Mexican Crisis 1994

Roots and Consequences – by W. Mościbrodzki
wojmos@interia.pl; http://www.wojmos.com

In this paper, author presents his analysis of Mexican crisis in 1994. At first, the macroeconomic and political background is presented, with some remarks what went wrong and if there were methods to prevent disaster from erupting. Then, the behavior of the foreign investors is investigated and discussed against possible reasons of their incapability to see dangerous symptoms. Finally, further questions are raised, addressing today and future challenges.

Introduction

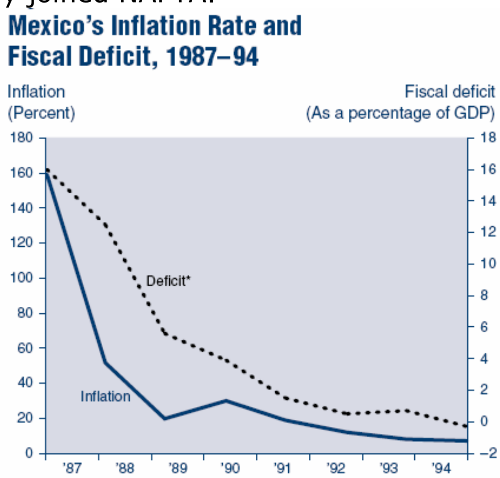
To properly answer the question stated above we must investigate the situation in Mexico and firstly decide if symptoms of problems were evident in the months or years preceding the downfall. At least 3 areas need to be examined:

- internal macroeconomic situation (like inflation, current account balance etc.)
- global ("external") events in world/region (like incentives for foreign investments, changing interest rate on nearby markets etc.)
- social / political state of the country and its stability

Macroeconomic Situation – the Background of Storm

Throughout the late of the 1980's the Mexican economy struggled under its crushing debt burden. Per capita GDP growth from 1981 to 1988 was -2% per year. Government spending on health and education fell under the fiscal pressure. A grim but evident effect was increased hardship and worsening future prospects for poor children. In 1990 the Brady Plan recognized the need to reduce interest and principal payments for Mexico and other developing countries. The focus shifted to market-oriented reforms. Mexico cut government spending while refocusing on social needs, reformed the tax system, privatized state enterprises, and liberalized trade. Those activities fruited in good results.

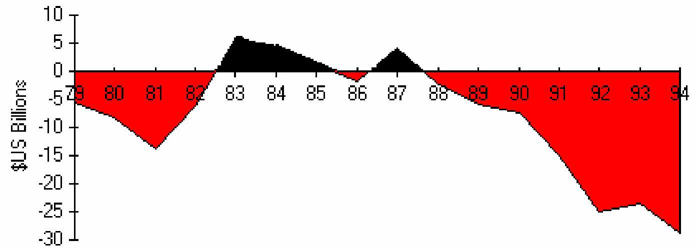
Generally speaking, in the early 90s the situation seemed to be very good – at least at first glance. Mexico just healed after two downfalls (debt crisis in 1982 and oil price driven slowdown in 1986) and it looked wounds are cured thanks to economic reforms know as the Pacto. This agreement – signed by major social players - allowed also restructuring the foreign debt (Brady bonds), reduction of budget deficit and inflation rate. In early 1984 Mexico has recently joined NAFTA.



Brief examination of country's fiscal structure suggested, that crises of 1982 and 1987 should not repeat. E.g. nonfinancial public sector was balancing on zero value, while in 1981 it showed a deficit of 13% of GNP. Primary balance was on surplus, while in

1981 a large defcit of 8% GNP was observed. There was no sign of external crisis trigger (oil price decline of 1986).

However, the current account deficit rose very quickly (from 6 bln in 1989 to 24 bln USD in 1993, which meant – in relative values – adding 2.1 per cent in relation to GNP in two years).



