Deposit dollarization: what’s happening, what can be done?

What has led to the rapid global increase in deposit dollarization, and how should governments respond?

Around the world—not just in Latin America—central bankers are looking uneasily at the growing share of foreign currency-denominated deposits in their banking systems. They have a sense that these deposits may not be a good thing, or at least may be a symptom of weaknesses in their financial structures or policies. In some countries spontaneous dollarization of the banking system has long been extensive and well known; in other countries it has been a creeping affair.

Empirical trends

So, what is going on? What are the quantifiable facts, and what is causing this trend? Is it good or bad? And what should be done about it?

The scale of this development is significant. Over the past decade trend growth in dollarization has averaged about 1 percentage point a year. In 25 countries more than half of bank deposits are denominated in foreign exchange (figure 1).

Since 1995, 64 countries have displayed a clear upward trend in dollarization. Yet there have also been important variations in dollarization trends, both across regions and across countries. Dollarization increased most sharply in South America and transition economies. It also increased, though more moderately, in the Middle East, Africa, and East Asia. And it remained constant on average (and low) in the Caribbean, Central America, and industrial countries (figure 2).

Deposit dollarization drags loan dollarization (also known as liability dollarization) along with it—though not on a one-for-one basis (figure 3). It is not hard to see why: banks have to hedge their exposure to exchange rate movements. They do so partly by lending in foreign exchange, but it is safer for them to do so by investing in foreign securities. After all, a dollar loan to an enterprise without foreign currency receivables may only appear to be a currency hedge for the bank, because the borrower might easily default in the event of a real devaluation.

A final instructive factoid: the higher is the pass-through from devaluation to domestic prices, the higher is dollarization (figure 4). Why? There could be several reasons, but one likely contributor is that, if pass-through is high, foreign currency may be a good inflation hedge.

Banking systems around the world have seen a jump in dollar deposits

Figure 1 Dollarization has been rising steadily around the world

<table>
<thead>
<tr>
<th>Percentage of bank deposits denominated in foreign exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

Third quartile

Median

Note: Based on a sample of 101 countries for which data are available. Admittedly, the more prevalent is dollarization, the more likely data are to be collected. Source: De Nicoló, Honohan, and Ize 2003.
That points to one reason people may hold dollar deposits: such deposits give them their desired risk-return tradeoff. This is also a reason outlawing dollar deposits may entail welfare costs. As De la Torre and Schmukler (2004) have observed, opting to hold foreign currency is essentially a coping mechanism adopted by depositors faced with policy-induced uncertainty.

**Policy responses**

How should governments respond to dollarization? Should deposit dollarization be outlawed? Some governments actively discourage dollarization through administrative means. But if residents are not allowed to hold dollar deposits, many will instead resort to capital flight. Such flight cannot easily be prevented, given increasingly easy access to offshore deposits (even where legally prohibited), partly as a result of growing globalization and progress in information and communication technology. Thus, seemingly confronted with a choice between allowing deeper financial intermediation at home, though denominated in dollars, and pushing it offshore and stifling domestic financial innovation, most governments have chosen to accommodate market forces by allowing financial intermediaries to offer dollar-denominated deposits (and loans) to their domestic customers.

An alternative for a highly dollarized country is to abandon the national currency altogether and opt instead for the exclusive use of foreign currency as legal tender. But only a few countries have made that choice.

Many governments facing high and rising dollarization have not taken the vigorous steps needed to rehabilitate the local currency as the medium of choice in intermediation (Hanson 2002). Some may consider it almost impossible to restore their reputations and credibly commit to sound monetary policies. Many others seem to consider dollarization irreversible and not subject to policy influence.

By allowing a dual currency regime to take hold, monetary authorities have hoped to have their cake and eat it. They have sought to expand intermediation by allowing the use of foreign currencies. By retaining the possibility of employing exchange rate flexibility, a dual currency system seems to offer insurance against large shocks that would not be available with a currency board or official adoption of the U.S. dollar in place of local currency.

But this is likely to be an inadequate response if deposit dollarization entails macroeconomic risks, and the boost to
Dollarization is no substitute for strong macroeconomic and institutional policies. Central banks wishing to reverse or contain dollarization face the same challenge any producer of goods and services faces: only products of reliable quality will sell.

Pending achievement of this first-best policy, the authorities need to address the risk environment—and ensure that their actions do not worsen it. In misguided attempts to avoid undermining the balance sheets of dollar borrowers and banks, some monetary authorities faced with growing dollarization have moved to brittle regimes, becoming averse to sharp exchange rate movements and displaying acute “fear of floating” (a phrase coined by Guillermo Calvo and Carmen Reinhart). In turn, the perception of assured exchange rate stability by the private sector promotes the moral hazard of further dollarization. Even if agents are aware of the risk of devaluation, it seems safe to transact in dollars when everybody else does so, not least because a bailout of depositors and debtors becomes more likely in the event of an abrupt change in policies.

This vicious circle can end in crisis. Instead of falling into the trap of a brittle, crisis-prone exchange rate regime, the authorities need to deal with the externalities associated with currency mismatches through effective prudential policy that seeks to ensure that financial intermediaries and their customers internalize the risks of dollarization.

Another possible solution involves the wider use of deposits whose value is indexed to the domestic price level. Although this approach also involves credibility challenges, it may merit further exploration.
Dollarization is not strongly associated with increased financial depth. Indeed, if one adds dollarization rates to a standard regression explaining cross-country variations in monetary depth as a function of inflation, per capita income and institutional variables, a positive effect is obtained only if dollarization is interacted with inflation—and the estimates imply that any such effect kicks in only at high two-digit inflation rates. So, at best dollarization has the effect of moderating the adverse effect of inflation on financial depth.

The analysis of what causes dollarization builds on the observation that, for equal expected real returns, investors could minimize the variance of their portfolios by holding dollars and local currency in proportions determined by the relative volatility of exchange rates and inflation, and their covariance. For example, the more volatile inflation is relative to the exchange rate, the higher is the share of foreign exchange in the minimum variance portfolio. The formula for the minimum-variance share of foreign exchange is:

\[
\frac{V(\pi) + \text{Cov}(\pi, s)}{V(\pi) + V(s) + 2\text{Cov}(\pi, s)}
\]

where \(\pi\) is inflation and \(s\) is real depreciation.

Controlling for the impact of relevant regulations, regression analysis reveals that macroeconomic policy—partly captured by the minimum variance portfolio, and partly by trend inflation—and the institutional structure are both key determinants of cross-country variations in dollarization.

The third empirical component addresses the contribution of dollarization to risk in the banking system. Whether this risk is measured by the mean ratio of nonperforming loans, the volatility of deposits, or a proxy aggregate measure of a bank’s “distance to default,” regressions reveal that risk is heightened in dollarized economies.