Currency Privatization as a Substitute for Currency Boards and Dollarization George Selgin

A nation that seeks to fix the value of its currency relative to that of some other nation's currency can do so in at least three different ways: it can assign responsibility to the central bank for "pegging" the currency's exchange rate, without imposing any particular foreign-currency reserve requirement; it can establish a currency board that continues to issue a distinct local currency, but is required by law to exchange local currency for the foreign currency at a fixed rate, and to hold 100 percent foreign currency reserves; or it can "dollarize," using the foreign currency itself as its circulating medium, while dispensing with its own former monetary unit.

Of these three alternatives, the first—a central-bank administered peg, backed by fractional and variable foreign currency reserves—is, as recent experience demonstrates, most vulnerable to speculative attacks that can cause its collapse. Dollarization, at the opposite extreme, rules out such attacks entirely. A currency board represents, in this particular regard, a middle ground, for although some currency boards may be *capable* of devaluating their currencies, and may for that reason still be objects of speculative attacks, a speculative attack can never *force* a currency board to devalue out of fear of running short of reserves. For this reason the fixed-rate commitments of currency boards tend to be more credible than the pegged-rate commitments of central banks, and currency boards are attacked less often.

Although a dollarized system is better able to maintain a fixed exchange rate than a currency board, it suffers from the disadvantage of exporting seigniorage instead of allowing it to be earned by a local authority. A currency board, on the other hand, earns seigniorage equal to the interest generated by its foreign currency assets. With regard to seigniorage, a currency board differs from a central bank

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principally in being unable to influence its seigniorage earnings by controlling the rate of growth of its assets and liabilities. Instead, that growth rate is dictated by its net dollar receipts.

After the collapse of the Soviet monetary system, followed by a series of speculative attacks on pegged exchange rate regimes, there has been much interest in the once relatively obscure currency board and dollarization alternatives. The aim of this article is to compare the currency board and dollarization approaches with a third, still obscure alternative—currency privatization. A privatized currency system resembles dollarization in employing a foreign currency (dollars, for the sake of concreteness) as the medium into which commercial bank IOUs are redeemed. It resembles a currency board, on the other hand, in relying upon domestically supplied currency that may be denominated in a distinct domestic unit of account. What distinguishes currency privatization from all commonly discussed alternatives, and what makes it more controversial than either, is that it assigns responsibility for issuing domestic currency, and for redeeming it in dollars, to commercial banks rather than to any public monetary authority.

I will argue that currency privatization is just as good as dollarization at preserving a fixed exchange rate, and better than a currency board at disposing of money-creation surpluses in a way that benefits the domestic economy. Currency privatization may therefore *dominate* these more familiar currency reform options. I will also argue that the usual reasons given for overlooking the currency privatization alternative are neither theoretically nor empirically well-founded.

Assumptions

In order to assess the relative strengths and weaknesses of currency boards, dollarization, and currency privatization as currency reform options, I will rely on some simplifying assumptions. I take for granted that we are dealing with a nation, call it Ruritania, having as its paramount goal the establishment of a credibly fixed exchange rate, meaning that such a rate takes precedence over other potential goals of Ruritanian monetary and banking reform. The assumption obviously is not valid for most countries, but it is valid for many countries that have suffered through the collapse of former pegged-or floating-rate central bank regimes. In other words, it is true for any country seriously contemplating the currency board and dollarization alternatives. I also assume that Ruritania initially has its own distinct monetary unit, which I will call the peso, and a monetary base consisting of a stock of IOUs issued by its central bank. I assume,

furthermore, that the peso-dollar exchange rate has been devalued to the point where the Ruritanian central bank is holding 100-percent dollar reserves, although not legally obliged to do so. This assumption allows for the possibility of a costless and immediate transition to either a currency board or a dollarized system. I treat Ruritania's commercial banking regulations, and the overall soundness of its banking system, as given, and assume that private banks are initially prohibited from issuing their own paper notes. Finally, I will also assume that, if it establishes a currency board, Ruritania does not intend to let that board function as a lender of last resort (LOLR), for example, by starting out with greater than 100-percent dollar reserves. An orthodox currency board therefore offers no LOLR advantages over dollarization.