Mexican Current Account Deficit

One way to judge the significance of the current account deficit is to look at its size relative to Mexico's GDP. The larger the share of the current account deficit in GDP, the larger the possible effect of shifts in external capital flows on the economy as a whole, and the greater the overall macroeconomic adjustment necessary to address pressure on the external acount. Between 1992 and 1994 the Mexican current account deficit averaged 7.4% of GDP. This level of current account is high but not unprecedented in more successful developing economies. However, indicator scaling the current account deficit (differences in the value of goods priced in foreign exchange) by GDP (an income flow valued in pesos) is sensitive to the valuation of the currency. Without additional policy, a devaluation of the peso would raise the current account deficit as a share of GDP. Thus, say, a 40% devaluation of the peso implies a current account deficit ratio of 12.3% of GDP, and hence indicates a more significant macroeconomic adjustment.

Between 1989 and 1993, export growth in Mexico averaged 8.7% per year while the current account deficit (excluding debt service) averaged 31.7% of exports. This implies a steady-state foreign liability to export ratio of 3.5. That means that in such a steady state Mexico would have to devote 36% of its exports to cover factor services if the required return on its foreign liabilities was 10%. These figures are rather high and suggest that there was an significant imbalance on the current account, one consistent with an over-valued real exchange rate. The further problem is, how severe this imbalance was and how a correction might take place.

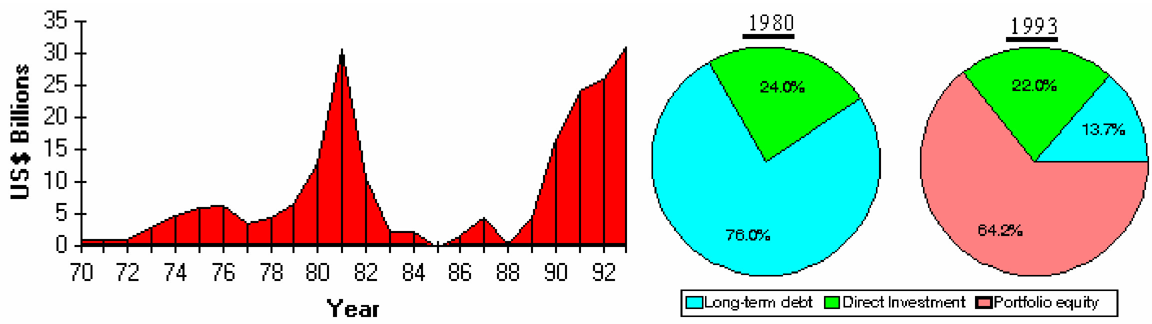
Another way to assess Mexico's vulnerability is to consider the size of its current stock of outstanding foreign debt. Averaged over 1991-1993, the present value of Mexico's future debt service obligations (a measure of the stock of debt) amounted to 184% of exports of goods and services and 36% of GDP. The World Debt Tables classify a country as severely indebted if its debt is greater than 220% of exports or 80% of GDP. A country is considered moderately indicated if the debt indicators are less than the above figures but higher than 132% of exports or 48% of GDP. Thus Mexico's debt stock relative to its level of exports places it in the moderately indebted category, while the debt stock to GDP indicator falls in the less-indebted category.

Some experts (Dornbusch, Williamson) suggested peso devaluation at that point of time, because crawling peg policy overvaluated the national currency. However, the government was not concerned, believing in that private capital inflow was financing the investments, so monetary expansion was not needed and current account gap will close soon (those investments, when completed, would make the current account turn around). Unfortunately, that expectation was not correct.

