

Currency Boards

A currency board is defined as an exchange rate arrangement in which the exchange rate is fixed to an anchor currency and the Central Bank operates with a simple rule that precludes the monetary authorities from issuing money unless they obtain an equivalent amount of international assets to back it. From a practical point of view this means that the Central Bank has no independent monetary policy and that it creates or contracts the money supply only as the result of its interventions in the foreign exchange market. If there is excess demand for domestic currency capital will flow in (probably in response to an increase in interest rates) and the Central Bank, by acquiring these flows, will expand the money supply. If there is excess supply of domestic currency, the Central Bank will take in this excess supply by giving away international assets, thus contracting the money supply. In some cases this rule is implemented by forcing the Central Bank to have full backing of domestic base money with international reserves. In some cases a currency board does not require a one to one backing of the monetary base, but it still precludes the conduct on an independent monetary policy beyond very strict limits. In fact, a currency board also differs from a typical peg in its commitment to the system, which is usually enshrined in law and in the Central Bank charter.

The latest exchange rate arrangement classification published by the IMF identifies 13 countries with currency boards. Of these, six correspond to countries in the Eastern Caribbean Currency Union (Antigua & Barbuda, Dominica, Grenada, St. Kitts & Nevis, St. Lucia and St. Vincent & the Grenadines), plus seven others: Bosnia and Herzegovina, Brunei Darussalam, Bulgaria, China-Hong Kong SAR, Djibouti, Estonia and Lithuania. Because all these countries are relatively small, it places currency boards in a relative unpopular category amongst potential exchange rate regimes.

There are two main reasons why countries have typically used currency boards. In some cases the currency board is a cheaper alternative to having a common currency. For example, for the Eastern Caribbean countries mentioned above it seems relatively obvious they should use the US Dollar as currency to maximize the benefits from a stable exchange rate arrangement with their almost exclusive trading partner. However, the currency board allows them to keep the exchange rate fixed without giving up the seignorage revenue of domestic currency. In other cases countries have resorted to a Currency Board as a way out of monetary and inflation chaos. Argentina's currency board experience in the 90s and Bulgaria's currency board are appropriate examples. Even though, as we will see below, the evidence points to large trade benefits of currency boards, it is typically assumed that it is as a tool to fight inflation where the main benefits of currency boards lie.

The interest and excitement on currency boards has depended both on the need that countries have faced to solve either of the two problems mentioned above: currency integration without seignorage cost, or exiting from a high inflation situation, as well as with the assessment made at the time of whether a currency board is the most efficient way to reach those objectives. Recent times have been unkind to currency boards on both dimensions. While the use of a currency board as a replacement for a common currency remains a valid motive, its effect as an anti-inflation device scores fewer points among academics and policy makers as of late. First of all, the inflation problem has significantly subsided, at least relative to the late 80s when high and chronic inflation was rampant. Today

most countries exhibit single digit inflation rates and only a handful of exotic cases appear to have a monetary policy that is out of control. The high inflation history of yesteryears has been critical in this improvement by fostering much stronger fiscal policies, with monetary policy being conducted much more freely from political pressures (both when Central Banks are independent and when they are not), increasingly within an inflation targeting framework. As inflation has decreased, so have the benefits of a currency board, thus making it a relatively less attractive proposition. Furthermore, while prior to the demise of Argentina's currency board in early 2002, no currency board had been forced to end, the fact that Argentina's currency board did end in the midst of a large crisis (after enduring a long period of high interest rates) did raise some questions as to how much credibility the regime actually bought. As a result many countries have opted to jump directly all the way to dollarization (e.g. El Salvador or Ecuador) or pursue integration into a currency union (Slovenia) thus making currency boards lose ground even to "harder" exchange rate commitments.

In spite of the recent drop in interest on this specific regime, nothing precludes that the interest may rise again in the future, so a discussion of the specifics of currency boards remains useful. The best way to organize the discussion is to present first the advantages of a currency board, then move to the disadvantages, and then attempt a synthesis.

