"Dollarization:" What's in it (or not) for the issuing Country?

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In the last decade or so, the term "dollarization" has entered the language of economists and policymakers as a generic reference to countries that forsake their own national currencies and opt for some other sovereign nation's currency for all (or most) transactions. Using the nomenclature of the University of California at Santa Barbara's Benjamin Cohen, at the end of 2001 there were 17 countries that were either dollarized or "near dollarized." (See Cohen, 2001. The tem near-dollarized refers to countries that issue a token local currency in addition to the circulating foreign currency.) In addition, there are several countries with currency board arrangements, in which the nation effectively backs its own national currency with another's at a fixed exchange rate. The list of currency boards shrunk early this year with the very visible departure of Argentina. On the other hand, within the last two years Ecuador and El Salvador have dollarized, and in the last decade several countries other than Argentina have adopted currency boards that still operate.

Given that there is a non-trivial number of countries that are either fully dollarized, near-dollarized, or quasi-dollarized (via a currency board arrangement), one would conclude that there are real benefits associated with dollarization to the adopting country. Why else would a country voluntarily give up its own currency? There must, however, also be costs associated with dollarization. If there were not, then we would expect to see an even larger number of dollarized countries, and would be unlikely to observe events such as the dismantling of the Argentine board.

Thus continues the lively debate over the pros and cons of dollarization. Most of the debate, however, focuses on the benefits and costs to the *adopting* country. That is, the debate is along the lines of "Should country X forego creation and circulation of its own independent currency and make the "dollar" the nation's legal tender?" There has been considerably less attention paid to the potential costs and benefits to the *issuing* country. Is dollarization in the best interests of the issuing country? This essay attempts to provide some perspective on this question.

Reponses by the Issuing Country

We think of an issuing country as having the ability to respond to the potential foreign adoption its currency in one of three ways. The issuing country can,

1. Passively accept the adopting country's decision;
2. Actively encourage the foreign country to adopt its currency; or
3. Actively resist or discourage the foreign country from adopting its currency.

To briefly indicate what we mean by these terms:

1. Passive Acceptance

Passive acceptance is exactly as the phrase suggests: The issuing country neither encourages—by offering subsidies, for example—nor discourages—by threatening to retaliate, for example—a foreign country from adopting its currency. Passive acceptance best describes the current U.S. policy toward dollarization.

2. Active Encouragement

Issuing countries can make specific concessions to foreign countries that make dollarization more attractive. The obvious concession would be explicit seigniorage sharing arrangements. There are other concessions that issuing countries could make, but

these could be a bit more difficult to implement from both from a practical and political point of view. For example, an issuing country could help regulate the banking or financial sector, could provide a settlement of account mechanism, or could provide a lender of last resort facility for the foreign country's banks.

3. Active Resistance

As with the other categories in our taxonomy of responses, active resistance is exactly as the phrase suggests: The issuing country engages in deliberate efforts to impede the adoption of its currency by foreign countries. At first blush, a strategy of active resistance would seem rather hard to pull off. Exactly how can a country actively discourage another country from using its currency? Given the current openness of worldwide trade—trade in both goods and assets—an issuing country can hardly prevent its currency from entering the borders of a potential adopting country. Instead, an issuing country has to have some sort of *credible* threat in order to prevent another country from adopting. A credible threat is one which, if carried out, would harm the adopting country but would not hurt the issuing country. It is not at all obvious that such threats actually exist.

The issue of the existence of credible threats is of more than just academic interest. As we will discuss, the European Central Bank (ECB) is currently attempting to discourage euroization among countries that desire to join the monetary union in the future. The ECB's threat is simple: Euroize unilaterally, and the road to joining the monetary union will not be smooth. Is this threat credible? Is it relevant to the Federal Reserve as well as the ECB? We will address this question a little later on.

Costs and Benefits to the Issuing Country

Which response should an issuing country pursue: Passive acceptance? Active encouragement? Active resistance? The answer to this question depends on both the costs and benefits associated with each response. Obviously, the issuing country should take that response which generates the highest net benefit to it. Below we will identify a number of benefits and costs to the issuing country associated with permitting another country to use its currency. If the total benefits exceed the total costs, then the issuing country should permit, either passively or actively, the foreign country to use its currency. If not, then the issuing country should attempt to formulate a credible threat to prevent the foreign country from using its currency.

Net Benefit 1: Seigniorage

When a country decides to adopt another country's currency as its own, it must somehow obtain this foreign currency. Here we are not talking of the technical issue of obtaining physical currency in exchange for accumulated claims on dollars, but rather the accumulation of these claims themselves.

How can a country obtain claims to the currency that it seeks as a replacement for its own? There is really only one way. The adopting country must sell goods and services to the issuing country: The issuing country gets goods and services and, in exchange, the adopting country gets the needed foreign currency. The value of the goods and services that the issuing country receives represents its seigniorage revenue.

