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## 5 Reflections on Dollarization

**D**uring the past few years, many emerging-market countries have suffered severe currency and banking crises. A popular view blames fixed exchange rates—specifically, soft pegs—for these financial meltdowns. Indeed, fixed exchange rates have been so demonized by some adherents to that view that the only alternative for emerging markets seems to be to allow their currencies to float.

Other analysts draw a very different lesson from these events. After all, a country cannot have a currency crisis if it does not have a domestic currency in the first place; firms, banks, and households are immune to currency mismatches if all assets and liabilities are denominated in the same currency. The obvious policy recommendation that follows is that full dollarization may, in some cases, be desirable. Some observers forecast that intermediate exchange-rate regimes will vanish, as countries move toward corner solutions—with freely floating exchange-rate regimes at one end and hard pegs, such as currency boards or dollarization, at the other. Thus, the

current circumstances provide the ingredients for a rich policy debate.

### *Fear of Floating*

On the surface, at least, a polarization in exchange-rate arrangements appears to be taking place. Eleven countries in Europe chose to give up their national currencies, whereas Ecuador was the first of what may be several countries in Latin America to adopt the United States dollar as its official national tender. At the other end of the spectrum, Korea, Thailand, Brazil, Russia, Chile, Colombia, and, more recently, Poland have announced their intentions to allow their currencies to float. On the basis of labels, at least, it appears that the new millennium will be very different as far as currency arrangements are concerned.

Yet a careful reading of the evidence on exchange-rate policy presents a strikingly different picture. Announcements of intentions to float are not new. The Philippines announced it would float in 1988—less than ten years later, its exchange-rate policy would be classified, together with the rest of the Asian crisis countries, under the commonly used (but ill-defined) label of a soft peg. Bolivia announced it would float on September 1985 owing to its hyperinflation—yet its exchange rate so closely tracked the United States dollar that the regime was reclassified as a *managed* float in January 1998. Korea and Thailand, despite their floating status, are amassing foreign exchange reserves at the time of this writing. If they are floating, they are doing so with a life jacket. After all, a floating exchange-rate arrangement should obviate the need for countries to maintain a war chest of reserves.

Is the middle disappearing? We don't think so. Empirical evidence suggests that *fear of floating* is pervasive, particularly among

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emerging markets. In a recent study,<sup>1</sup> we found that the currencies of emerging-market economies are less likely to fluctuate than those of the major industrial countries. The supposedly disappearing middle accounts for the lion's share of country practices. Indeed, one of the hardest challenges for policymakers trying to draw lessons from the experiences of countries that are at the corners is that hardly any countries are there to study. The experiences of some of the floaters, such as the United States and Japan, are not relevant for emerging markets. Similarly, the countries that have eschewed having their own currency are so few in number that it is difficult to draw generalized conclusions.

The reality is that any exchange rate that moves at all is now being labeled as a *floating exchange rate*. In truth, these floating exchange-rate regimes are far removed from what is classically defined as a floating exchange rate. One change that does appear to be taking place is that interest-rate policy is replacing foreign exchange intervention as the preferred means of smoothing exchange rates. This is evident in the high variability of interest rates in emerging markets and in the practices of countries such as Mexico and Peru. Does this change make countries less vulnerable to currency crises? It is possible but not probable. Interest-rate policy will have its limits (just as international reserves have their limit), as interest-rate hikes to defend the currency take their toll on the economy and the financial sector. All that we can say is that, when it comes to exchange-rate policy, discretion rules the day!

Where does this leave us? Because the experience with dollarization or floating is so limited that a definitive assessment at this stage is foolhardy, in what follows we will focus on how to think about these issues.

1. See Calvo and Reinhart (2000), "Fear of Floating," NBER Working Paper 7993, November.

*Liability Dollarization*

As noted, many analysts concluded that the soft pegs were responsible for the crises. At some level, the statement is right because, if the exchange rate were allowed to float freely, by definition some of the international reserve loss would have been prevented. However, such a characterization is incomplete. It misses a key point, namely, that, in these episodes, either the government or the private sector or both had large foreign exchange–denominated short-term debt obligations that exceeded the stock of international reserves. Therefore, it is probable that the currency crises would have taken place even under more flexible exchange-rate arrangements. This brings us to the issue of liability dollarization.