Central Banks, Currency Boards, and Dollarization

Suppose, then, that Ruritania chooses to convert its central bank into a currency board by prohibiting it from acquiring nondollar assets, by having it maintain 100-percent foreign currency reserves, and by requiring it to exchange paper pesos (which may consist of newly designed notes issued in exchange for withdrawn central bank notes) into paper dollars and vice versa, on demand, at the established fixed rate and without any conversion limits. What would be the advantages and disadvantages of this reform compared with the original central-bank based arrangement?

The most obvious advantage would be to enhance the credibility of the rigid peso-dollar exchange rate by guaranteeing the monetary authority's absolute liquidity. The authority cannot be forced to devalue by a speculative run on the peso because it is no longer allowed to hold fractional dollar reserves. Consequently, there would be a lower devaluation risk discount on peso-denominated assets.

The most obvious cost of the currency board reform would be the loss of any potential for discretionary money stock changes, including changes that might allow the monetary authority to serve as a LOLR for the domestic banking system. The loss of monetary discretion also means that the monetary authority is less able to provide fiscal assistance to the government by purchasing peso-denominated government bonds. The authority would, nevertheless, continue to earn seigniorage revenues equal to the interest earned on its holdings of dollar-denominated securities.

Now suppose that, instead of establishing a currency board, Ruritania elects to abolish its central bank and dollarize. The central bank

is liquidated, and its (dollar-denominated) assets are converted into actual Federal Reserve notes. These notes are then used to redeem the outstanding peso monetary base, including both paper pesos and commercial bank reserves. Bank assets and liabilities are redenominated in dollars, according to the established exchange rate, and banks are responsible for redeeming their deposits in dollars. In order to be able to do so, they will retain some of the Federal Reserve notes they receive as vault cash, lending or investing the rest.

What would be the main advantages and disadvantages of dollarization compared with a currency board? The principal advantage would be an even stronger guarantee against any risk of devaluation: a currency board, even though it need never be forced to devalue by a shortage of reserves, might nevertheless be tempted to devalue were it authorized to do so by a change in statutory law. For this reason, currency boards remain subject to speculative attacks, and local-currency denominated assets in currency board systems tend to bear a risk premium relative to similar dollar-denominated assets. Dollarization, by doing away with distinct domestic base money altogether (and with a public or quasi-public monetary authority charged with supplying the domestic monetary base), eliminates any risk of a devaluation of the monetary base relative to the dollar, although it does not eliminate the possibility of a depreciation of commercial bank IOUs (owing to one or more bank failures) relative to the dollar.

The chief disadvantages of dollarization relative to the currency board alternative are, first, that it involves a unit of account change, the costs of which may not be trivial, and, second, that it relies upon a foreign central bank to satisfy the local demand for paper currency. The use of foreign central bank notes entails a loss of producers' surplus compared with the currency board alternative, with the surplus or seigniorage that might otherwise have been retained by the domestic monetary authority being instead transferred to the host-currency country. In countries with relatively high currency-to-money ratios, and those with poorly developed fiscal systems, the seigniorage loss can represent a substantial drain on total government revenue. For this reason the desire to retain seigniorage revenue constitutes an important argument for retaining a distinct "national money" (Fischer 1982).

Furthermore, in relying upon a foreign central bank as a source of paper currency, a dollarized nation exposes itself to some risk of a foreign embargo on currency shipments, as happened to Panama during the Noriega conflict.

The relative strengths and weaknesses of a currency board on one hand and dollarization on the other are summarized in Table 1, where a plus in a column indicates a relative strength and a minus a relative weakness.

TABLE 1
RELATIVE STRENGTHS AND WEAKNESSES OF A CURRENCY
BOARD VERSUS DOLLARIZATION

	Credibility	Seigniorage	Unit Switch	Embargo Risk	Pride
Currency Board Dollarization	_	+	+	+	+
Dollarization	+	_	-	-	_

Currency Privatization

Now suppose that, instead of setting up a currency board or dollarizing, Ruritania elects to privatize its currency stock. In that case, it liquidates its central bank and redeems the peso monetary base with dollars, as in the dollarization case; but it does not abolish the peso unit. Instead, it allows commercial banks to issue pesodenominated notes while making them directly responsible for redeeming their liabilities, including any notes they issue, into dollars at the established rate of exchange. Federal Reserve notes would then serve as Ruritania's *medium of redemption*, without necessarily serving as a component of its money stock. This privatized and competitive currency arrangement resembles historical arrangements, like those of 19th-century Scotland and Canada, in which commercial banks supplied paper currency in the form of their own notes, which they offered to redeem in gold at a fixed rate.

