

Argentina: The end of a clever idea?

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Abstract: This paper asks why Argentina slipped into a deep crisis with its currency board (CB) arrangement though this regime had received so much academic support as a stabilisation device. It is argued that a CB does not make devaluation risks disappear but translates them into an explosive, strongly pro-cyclical mixture of exchange rate, financial system and default risk which might trap a country in a recession cum debt crises when hit by a large exogenous shock. Thus, a CB should only be introduced after careful consideration. Countries already in a CB should aim at excess reserves and a very sound fiscal position.

JEL-Classifications: F33, E42

Introduction

For almost a decade, it seemed like an outright smart idea: By adopting a currency board and thus simulating the gold standard with some stable foreign currency, it was argued, a developing or emerging market country could easily import monetary stability. This arrangement would bring a stable exchange rate with full credibility. Not only would exporters be able to calculate future exchange rates more easily. The credibility should also lead to a dramatic decline in interest rates as risk premia were reduced (Dornbusch 2001:240). Consequently, a currency board would foster trade and growth.²

Some small and medium sized countries such as Argentina (in 1991), Bulgaria (in 1997), Bosnia (in 1997), Estonia (in 1992) and Lithuania (in 1994) adopted a currency board to break hyper-inflationary processes. The initial success seemed to prove the currency board's advocates right: After introduction of a currency board, inflation was quickly brought under control, and growth increased compared to the time before the regime shift. Moreover,

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² Literature which strongly favours the adoption of a currency board include Hanke/Schuler (1994), Hanke (2000) and Dornbusch (2001), a more careful, but nevertheless favourable judgement is given in Gosh/Gulde/Wolf (2000).

empirical studies such as Hanke(2000) and Gosh/Gulde/Wolf(2000) showed the superiority of currency boards vis-à-vis floating or pegged exchange rate regimes. It seemed that the only cost of a currency board would be an increase in the volatility of output.

However, since Argentina's economy slipped into recession after its neighbour Brazil allowed its currency, the real, to float in January 1999,³ the discussion got a slightly different turn:

While the dollar, Argentina's anchor currency, appreciated strongly against the Euro, Argentina lost increasingly competitiveness. For three years, GDP growth rates remained negative. The fiscal position deteriorated. At the same time, interest rates sky-rocketed, reaching a spread of several thousand basis points over US treasury bonds which together with a falling price level translated into extremely high real interest rates. By mid-2001, the country was de facto cut off from the international capital market. The government decided not to borrow any more and instead cut expenses when taxes would fall short. Increasingly desperate measures were discussed, including an outright dollarisation. Since dollarisation would not solve the problem of the peso's real overvaluation, some economists warned against such a step and designed other ways out of the currency board⁴.

In late 2001, all measures taken had failed to sustain credibility of the banking system. The government saw itself forced to freeze bank accounts. In early 2002 it then left the currency board arrangement in a disorderly process.⁵ Up to now the mess has not been sorted out. At the time of revising this article, the Argentine government again ordered a temporary closure of all banks as to prevent further flight from the banking system while Argentina's economy was continuing to spiral downwards.

³ Of course, the Real devaluation was not the sole cause of Argentina slipping into recession. Instead, also investors' increasing aversion to exposure to emerging markets after the Asian crisis in 1998 as well as unfavourable terms of trade developments for Argentina's exports played a role.

⁴ The most prominent proposal came from Ricardo Hausmann (2001), himself a former proponent of Argentina's set-up. He proposed to change peso debt contracts into inflation-indexed peso-contracts and let the peso float. Roubini (2001) also considers the option of a devaluation cum dollarisation.

At a point where it is hard not to call Argentina's currency board experiment a failure, one question is central for other emerging market economies which are either considering adopting a CB-system or already have a CB: What went wrong in Argentina? And how can a country avoid to be the next Argentina? Even for crisis-ridden Argentina, this analysis might still be of some value: As I will argue, the same problems which brought down the Argentine CB also persist in a completely dollarised economy. With the Argentine government moving further away from managing to establish a new domestic currency, the market process of people changing whatever Pesos they get into dollars might still lead to a complete dollarisation of the economy.⁶

Dornbusch as a typical advocate of Currency Boards

Of course there was criticism against the currency board approach before Argentina's economy hit the wall. First, it was often questioned whether a fixed exchange rate would give away too much room for adjustment to asymmetrical shocks. While this issue is not entirely decided, the new consensus seems to hint that exchange rate changes might not be the ideal instrument for adjusting to shocks, as they might deepen financial sector problems (Calvo 2000) while most of the shocks are only temporary (Dornbusch 2001).

