

## THE CASE FOR HARD PEGS IN THE BRAVE NEW WORLD OF GLOBAL FINANCE

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### I. Background

As a first approximation, recent currency crises in EM can be likened to hurricanes. They came from nowhere, caused major destruction, and left with the same force, leaving residents astounded, confused and apprehensive. Right after the Tequila 1994/5 crisis, observers quickly arrived at the conclusion that affected countries were punished for not heeding the commandment: *Thou Shall Save*. However, the ravaging winds in Asia that followed soon after, raised serious questions about this kind of explanation. Asians had taken the commandment to heart and, if anything, had gone beyond the call of duty. Thus, the consensus view started to focus on the foreign exchange regime as a reason, although there was no Holy Commandment that gave any guidance in this respect. A hurricane explained by a small fly in the ointment?

1. Sudden Stop. Calvo and Reinhart (1999) shows that currency crises are associated with major contraction in international credit (*Sudden Stop*). For example, capital inflows have exhibited cuts ranging from 10 to more than 20 percent of GDP in recent crises. These cuts are too large to be explained by strictly economic factors in periods of relative tranquility. Therefore, a plausible conjecture is that external factors played a key role (e.g., contagion) coupled with serious *structural deficiencies* that could give rise to *multiple equilibria*. In this respect, a weak domestic financial sector is a natural suspect. First, as shown in Kaminsky and Reinhart (1999) currency crises are usually accompanied by banking crises (the *Twin Crises* phenomenon). Second, the unholy combination of credit and payment system in the banking sector implies that

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banking crises reverberate all over the economic system. This often leads to bank bailouts that involve the sacrifice of a large stock of international reserves, and seriously compromise government's credibility. The effect on government's credibility is the most serious because it contributes to the government's loss of access to the international capital. These bailouts are therefore financed by higher taxes and inflation, dealing a *real* shock on the private nonfinancial sector. This leads to a smaller *demand* for credit.

2. Liability Dollarization. What if in the midst of a hurricane, authorities refuse to defend the exchange rate, and let it go through the roof? Some observers claim that this policy would have minimized the damage. At first blush, this may look right. Certainly, reserves' drainage provoked by a run on domestic currency would stop. However, this view misses a very important point: a key characteristic of EM is *Liability Dollarization*, LD, i.e., that financial contracts are expressed in foreign currency (say, dollars). For example, the proximate cause of Mexico's 1994/5 crisis was the government's inability to roll over its short-term dollar-denominated debt (*Tesobonos*). A flexible exchange rate would not have helped to stem the reserves drainage due to that. Furthermore, a large devaluation under these circumstances could be highly damaging for the domestic financial system. Unless debtors are fully hedged—which is unlikely unless the government offers hedging instruments like Brazil in 1998—a large devaluation will wreak havoc in the financial system, bankruptcies will show a sharp increase and banks' loan portfolio will deteriorate. In fact, this is the kind of consideration that prompts central bankers to avert major swings in the exchange rate.

3. Moral Hazard. Those that believe that 'pegged-exchange-rates did it' may not be persuaded by the above argument. Risky LD positions could themselves be a result of the *expectation* that the government will come to the rescue as pressure on the currency mounts, making its international reserves available to those that are subject to currency risk. This is an interesting argument. If relevant, the key would be to convince the private sector that the central bank will never again be a *Lender of Last Resort*, LOLR—no matter what. This is very hard. It is not even obvious that it would be optimal to operate the economy without a LOLR. Sovereign countries

are subject to risks that cannot be ensured by the private market because they emanate from their political authorities. For instance, individual banks may be unable to borrow in case of a systemic crisis because their counterparts may fear that the government where these banks are located may impose foreign exchange controls. Hence, they can only be ensured by government.

LOLR are also a feature of advanced economies. How come problems appear to be so much less severe there? An answer is that the LOLR in advanced economies is able to *borrow* (it really is the *Borrower of Last Resort*), while, as noted above, during crises EM see their borrowing capacity precipitously shrank.

4. Why Sudden Stops? The discussion leads us back to the Sudden Stop issue. In absence of Sudden Stops it is not obvious that pegged exchange rates would have been damaging, and even that currency crises would have occurred, in the first place! In my opinion, the key problem of EM is captured in their name, i.e., their nascent capital markets.

