



Share This



FINANCE & DEVELOPMENT

A quarterly magazine of the IMF

December 1998, Volume 35, Number 4

Are Currency Boards a Cure for All Monetary Problems?

Charles Enoch and Anne-Marie Gulde

Search Finance & Development

Search

[Advanced Search](#)

[About F&D](#)

[Subscribe](#)

[Back Issues](#)

[Write Us](#)

[Copyright Information](#)

Use the free [Adobe Acrobat Reader](#) to view a pdf file of [this article](#)

Free Email Notification

Receive emails when we post new items of interest to you.

[Subscribe](#) or [Modify](#) your profile

Currency board arrangements may be coming back into fashion. What recent successes have countries had with currency boards and in what circumstances are they most likely to be effective?

Currency board arrangements, under which domestic currency can be issued only to the extent that it is fully covered by the central bank's holdings of foreign exchange, were long generally dismissed as throwbacks to the colonial era. (See box for an explanation of what currency boards are and how they work.) It was argued that such a rigid, rule-based arrangement was not well suited to diversified economies in many of which the authorities had developed sophisticated skills in monetary management. Instead, currency boards were seen as desirable and, indeed, workable only in very special circumstances, such as the small, open economies of city-states and small islands. In 1960, 38 countries or territories were operating under a currency board. By 1970, there were 20 and, by the late 1980s, only 9.

What is a currency board?

A currency board combines three elements: an exchange rate that is fixed to an "anchor currency," automatic convertibility (that is, the right to exchange domestic currency at this fixed rate whenever desired), and a long-term commitment to the system, which is often set out directly in the central bank law. The main reason for countries to contemplate a currency board is to pursue a visible anti-inflationary policy.

A currency board system can be credible only if the central bank holds sufficient official foreign exchange reserves to at least cover the entire narrow money supply. In this way, financial markets and the public at large can be assured that every domestic currency bill is backed by an equivalent amount of foreign currency in the official coffers. Demand for a "currency board currency" will therefore be higher than for currencies without a guarantee, because holders know that "rain or shine" their liquid money can be easily converted into a major foreign currency. In the event of a "testing of the system," a currency board's architects contend, automatic stabilizers will prevent any major outflows of foreign currency. The mechanism works through changes in money supply within the currency board country—a contraction in the case of a flight into the anchor currency—which will lead to interest rate changes that, in turn, will induce investors to move funds. While this is essentially the same mechanism that also operates under a fixed exchange rate, the exchange rate guarantee implied in the currency board rules ensures that the necessary interest rate changes and the attendant costs for the economy will be lower.

Economic credibility, low inflation, and lower interest rates are the immediately obvious advantages of a currency board. But currency

boards may prove limiting, especially for countries that have weak banking systems or are prone to economic shocks. With a currency board in place, the central bank can no longer be an unlimited lender of last resort to banks in financial trouble. At most, it may make loans from an emergency fund that is either set aside at the time the currency board is designed or, over time, funded from central bank profits. Another cost could be the national authorities' inability to use financial policies, such as adjustments of domestic interest or exchange rates, to stimulate the economy; instead, under a currency board, economic adjustment will have to come by way of wage and price adjustments, which can be both slower and more painful.

The renewed interest in currency boards has come in several waves, raising the number of countries currently using them to 14 (see table). Following the successful use of a currency board to stabilize the economy in the aftermath of Argentina's hyperinflation in 1991, additional attributes of currency boards became evident as a result of the successful efforts made by two transition economies—Estonia and Lithuania—to achieve credibility quickly for their newly established currencies. In 1997, a currency board was introduced to end the economic chaos in Bulgaria. In view of the favorable outcome, and given that to date no currency board has had to be abandoned as a result of a crisis, the discussion about potential candidates has recently been broadened further. In early 1998, there was serious discussion of whether a currency board would be an appropriate anchor to use in efforts to halt the Indonesian currency crisis. Most recently, there have been calls to study the possibility of stabilizing the Russian ruble under a currency board.

Currency boards in operation

Country/region	Years in operation	Peg currency	Special features
Antigua and Barbuda	32	U.S. dollar	Member of East Caribbean Central Bank (ECCB)
Argentina	6	U.S. dollar	One-third of coverage can be in U.S. dollar-denominated government bonds
Bosnia and Herzegovina	1	deutsche mark	
Brunei Darussalam	30	Singapore dollar	
Bulgaria	1	deutsche mark	Excess coverage in banking department to deal with banking sector weaknesses
Djibouti	48	U.S. dollar	Switched peg currency from French franc to U.S. dollar
Dominica	32	U.S. dollar	Member of ECCB
Estonia	6	deutsche mark	Excess coverage for domestic monetary interventions
Grenada	32	U.S. dollar	Member of ECCB
Hong Kong SAR	14	U.S. dollar	
Lithuania	4	U.S. dollar	Central bank has the right to appreciate the exchange rate
St. Kitts and Nevis	32	U.S. dollar	Member of ECCB
St. Lucia	32	U.S. dollar	Member of ECCB
St. Vincent and the Grenadines	32	U.S. dollar	Member of ECCB

