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The Mexican Financial Crisis of December 1994 and Lessons to be Learned

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Abstract

When the Mexican financial crisis occurred in December, 1994, there was little information with which to analyze the prospects, but there were many similarities between the adjustment that Mexico went through in connection with the debt crisis of 1982-83. The time paths of crucial variables in the two situations, 1994-95 and 1982-83, has been studied in order to gain some insight, allowing, of course, for special circumstances that were important on each occasion.

We estimated export and import equations from monthly data, 1982-83, and used these equations, together with the rest of the CIEMEX model, to make extrapolations for the period after December 1994.

A main finding is that the earlier crisis required a two-year adjustment, but current circumstances lead the full model to extrapolate a milder contraction and faster (one year) recovery.

These calculations have been useful in interpreting some of the noneconometric aspects of Mexico's adjustment after 1994, as well as some of the circumstances that precipitated the crisis in the first place.

There have been many postmortem assessments of what occurred when Mexico suddenly revealed a crisis situation in December, 1994, and most of these analyses stress the exchange rate policy of Mexican monetary authorities -too little, too late- and the excessive use of short maturity tesobonos for

deficit financing. There is little quarrel with the fact that these were important issues and also with the fact that some individuals warned about a coming crisis well in advance of the December date; but in this paper we stress other dimensions or aspects of Mexico's underlying problems, with the feeling that these other issues have not been given adequate attention. If the issues that are to be dealt with below are not corrected, there will not be a satisfactory resolution of the problem.

Soon after the crisis, in early 1995, at a meeting in Washington, D.C., dealing with revisions and enhancement of the US economic statistics system, one of the two authors (Lawrence Klein) asked what international statistical information could have helped to avert the crisis or could have led to very early action of a mitigating nature? The response was extraordinarily simple; it was that if the monetary authorities had known the actual state of Mexican reserves (foreign exchange and gold) early action could have been taken.

At the beginning of 1994, Mexico had reserves of about $25-30 billion, but by early December, these had been drawn down to about $5 billion. The reserves were inadequate, as the year wore on, to meet current obligations, and a default was considered to be extremely dangerous for the stability of international financial markets; this constituted the makings of a crisis. In terms of lessons to be learned, we can be assured that the Federal Reserve, the US Treasury, the International Monetary Fund and other interested parties will not let such a statistical vacuum appear again. There is, presently, close monitoring of Mexico's and other developing countries' reserves on a frequent basis -perhaps weekly or monthly- in order to plug this hole in statistical knowledge. In addition, the IMF has been stimulated into providing a more

comprehensive set of "early warning indicators" in order that such an embarrassing situation should not happen again. This is all reassuring, but does not fully deal with the problem.

Generally speaking, a promising, developing country should, in most cases, be incurring a deficit on current account and a corresponding inflow of international financial capital in order to pay for the import surplus that can be vital to future expansion. The capital inflow can take various forms. It can be:

(i) portfolio investment in securities

(ii) direct investment

(iii) private loans

(iv) official grants, transfers, loans

Mexico previously got into trouble, almost like that of 1994-95, in 1982. A crisis developed at that time in the form of excessive international debt, much of which could be traced back to the recycling of the petrol-dollar surplus. That was a serious disaster, not only for Mexico, but for many developing countries in Latin America, Asia, and Africa. Mexico, Brazil, and Argentina were among the hardest hit by the World Debt Crisis of the 1980s, and it was so serious that there was, in fact, a decade of no growth, while lenders and borrowers renegotiated the enormous sums at stake.

The bitter experience of the 1980s would seem to have taught a lesson to aspiring developing countries -not to become too exposed by unsustainable debt burdens, either from private banks, other private lenders, or from other governments. The debts were assumed at fairly modest interest rates, but the servicing burden became unbearable when the main creditor countries decided to deal with their own inflation by tight monetary policies that lifted rates to

levels that went far beyond the ability of developing countries to pay.

A Mexican colleague remarked, during the dark days of the 1980s, that the situation became so bad that the Bank of Mexico could not issue a check for payments demanded by creditors until some funds had been received, to cover the amount of the outgoing check. This is an intolerable situation for a self-respecting nation, yet it is, in effect, like the situation that Mexico faced in late 1994. The main difference is that the latter crisis was more confined, to Mexico, with a possible spread to a few other Latin American countries.

