	57,493	61,330	67,428	78,024	96,707	115,156
of which work- ers remittances	...	698	2,213	2,492	2,414	3,070	3,332	3,475	3,673	4,224
Imports of goods & services(MGS)	...	35,243	59,907	63,504	72,713	86,087	91,136	107,990	98,571	117,390
international reserves(RES)	756	4,175	6,741	10,214	18,027	19,129	25,289	6,443	16,999	19,494
Current account balance	...	-10,420	-5,825	-7,451	-14,890	-24,440	-23,400	-29,600	-1,576	-1,923

Sources : Global Economic Prospects 1998-99, World Bank.

Developments during 1988 to Early 1994

Similar to South-East Asian Tigers who were manifesting a success story till 2nd July 1997 when the currency crisis hit the region, Mexico was also cited as an example of 'success story' of the process of economic reforms and macroeconomic stabilization during 1988-93, the years of Salinas administration.

During this period Mexico followed a strategy of economic adjustment and reform that strengthened fiscal consolidation and structural changes initiated after the 1982 debt crisis. The strategy, which had the active support of the IMF (Camdessus, 1995) aimed at restoring macroeconomic stability, reducing the role of the public sector in the economy and laying the foundations for private sector led growth. The key elements of the strategy were the maintenance of fiscal and monetary discipline, a major debt restructuring, and a comprehensive programme of structural realization of the financial sector and of the capital account discussed above were thus part of a broader policy thrust.

Certain macroeconomic variables followed an exemplary evolution. Thus, the overall public sector financial balance reported a surplus of almost 1 per cent of GDP in 1993, compared with 11 per cent deficit of GDP in 1988. Inflation was reduced from 160 per cent in 1987 to 8 percent in 1993.

The exchange rate was the main nominal anchor of the system throughout the period, with incomes policies playing an important supportive role. The Mexican peso was fixed to the U.S. dollar from March to December 1988 and allowed to depreciate during the following three years at a pre announced rate. In November 1991, the authorities added some more flexibility to exchange rate management by creating a publicity announced intervention band. As the floor of the band was kept constant while the ceiling depreciated at a predetermined rate, the band widened gradually from less than 1 percent at the end of 1991 to about 9 percent at the end of 1993⁸.

The Mexican real exchange rate appreciated by around 30 per cent between the beginning of 1989 and late 1993. The real exchange rate appreciation was exacerbated by the large capital inflows, which Mexico received in the early 1980s, which led to a 'financial Dutch disease' type of phenomena. These capital flows had two important features. First, they were very high, both in absolute amounts and as proportion of GDP (Devlin, French-Davis and Griffith-Jones, 1995). Secondly, as can be seen in

Table VII, an extremely high proportion of the capital flowing into Mexico, (as compared to same Latin American developing countries) came as portfolio investment; it reached 67 per cent of total inflows for 1990-93.

	Mexico	Argentina	Chile
Portfolio investment	67	37	22
Foreign direct investment	21	42	31
Other (inc. bank lending)	12	21	47
Total	100	100	100

Source: Banco de Mexico; IMF, International Financial Statistics.

Analysis of Capital Account Movements (1988-1994)

During 1990-93, capital inflows were dominated by flows to the private sector, which benefited from the internationalization of Mexican capital markets, particularly in respect of equity and bonds, which provided inflows of \$24 billion and \$12 billion respectively (see Table VIII). Until the late 1980s, foreign equity participation in Mexican companies was restricted. At the end of 1989, nonresidents accounted for just 6 per cent of Mexico's equity market capitalization. Foreign participation rose rapidly in the wake of the Stock Market Law of December 1989, which liberalized access to foreign investors. As a result of this (and other factors) net foreign purchases of Mexican equities-which had been less than \$1 billion annually till 1989-reached a total of \$28 billion during 1990-93. By the end of 1993, non-resident investors accounted for 27 per cent of the capitalization of the Mexican market, a figure, which remained broadly unchanged through 1994.

Table - VIII
Mexico: Summary Capital accounts, 1988-94.

	1988	1989	1990	1991	1992	1993	Prel.1994
	In millions of US dollars						
Current account	-989	-5 823	-7 450	-14 649	-24 439	-23 400	-28 786
Capital account	-5 774	4 745	10 889	22 232	26 361	30 491	10 866
Official capital	265	-1 124	-1 820	3 424	7 940	7 882	-400
Non-resident purchases of Mexican Government treasury bills	-	-	-	3 406	8 147	7 013	-1 942
Tesobonos	-	-	-	253	-62	1 063	14 338
Other	-	-	-	3 153	8 209	5 950	-16 280
Private capital	-6 039	5 869	12 709	18 807	18 421	22 609	11 266
Direct Investment	2 595	3 037	2 633	4 762	4 393	4 389	7 980
Equity Investment	-	493	1 995	6 332	4 783	10 717	4 088
Bond placements	-	-	1 009	1 340	3 559	6 318	2 061
Net international reserves (Increase -)	6 763	1 078	-3 439	-7 583	-1 923	-7 092	-17 919

Sources: Bank of Mexico; and Fund staff estimates.