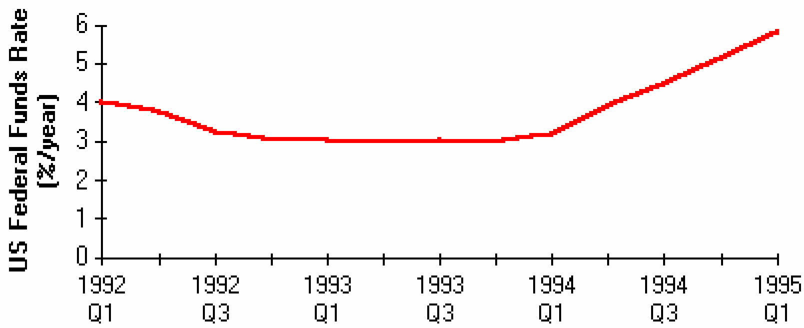
The investment capital in majority did not seek for long-term opportunities, in which case the country would benefit from growing export in close future. To the contrary, foreign investors headed for short-term, portfolio investments. Note, that while in 1990 FDI and Portfolio parts were roughly comparable, the upcoming years skewed this ratio to 1:7 in three years.

	1987	1988	1989	1990	1991	1992	1993	1994
capital balance	-3	-4,5	1,1	8,4	25,1	27	33,8	15,8
FDI, bln USD	1,2	1,7	2,8	2,6	4,7	4,4	4,4	7,9
Portfolio, bln USD	-1	1	0,4	3,4	12,7	18	28,9	8,2

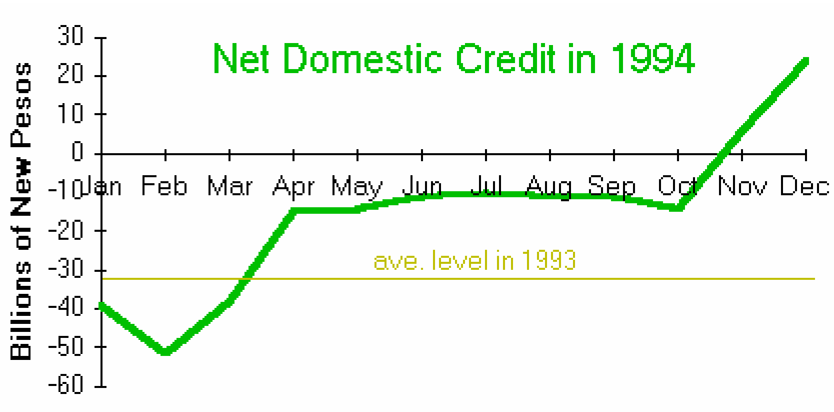
In that case, when short-term assets played major role, and the events of 1994 (described below) scared foreign investors, the capital flow reversed in a moment. The source of money run dry very quickly (thanks to underestimated or overlooked high liquidity of international money).



The reverse of capital flow was caused not only by bad Mexican policy. In 1991-1993 USA interest rates were at relatively low level (around 3 per cent). That was an incentive signal to investors to look for opportunities in other markets. However, in 1994 T-bill rate flown almost by 80%.

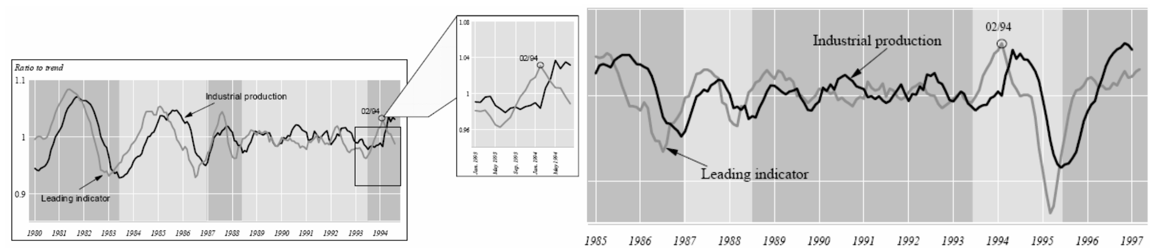


Another issue was government reserve. The lack of the information (no matter if they were really unavailable (http://www.imf.org/external/np/exr/ib/2001/030901.htm) or just not taken into analyses) of current level was one of the key elements of the upcoming crisis. During 1990-93 the reserves raised almost 3 times in total (which at first sight gave an optimistic signal of state's financial stability). However, the monetary base was shrinking rapidly, suggesting negative domestic credit. The cetes were issued (and purchased by foreign investors) regularly, so that growing reserves were accompanied by growing liabilities of short terms. Some reports claim, that even during the reserves' peak in 1993 Mexico's total liabilities were four times greater that total sum of reserve. The situation looked like if one would borrow money from bank just to show piles of coins as his emergency supply for the time of need. The credit burst happened, however, in 1994.