A common misconception in the ongoing debate about dollarization is that it is a drastic measure, requiring, among other things, the surrender of the central bank's ability to function as lender of last resort. But dollarization may not be the sharp departure from existing practices that its critics assume. Partial dollarization is well under way in emerging markets, particularly those that have a history of high inflation. Analysis of this issue typically focuses on deposit (asset) dollarization, but debt (liability) dollarization is equally important and far more widespread—even in countries with an admirable inflation track record. Individual borrowers with foreign exchange–denominated debts not matched by foreign exchange assets can be forced into bankruptcy by an unexpected depreciation of the exchange rate. The presence of such currency mismatches may argue for full dollarization.

It is possible that liability dollarization is partly a result of pegging, magnified by the overconfidence and moral hazard problems that pegging may bring about. As the argument usually goes, if the exchange rate were allowed to float, domestic investors would shy away from foreign exchange–denominated debts because they would face a larger currency risk than under a fixed exchange rate.

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This argument sounds convincing, but it misses two important points: (1) most emerging markets start from a situation of partial dollarization (at the very least, liability dollarization), and (2) it is hard to find examples of an emerging market ignoring exchange-rate volatility. These points reinforce each other. Partial dollarization increases the cost of exchange-rate volatility, which, in turn, induces the central bank to intervene in the foreign exchange markets to prevent fluctuations in the nominal exchange rate. In fact, as the cases of Egypt, El Salvador, the Philippines, and Venezuela attest, this fear of floating may be so severe that the exchange rate spends long stretches of time at a fixed level, making it observationally equivalent to a soft peg. In turn, fear of floating induces more liability dollarization, creating a vicious circle from which it is difficult to exit. Fear of floating also arises from domestic firms' use of imported raw materials and may also drive authorities to adopt additional measures, such as controls on capital mobility. Even when fear of floating does not lead to capital controls, and countries adopt "market-friendly" ways of stabilizing the exchange rate through domestic open market operations, such policies have costs in terms of the interest-rate volatility associated with them as well as their procyclical nature. Thus, contrary to the view that floating provides authorities with an extra degree of freedom to guarantee a market-friendly environment, the opposite may happen.

### *Ineffective Lender of Last Resort*

Another popular view is that the adoption of a currency board or dollarization significantly detracts from the central bank's ability to operate as lender of last resort. This view is based on the conjecture that, since the sums involved in bank bailouts are usually huge, an effective lender of last resort should be able to issue its own money.

True, a bank's liabilities are more liquid than its assets, which is why it is susceptible to runs. A possible way to prevent self-fulfilling

bank runs is for the central bank to step in and bail out the banking system if a run takes place. If expected by the public, the bailout may never have to be activated, thus making lender of last resort capabilities costless to the central bank and beneficial to the private sector. However, this explanation of bank runs was formulated in terms of a nonmonetary economy. If the government's promise is to be credible, the government has to be able to finance the bailout. At its heart, this is a fiscal issue because, given the sums involved, this financing normally requires issuing government debt, which will eventually be serviced by higher taxes. Yet this may not be possible for an emerging market that has lost access to international capital markets.

Furthermore, this analysis does not address the issue of whether relinquishing the issuance of one's own money could impair the effectiveness of the lender of last resort. Suppose that deposits are denominated in domestic currency and that the central bank guarantees that depositors will be able to withdraw all their deposits, if they so wish. Would this insurance be effective in preventing self-fulfilling bank runs? Not at all—not if this policy does not ensure depositors that their deposits' purchasing power will remain intact. Consider the case in which bank deposit interest rates are subject to a statutory ceiling. If depositors expect the currency to weaken substantially, there will be a bank run that the government cannot stop by issuing money—indeed, issuing money will worsen the currency crisis. This example may not be relevant in economies where a large share of deposits earn interest. In this case, banks could stop the run by offering higher interest rates on their deposits or by indexing deposits to prices or the exchange rate. The latter (i.e., “dollarization” of deposits) is a popular practice in emerging markets. If higher interest rates are successful in stopping runs, a lender of last resort would not be needed because this operation could be undertaken by the banks without the help of the central bank. However, we cannot be hopeful about the high-interest strat-