It would seem that a major lesson to have been learned from the experience of 1982 was that Mexico should resort more to an inflow of private equity (instead of debt) capital in order to offset the current account deficit, but that, too, proved to be an inadequate lesson.

Mexico made itself into an attractive host for international equity capital. The country liberalized according to accepted principles being urged by the major multilateral institutions. Markets were freed-up; equity ownership of Mexican assets was made easier; and the NAFTA Agreement was put in place. The major industrial countries could say that Mexico was doing "all the right things" according to the liberal philosophy of free-market capitalism. That, however, proved to be inadequate.

Not only should the lesson have been to shift to equity capital inflow, away from heavy reliance on debt capital -especially away from sovereign lending or sovereign borrowing- but it should have stipulated that "hot" money in the form of portfolio equity capital should have been kept relatively small. The emphasis should have been much more heavily on direct investment through wholly owned facilities of foreigners, joint ventures, license arrangements or

other kinds of hands-on capital in which the host works alongside the foreigners who have superior technological know-how that is to be transferred.

The host country should make itself attractive, but must stay directly involved at all times. This kind of capital exchange is much more stable, for the long term, and contributes to modernization for the host country.

Mexico had a great deal of the right kind of direct capital investment in 1994 but not enough. There was too much money coming in through the medium of stock-brokers or investment bankers who were interested mainly in quick returns of 15-25%, or more, annually, and ready to leave as soon as trouble appeared on the horizon.

There were troubles "a plenty" for Mexico, not only conventional economic troubles narrowly defined in terms of adequacy of reserves, ability to service debt, or ability to generate good profits on equity capital. There were important social and political problems. There was, first of all, the Chiapas rebellion in the early days of 1994, which the Mexican government took all too lightly. At a conference in Guanajuato, sponsored by the Leon Campus of the Tecnologico, in the latter part of March, 1994, a familiar theme was that the Chiapas revolt should be considered as a "wake-up" call to Mexico. The political leaders were being asked why the growing prosperity was not shared by all segments of the population. This was an issue of *distribution---of* income and wealth.

On the way home from that conference, the news headlines covered the assassination of Candidate Colosio. This was not a situation that appealed to international investors, and they eventually started a massive withdrawal of portfolio capital. Not only did foreigners take "hot" money out of Mexico, but many Mexican nationals ex-patriated their own funds. Investors want political

stability and found little in Mexico, especially after other disturbing events followed the killing of Colosio.

Both these socio-economic and politico-economic aspects of Mexican life the failure to deal with distributional matters and the breakdown of political stability--contributed greatly to the Mexican crisis, and remain as obstacles to vigorous economic recovery. These are defining points in explaining why Mexico and other Latin American countries are not yet ready to implement an economic miracle like those that have taken place in East Asia.

A related characteristic of the Mexican expansionary phase was the focus on consumption and heavy investment in projects that contributed little to the country's urgent needs to build an industrial infrastructure. Shopping malls, convenience stores, fast food outlets and other features of a high consumption society were plainly evident, in place of new factories based on modern technologies served by a well functioning infrastructure (communication, transportation, sanitation, water, etc.). That is not to say that all investment was consumer-oriented; it is simply that not enough was oriented towards improved industrial productivity.

High savings, high investment, strong export expansion, and productivity improvement needed more emphasis. Mexico has a moderately high savings rate but not up to the levels in many East Asian countries, where economic progress has been the world's envy.

What is a likely prognosis for Mexico, given the unusual action of the United States and the International Monetary Fund in containing the crisis? We have already seen a great part of the economic adjustment--a deep recession, elevated price levels, high interest rates, currency depreciation. These events of

1995 sound remarkably familiar. These were, in fact, similar to the reactions to a crisis in 1982-83.

There had been general approval of Mexico's economic reform program, yet the changes that were introduced were not enough to prevent a recurrence of near financial bankruptcy. Although the changes were not sufficient to prevent a recurrence they may have been instrumental in changing the dynamics of recovery. Mexico had seemed to be a very promising emerging market for the world investment community in the late 1980s, early 1990s, and it undoubtedly is very attractive now, but more for the long term investor and not for speculative capital that seeks a quick return at very high rate.