Finally, the Mexican economy business cycle was just entering its most dangerous phase. The significance of this is usually omitted, as it might be difficult to forecast cycle boundaries a priori (analysis made a posteriori is far easier). However, there are proofs that simulations done using data available to market players in 1994 are not far from simulations using data available after the crisis. In a OECD databank, one could find such an analysis (http://www.oecd.org/dataoecd/3/57/1896695.pdf):

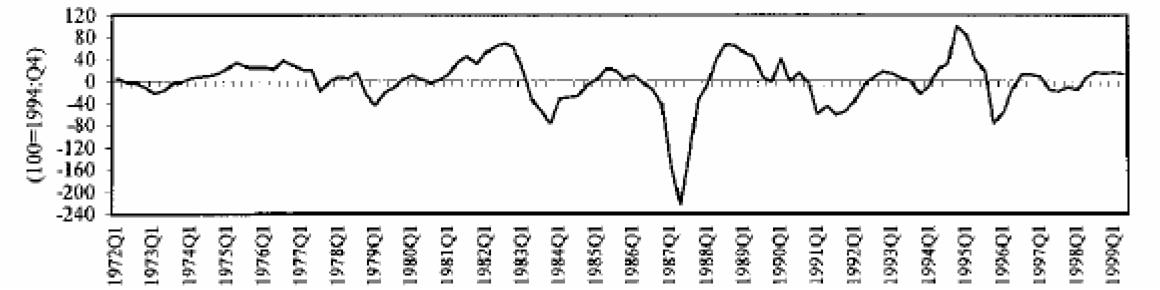
The left picture shows CLI (composite leading indicator) value based in '94 data as opposed to real values (black ink). Right chart present a posteriori analysis. In both cases, symptoms of upcoming crash can be foreseen in 4 months ahead.



Source: OECD

Both indicators are based on data available on public domain access (like inflation, unemployment rates, interest rates, production tendency etc.).

Just another clue comes from business cycle analysis done by IMF researchers who observed banking system vulnerability in Mexico, estimating the danger basing on some wide—known indices (http://www.imf.org/external/pubs/ft/wp/2002/wp02150.pdf). Please note, however, that this measures only potential threat to financial institution – the crisis in 1987 was not so deep as the one of 1994.



Source: IMF

Those examples give final evidence that financial crisis in 1994 could be foreseen and hereby states a question, why it did not. That will be discussed later on.

Political and social situation in Mexico – The Trigger

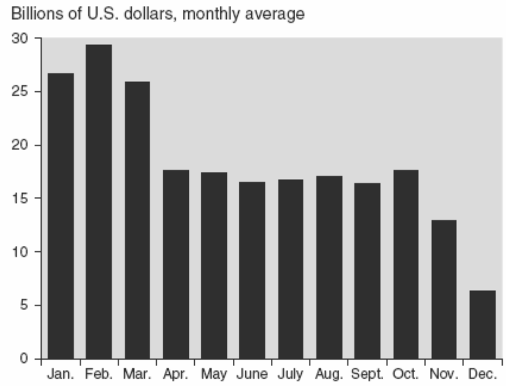
The political situation in Mexico eroded since governance of president Alvarez in early 70s. The growing problems of poverty and natural increase rate of almost 4% caused the tendency to raise empty populist promises. The lack of real reforms however, stood against any improvement. However, the finding of oil resources as well as José López Portillo Pacheco policy oriented to strict and tight macroeconomic seemed to put Mexico on a fast track to economical bloom. Unfortunately, corruption, growing importance of narcotics gangs and lack of political consistency led only to large unbalance in income distribution and unhappiness. In that type of situation populist politicians used to appear, shifting the state into instability, which was clearly observed in Mexico.