Advantages of a currency board

The main advantage that is ascribed to a currency board is the credibility gains that it allows, helping deliver lower inflation and better fiscal results. The argument is plain simple: a currency board represents a strong commitment that if broken can have a large and costly effect on expectations. Because politicians fear this loss of credibility, while in place the currency board lowers inflation expectations and inflation itself, and should provide the incentives for an improvement in fiscal behavior.

These predictions broadly bear out. On the inflation front Ghosh, Gulde and Wolf (1998), drawing on a dataset for all IMF countries between 1970 and 1996, found that countries with currency boards delivered an inflation rate that was about 4% lower, a sizable effect. This result has held up in later work (see for example Levy Yeyati and Sturzenegger, 2001 and Kuttner and Posen, 2001).

The record on fiscal discipline is also relatively favorable. Ghosh, Gulde and Wolf (1998) and Culp, Hanke and Miller (1999) find that countries on currency boards tend to run tighter fiscal policies. Fatas and Rose (2000) also find that currency boards are associated to fiscal restraint (though, somewhat surprisingly this restraint does not carry on to dollarized economies or those operating within the context of a common currency). Anecdotal evidence also seems to point in the same direction. In 2001, as Argentina's currency board was under fire fiscal authorities implemented large budget adjustments in an attempt to strengthen the system.

Currency boards may also have an effect on trade as a result of the stability it induces on the exchange rate, an effect similar to the one that has been identified for countries that adopt a common currency with other countries. This exercise is specifically undertaken in Frankel and Rose (2002) who find that the effect of a currency board is a more than tripling of trade

(in fact they find that the trade effects for currency boards and common currencies are statistically indistinguishable). Thus the trade motive for a currency board seems to be important. Added to the benefits of saving on seignorage it explains why currency boards may remain an attractive option for some small countries.

Disadvantages of a currency board

Four main arguments have been identified as the main disadvantages associated to currency boards. First, the fact that it precludes monetary authorities from running an independent monetary policy and that the exchange rate cannot adjust in response to real shocks; second, that it may “hide” underlying problems leading to larger crises down the road; third, that it stimulates large currency mismatches in the portfolio structures of government and the private sector; and fourth that it limits the ability of the Central Bank to act as a lender of last resort, thus hindering the possibility of developing a local based financial sector.

The debate has focused mostly on how relevant these restrictions are, in particular whether alternative mechanisms within the context of the currency board are available to deal with these problems. Let us review each of them briefly.

On the loss of monetary/exchange rate policy, the question is how relevant of a loss this is. It can be argued that the idea of a currency board is indeed to limit the scope for an independent monetary policy, which had otherwise proven unable to contain high inflation. To the extent that inflation and fiscal policy do improve, not much may be lost relative to the situation in which monetary policy just induced inflation without any particular benefit in terms of macroeconomic stabilization. Thus, assessing whether this is a cost requires understanding what the actual counterfactual is. Proponents of currency boards could argue that only countries where monetary policy served no purpose are those that chose currency boards as a commitment device.

Of course if monetary policy were possible, the costs of giving away with it may turn particularly costly for currency boards. The case of Argentina helps illustrate why. Argentina had established a currency board with the dollar to quell inflation expectations in the early 1990s. As any emerging country is was hurt by the rush out of emerging markets following Russia's default in 1998. This rush out of emerging markets strongly appreciated the dollar, making Argentina's currency stronger exactly when the country needed it to weaken. The fact that currency boards require a strong anchor currency and that capital flows may strengthen these currencies when there is turmoil in emerging countries poses a problem for currency boards during periods of high turbulence in international financial markets. Of course, as much as in the optimal currency area debate, how costly is the loss of the monetary instrument depends on the availability of alternative adjustment mechanisms: fiscal transfers, remittances, labor market mobility, or internal price flexibility that may all operate as substitutes for the loss of monetary policy (the relevance of these alternative mechanisms may explain the different fates of Hong Kong and Argentina's currency boards). Fiscal policy can also be used as a stabilizer that may substitute for the lack of exchange or monetary policy, though the ability of countries to use it seems relatively limited, particularly for countries that opted for a currency board as a result of their poor fiscal policies. Some evidence for the fact that the lack of monetary policy may hurt is provided by Levy-Yeyati and Sturzenegger (2001), who compare the growth performance of hard pegs generally

(including currency boards) with other regimes. They find that hard pegs trail floating regimes in growth performance (though not by more than pegs or intermediate regimes). However, this allows to conclude, that, in the end, the lack of policy responses may have a detrimental effect on overall economic performance.