In 1982-83, Mexico was but one of many developing countries struggling with a debt servicing burden; in 1994-95 the spread of the crisis was restrained. To some extent, Argentina felt the effects, and other Latin American stock markets reacted sharply, but only for a few weeks or months. On the whole, the joint aid was effective, and no other country needed such an infusion of support in short order. It may not have been possible to repeat the rescue operation several times over.

Also the climate for recovery appears to be better now than it was in 1982-83. This first episode turned out to be a two-year recession for Mexico, followed by a stagnant period of very limited economic progress. The figures in Table I show that imports were severely restricted in 1982-83, while exports were expanded moderately. This enabled the trade balance to go quickly into surplus. The same is true of the current account. It was, however, a long time until inflation was brought under control, largely through imposition of the kind of anti-inflation strategy that worked in Israel.

The border industries (Maquiladora) were relatively new, and held fairly steady in 1982-83, not contributing significantly to the adjustment. Also, there was no NAFTA, to encourage basic, long-term foreign investment. The facts that Mexico is a resource-rich country and is still attracting much direct investment have contributed to a reduced period of painful adjustment.

Things are working out similarly in the present context, but the recovery path appears to be visible in a much shorter time frame.

The worst point of the recession seems to have occurred in mid 1995. The figures in Table 2 show smaller declines in real GDP at the end of 1995 and a very small decline in the first quarter of 1996. This year is expected to see a return to expansion, although modest. The inflation rate is down; the trade balance has been in surplus since early 1995, and the current account is near balance in 1996. Exports have grown nicely, and imports have practically held steady since the onset of the crisis.

In the Maquiladora sector, both imports and exports have expanded together since early 1995. The trouble spots have been (1) falling real wage rates and, (2) increased unemployment. Signs are visible now that these two important indicators are about to change for the better.

Table 1. Mexican economic indicators

	1981	1982	1983	1984
Gross Domestic Product (% real growth)	8.8	−0.6	−4.2	3.6
Inflation Rate (% annual average)	28.0	58.9	101.9	65.5
Exchange Rate (annual av. − ps/dls)	24.5	57.2	150.3	185.2
Current Account Bal. (billion dollars)	−16.1	−6.2	5.4	4.2
Trade Balance 1/ (billion dollars)	−3.8	6.8	13.8	12.9
Total Exports 1/ (billion dollars)	20.1	21.2	22.3	24.2
Total Imports 1/ (billion dollars)	23.9	14.4	8.6	11.3
Maquiladora Exports (billion dollars)	3.2	2.8	3.6	4.9
Maquiladora Imports (billion dollars)	2.2	2.0	2.8	3.7

1/ Excludes maquiladoras.
Source: Ciemex-Wefa with information from Banco de México and INEGI.

Table 2. Mexican economic indicators

	1993				1994				1995				1996
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Gross Domestic Product (% real growth)	2.4	0.2	−0.8	1.0	0.7	4.8	4.5	4.0	−0.8	−10.5	−9.6	−6.6	−1.0
Inflation Rate (% quarterly)	2.7	1.7	1.8	1.6	1.8	1.5	1.6	1.9	14.5	16.0	5.9	8.0	8.3
Exchange Rate (quarterly av. - ps/dls)	3.11	3.11	3.12	3.13	3.17	3.34	3.39	3.60	5.97	6.16	5.21	7.34	7.51
Current Account Bal. (billion dollars)	−5.7	−5.8	−6.6	−5.4	−6.7	−7.4	−7.8	−7.5	−1.2	0.5	0.5	−0.5	...
Trade Balance 1/ (billion dollars)	−3.6	−3.4	−3.4	−3.1	−4.3	−4.6	−4.8	−4.8	0.6	2.6	2.2	1.7	1.8
Total Exports 1/ (billion dollars)	11.8	12.9	12.9	14.3	13.8	15.1	15.1	17.0	18.8	19.6	20.1	21.0	21.8
Total Imports 1/ (billion dollars)	15.4	16.3	16.3	17.3	18.1	19.6	19.9	21.8	18.2	17.0	17.9	19.4	19.9
Maquiladora Exports (billion dollars)	4.6	5.5	5.6	6.2	5.7	6.5	6.7	7.4	7.1	7.6	8.0	8.4	7.9
Maquiladora Imports (billion dollars)	3.6	4.1	4.3	4.5	4.5	5.0	5.2	5.7	6.0	6.3	6.7	7.1	6.6
Real Av. Wages 2/ (% annual)	7.3	3.1	3.7	4.2	6.3	3.9	2.5	2.3	−3.3	−11.4	−14.6	−19.9	...
Unemployment Rate (quarterly av.)	3.5	3.2	3.7	3.3	3.7	3.6	3.9	3.6	5.2	6.5	7.4	6.1	6.2