Moreover, the debt crisis in 1982, oil prices downfall in 1987 as well as the incompetent rescue action after significant earthquake in 1985 swept away public trust from ruling RFI party. This will play, unexpectedly large role in 1994 when political instability and economical costs of political election will catalyze the financial crisis (countries are usually unable to carry on with economy rescue operations near the elections).

In 1988 the presidential debate touched the role of international economic institutions and view on Mexico's future economy. Carlos Salinas de Gortari won the election, but rivaling) populist Cuauhtemoc Cardenas Solorzano (also representing ruling PRI party undermined population's trust to reforms. Salinas' advantage was only 1% giving him only a weak mandate to introduce reforms. Surprisingly, however, the new president was able to introduce a new course, closely cooperating with IMF and OECD. The development speed was high and everything seemed to be back on a good way. On the other hand, the level of corruption was still significant. Moreover, not all the society benefited from growth which made a tension in society. The next presidential election was planned on 1994. People were expecting new social bonuses, a traditional gift from candidates.

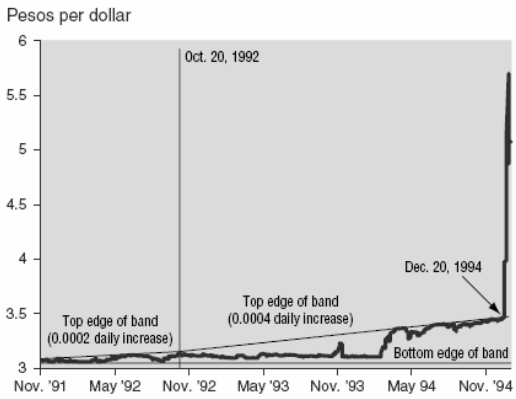
In the early 1994 a rebellion erupted in a rich southern province of Chiapas. The left partisans from Zapata Movement (EZNL) fought for more social benefits and requested autonomy in the name of Mexican Indians, who lived in secluded villages, often without health care and education services. The uprising, led by subcomendante Marcos, had strong support from locals, because those native Mexicans did not participate in effects of economy bloom in late 80's, and government promises of prosperous future after founding oil sources proved to be empty. This undermined the country's political stability. To make it worse, the guerilla exploded just before presidential election.

On March 23rd, the sure-to-win ruling's party candidate Luis Donaldo Colosio was assassinated on his electoral tour. That pushed concerns of political future onto next level and forced a pressure onto peso (an interesting remark is, that even though Mexico had witnessed political murders of high officials, they always affected politicians still holding offices or after their resign). The Central Bank reacted but the cost was very high – Mexico lost 11 bln USD of his federal reserves in four weeks.



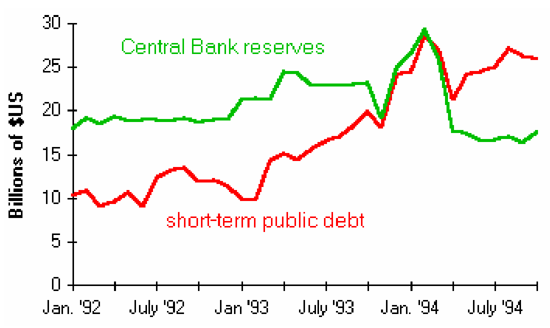
Mexico Government Reserve Level in 1994
Source: International Monetary Fund