A privatized currency system shares many of the same features as a dollarized system: there is no domestic monetary authority or distinct domestic base money, and banks are responsible for redeeming their transactable liabilities directly in dollars on demand. Currency privatization allows a nation that resorts to it to retain a distinct and potentially more convenient money unit and, otherwise, to adjust the denominational structure of its currency to match domestic needs. Instead of having to be imported from abroad, paper currency is supplied domestically.

Devaluation Risk

While the most obvious differences between a privatized currency system and a dollarized system are that dollars need not circulate and that prices may continue to be expressed in pesos, the major difference between a privatized currency system and a currency board arrangement is that private banks alone are responsible for enforcing the fixed exchange rate between the local currency unit and the dollar. There is, as in a dollarized system, no public or quasi-public monetary authority capable under any circumstances of engineering a unilateral devaluation. The risk of devaluation in a privatized arrangement is therefore more-or-less identical to that of a dollarized system. In either case the only possible "attacks" consist of runs on commercial banks which, not being sovereign entities, generally must fail before they can devalue (that is, pay less than 100 cents on the dollar to their creditors). More generally still, the enforcement of fixed exchange rate commitments becomes a matter of private law rather than public policy, where the terms of private law are (generally speaking) less readily altered than those of public policy. A commercial bank's failure is, of course, costly to its owners and managers. In this respect at least commercial banks may have a stronger incentive to avoid "devaluation" than public monetary authorities (Selgin and White 1994).

Indeed, perhaps paradoxically, with respect to bank deposits and other conventionally privatized exchange media, eliminating the domestic monetary authority and thereby fixing responsibility for honoring fixed exchange rate redemption pledges solely upon private firms is advantageous even if the monetary authority is *more* likely to honor its redemption commitments than a typical commercial bank. That this is so becomes apparent as soon as one recognizes that, where a domestic monetary authority exists, domestic commercial banks are only expected to maintain a fixed rate of exchange between their own liabilities and those of the monetary authority. The probability of any one commercial bank's liabilities being devalued in terms of foreign currency is therefore

$$P(f) + P(d)$$
,

where P(f) is the probability that the commercial bank will fail, and P(d) is the probability that the authority will devalue. Eliminating the authority and making banks themselves directly responsible for redeeming their liabilities in foreign currency reduces the above probability to P(f) alone.

When, on the other hand, money takes the form of privately issued bank notes denominated in pesos and redeemable in dollars at private financial firms' counters, the risk of any note losing value relative to the dollar is simply equal to the risk that the bank will fail, P(f). This risk will be less than the risk of devaluation embodied in the notes of

a monetary authority only if that probability is less than the probability that the authority will devalue. In principle, then, currency privatization might leave the risk that the bank will fail, P(f), unaltered. This risk will be less than the risk of devaluation embodied in the notes of a monetary authority only if that probability is less than the probability that the authority will devalue.

Currency privatization might leave the *currency* component of the money stock more prone to devaluation than it would be were it supplied by a currency board. However, so long as the acceptance of private notes is not compulsory, it is not difficult to avoid such an outcome, or at least to ensure that a greater currency depreciation risk is incurred only when the extra risk is offset by other benefits. As long as consumers retain the option of holding Federal Reserve notes, they will, presumably, only accept any extra risk entailed in holding private notes when that extra risk is more than offset by in-kind benefits (including denomination convenience) offered by the private substitutes. Otherwise, spontaneous dollarization will occur.

Furthermore, a privatized currency system is one in which currency is supplied competitively rather than monopolistically. The risk of a systematic devaluation is therefore much smaller than the risk that any single currency-supplying firm will fail to keep its promises. An individual bank's decision to dishonor its promises means failure for that firm alone, possibly involving losses to its creditors, not a general revaluation of all local currency assets. A privatized currency arrangement is, in other words, one that involves default risk but practically no "exchange-rate risk" in the conventionally understood sense of the term.