1/ Includes maquiladoras.
2/ Index of Real Wages in Manufacturing Sector. 1980= 1.0;
Source: Ciemex-Wefa with information from Banco de México and INEGI.

On a monthly basis, in Table 3, we can see that the trade balance switched from minus to plus by the time the crisis was only 2 months old, in February 1995. A steady stream of large monthly deficits has been replaced by an impressive stream of surpluses. Exports were moderately expanded, but imports were only slightly reduced below December 1994 levels and held steady.

The exchange rate of the peso vs. the dollar doubled in this first year of adjustment (peso per dollar) and will undoubtedly continue to depreciate, but the speed of deterioration is much less than before. On a *monthly* basis, inflation has been stabilized at about 2 to 3%.

In bilateral trade with the United States, the net turnaround has been stronger and faster than is the case with Mexico's overall balance.

The forecasts, however, of a shorter recession in a more resilient economy appear to have been borne out. It is, of course, too early to declare an end to the recession. Real GDP fell by more than 6% in 1995, a sharper fall than in 1982-83, but the monthly statistics of industrial production seem to have turned up during the last few months of 1995 and continue upwards in 1996.

Mexico has been successful in returning to the international bond market, and the stock market has stabilized, even recovered from its lowest values.

To reinforce the arguments about the faint appearance of a recovery that was projected over one year ago, we have made some simulations to see if there is evidence for a continuation of these early signs of recovery.

Table 3. Selected monthly data, 1995–96

		Inflation (monthly rate)	Interest rate (cetes)	Exchange rate (average) ps/dls	Unemployment rate	Industrial production (index) 1/	Trade balance 2/ (mill.dls.)
1995	January	3.8%	37.25%	5.51	4.5	129.7	−307.7
	February	4.2	41.69	5.69	5.3	122.3	470.3
	March	5.9	69.54	6.70	5.7	131.0	434.2
	April	8.0	74.75	6.30	6.3	114.5	895.5
	May	4.2	59.17	5.96	6.6	122.5	991.0
	June	3.2	47.25	6.22	6.6	116.3	712.3
	July	2.0	40.94	6.13	7.3	113.9	659.7
	August	1.7	35.14	6.19	7.6	118.3	692.0
	September	2.1	33.46	6.30	7.3	116.8	862.9
	October	2.1	40.29	6.69	6.7	120.1	718.3
	November	2.5	53.16	7.66	5.8	125.0	471.0
	December	3.3	48.62	7.66	5.5	123.9	489.1
1996	January	3.6	40.99	7.50	6.4	129.4	672.6
	February	2.3	38.58	7.50	6.3	127.3	491.3
	March	2.2	41.45	7.57	6.0	...	681.8
	April	2.8	34.49	7.53	5.9	...	731.0

1/ Index 1980=100
2/ Includes Maquiladoras

A simulation exercise

In looking at the monthly pattern of exchange rate values in Table 3, it is plausible to assume that the upward movement in the rate has not yet run its course. We, accordingly, fixed the rate at 8.0 pesos/dollar on average in 1996. We used the same basic input values for this calculation that were imposed by CIEMEX-WEFA in their baseline forecast evaluation of the Mexican Economy. Solutions for 1995 and 1996 are presented in Table 4, where it can be seen that the decline for 1995 in total output (GDP) is reversed to a modest gain for 1996. This is our main basis for saying that the 1995-96 adjustment policy provides estimates of just one negative annual production change value followed by a positive value, estimated for 1996. The trade balance in this simulation turns more positive; the annual changes in real wages has turned positive;

employment appears to be realizing gains; inflation is subdued; and interest rates are expected to fall a bit. Much of the fear in international economic circles was appropriately based on the possible spread of Mexico's crisis across borders, to other Latin American economies. A principal possible victim was thought to be Argentina, but deft work in policy formation in that country