Another important item of capital inflows was foreign purchases of Mexican government securities. During the 1980s, peso denominated government securities were sold only to Mexican residents. In 1990, the Government allowed direct sales to foreign residents (foreign residents were already able to do some purchases previously, through secondary purchases from Mexican banks). In 1991, the first year without restrictions, foreigners, invested \$3.4 billion in government paper. Purchases rose rapidly, totaling over \$18 billion, during 1991-93 (see Table -VIII). During this period, non-residents absorbed virtually all of the net increase in government securities. It is paradoxical that an important part of the issue of government securities was in those years not linked to financing fiscal deficits, but was issued largely as part of the monetary sterilization of capital inflows, and that government paper led to new inflows. The share of government securities held by foreigners during 1990-93 rose from 8 per cent at the end of 1990 to 57 percent at the end of 1993. On the whole, the Mexican authorities did not discourage these capital inflows.

Current Account Deficit — A Growing Trend (1988-1995)

A rapidly and consistently growing current account deficit since 1988 (See Table IX) peaked at 7.7 per cent of GDP in 1994. To an important extent, this growing disequilibrium in the current account was explained by the appreciation of the exchange rate. It was funded by the rapidly growing net capital flows until 1993. Indeed, as net capital flows were even larger than current account deficits until late 1993, levels of foreign exchange reserves increased, even though the current account deficit was growing. This contradictory situation acted as the basic background behind the Peso-Crisis in December 1994 as discussed in the later paragraphs.

Table - IX	
Current Account Balance (% of GDP)	
Year	Current account deficit
1988	1.4
1989	2.8
1990	3.0
1991	5.1
1992	7.4
1993	6.4
1994	7.7

Source: Banco de Mexico.

Pre-Peso Crisis Situation during February to December 1994

The black clouds of the peso-crisis began to appear in February 1994 when the foreign exchange reserves peaked at \$29.2 billion (Banco de Mexico 1995). There were important changes in the U.S. monetary policies after signing of NAFTA, which became effective from 1.1.94. In February 1994 the US Federal Reserve raised interest rates from 3 percent to 3.25 percent, which were further increased six times within a short span of ten months with yields on US Treasury Bills increasing from 3 percent in January 1994 to 5.6 percent in December 1994. This resulted into reduction in the differential between US and Mexican Treasury bills. This problem was accentuated with the assassination of the Presidential Candidate Luis Colosio on 23rd March which led to a dramatic decline in the forex reserves by almost \$11 billion between 23rd March and 21st April (Banco de Mexico).

The dwindling forex reserve position led to change in perceptions – both by domestic and foreign investors. The Mexican authorities increased the rates of interest on CETES (government securities) from 10.1 percent on 23rd March to 17-18 percent in the last week of April. It also allowed a major switch from peso denominated Treasury Bills (CETES) to dollar denominated Treasury Bills (Tesobonos). As a result the stock of Tesobonos rose from US \$3.1 billion in March 1994 to US \$12.6 billion in June 1994; it rose further to US \$19.2 billion in September and US \$29 billion in December 1994 (Banco de Mexico). As a result the composition of government debt held by foreigners was dramatically modified. In December 1993, 70 percent was in CETES and 6 percent in Tesobonos, with changes in December 1994 to 10 percent in CETES and 87 percent in Tesobonos (Stephany 1998 Pg.-119). It was institutions like the US mutual funds (FIIs), which were switching from CETES to Tesobonos, which made their job easier to leave the country rather than switching to Tesobonos. These Tesobonos were of very short-term nature. Shortly the stock of Tesobonos became higher than total foreign exchange reserves and the gap continued to widen. Another instrument, which created vulnerability for Mexico was the banks increased reliance on short term financing in the form of certificates of deposits (CDs) from non-residents. This short term deposits increased from US \$19 billion in 1991 to US \$ 25 billion in 1994.

During the second quarter of 1994 (the period which includes the Colosio assassination and rises in US interest rates), the capital account deteriorated sharply, from US \$7.7 billion in the first quarter of 1994 (figure slightly higher than the average for 1993) to US \$2 billion in the second quarter. The only category that remained strong was

foreign direct investment. This was however more than offset by shortfalls in portfolio investments (particularly in equity but also in bonds) and by negative residents' borrowings abroad.