Seigniorage

To the extent that commercial bank notes circulate instead of Federal Reserve notes in a privatized currency arrangement, the extent to which the Federal Reserve collects a seigniorage tax from Ruritanian citizens is reduced. In the limit, only commercial banknotes circulate, and the seigniorage-tax base is no greater than the stock of Federal Reserve notes held as vault cash. That stock in turn need not be much larger than the stock of such notes that would be retained by a currency board. So currency privatization might involve the same, low seigniorage-export cost as a currency board.

There is, however, an important difference, and that difference tends to favor the privatization alternative. Whereas a currency board, being a monopoly supplier of currency, generates its own seigniorage instead of the seigniorage that dollarization sends abroad, currency privatization does away with seigniorage—a monopoly producer's surplus—altogether, transforming it into *consumers*' surplus, while also eliminating the "deadweight loss" associated with any monopoly to the extent that the monopoly earns monopoly rents.

Because it is practically impossible to pay interest on circulating paper notes, commercial banks could not readily resort to price competition to preserve or extend their shares of the market for paper currency. However, they can engage in nonprice competition, for example, by improving the quality of their notes or services associated with them, and such nonprice competition is also capable of maximizing consumers' surplus (White and Boudreaux 1998). It follows that currency privatization may contribute more to domestic welfare than a currency board system, even apart from the former arrangement's superior ability to prevent devaluations.

Currency Embargo Risk and Other Considerations

It should be evident that a privatized currency system is also just as free of currency embargo risk as a currency board-based system, provided that commercial bank notes are considered close substitutes for Federal Reserve notes. A privatization option is thus capable of earning "plus" signs in every one of the columns shown in Table 1.

But currency privatization also has potential advantages not allowed for in Table 1, because both of the other currency reform options preclude them. They include (1) a greater ability to channel loan funds to the private sector where they may contribute more effectively to economic growth; (2) more stable money stocks (owing to banks' capacity to accommodate changes in the public's currency-deposit ratio without drawing upon either their own cash reserves or those of some monetary authority); and (3) less potential for bank-run "contagions," thanks to the presence of a banknote market, which eliminates potential information asymmetries.

National Pride

Although a good case can be made that considerations of national pride should no more enter into the choice of a national currency system than they should enter into the choice of, say, a national telecommunications system or railroad gauge, the fact is that many nations view their distinct national currencies as symbols of sovereignty, much as if each unit of paper currency were a small flag.

¹This is especially the case in poorer nations with high currency-deposit ratios and poorly developed nonbank financial markets.

Dollarization thus suffers from the final drawback of involving a loss, in the eyes of many, of national pride, and a corresponding encroachment upon national sovereignty by the nation supplying the adopted currency.

Although privately issued bank notes, unlike central bank notes, are unlikely to function as symbols of sovereignty, they are at least "neutral" in this respect, being products not of some foreign national monetary authority but of private firms. Moreover, to the extent that domestic consumers value having currency that also serves as a symbol of national pride, private note issuers will have an incentive to issue notes that serve that purpose, for example, by honoring famous citizens of the nation in which they are issued. The Bank of Scotland's current five-pound notes thus feature a portrait of Sir Walter Scott; and it is hard to see how a Scottish central bank, if one existed, could better cater to Scottish pride.

Is Private Currency Viable?

I do not intend here to suggest that many private financial firms will in fact be capable of issuing notes that are perceived as being sufficiently risk free as to compete successfully against Federal Reserve notes. But there is no reason to doubt that *some* private firms could do it, given the opportunity. Possibilities that come to mind include firms like American Express, Visa, and Citicorp that have established markets for their traveler's checks, which differ from notes in offering security against theft and by virtue of the fact that they generally do not circulate from hand to hand. Other possibilities include well-established and internationally diversified banks, including the Hong Kong bank group. (Both HSCB and the Standard Chartered Bank still supply currency in Hong Kong, although the Bank of China has been issuing notes there since 1994.)