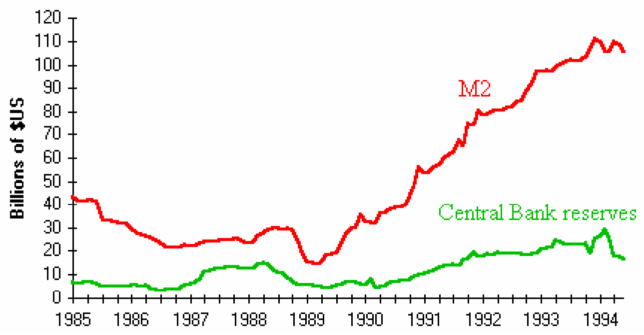
The high pressure on peso quickly drove the exchange rate on 0.0004 ceiling line in country's crawling peg system (the currency stayed at this level till end of 1994 and spectacular crash in December). The political instability was even more strengthened after a resignation of a Minister of Interior, Jorge Carpizo, kidnapping of a prominent businessman Alfredo Harp and second political assassination (José Francisco Ruiz-Massieu, leader of ruling party). The last event was even more sensational after Deputy Attorney Mario Massieu accusations (followed by his resign) that his brother's murder was ordered by prominent leaders of a ruling party.



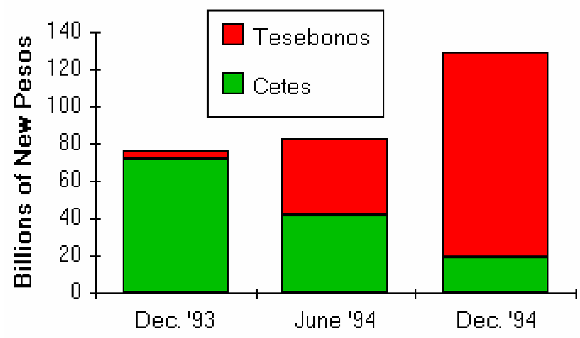
Source: Bank of Mexico

Since start of political unrest, starting in early 1994 and peaking later, the Mexican government issued bond not only in pesos (cetes) but also in papers indexed on dollars (tesobonos). They were usually noted a few percent lower than cetes, and that way the Mexico lowered the interest cost of its debts (tesobonos reached their peak in bond portfolio in August). However, that way the government put aside benefits form potential devaluation. It might be, however, a intentional try to give a signal to the market that Mexic is NOT planning a depreciation of its currency.

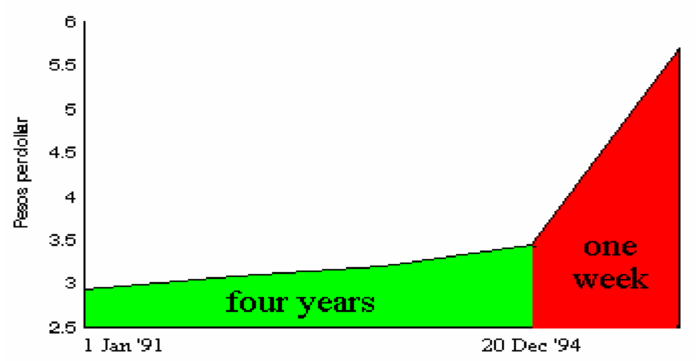




That finally lead to the situation, that Mexico must have been choosing between giving up from maintaining current exchange rate or devaluating. Withdrawing from the officially announced target band thus switching to floating policy (and freeing the reserves form supporting peso) could heal the situation, but that was not sure. Moreover, that meant breaking the recent government promises of defending the currency value which - in present unstable political situation - could provoke new unrest (depreciation the peso furthermore). On the other hand, continuing to support exchange rate can be done by tightening monetary base. That, however, could also lead to social and political strife – as well as slowed already slow economy. The third way was to devaluate peso at non-shocking level (hoping to match the long-term currency real value). Unfortunately that should have been done with protection of federal reserves, which Mexico does not possess (not mentioning that most of the bond were now transferred to tesobonos, not giving the reduction of debt in case of denomination).