Capital flows to EM exhibited a sharp increase from 1989, shrank a little during the Tequila in 1995, suffered another setback during the Asian crisis in 1997, and received a major blow after the 1998 Russian crisis. Since then, portfolio capital has only hesitantly come back to life. In the meantime, however, a new breed has been blooming, especially in Latin America, namely, Foreign Direct Investment. Portfolio Capital inflows that dominated the scene from 1989 to 1998 can be argued to stem from the development of the market for Brady Bonds. These bonds signified a repackaging of nonperforming sovereign debt originally held in bank portfolios. Their marketability gave rise to an interest in EM that resulted in *better information* about these nascent markets. Consequently, fresh-minted EM debt obligations could more easily find their way to the market, generating a sharp increase in Portfolio Capital inflows. The basis for these flows, however, was somewhat fickle. Their market was not very liquid. A sale by a major holder or low prices in new bond issues had a major impact on the EM market. The reason for this is that although market information was better than before, EM suffered from a series of structural weaknesses (e.g., new political configurations) that made information rapidly obsolete. Besides, the market value of an asset does not only depend on information available to

*specialists*. The bulk is held by nonspecialists who rely on the advice of specialists. Thus, when specialists suffer a liquidity crunch—as it reportedly happened during the 1998 Russian default—nonspecialists become like chicken without a head, switch into panic, and shy away from EM paper unless it falls to a fraction of its real value. The counterpart of this run to safety is a Sudden Stop (see Calvo (2000 b, and Calvo (1998)).

5. What to Do. A useful policy discussion to prevent recurrence of recent crises has to address the above issues head-on. Taking ‘best practices’ from advanced economies will not do, and could be harmful. Chairman Greenspan can shake the markets with a subtle hint or 25 basis points. Not so in EM where the central banker may have to tie himself to the mast or a Currency Board to command any respect. When Sudden Stops are possible, emphasis should be on *Credibility*.

## **II. The Exchange Rate System: The Case for Hard Pegs.**

The exchange rate is a side show, almost a distraction, compared to the Hurricane Story. Swept by the strong winds, governments sacrifice all their possessions to mitigate the pain. Down the drain go international reserves, and the exchange rate rises to the sky like an unguided missile. Witness the recent devaluations in Korea, Brazil and Mexico. Although so far the outcome of these devaluations has been surprisingly favorable, they give us no basis to conclude that exchange rate flexibility is desirable for EM. We saw “exploding” exchange rates, not flexible exchange rates as understood in advanced economies like the US.

Let me start by defining two key concepts: *Hard Peg* and *Flexible or Floating Exchange Rates*. The definition of a Hard Peg, HP, is straightforward. It corresponds to fixing the exchange rate to a hard currency, and holding enough reserves to back up the peg (e.g., through holding a stock of international reserves equal to the Money Base). Full dollarization is an example. The definition of *Flexible Exchange Rates*, on the other hand, is much more problematic. The textbook definition is a system in which the monetary authority sets money supply and lets prices and the exchange rate free to reach their market equilibrium levels. However, few countries follow this practice. A system that is becoming very popular these days

is ***Inflation Targeting***, IT, where the central objective of the monetary authority is to achieve a predetermined rate of inflation. It can be shown that HP is a special case of IT because the former targets the price of foreign exchange, while the latter targets the price of a basket. However, as long as foreign exchange is not the only type of good contained in the basket, the exchange rate will show some flexibility under IT. Therefore, IT could be classified as a system of Flexible Exchange Rates. Given its current relevance in policy discussion, I will center my comments on IT, its similarities with a HP, and the relative advantages and disadvantages of each system.

1. Lender of Last Resort: A major concern about HP and IT (that most people wrongly identify exclusively with HP) is that the central bank might be forced to abandon the role of ***Lender of Last Resort***, LOLR. However, this need not be the case. An effective LOLR (like the US Fed) is able to ***borrow*** in order to lend to a troubled banking sector. Printing money is not essential and, at best, it solves one problem by creating another, high inflation.

However, a key obstacle faced by EM, as noted above, is a Sudden Stop. Thus, the relevant question is whether a LOLR that is not able to borrow can improve the situation by issuing money to bail out banks, letting the exchange rate go through the roof. A moment's reflection shows that the answer is far from obvious. First, a large devaluation could exacerbate the currency mismatch problem, worsening financial difficulties. Second, if credibility is a central issue, monetary policy is bound to become largely ineffective and possibly lead the monetary authority into discretionary policy, further impairing credibility.