Capital market inflows recovered fairly strongly in the third quarter, as political conditions seemed to stabilize after the 21 August Presidential elections. In the October-December period, capital inflows again declined drastically. In November, however, foreigners sold equities and government securities. In December, there was a further pullback by non-residents from government securities' markets (see Table-X)

Table – X
Mexico: Quarterly Capital Account, 1993-First Quarter 1995
(in millions of US dollars)

	1993				1994				1995
	I	II	III	IV	I	II	III	IV	I
Capital account	7 959	7 639	6 955	7 938	7 729	- 2 040	7 754	- 2 576	- 6 253
Official capital	4 678	367	2 648	191	2 730	-474	2 278	- 4 933	- 1 935
Non-resident purchase of Mexican Government									
treasury bills	3 718	1 227	1 694	374	1 487	35	1 163	- 4 627	- 4 652
CETES	2 330	-205	2 175	1 304	-60	-5 509	- 1 955	- 4 063	933
Tesobonos	-120	-25	515	693	1 732	7 108	4 628	870	- 5 578
Private capital	3 281	7 272	4 307	7 748	4 999	- 1 566	5 476	2 357	- 4 318
Direct investment	1 164	954	550	1 721	1 846	1 618	2 325	2 191	607
Equity investment	1 269	1 312	1 879	6 257	3 466	248	744	-369	119
Bond placements	994	1 865	1 968	1 491	1 486	74	446	55	- 1 185

Source: Bank of Mexico; and fund Staff estimates. (Stephany 1998 Pg.-122.)

The Peso Crisis in 1994

According to an IMF study⁹ the various factors advanced as the causes of crisis can be grouped into three broad and complementary views. The first considers Mexico as having been hit by a set of adverse shocks, which turned out to be more severe and persistent than appeared at the time and served to undermine the authorities' economic strategy. The second argues that the size of Mexico's current account deficits in recent years was not sustainable and needed to be addressed by major changes in the stance of macroeconomic policy, including a realignment of the nominal exchange rate. Finally, the third view claims that, while the overall direction of macroeconomic policy was sound, the Mexican authorities' allowed inconsistencies in macroeconomic policy to arise during 1994, which ultimately eroded the confidence of domestic and foreign investors in the authorities commitment to maintain a coherent medium-term economic strategy.

On 20 December, the Mexican authorities widened the intervention limit for the peso by 15 per cent. This acted adversely and led to massive outflow of funds (during 20 and 21 December, foreign exchange reserves in Mexico fell by over US\$4 billion) and reserves fell to fairly low levels. The Mexican authorities then allowed peso to float, a decision, which they should have taken much earlier.

Even though the Mexican authorities on 20 December did what many observers had said was necessary (a devaluation of around 20 per cent), this decision precipitated an incredibly large financial and balance of payments crisis for Mexico, with strong ripple effects not just in Latin America, but throughout the developing world and even in some of the weaker developed economies.

After the 15 per cent devaluation, and even more after the floating of the peso, investors rushed for the 'exit', with the incredible speed of a stampede. Within a very short span of three days US\$4.5 billion of reserves were lost between 20 December and 22 December; reportedly much of this was money belonging to Mexican residents. However, foreign investors, who panicked, increasingly joined the flight. The dollar value of foreign investment in the Mexican Stock Exchange fell dramatically, from US \$50 billion in November 1994 to \$18 billion in February 1995; however, the decline in the share of foreign investment in the Mexican Stock Exchange fell by only around 1 per cent in that period from 25.7 per cent in November 1994 to 24.5 percent in February 1995 (Stephany 1998 pg-127). The explanation lies in the fact that the total value of the Mexican Stock Exchange fell sharply in US dollar terms, mainly due to the falling peso, but also because of some decline in prices of stocks.

However, the main impact of capital flows on the crisis was not only via the Tesobonos but also via the banking system. Towards the end of December investors (and especially foreign ones, who held the majority of Tesobonos) became increasingly concerned about the amount of Tesobonos that would mature in the first few months of 1995. There was suddenly strong focus on the fact that a total of \$9.9 billion was expected to mature in the first quarter, while foreign exchange reserves had fallen to \$6.3 billion at the end of December 1994. Panic spread that the Mexican government could perhaps be forced by events to default on its obligations. As a result of these fears, three weekly auctions of Tesobonos starting in 27 December 1994 were well short of the amount of Tesobonos offered at auctions. The unwillingness of (mainly) foreign investors to buy Tesobonos greatly accentuated the crisis, as their fears became potentially self-fulfilling. It was only the massive US Treasury-IMF package agreed in late January 1995 that stopped the risk of a potential default.