Seigniorage is a pure benefit to the issuing country. In essence, the issuing country (costlessly) prints intrinsically useless pieces of paper, which it exchanges for valuable goods and services. If the issuing country is trying to encourage dollarization it

can always do so by rebating some of the lost seigniorage to the adopting country. So a net benefit of dollarization to the issuing country is the seigniorage it collects minus any rebate that it provides to the adopting country.

It may appear that the issuing country should never resist dollarization since, by resisting, it will lose revenues. But if these revenues are not very big, seigniorage would not be a particularly important determinant of whether a country should accept or resist dollarization. So exactly how big are seigniorage revenues? Could the seigniorage revenue from dollarization really amount to a big deal for the United States, for example?

Our back-of-the envelop calculation, based on figures reported in Humpage (2002), is as follows: If all of South America and Mexico were to dollarize, then the annual return in seigniorage would be something on the order of 0.2 percent to 0.8 percent of U.S. GDP. Is this a large number? This number is large relative to the usual estimates of seigniorage collections in the U.S., so at the margin it is not so clear that policy markers should be completely indifferent. But note that there is already partial or complete dollarization (formal and informal) in this region. Furthermore, more extensive adoption of the dollar may require inducements such as revenue sharing arrangements. Both of these considerations implies that the total seigniorage benefits would be much less than 0.8 percent.

In the overall scheme of things, a number that is much less than 0.8 percent of GDP (on the high end of our estimate) is a drop in the bucket compared to the 19 to 20 percent of GDP collected every year by the federal government in the United States. It may be true that something is better than nothing, particularly if the associated costs are low. But it does seem that it will be necessary to explore potential benefits and costs

beyond seigniorage before one conclude that dollarization is either a good or bad deal for the issuing country.

Net Benefit 2: Optimal Currency Areas

Countries that share the same currency will eliminate exchange rate risk when they trade. There are benefits associated with eliminating this risk and these benefits are both direct and indirect. The direct benefit is that real resources that would have been devoted to managing this risk can now be channeled to other productive uses. The indirect (but corollary) benefit, which we believe is much larger than the direct benefit, is that trade between the adopting and issuing country may expand. Indeed, there is some evidence that trade does expand with currency union – see for, example, Frankel and Rose (2002) and Glick and Rose (2002) -- and we take it as axiomatic that trade enhances wealth.

On the other hand, when a country dollarizes it loses its ability to conduct independent monetary policy since it no longer controls its money supply. This loss of control represents a potential cost for the *adopting* country since, for example, the country may be unable to respond to specific macroeconomic conditions in the manner that would be optimal for an unfettered domestic central bank. But if the loss of independent monetary policy is harmful for the adopting country, there may be negative spillovers to the *issuing* country as well. At the less threatening end of the spectrum, these spillovers might have the effect of diminishing the enhancements to trade that dollarization would presumably otherwise promote. On the more threatening end, macroeconomic distress in a large enough trading partner could conceivably spillover into the issuing country's own macroeconomic performance.

The important point to be made is that, from the perspective of optimal currency considerations, the interests of the adopting country and the issuing country may very well be aligned. If the two countries are very far from an optimal currency area, and on net it is harmful to the potential adopting country to dollarize and lose its ability to tailor monetary policy to its own macroeconomic state, then the country will not adopt. If the return to eliminating exchange rate risk justifies the loss to the adopting country of an independent monetary policy, then presumably the trade benefits are substantial, and the country would dollarize. Although it is not guaranteed, it seems plausible to assume that, focusing solely on optimal currency area considerations, the same cost-benefit calculus would weigh in favor (or not) of dollarization for the issuing country as well.

Net Benefit 3: Buying Financial Stability

The fact that a dollarizing country gives up the ability to conduct its own monetary policy means that monetary policy in the adopting country will mimic the policy of the issuing country. From the optimal currency area perspective, this is presented as a potential cost to dollarization. But in many (maybe most) cases, countries that dollarize are also countries that have high inflation rates, and in these cases the benefits of dollarization are assumed to arise precisely because domestic monetary policy is jettisoned.

Evidence suggests countries that experience medium to high inflation rates have low growth rates. (See, for example, Barro, 1995.) Boyd, Levine, and Smith (1996) argue that this correlation may in large in part operate through the deleterious effects of inflation on financial markets. Dollarization thus enables a country to "import" a credible monetary policy of low and stable inflation rates, contributing to the strength and stability

of the economy's financial markets and institutions and enhancing the growth prospects for the adopting country. Here again, we argue that, to the extent that dollarization works to promote growth and trade, financial market integration and stability, and so on, these affects would inevitably work to the benefit of the issuing country as well as the adopting country.

Some might argue to the contrary that closer integration, particularly in financial markets, represents a significant potential cost to the *issuing* country, because with integration comes greater responsibility for, and exposure to, risk in the rest of the world. In this view, one cost to the issuing country is the possibility that domestic policy decisions of the central bank or federal government will at times be dominated by shocks in other economies.