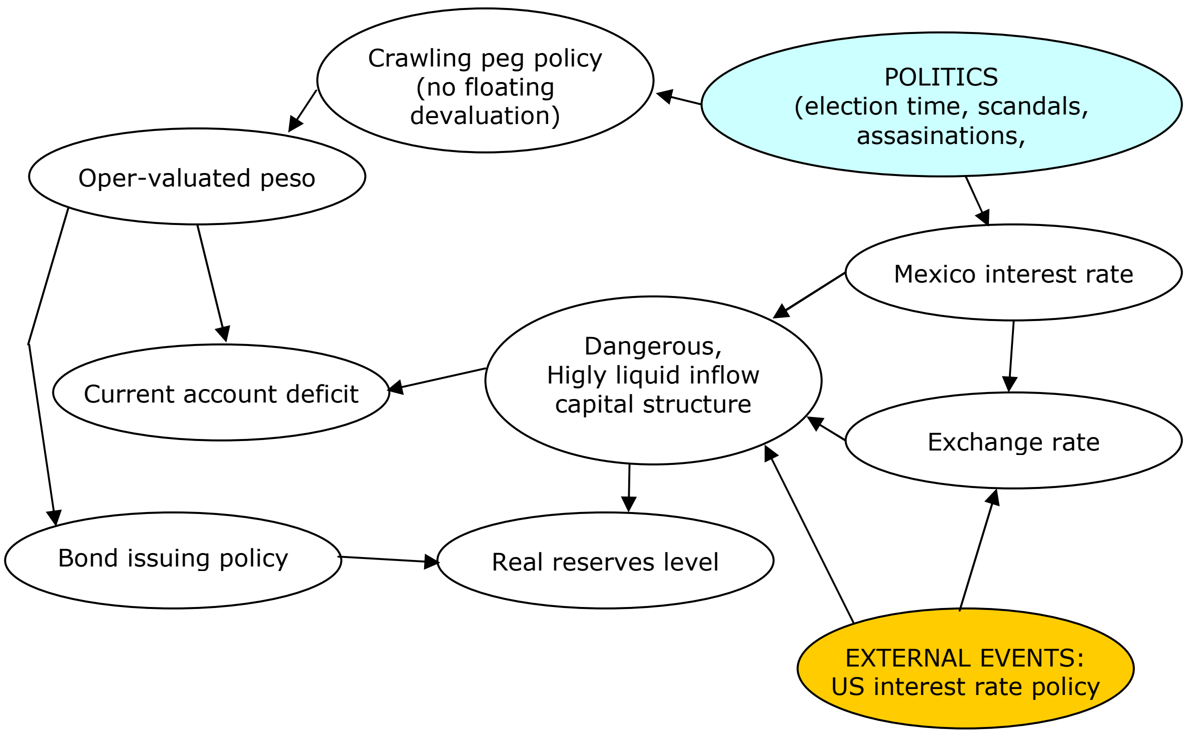
The interest rates were raising so and the government source of financing the expenditures – the Cetes (short-time peso-valued bonds) increased almost by 7%. At this point devaluation of a peso was announced (20th Dec), making a breaking point. That was like a signal for investors to retreat from Mexico, as government lost its hard-won credibility. National reserves fell again – this time by more than 4 bln USD in one day, reaching critical of 6 bln USD on 22nd Dec. The spectacular crisis emerged, and Mexico announced its currency a float. USA and Canada as well as International Monetary Fund issued a swap credit line in a try to control the disaster.



Summary - Should Mr. Woo, and others, have expected the crisis of Dec 1994?

The dark, stormy clouds in the late 1993 were clearly visible. They came from various areas: macroeconomic, financial, political and social. A significant and rising current-account deficit (caused by government-supported overvaluation of the exchange rate), semifixed exchange rate, dangerous structure of highly liquid capital inflow and dramatically low level of reserves (sometimes masked by high nominal values as in 1993) - not omitting corruption in ruling party and social discontent were enough to create a disaster. However, even though the crisis was very probable, it was not predestined. It was like the over-cooled liquid, which can be stable (to some extent) unless the catalytic factor is nonexistent. Unfortunately, this factor appeared (the political instability, uprising and assassinations) causing the "phase transition" and crisis.

In economic multidirectional dependencies of causes and results it is often hard to distinguish variable from score. However, a picture below can act as brief description of Mexican crisis. I would like to emphasize, that - in my opinion - Mexican crisis was not caused solely by economic means (although they played main role) but rather by a fatal coincidence of bad economical and political issues.