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egy because rates may have to rise to the point that banks will go bankrupt (and we should not forget the adverse-selection problem). In a market economy where information is limited, depositors might interpret an individual bank's increase in its deposit rate as evidence of higher risk. Banks would fail either because interest rates on their liabilities rise substantially more than on their assets or because their loans become nonperforming.

Indexation provides a mechanism to raise deposit interest rates implicitly when expectations of a run arise. However, indexation increases the burden on the lender of last resort because deposits are now denominated in real terms. Indeed, if all deposits are indexed to the exchange rate, there would not be a major difference between this case and full dollarization.

Why do advanced countries manage to have an effective lender of last resort? The answer suggested above is simple: advanced countries never lose access to capital markets. Was it critical for those countries to be able to print their own currencies? We doubt it. Thus, contrary to popular belief, full dollarization may not entail a substantial loss of lender-of-last-resort capabilities in countries that are credit constrained.

### *The "Sudden Stop" Problem*

Any discussion of exchange-rate options needs to give full weight to the environment in which that policy will be implemented. This analysis requires a discussion of the characteristics of international capital markets. As the debt crisis of the 1980s was resolved, official capital flows to emerging markets shrank and private capital flows assumed an increasingly important role. But, time and again, such flows have proved to be moody and fickle throughout the 1990s. Indeed, emerging markets routinely face what we call the "sudden stop" problem, that is, the immediate drying up of access to world

financial markets. When a sudden stop occurs, the effects on the economy can be devastating.

Some analysts have suggested that the very increase in capital mobility in the past decade and the limited resources that central banks can muster, relative to the private sector, are a call for governments to allow their currencies to float. But this recommendation misses a key point: when capital leaves an emerging market abruptly, it entails a massive swing in a key relative price in a small open economy—the real exchange rate—with usually devastating consequences for the domestic economy and financial sector. Thus, few (if any) central banks in emerging markets would turn a blind eye to such sharp swings in the nominal (and real) exchange rate. The widespread incidence of fear of floating attests to this fact.

Yet it is certainly true that capital markets have become increasingly integrated and that central banks command limited resources. In our view, these observations suggest that central banks in most emerging markets are powerless to fend off a speculative attack, act as an effective lender of last resort, or *conduct independent monetary policy*, as the latter will be subjugated to accommodating the whims of the international capital markets. This, of course, implies that monetary policy will tighten when a sudden stop problem threatens (which is usually when the domestic economy is facing a slump or an adverse shock and would most benefit from low interest rates). In this environment, it is not clear what benefits an emerging market derives from having its own central bank and its own currency.

Capital in emerging markets has been moving with an intensity not seen since the late nineteenth and early twentieth centuries. This dynamism suggests that a system of fixed exchange rates (i.e., hard pegs)—like the gold standard system of that earlier era—may again be appropriate for emerging markets.

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### *To Fix or Not to Fix*

In summary, much of the glitter of flexible exchange rates disappears on closer examination. The extra degrees of freedom provided by exchange-rate flexibility are fallacious or can be substituted by fiscal policy. A point to remember in the debate over whether dollarization is appropriate for emerging markets is that these economies are still “emerging.” They are setting policy in a world in which their own financial markets remain underdeveloped, their trade is invoiced predominantly in dollars, their corporate and financial institutions have a limited ability to hedge exchange-rate risk, and their governments, more often than not, lack credibility. Exchange-rate movements are costly in this environment. If policymakers take a hard look at the options for exchange-rate regimes in emerging economies, they may find that floating regimes may be more of an illusion and that fixed rates—particularly full dollarization—might emerge as a sensible choice for some countries, especially in Latin America or in the transition economies on the periphery of euroland.