We argue that this does not represent a "new" cost. It is a cost that large countries such as the U.S. have been bearing for some time, and it is quite independent of dollarization. For example, U.S. domestic policy was directly influenced by collapse of the Thai baht and the problems that followed in South East Asia in 1997, by the collapses of the Russian ruble and Long-Term Capital Management in 1998, and the Brazilian *real* in early 1999. We have for some time lived in a world where foreign and domestic markets have been tightly integrated and where U.S. domestic policy has been impacted by events outside of the U.S. Hence, it is our belief that the *marginal* cost of dollarization-driven integration of domestic and foreign markets is easy to overstate because these markets are already highly integrated.

Active Resistance? The Case of the ECB

Our basic conclusion is that the costs and benefits associated with dollarization for the issuing and adopting country are, more often than not, aligned. If it is in the best interests of the potential adopting country to dollarize, then the very same considerations that lead to this conclusion will typically work to the benefit of the issuing country too. In those cases where dollarization is harmful to the adopting country, then it is probable that, beyond seigniorage considerations, the effects of dollarization would rebound to the detriment of the issuing country as well.

Almost all of our arguments to this point have favored policies of passive acceptance or active encouragement. The natural conclusion would be that the choice between the two depends on a straightforward (but not simple) quantitative assessment of net benefits. If the benefit of dollarization to the issuing country is particularly high, then it might respond by actively encouraging dollarization, say through seigniorage-revenue sharing schemes. If the net benefits are not particularly high to the issuing country, then it may simply passively accept the decision of the adopting country.

We have not provided a case for active resistance. Yet a reasonable interpretation of the current stance of the ECB is that it is actively resisting euroization, at least by countries that might one day join the European Union (EU). Although, ECB President Wim Duisenberg has at times declared the ECB neutral with respect to international adoption of the euro[2], in discussing the path toward euroization by EU-hopefuls, Mr. Duisenberg has also made it clear that, for these countries "adoption of the euro outside the treaty process would not be welcome."[3]

The explanation advanced by Mr. Duisenberg in support of this position is that unilateral euroization may impede the adoption of the Maastricht reforms that have been imposed as a condition for non-ECB countries to join the monetary union. Presumably, by adopting the Maastricht outline monetary union members maximize the probability that the collection of countries will in practice be an optimal currency area.

A counter argument is that this type of "union by fiat" is unwarranted: If non-ECB countries euroize it will be because they judge it in their best interests to do so. In other words, the adjustments and conditions in which euroization is desirable are implied by the desire to join the union. If the arguments we have advanced above are true, the net benefits that result in any given country choosing to euorize are likely to be in the interests of the existing ECB economies as well. In this view, there is no clear reason to pursue a policy of active resistance, as the self-interests of potential adopters will be sufficient.

But there are clearly some complications with this relatively laissez-faire view of the dollarization. The euro is a new currency that intends to compete with the U.S. dollar as a world currency. But precisely because the euro and its institutions are new, reputation and credibility are still works-in-progress. There may be a reasonable concern that the fates of economies adopting the euro, but living outside the discipline of the Maastricht treaty, can unduly influence euro policy, either directly or indirectly. In anticipation that these influences would be negative, the ECB has apparently chosen to exert active resistance through the leverage provided by the non-EU countries' desire to ultimately join the European economic and monetary unions.

Summary

One might suppose that the foregoing rationale for active resistance does not apply to the U.S. for two reasons. First, the Fed has, over the past several decades, demonstrated that it is committed to a policy of low and stable inflation. Consequently, issues of reputation building may be less salient in the context of the dollar. Second, the process for EU accession and the Maastricht conditions for joining the European monetary union provide the ECB with the carrots and sticks that make active resistance to euroization feasible. It could be claimed that the United States has no comparable incentive mechanism, so there are limits to the potential for active resistance to global adoption of the dollar, even if that is deemed the best policy response.

We do not find these arguments persuasive. As we have already noted, developments in foreign markets do have the potential for impacting U.S. monetary policy. Today, the U.S. central bank clearly has a track record that supports a high degree of credibility for protecting the purchasing power of money. But it will not necessarily always be so. The Federal Reserve enjoyed a comparable degree of credibility in the 1960s. If the 1970s taught us anything, it is that such credibility is a sometimes tenuous commodity.

Furthermore, it is unclear what practical and political forces a dramatic expansion of US dollarization might bring. The desirability of regional trade agreements may open the door to both greater dollarization *and* greater influence on the route to more widespread dollar adoption. As banking systems become increasingly intertwined the impulse to coordinate on regulatory policy gains momentum, and the more formalized

that coordination the greater the potential for negotiations on the timing and form of monetary regime changes.

In other words, the choice between active encouragement, passive acceptance, and active resistance is very much in play, even for the United States. We do not pretend to have offered anything but some preliminary thoughts on the issue, and hope that conferences such as this induce much greater attention to the topic.

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[2] See, for instance, the European Banking Congress keynote address of November 17, 2000 titled "The international role of the euro." The speech is available at the ECB's web site, www.ecb.int .

[3] This quotation is from the speech "The ECB and the accession process," presented at the Frankfurt European Banking Congress, November 23, 2001. The speech is available at the ECB's web site, www.ecb.int .