Table 4. Simulation (Exchange rate 8.0 ps/dls)

	1995	1996
Gross Domestic Product (% real growth)	−6.9	4.3
Primary sector (%)	−3.7	6.8
Secondary sector (%)	−8.0	4.5
Tertiary sector (%)	−6.7	3.9
Trade Balance (bill.dls) 1/	2.164	4.539
Exports (%)	39.9	11.2
Imports (%)	−21.4	6.6
Exchange Rate		
Annual Average (ps/dls)	6.407	8.000
Change (%)	90.4	24.8
End of Period (ps/dls)	7.675	8.796
Change (%)	50.5	14.6
Public Expenditure (%) (Consumption & Investment)	−6.8	5.5
Labor Sector		
Annual Average Real Wage (%)	−13.4	−1.3
Employment Formal Sector (%)	−7.0	2.8
Inflation (CPI)		
Annual Average (%)	35.0	31.2
End of Period (%)	52.0	24.1
Interest Rate (Annual Average) 2/		
Nominal	48.44	32.26
Real	6.45	4.81

1/ Excludes Maquiladoras.
2/ Corresponds to the Treasury Bill Rate (Cetes 28 days).

seems to have turned around a recessionary situation within a few months. The IMF projects a modest growth in Argentina's GDP in 1996 at about 2.5%, following a decline of more than 4% in 1995. The line has been held on inflation and the exchange rate. In these senses, a potentially spreading crisis has been contained.

In addition to the assumption that the peso exchange rate would average, against the dollar, 8.0 for 1996, we used the CIEMEX-WEFA assumptions that public sector spending would grow by as little as 0.7% in 1996, after having contracted by 8.4% in 1995. The monetary base was expanded by 17.3% in 1995.

A feature of our simulation is that we estimated trade equations from monthly statistics of 1982 and 1983, using the sensitivity of exports and imports to changes in exchange rates that were observable in the previous crisis. A year ago, we used the same equations to get a very early judgment of the crisis effect. We had little else to guide us then, and concluded at the time, that the recession would be just one year in duration. That has proved to provide us with good guidance, and we have re-applied the same technique with the added advantage of having better initial conditions that reveal how events worked out in 1995.

Annex

Estimates of the Exchange Rate Effects on Exports and Imports, 1982-83

(months)

(Equations used for the scenario)

Non-oil exports (mdse.)

In (tegon $) = -11.31 + 0.17 In (rexsm (-1)) + 2.13 In (USIP)

(2.54) (1.85) (2.09)

$R2$ = 0.66 DW = 1.88

e = 0.33 e -1

(1.54)

Tourism exports

In (tesbtn$ + testun$) = -5.02 + 0.44 In[USIP*rexs m*P/Pe]

(1.51) (1.07)

R^2 = 0.66 *DW* = 1.74 [activity level and exchange rate effects

are the same (elasticities)]

e = 0.67 e-1

tegon$ = dollar value of Mexican non-oil exports

rexsm = peso per dollar exchange rate

USIP = index of US industrial production

tesbtn$ + testun$ = tourism receipts

USIP*rexsm*P/Pe = value of US industrial output in pesos deflated by an index

of Mexican export prices, in pesos.

Total imports (mdse)

In (tmpmn$) = - 1.02 In(rexsm) + 0.43 In (rexsm)_6 + 5.45 In(ipi) - 4.84 In(ipi)_ 6

(2.41) (1.44) (5.09) (4.75)

R^2 -= 0.69 *DW* = 1.89

tmpmn$ -- dollar value of Mexican imports

ipi = domestic (Mexican) industrial production index.

Tourism expenditures (Mexican)

In (tmsbtn$ + tmstun$) = -1.40 Irn(exsm) -2.10 In(rexsm)_: + 2,14 In (rexsm)_6

(2.92) (2.87) (4.22)

+5.70 In(ipi) - 4.58 In(ipi)_3

(3.84) (3.22)

R^2 = 0.83 *DW*= 2.14