In any case, the total of investment in all Mexican government securities (including Tesobonos, CETES, Ajustabonos and Bondes) fell from \$21 billion in December 1994 to \$14 billion in April 1995, to \$7 billion in September 1995; this decline was practically totally explained by the sharp fall in foreign investors' holdings of Tesobonos, which fell from their peak in December 1994, at \$17.8 billion, to \$1.8 billion in late September (Bank of Mexico, see Stephany 1998 pg-119).

There was another source of potential vulnerability, which is hardly mentioned in the literature, but which also played an important (though smaller) role in the crisis than the Tesobonos. Mexican banks in January 1995 faced severe dollar liquidity problems, as they faced difficulties in rolling over foreign currency denominated certificates of deposit (CDs) and other short-term lines of external credit, due to the higher country risk perceived by foreign lenders, accentuated by the fact that many of these loans were using Tesobonos as collateral.

During the first quarter of 1995, the weakness of capital flows intensified and became generalized to different categories. We have already discussed the problems of renewing Tesobonos and of the difficulties for commercial banks. Also, state agencies and companies faced difficulties in rolling over short-term lines of credit and the non-bank private sector faced bond payments that could not be rolled over (see table-IX). During the first quarter of 1995, net capital outflows totaled \$11.5 billion (excluding the special loans via IMF and US Treasury, as part of the massive rescue package for Mexico), compared to an average quarterly inflow of US\$7.6 billion during 1993, and of around \$2.5 billion in 1994.

The speed and scale of the response of international capital markets to the December devaluation cannot fully be explained by a sharp deterioration of economic (and even political) fundamentals – as vulnerability (for example Tesobono to reserves ratio), though all these factors played an important part. An important factor in explaining the magnitude and speed with which international markets reacted, are certain imperfections in these markets, which made them overreact to the devaluation.

Finally, 'disaster myopia' reportedly played a big role in investors' behaviour. Because there was so much (unjustified) faith that there would be no devaluation, this also helps to explain why there was so much over-reaction to the devaluation, when it did occur. Such 'disaster myopia', and later over-reaction seems to have been accentuated by the sheer inexperience and great youth of many of the people both analyzing and deciding on investment in Mexico and Latin America in the early

1990s; the fact that many would not have been adults when the 1982 debt crisis occurred may have implied that they had little knowledge of the region's history of capital flows and balance of payments crises. (Stephany Griffith-Jones 1998).

Timely IMF bailout came as a rescue to the Mexican peso crisis. However despite potential stabilizing effects in the short run, there are a number of major problems with current IMF bailout practices; which include the problem of moral hazard. IMF bailouts not only fail to change incentives to correct reckless lending behaviour, but also embody incentives encouraging this behavior. Existing lending practices persist because both borrowers and lenders recognize that if loan problems should occur, a bailout will readily materialize. To change such incentives, some lenders and borrowers should suffer losses and shoulder some of the risks of their poor decisions. Insolvent institutions should be allowed to fail. Necessary adjustments should be allowed to occur. Lending at market-determined, non-subsidized interest rates would also work to minimize moral hazard.

A study conducted on Mexican peso crisis by Calvo and Meadoza (1996) shows that the heavy punishment capital markets inflicted on Mexico is characteristic of a new kind of crises in the global-markets era. Punishment appears to be especially harsh on countries committed to fixed exchange rates. Rather than a crisis due to conventional current-account sustainability or real overvaluation (i.e., "flow") problems, Mexico's crash was primarily a capital-account crisis of "stocks", to some extent similar to the balance-of-payments crises studied by Paul Krugman (1979).

The Mexican crisis, however, differs in that it was not caused by monetization of a fiscal deficit. To the contrary, for the first time in the postwar period the peso collapsed without the pressure of clearly expansionary policies. Instead, the peso became extremely vulnerable because of (a) large imbalances between money balances, short-term debt, and gross reserves caused in part by the effects of global markets on the financial system, and (b) the tendency of global investors in the complex world economy, in which information is costly to acquire, to neglect fundamentals and display herding behaviour.

The 1995 IMF program for Mexico, together with US bilateral support, provide the short-term liquidity Mexico needed to address the macroeconomic and structural problems behind its financial and economic crisis. Based on strict fiscal and monetary policies and structural measures, including banking reform and data transparency, the

support program gave Mexico the breathing room it needed to make a rapid adjustment, which included slashing the current account deficit from 7% of GDP in 1994 to zero in 1995. The economy contracted over 6% in the crisis year of 1995, but the recession was short-lived. By late 1996 output had surpassed pre-crisis peaks, with GDP growing over 5% in 1996 and 7% in 1997. Restored growth was accompanied by steadily falling inflation and rising savings and investment. Based on that progress, Mexico was able to return to international capital markets only seven months after the onset of the crisis, compared to a seven-year-absent strong growth allowing it to repay US loans in full more than three years ahead of time (at a profit of \$580m to the US taxpayer), as well as prepaying \$3.7 billion of the \$13 billion provided by the IMF. US jobs and exports also benefited from international support and Mexico's speedy recovery, as US exports to Mexico rose to new record highs in 1996 and continued to grow in 1997. Finally, Mexico's strong policies helped shield it from the financial crisis that swept through Asian nations in late 1997. (IMF Website)