A sketch of main chain reaction factors in the Mexican crisis

So if anyone can see the financial crisis in 1994, why no-one did?

Why all investors disregarded symptoms of disaster?

Reasons for such an irrational (at first glance situation) are psychological in nature. First of all – herding behavior plays unexpectedly large role in decision making process. Therefore when all large institutions take policy to invest – we follow that approach (with a little risk). Herding might be illogical sometimes (when we deal tremendous sums of money), but indeed it is a very strong behavior shaper.

Secondly, the investors are optimistic in general. Therefore, they tend to try their chances even in face of a crisis – especially with short-term instruments (with Mexico as a perfect working example). They pursue the idea that if something goes wrong, they would be "among the first at the doors" (they are optimistic about their mobility, even if their views on financial prosperity are not so bright). This sliding "on the edge of storm" manner is typical with short-term investments, which form a majority of Mexican capital inflow.

Thirdly, to copy competitor's policy is always a defensive, but reliable strategy. Therefore granting a credit to a risky acting government, entering unbalanced market or investing in uncertain situation can be rational (if my main rival just did it and my knowledge is not bigger than his).

Fourthly, the assumption that we all have full and reliable knowledge on the case is usually false. Therefore we act and decide in the space of uncertainty. In that we tend to trust someone else's decision even if our own calculations are against chosen solution.

Fifthly, this is a typical human behavior that if signals for bad event are old and nothing happens – we tend to disregard them (like people ignoring true wolf appearance after repeated false alerts of a young rascal shepherd). This phenomena is widely observed – e.g. in ecology. We pump more and more carbon and sulphur dioxides into the atmosphere, but because the observed results (like catastrophic climate shift probability) are slowly and unnoticeably rising – we do nothing to stop (despite cries from ecologists). Unfortunately – when wolf stands at the door, the catastrophe is spectacular and inevitable.

Finally, our knowledge can be false – which certainly happened in Mexico crisis case. Many analyses done just before eruption of disaster were estimating good future for Mexican investments. Some even forecast appreciation of peso. Combined with herding effect this led many investors to total a misjudgment of the situation.

Final Conclusions and Open Questions

A floating currency system as opposed to crawling peg seems to be more resistant to large scale crises. It is like in all controlled systems (economical, biological, computer etc.) – the more controlled (and thereby less flexible) the system is, the more distortion it could bear. However, if a distortion is strong enough to pass through the systems' defenses – the more spectacular the downfall is. However, this cannot be easily transferred into suggestion, that we should allow states to carry on with uncontrolled economical behavior, unsupervised by international organizations (hoping that electors would repair policy errors in next election). Possible crises are too costly (we are talking about human beings …). On the other hand, if bodies like IMF or OECD fail – the populist will utilize those failures to promote their parties and weakening the international financial system. That leads us to the discussion on how much control the state should receive from international committees …

A practice points that no matter how strict rules of control we invent, someone will find a way to override them. A World.Com or Enron examples are good ones. That can lead to suggestion that making rigorous control for economy policies (like those proposed by IMF after subsequent crises) is a futile attempt. Sooner or later someone will find a way to prepare data in such a way, that a policy will made its way through IMF security guard and we would have another crisis. *A data control sheet is for data or data for a data sheet?*

In todays world we observe the unique phenomena for the first time in the history: some market entities are more powerful than the states. Corporations like Microsoft, IBM or BMW can have outputs far exceeding smaller countries. A financial company can successfully attack – say – smaller economy just in attempt to benefit from financial strife. Corporation cannot be then retaliated in a military way. Putting aside question if it is good or not – we must fact this fact in other approach: is it threatening the institution of the state itself? The society invented the state-organization to prevent its members from dangers. Now we witness that this structure cannot protect its civilians. *So is the state obsolete in the face of a corporation?*

Wojciech St. Mościbrodzki

Supplementary pictures, charts and data sources:
http://www.galbithink.org/topics/mex/, http://www.imf.org, http://www.oecd.org