Currency boards and inflation

Ultimately, the relative merits of currency board arrangements and other forms of exchange rate pegs cannot be resolved by theory alone. Ghosh, Gulde, and Wolf (1998) have undertaken an empirical investigation, extending the existing literature on inflation performance under fixed exchange rates. Given the empirically verified anti-inflationary capability of fixed exchange rate systems, it can be argued that instituting a currency board arrangement makes sense only if the regime delivers even better inflation performance. By using a data set containing all IMF member countries over more than twenty-five years, the study attempted to isolate the inherent effects of a currency board arrangement regardless of the many country-specific challenges facing countries where such arrangements are in operation—for example, hyperinflation (Argentina and Bulgaria), transition to a market economy (Bulgaria, Estonia, and Lithuania), volatile terms of trade (Eastern Caribbean Currency Board), post-conflict situations (Bosnia), or the presence of an international financial center (Hong Kong SAR).

Comparative statistics and more formal econometric analysis confirm that, historically, currency board arrangements have done better than even other fixed exchange rate regimes. For example, the presence of a currency board arrangement is found to lower annual inflation by about 3.5 percentage points—the result of a "confidence effect" that essentially arises from the faster growth of money demand made possible by the greater institutional certainty associated with a currency board. In contrast to fears often raised by opponents of currency boards, Ghosh, Gulde, and Wolf (1998) did not find that existing currency boards had any negative effects on growth.

Creating an operating environment

Even if economic arguments favor a currency board arrangement, its operational feasibility will depend on whether the attendant legal and institutional issues are effectively addressed. Their importance should not be underestimated: although a currency board is a simple monetary arrangement, a range of important decisions must be made about its specific nature, including changes needed in the institutional framework for financial management in the economy and, especially, in the legal environment in which central banking is carried out. Unless these adjustments—which tend to be more time-consuming than those involved in carrying out other exchange regime shifts and in many countries will have to be resolved in full public view (for instance, in parliamentary debates)—are completed satisfactorily, a currency board cannot be established in a way that will enable a country to achieve the necessary improvement in the credibility of its monetary policy.

The basic decisions that need to be made when a country establishes a currency board arrangement include choosing the peg or anchor currency, setting the level of the peg, and determining whether or not to include a "safety margin" for the financial sector. Changes are also required to the legal system and the government's relations with the central bank.

- Obvious criteria to use in choosing an anchor include the strength and international usability of a currency, which generally rule out all but a handful of moneys. In fact, the 14 currency board arrangements currently in operation involve pegs to only three currencies: the U.S.

dollar (10 countries), the deutsche mark (3 countries), and the Singapore dollar (1 country). In choosing from among this much narrower field, a country should carefully consider its current and prospective trade flows, as well as other economic links, with the country issuing the currency to which a country's currency is pegged. A country's choice can get more complicated if its economy is characterized by widespread "currency substitution," where the currency used is not that of its major trading partner. In this case, or where the values of a country's trade with two dominant currency blocs are roughly equal, a currency basket is a theoretical option. In practice, however, all countries that have introduced currency board arrangements so far have opted for the simplicity of a single currency.

- Setting the exchange rate would appear straightforward, given that a currency board arrangement by definition has to cover a monetary aggregate, usually the full amount of reserve money but sometimes narrower definitions of money. Yet the rate at which the central bank's available international reserves cover the monetary aggregate in question varies depending on the exact definition of reserves used. Choosing the appropriate definition most likely involves a trade-off: although a narrow definition of foreign reserves, such as "net reserves," might signal strong discipline and possibly improve the credibility of the system, it might also require an up-front devaluation that would prove politically and economically infeasible.
- In a "pure" currency board arrangement, the currency board has no margin to intervene as lender of last resort on behalf of a bank in difficulties or to engage in open market operations. A country weighing the option of establishing a currency board may, however, seek a "safety margin" of some excess coverage, holding reserves of $100+x$ percent of the monetary base. In this case, interventions of up to x percent of base money would be possible without violating the currency board rules. While most operating arrangements do allow for some form of limited intervention, the decision to include this feature should not be taken lightly. Room for maneuver in case of unexpected difficulties is possible only at a more depreciated exchange rate than would have been necessary under other exchange arrangements. Intervention may also limit the transparency—and, thereby, the credibility—of the system.
- A sound legal basis is essential, because a currency board arrangement derives much of its credibility from the changes required in the central bank law concerning exchange rate adjustments. Countries seriously considering establishing a currency board may therefore wish to incorporate some, or all, of the above-mentioned principles into the central bank law. The law must define both the exchange rate and reserves, as well as specify the limited powers of the managing institution under the system. It is sometimes argued that the rules governing a currency board could be asymmetrical, permitting the central bank to appreciate the exchange rate but requiring legal action before depreciation can be undertaken. For example, the rules governing Lithuania's currency board contain such provisions. The period needed to set up the necessary legal process will obviously differ across countries, depending on the availability of technically skilled lawyers who can draw up a draft bill and the minimum parliamentary requirements for its enactment into law. In most countries, the process will take time owing to parliamentary discussion about the merits of the proposed arrangement, which may itself require the relevant authorities to carry out an intensive information campaign.
- Finally, establishment of a currency board arrangement will require the redefinition of the financial relationships within the country's