Causes of Mexican Peso Crisis

The high volume of capital inflow particularly the portfolio investments bloated the prices in the Mexican Stock Market (See Table XI)

Table-XI							
Mexico: data on net private capital flows (US \$ billion) and annual % change in the stock market index, 1980-1996							
	1980	1989	1991	1993	1994	1995	1996
PI	0	0	4.4	14.3	4.5	0.5	3.9
DFI	2.2	3.0	4.8	4.4	11.0	9.5	7.6
Loans	6.8	-1.5	4.2	2.5	4.6	16.3	4.3
STK	—	98.0	127.7	47.9	-8.7	16.7	21.0

Sources : PI, DFI and Loan data are from *Global Development Finance, 1998 Vol.1, World Bank, Washington, DC, 1998*; stock index data are from the *Emerging Stock Markets Factbook, 1997, International Finance Corporation, Washington, DC, 1997*.

Note : PI=net portfolio equity flows; DFI=Net foreign direct investment; Loans=net flow of long term debt (excluding IMF loans); STK=annual % change in Mexican stock market price index.

The second possible cause was tightening of US monetary policy beginning in February 1994, which began to diminish the appeal of Mexican portfolio investment. By April 1994 the Mexican bubble began to lose steam, completely collapsing in December of that year. During 1994 the stock market lost 30 percent of its value and there were several speculative attacks on the peso. In efforts to stabilize the peso, the

government drew down \$10 billion dollars of foreign exchange reserves (Dornbusch and Werner, 1994). The conjunction of this financial instability, the Chiapas revolt, and the assassination of the leading Presidential candidate led President Ernesto Zedillo to devalue the peso by 40 percent on December 20, 1994, and to float the peso just two days later. Rather than stabilize Mexican financial markets, however, the depreciation triggered a cycle of portfolio investor exit and peso depreciation-the combined effect of which was financial crisis. Within the first month of 1995 alone the Mexican government drew down almost 50 percent of its foreign exchange reserves in efforts to stabilize the peso (Economist, 2/4/95)¹⁰. (Jonathan Michie and John Grieve Smith 1999)

Michel Camdessus, the Managing Director of the IMF, described the Mexican crisis in 1994-95 as "the first financial crisis of the twenty-first century" to draw attention to the volume and velocity of the capital flows involved¹¹.

In a recent detailed study of the sequence of events in Mexico, the IMF has come to the conclusion that the pressure of Mexico's foreign exchange reserves in the run-up to the devaluation came primarily from Mexican residents rather than from foreign investors selling their holding of Mexican securities. (See IMF 1995) According to this report, for the entire month of December, 1994, foreign investors were not sellers of only about \$370 million of debt and equity, while Mexican foreign exchange reserves fell by as much as \$6.7 billion. This meant that Mexican residents were responsible for the downward spiral in reserves, which precipitated the Mexican crisis. Apparently, the movement out of pesos by residents during this period was triggered by expectations of an imminent devaluation. Interestingly, according to the IMF report, foreign investors did not start to sell their Mexican equity holdings in any sizeable quantity until February 1995.

The findings of the IMF regarding the origins of the Mexican crisis are significant. If correct, these findings squarely lay the blame for the Mexican crisis on the mismanagement of the exchange rate. The crisis could have been avoided if Mexico had devalued earlier, and Mexican residents had not lost confidence in the value of their currency. Even more important, these findings suggest that it was not the 'inward' flow of capital or investment by foreigners which was responsible for the crisis, but liberalisation of the capital account whereby residents were free to redenominate their domestic financial assets into foreign currency. In other words, it

was the premature 'capital account convertibility', more than liberalisation of foreign capital flows, which led to Mexico's difficulties once confidence in the Mexican economy was shaken.

Lessons to Be Learnt from Mexican Crisis

There are some lessons, particularly for the developing countries. The first and foremost is that should follow sound economic policies in relation to exchange rate management and debt management.

Secondly, a surge in capital inflows, particularly portfolio investment led to a high value of peso which was on fixed rate in turn led to collapse and therefore market determined floating exchange rate is preferred in the current scenario.