The fact that currency boards may delay an adjustment has also been a cause of concern. Aizenman and Glick (2005) and Kuttner and Posen (2001) have both found that the harder and longer the peg, the larger the depreciations upon exiting. This is to be expected, because the larger the commitment, typically longer will be the fixed exchange rate spell, and only under more unfavorable conditions will the peg be abandoned, suggesting that an earlier adjustment may have been beneficial. This conclusion, however, should be taken with care because it fails to take into account that this stringency also helps avoid many exits that later on would have turned out unnecessary.

The same caution should be used when evaluating the tendency of currency boards to foster the evolution of mismatches in government and private sector debt structures. The basic idea is that as long as the currency board holds countries develop a tendency to “dollarize” their financial sectors (see Catao and Terrones, 2000) with banks piling foreign currency deposits on their liability side, firms borrowing in dollars abroad and governments issuing debt in dollars. This is a problem because their asset side is in most cases strongly linked to the local economy, and thus, whether denominated in foreign currency or not, subject to currency risk in the event of a devaluation. This mismatch however, is a double edged sword. On the one hand it increases the commitment of the authorities to the peg (and this is why sometimes it is encouraged by the authorities as an additional credibility booster), but on the other it may also trigger large capital outflows in the anticipation of a crisis. In the presence of large mismatches, agents would correctly anticipate a devaluation to produce a costly crisis, thus accelerating the run and the likelihood that the currency goes. How these two factors play out during a crisis depends on the specifics of each individual country.

Finally, a currency board limits the ability of the central bank to operate as lender of last resort, particularly in the event of a bank run. This has been suggested as an explanation as to why countries with currency boards quickly develop an international based banking system (typically with local institutions bought out by foreign banks) which is better insured against runs at any specific location. Proponents of currency board have suggested several alternatives to replace the Central Bank’s function as lender of last resort with alternative mechanisms. Among these: the possibility of the government operating as lender of last resort, potentially by borrowing in dollars in times of need; the setting up of insurance schemes by which financial institutions buy in advance the access to funds in the context of a systemic liquidity run (this schemes were implemented by Mexico and Argentina); tighter capital and liquidity requirements on the banking sector; and the piling up of “extra reserves” to the extent possible. The first of these mechanisms is doubtful, as the government may have limited access to financing when it faces a crisis, and the others entail a cost. However, it may be said, some of these schemes have been implemented and used successfully. Specifically, Argentina did use its contingent credit line with private banks during its 2001 crisis and banks did honor their pledge at the time.

Where does this leave us?

The conclusion is then that, as much as with currency unions, there seems to be a strong trade motive to set up a currency board for small countries. In fact, for a fiscally sound small country with the ability to conduct fiscal policy with some flexibility a currency board may be superior to a common currency as it allows the country to retain the seignorage on its money stock. For larger middle income countries a currency board has been pursued more as a way of improving credibility than anything else. While currency boards seem to have delivered, the Argentina case also suggests that their role in improving credibility cannot be taken fully for granted. If a currency board is implemented in times of easy access to international financial markets, fiscal discipline may be sidestepped and a fiscal and currency crisis may still occur at the end of the day. Additionally, policy makers should ask themselves if it makes sense to buy in the credibility through a peg, or to buy it the hard way, day by day, implementing reasonable fiscal policies while maintaining some degree of flexibility in their monetary policy. The successful recent experience of many countries with managed floating regimes and inflation targeting seems to point into this direction. If this trend continues, currency boards may turn to be an even rarer occurrence in the future.

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