Understandably, however, many a policymaker will be concerned about the inability of printing money to bailout the banking system implied by HP and (a credible) IT, and adopt some variant of a Soft Peg. The option is not cheap. Aside from the considerations laid out at the outset, if the public is aware that the LOLR will resort to inflationary finance to bailout the banking sector, inflationary expectations will rise, increasing the ***level*** of domestic interest rates. High domestic interest rates, in turn, become high ***real*** interest rates in tranquil periods (called the ***peso problem*** in the literature), which leads to a deterioration of banks' loan portfolio.

Actually, to prevent this from happening, banks may offer *indexed deposits*, which increase the inflationary consequences of bank bailouts. This is so because inflation will likely be much less effective in lowering the real value of indexed bank liabilities. Therefore, keeping the option of inflationary bailouts may create financial difficulties and eventually make the LOLR largely ineffective.

Another concern with HP or IT is that monetary policy could not be used to offset shocks that require possibly painful and time-consuming changes in relative prices. For example, a negative terms-of-trade shock may call for lower equilibrium real wages. If the adjustment is not facilitated by monetary policy, this situation may lead to protracted unemployment. This is an argument in favor of Flexible Exchange Rates (textbook version) popularized by the Optimal Currency Area literature. The main problem with the argument is that it ignores the *financial* angle. In the context of the present example, a devaluation may tend to solve the unemployment problem but it may deepen financial difficulties.

2. HP vs. IT. As shown by Chile's experience with IT, this system could be effective in ameliorating the Liability Dollarization, LD, problem highlighted above. In Chile most domestic financial contracts are denominated in terms of a price index. This has reportedly helped to develop the market for long-term loans (e.g., mortgages). The same is true for HP, as shown by the experience of Hong Kong (Currency Board) and Panama (Full Dollarization). However, an advantage of HP over IT is *transparency*. The exchange rate, in contrast with a price index, is easily observable, and the information is available with virtually no time lag. Moreover, under IT the central bank can only *indirectly* influence the relevant price index, in contrast to Full Dollarization, for example, in which the exchange rate peg is automatic. All of this is highly relevant for cases in which policy or policymakers *credibility* is a major issue. Another advantage of HP over IT is that many EM are already partially dollarized, and IT is unlikely to revert that pattern.

A major concern with HP, and especially Full Dollarization, is its irrevocability. Abandoning a HP is totally transparent. Anybody can see and testify about it. IT, on the other

hand, gives more degrees of freedom. Nobody expects the target to be hit on the nose at all times. Moreover, given price stickiness, the policymaker can momentarily gear monetary policy to purposes other than inflation control. These are positives in a context of high credibility. However, this is not the relevant context for most EM, as pointed out above. The specter of a Sudden Stop constantly hangs over these economies. The public knows that and, as a result, is always looking over the shoulder of the policymaker for a clue on his/her future actions. An awkward move quickly triggers a loss of credibility (see Calvo (2000 b)).

A large body of evidence shows that exchange rate volatility in EM is significantly smaller than in advanced countries, a phenomenon that is labeled *Fear of Floating*. This appears to be a result of *Liability Dollarization* and high *Pass-Through Coefficients* (which measure the speed of transmission of devaluation into inflation) – see Calvo and Reinhart (2000). Thus, Fear of Floating seems to be a reflection of Fear of Financial Collapse and Fear of Inflation. This situation is unlikely to be reversed on short notice. Therefore, IT may end up operating much like a HP without the benefit of strong commitment to fixing the exchange rate. Without such commitment interest rates may remain high and volatile.

In summary, IT has no clear advantage over a HP, and the credibility of IT is difficult to establish. It would be a serious mistake to let one's choice be guided by the Sirens' Song of the extra degrees of freedom provided by IT.

This should not be taken to imply that HP automatically carries an economy to the bliss point. HP has to be supplemented by adequate institutions and regulatory conditions. For example, it is essential that government wages and regulated prices show a high degree of flexibility. Otherwise, the full brunt of adjustment will fall upon the private sector, increasing the pain of a recession and triggering social unrest. Thus, inflexibility of public sector wages will generate larger fiscal deficits during recession. If these recessions are accompanied by Sudden Stop, the fiscal authority will have to resort to higher taxes (because loans would not be available), deepening recession (the recent experience in Argentina illustrates this point).

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