Thirdly, it should be remembered that capital inflows are often a reflection of transitory changes in the international environment, while outflows are usually a sign of an enduring problem. Emerging-market governments should treat capital-outflows as permanent as it may happen any time particularly under capital account liberalization.

A fourth lesson with longer-term implications is that, even with the increasing sophistication of international capital markets, high rates of domestic savings are essential for healthy development. Foreign finance certainly cannot be relied upon permanently. Mexico's experience reveals that current account deficits that arise alongside a sound fiscal policy can also cause serious difficulties. Policy-makers should remember that current-account deficits, however caused, represent borrowing on a national scale. They are dangerous if they are too big; or if the terms on which they are financed are too sweet for the creditor; or if the proceeds are not used to generate extra capacity to repay.

These principles and the Mexican experience suggest a fifth lesson: that close attention should be paid to any current-account deficit in excess of 5% of GDP, particularly if it is financed in a way that could lead to rapid reversals. A current-account deficit in which the financing is made possible by government guarantees to creditors, such as happened through the currency-risk insurance provided by Mexico's dollar-denominated tesobonos, or through deposit insurance on foreign deposits in domestic banks, should also be watched carefully. Particular scrutiny is needed if increases in capital inflows are not matched by increases in investment in traded-goods sectors.

A sixth lesson may be harder for developing country governments to accept: the need for greater openness. Transparency is essential to a well-functioning international capital market. Just as the idea of GAAP (generally accepted accounting principles), has made an enormous contribution to American capital markets, so standards for reporting and disclosure can make an enormous contribution to the international capital market. In today's securitised world, such standards are especially important.

The seventh lesson, however, is that even when armed with all this extra information, the international financial community must become better at surveillance. This is a task for private analysts, as well as for the IMF. But it is also a task for national finance ministries.

One more lesson from Mexico is for the development of IMF emergency financing procedures, and for increasing the general arrangement to borrow to support these procedures. To minimize moral hazard, however, it remains essential that these procedures should not be spelt out in detail; and that it be universally understood that any financial assistance will come only with rigorous conditionality.

Another lesson, is that long-term investment must be promoted. Direct investment flows are of higher quality because they usually represent a longer-term, better-informed commitment to an economy. The quality of capital flows can be as important as the quantity.

There are certain other important lessons for improvement in IMF surveillance and financing patterns. These lessons have been widely discussed at various platforms of IMF¹². These lessons include :

- i) Timely reporting of economic data and cogent analysis of economic prospects and policies of the member countries by IMF¹³,
- ii) To provide timely and relevant policy advice on balance of payment difficulties, thereby limiting the dangers of major economic and financial disruptions
- iii) Early diagnosis and correction of weakness in the financial sector might do much to lessen the severity of losses associated with a country's necessary efforts to correct maladjustments in its balance of payments,
- iv) IMF surveillance should focus on policies including debt management such as to highlight the large volume of short-term bonds as happened in case of Mexico with US dollar denominated tesobonos issued by the Mexican government,

- v) In view of the facts that the direct or the portfolio investments take place in the private sector as happened in Mexico¹⁴, it will be important to maintain the principle that the risks associated with private investment in private sector assets are not the responsibilities of the governments. The IMF can forestall such adverse developments through surveillance that discourages the provision of explicit or implicit government guarantees for private investments¹⁵,
- vi) In order to contain the contagion effect the IMF and its members, both should be prepared to act promptly and for adequate financial support for strong adjustment programmes,
- vii) While it is not possible to establish with a high degree of confidence the consequences of a hypothetical failure to establish a strong adjustment program for Mexico, it may reasonably be concluded that the results for Mexico (and other countries) would have been substantially worse than the painful adjustment process that is presently under way. As a practical matter, without the assurance of substantial external support (almost \$40 billion of medium-term financing from the IMF and the U.S. Government), the Mexican Government might well have been forced to reschedule unilaterally its external and internal debt, most notably the tesobonos. Such an outcome would almost surely have led to deeper and longer recession in Mexico, stronger and more persistent contagion effects for other emerging-market countries, and impairment of Mexico's medium-term economic growth prospects. By any reasonable standard of judgement, the benefits from avoiding these losses must be many times the economic cost of the financial support provided to Mexico and
- viii) It has sometimes been suggested that the financial support provided to Mexico was a "bailout" that raises serious concerns about the "moral hazard" of inducing governments to pursue unduly risky policies. Such concerns, however, are exaggerated. It is clear that the economic pain of the present crisis in Mexico (even with large-scale financial support) is very substantial. No government would have rationally decided to risk the economic difficulties that currently beset Mexico because of the expectation of the financial support that Mexico has received in the current crisis. However, it may be necessary to note that despite several study and debates after the Mexican-crisis, no seriousness appear to have taken place either at IMF level or at the level of member countries lest it should repeat in South-East-Asia in 1997.