government. More often than not, the initial inflationary impetus that is to be eliminated by moving to a currency board has been created through extensive central bank financing of the government. Rules for a currency board arrangement therefore need to prohibit new central bank loans to the government. What financial links there are to be between the central bank and the government, and how these are to function—most important, how the central bank will handle government deposits—will also need to be worked out. Although the central bank continues to handle government accounts under some currency board arrangements, doing so may decrease the arrangement's transparency. Further difficulties may arise from the fact that government deposits are callable at short notice, and consistency with currency board arrangement rules can be achieved only if such accounts are fully covered by foreign reserve holdings. For these reasons, some economies with currency boards—most notably Hong Kong SAR—have moved all government accounts to commercial banks. Other economies with currency board arrangements, including some transition economies, have felt that the commercial banking sector was not yet able to handle the government's accounts and, hence, have opted to keep them with the monetary authority. In this case, however, interest on these accounts can be paid only to the extent that the currency board has a flow income from its foreign reserve holdings that exceeds its operating costs. In addition, transparency is likely to be enhanced if the public debt management function, an auxiliary service provided by many central banks, is clearly placed outside the domain of the currency board, possibly by creating an independent agency under the ministry of finance.

Transition to a currency board

The rules laid down in the new central bank law will serve as guideposts for reorganizing the central bank into a currency board. In a number of countries that have recently adopted currency board arrangements, this has involved setting up separate banking and issue departments, each with distinct functions and coming under the authority of different deputy governors. Other countries with currency board arrangements, such as Argentina, have retained a unified structure for the monetary authority. In either case, a reorganization has to take place to allow easy identification of the central bank's key activities and to ensure that maintenance of the relevant currency cover ratios will be clearly visible. To that end, the currency board arrangement will have to publish a well-defined set of statistics (including, for instance, the balance sheet of the issue department or statistics on selected assets and liabilities included in that balance sheet) in a form, and according to a calendar, that are consistent with the currency board arrangement law.

Establishing a currency board arrangement will also generally involve reviewing how the central bank will carry out its new core functions, the most important of which is reserve management. The added importance of reserve management under a currency board arrangement is obvious, given that the board's earnings from foreign exchange holdings will probably be its major source of income and because even a small violation of the cover requirement, which could arise from technical problems in reserve management, might cause serious trouble for the arrangement.

Finally, conducting a review of the banking sector and prudential standards and deciding on the location of banking supervision will generally also be necessary during the transition to a currency board arrangement. The review and, if required, a streamlining of the

banking sector are important because of the elimination of, or reduction in, the central bank's ability to function as a lender of last resort under such an arrangement. During this period, the authorities may decide to transfer banking supervision, which has often been carried out by the central bank, to an independent agency to avoid possible circumvention of currency board arrangement rules in case of banking sector difficulties. If, for reasons of timing or organization, banking supervision functions cannot be performed outside the central bank, it has to demonstrate clearly that any support it provides to banks in difficulty will not breach the currency board arrangement rules.

Conclusion

Currency boards in many countries have achieved impressive economic results, both in achieving lower inflation than other exchange rate regimes and in stabilizing expectations after prolonged hyperinflation. There have thus been calls for such arrangements to be established in a rather diverse group of other countries, many of which are in crisis. Such calls should be viewed warily by national governments, for at least three reasons. First, the success stories largely reflect the experiences smaller countries have had with currency boards, whose applicability to larger countries has yet to be fully demonstrated. Second, and equally important, the successful establishment of a currency board arrangement requires time for building consensus, as well as for careful planning and implementation of important legal and institutional changes. Third, countries with one or several weak banks may have to rehabilitate them before changing their monetary regimes. These prerequisites to establishing a currency board may, in many cases, be too involved and take too much time to make it advisable for a country to attempt to do so during a macroeconomic crisis.

Suggestions for further reading:

Tomïç½s Baliïç½o, Charles Enoch, Alain Ize, Veerathi Santiprabhob, and Peter Stella, 1997, Currency Board Arrangements: Issues and Experiences, IMF Occasional Paper 151 (Washington: International Monetary Fund).

Charles Enoch and Anne-Marie Gulde, 1997, "Making a Currency Board Operational," IMF Paper on Policy Analysis and Assessment 97/10 (Washington: International Monetary Fund).

Atish R. Ghosh, Anne-Marie Gulde, and Holger C. Wolf, 1998, "Currency Boards: The Ultimate Fix?" IMF Working Paper 98/8 (Washington: International Monetary Fund).

Charles Enoch is an Assistant Director and Chief of the Banking Supervision and Regulation Division of the IMF's Monetary and Exchange Affairs Department.

Anne-Marie Gulde is a Senior Economist in the Monetary and Exchange Policy Review Division of the IMF's Monetary and Exchange Affairs Department.