That only certain relatively well-capitalized and reputable financial firms are likely to command the confidence needed to establish a market for their paper notes points to an essential role for freedom of entry in banking and freedom of international entry, in particular, in a privatized currency arrangement. Such freedom of entry is desirable even when currency is supplied by nonprivate means, because it bolsters the overall strength and resilience of a nation's banking system, allowing it to better withstand local or regional shocks that might prove fatal to less-diversified local banks.² The private-market

²An internationally branched financial institution's foreign reserves may be a good substitute for absent LOLR facilities in a currency board or dollarized monetary system.

alternative also has the distinct advantage of avoiding moral hazard problems associated with public LOLR guarantees. The same internationally diversity that renders certain financial firms less dependent on government guarantees also makes them especially well-qualified to issue redeemable paper money.

Economic theory provides hardly any justification for denying private firms an opportunity to supply paper currency. Indeed, a private bank note is, by its very nature (as a direct claim on the issuing institution), a relatively low-risk and low-information-cost substitute for a personal check drawn on the same institution. Resistance to proposals for currency privatization is mainly informed not by any sound theory but by a misreading of the historical record and of American experience in particular. According to this misreading of history, private bank notes have been riskier claims than transactable bank deposits. In fact, bank notes have generally been less risky than individually endorsed claims to transactable bank deposits, just as common sense suggests they ought to be. Poor quality private bank notes have circulated only where legal restrictions have limited entry into the currency business, as branching restrictions did in most parts of the United States until well after the establishment of the Federal Reserve, and as the six-partner rule did in England before the passage of the Country Bankers Act of 1826.

Although a privatized currency system must involve some greater risk of currency devaluation than a dollarized system, this risk will tend to be more than offset by corresponding benefits to the holders of private notes. This fact reminds us of the major benefit of currency privatization relative to dollarization, which is that privatization avoids the loss of surplus or seigniorage entailed in a dollarized arrangement. Unlike actual Federal Reserve notes, private bank notes may be backed mainly by interest-earning dollar or peso-dominated assets. These earnings remain in the domestic economy. They are not, however, retained by currency suppliers in the form of seigniorage revenues. Instead, competing issuers are forced to pass on their extra earnings to consumers, including note holders, in the form of in-kind benefits. This outcome is, indeed, more efficient than the outcome under a currency board because, although both involve the same (or approximately the same) extra interest revenue, the currency privatization alternative turns this income into consumers' rather than producers' surplus.

Other Advantages of Currency Privatization

Currency privatization has other advantages besides those considered here. I have merely attempted to indicate here how it is free

from some of the more frequently mentioned shortcomings of dollarization and currency boards. In fact, a privatized currency harbors extra self-stabilizing properties that would make it far less vulnerable to crises and business cycles than either a dollarized economy or one having a currency board arrangement (Selgin 1988, 1989; Selgin and White 1994).

Conclusion

To take the possibility of private currency issuance seriously is to shed yet more light on the dollarization and currency board alternatives—light that is considerably less flattering than the glow cast by recent currency crises. Dollarization transfers wealth from domestic currency users to a foreign government, depriving the domestic economy of access to some of its own savings. A currency board, on the other hand, involves a similar wealth transfer, while also posing a greater danger of devaluation. The larger danger will manifest itself in higher interest rates on assets denominated in the domestic currency. Apart from its other advantages, currency privatization alone allows domestic savings embodied in local currency holdings to fund private-sector undertakings, including (though not limited to) undertakings in the domestic economy.

References

- Fischer, S. (1982) "Seigniorage and the Case for a National Money." *Journal of Political Economy* 90 (2): 293–313.
- Selgin, G. (1988) *The Theory of Free Banking*. Totowa, N.J.: Rowman and Littlefield.
- _____(1989) "Legal Restrictions, Financial Weakening, and the Lender of Last Resort." *Cato Journal* 9 (2): 429–69.
- Selgin, G., and White, L. H. (1994) "How Would the Invisible Hand Handle Money?" *Journal of Economic Literature* 32 (4): 1718–49.
- White, L. H., and Boudreaux, D. J. (1998) "Is Nonprice Competition in Currency Inefficient?" *Journal of Money, Credit, and Banking* 30 (2): 252–60.