The Mexican crisis, and its lessons, had also been extensively debated in India. There appears some inherent dangers in opening the economy and in the enhanced mobility of finance capital. It has been argued that an open economy is more vulnerable to external market forces and to the 'caprices' of international financiers. Generally, movement of capital into developing countries is not for productive purposes but for short-term speculative gains. By definition, such capital, or 'hot money', is likely to be volatile. It is therefore, suggested that India should not permit unrestricted foreign private capital flows particularly short term flows. In view of the IMF findings that the Mexican crisis was largely caused by movement out of pesos by residents (and not foreign investors), the Govt. should take some measures of capital controls on the movement of NRIs funds which was also one of the causes of BOP crisis in 1990.

Other analysts have highlighted the basic differences in the Indian and Mexican situations. India's current account deficit, unlike that of Mexico, is small. It has seldom exceeded 2 percent of total external debt. In the past couple of years, this share has declined further. In any case, the volume of capital flows into India, although large by historical standards, is also small, foreign exchange reserves, on the other hand, are twice as large as short-term liabilities (including non-resident deposits of maturities of less than one year). The fiscal deficit in India is no doubt higher than that of Mexico, and requires correction, but most of it is domestically financed. Under these circumstances, it has been suggested that while some restraint is necessary, India need not be afraid of capital flows as long as fiscal and current account deficits are kept under control.

It is true that India's present situation is not comparable to that of Mexico. Even so, there are important lessons to be learnt from the Mexican experience both in terms of policy for capital inflows as well as management of such flows in case they become 'excessive' and thereby exert pressure on domestic money supply and external value of the currency. These lessons are as important for India as they are for other developing countries. Fortunately, in the aftermath of the Mexican crisis, a substantial amount of data and analysis are now available to guide us in developing an appropriate policy framework for regulating capital flows.

Conclusions and Policy Implications

The Mexican peso crisis was not unique, and there is the risk that a 'Mexico style crisis' could be repeated in developing or transition economies. Therefore policy-makers need, as a very important policy objective, to aim at avoiding such crises, as they are extremely costly to the domestic economy. It is important to stress that Mexican GDP fell by 7 percent in 1995, consumption declined by over 17 per cent and investment fell by 30 per cent (there has been an important recovery in 1996, but levels of output, consumption and investment per capita are still well below 1994 levels).

Important lessons can be learnt (or re-learnt) from a careful analysis of the Mexican peso crisis, as well as from previous foreign exchange crises. These relate both to macroeconomic management of capital flows and to the style and pace of liberalization both of the capital account and the financial sector.

The following criteria for macro-policy seem essential :

1. Unsustainable current account deficits should be avoided, especially for longer periods (more than one or two years). It is difficult to establish in advance what levels of current account deficit are sustainable — that is, will continue to be financed. However, the emerging consensus is that for countries growing at 5 per cent per annum or less, the current account deficit should not exceed 3-4 per cent of GDP.
2. As regards exchange rate policy, there is a trade off. While exchange rate flexibility can have some inflationary effect-though there is growing evidence that the degree of pass-through from exchange rate to prices is relatively low, especially for relatively low inflation economies (Leiderman and Bufman, 1995) – greater exchange rate flexibility also diminishes the risk of declines in output and employment. If priority is given to the latter objective, that is avoiding declines in output and employment, then a more flexible exchange rate regime is more desirable.

Furthermore, it is important to avoid excessive over-valuation of the currency even if this is attractive to governments, like the Mexican one in the 1992-94 period, as it helps lower inflation quicker. However, if there is a crisis, it will result into not only fall of output, but will also increase the inflation significantly, as it did in Mexico in 1995.

It should be mentioned that managing exchange rates in times of very large capital surges poses difficult dilemmas to policy makers (See Ffrench-Davis and Griffith-Jones, 1995). This is one important reason why excessive surges of short-term capital flows should be discouraged, so as to help avoid a very sharp short-term deviation of the exchange rate from its medium term equilibrium.

3. A third area of macroeconomic policy where clear lessons can be extracted from the Mexican peso crisis relates to the management of the stock of public debt.

Economic authorities should definitely avoid assuming the foreign exchange risk in short-term government debt (as the Mexican authorities did on a large scale by issuing very significant amounts of Tesobonos). Furthermore, it may be desirable to change the structure of government debt towards more long-term paper, even if this implies somewhat higher costs in interest payments. More specifically, large scale purchases by foreigners of short-term government debt are to be avoided.

4. A final macroeconomic criteria emerging from the study of the Mexican peso crisis, is that in very open economies, it is necessary to have far higher foreign exchange reserves than in the past, due to the volatility of capital flows. Sharp declines of foreign exchange reserves require a speedy policy response, and should never be dismissed as a temporary problem.

As regards the style and pace of liberalization, both of the capital account and the financial sector, there has been a fairly important shift in thinking by international financial institutions, (for example towards recognizing the desirability of discouraging large short-term capital surges), but this shift still seems to be incomplete.

The key issues here include :

1. Slow and gradual liberalization of the capital account is desirable, and should be done when the economy is properly stabilized, and has a healthy financial sector. If excessive surges of capital flows occur, after liberalization of the capital account, measures need to be adopted to discourage them (for example, via reserve requirements for taxes). This is not a step back in the reform process, but a measure to make the reforms – and above all economic growth – sustainable. This seems one of the most clear-cut lessons from the Mexican peso crisis.

2. The liberalization of the financial system should also be done gradually, especially if it coincides with a period of liberalizing the capital account and of surges of capital flows. Large capital inflows (and subsequent outflows) can have very disruptive effects on banking systems.

Liberalization of the financial system should not be quicker than the development of a sound regulatory framework (including training personnel in new and complex tasks) will allow, without risk of a very large increase in non-performing loans. This is particularly the case when the banking system (as in Mexico) has just been privatized, as banks will be inexperienced in evaluating risk.

3. There are two specific important areas of regulation, whose need is highlighted by the Mexican experience.

First, there is a need to appropriately take account of exchange rate risks, and of the fact that exchange rate risk becomes credit risk in the case of a large devaluation and may lead to sharp increases in bad loans. If a bank borrows in foreign exchange, even if it lends in foreign exchange, there is an indirect but important exchange rate (and credit) risk, as in the case of a large devaluation, the borrower may become insolvent and therefore unable to pay. The Mexican and other regulators did not fully take account of this risk, and it is important that this is properly done in the future.

Secondly, episodes of financial liberalization are often followed by large booms of consumer lending (not just in Mexico, but also for example in the UK). This tends to lead to a decline in private savings, which contributes to a higher current account deficit. This tendency is sharply strengthened if there is a simultaneous surge in capital flows, especially if intermediated by the banking system. There seems to be a particularly strong case for discouraging excessive growth of consumer lending by regulatory (as well as macroeconomic) measures. A complementary policy is to do the liberalization of consumer credit particularly slowly and carefully. (Stephany Griffith-Jones 1998)

Notes and References :

1. See, Sidney Weintraub, "Mexico's Foreign Economic Policy : From Admiration to Disappointment," *Challenge/ March-April 1995, Pg.39.*

2. See, Gould David M., "Mexico's Tectonic Shift: Will it be long-lasting?", *Challenge*/March-April 1995, Pg.25-26.
3. See, Pedro Aspe and Jose Angel Gurria, 1993 "The International Bank for Reconstruction and Development/The World Bank: The State and Economic Development A Mexican Perspective", *Proceedings of the World Bank annual conference on development economics 1992*, Pg.9.
4. See, Gould David M., "Mexico's Tectonic Shift: Will it be long-lasting?", *Challenge*/March-April 1995, Pg.26-27.
5. See, Jose Angel Gurria Trevino, "The Mexican Debt Strategy", *Challenge*/March-April 1995, Pg.34-35.
6. *The Columbia of Journal of World Business*, winter 1995, Pg.60-61.
7. Jeffrey A. Hart, "Maquiladorization as a Global Process: Foreign Direct Investment in a changing global political economy", *International Political Economy Series*, Pg.25-37.
8. See, *World Economic Outlook, IMF*, (May,1995) Pg.90-97,Annex-I.
9. See, *World Economic Outlook, IMF*, Pg.94-95.
10. Ilene Grabel, "Rejecting exceptionalism, Reinterpreting the Asian financial crises: Global Instability, The political economy of world economic governance", (1999),pg.41.
11. Guillermo Ortiz Martinez, "What Lessons Does the Mexican Crisis Hold for Recovery in Asia: Finance & Development", June 1998, Volume 35, No.2.
12. Pamphlet Series No.50-Lessons from Mexico for IMF Surveillance and Financing", IMF 1995 and also website <http://www.imf.org>.
13. There is, of course, the controversial issue of whether and how the IMF should publish its views on individual countries. The IMF already has a variety of means for presenting its general views on important economic policy issues, including the Annual Report, staff documents such as the World Economic Outlook, and speeches and press by briefings by the Managing Director and other IMF officials.
14. This is true more generally of capital flows to emerging market countries during the 1990s.
15. It is critical that the potential problem of defaults by sovereign borrowers should not be allowed to expand through governmental assumption of the debts of private entities, as has sometimes happened in the past.