However, the fixed exchange rate is not the only issue which is attacked by the currency board's critics. Rudi Dornbusch (2001) structures the counter-arguments brought forward into five categories only to invalidate them one by one. According to him, standard arguments against CBs are: the loss of sovereignty, the loss of seigniorage, the loss of monetary policy, the loss of a lender of last resort (LOLR) and fiscal preparedness.

⁵ For details on the process, see Fritz (2002).

⁶ For the logic of dollarisation as a market process, see Roy (2000).

Dornbusch dismisses the argument of a loss of sovereignty as a political, not an economic argument. The loss of seigniorage is compensated (and might even be overcompensated) by the fact that the currency board holds its reserves in interest bearing assets, especially if the public decides to hold more currency than it would have in a high-inflation environment. With respect to the loss of monetary policy, he claims that the developing country's freedom to conduct an independent monetary policy is an illusion anyway. He asks (p. 239): "What central bank in, say, Latin America can cut interest rates below New York, or what central bank in Eastern Europe can go below Frankfurt?" For the question of a lender of last resort, he argues, that it is the treasury, or the global financial market, not the central bank who is the appropriate lender. Calvo (2000) even argues that an emerging market's central bank cannot sensibly act as a lender of last resort by printing money, since it only solves one problem with another, high inflation. Roy and Betz (2000) take a different line here: They argue with domestic banks being foreign owned, the foreign subsidiaries have access to their central banks' discount window and are thus able to provide for a lender of last resort function for the CB-country's financial system. With regard to fiscal preparedness, Dornbusch argues that he does not understand how a discretionary monetary and exchange-rate policy could accommodate a bad fiscal situation better than a fixed rate.

Problems with Dornbusch's Arguments or: Economics of Cumulative Risks

One by one, these points against the traditional Anti-CB-arguments seem quite plausible. And as to the question of sovereignty and seigniorage, not much is to be added to Dornbusch's arguments. However, as the real world experience in Argentina has shown, the last three points of Dornbusch's argumentation are not quite as convincing as they seem at first sight. In combination, the loss of monetary policy, the loss of a LOLR, and the need for fiscal preparedness might become highly problematic.

The first lesson learnt from Argentina's experience is that a currency board does not make exchange rate risks disappear. As the government can always decide to leave the currency board (and many post-colonial countries have indeed left their colonial CB-systems), there remains a devaluation risk. But, and this is important, the exchange rate risk premia in a CB becomes strongly procyclical. In a boom, there is hardly any reason why a country should leave its CB. And since the monetary authority holds reserves sufficient to back (most of) the monetary base, speculative attacks are not too great a risk. In addition, as long as the public debt is not too large, the government should be able to borrow in the international financial market. In addition, the real interest rate achieved in a boom can fall significantly below that of the anchor currency, creating an incentive not to abandon a CB in a boom: With perfect credibility, the nominal interest rate is given by the anchor currency's central bank's refinancing rate while inflation is domestically determined. In a boom, inflation typically rises, lowering the real interest rate.⁷ Thus, the exchange rate risk premium approaches zero during a boom.

Things are different in a downturn or in an economic crisis. During such a period, the currency board might become a strait-jacket. With falling inflation or even deflation, the real interest rate rises strongly, and the public debt burden becomes more pressing. If then even the treasury is cut off the international capital markets as the country's medium term growth prospects deteriorate, politicians might well sympathise with the idea of abandoning the CB. As markets participants anticipate this train of thought, they will demand a higher risk premium on their holdings in domestic currency – and on dollar credits to the currency board economy as an exit from the CB would hit banks' and companies' balance sheets and thus

⁷ From Hanke (2000) we learn that in Argentina, real interest rates were negative in the first years of the currency board regime, while GDP growth topped 10 percent in 1991 and was only slightly lower in 1992. In Estonia, real interest rates continued to be negative until 1996 and in Lithuania until 1995.

increase default risks. The natural pro-cyclical element of a currency-board (via the inflation-real interest channel) is thus amplified by an additional pro-cyclical exchange rate risk.

This strong pro-cyclical element is again amplified with the loss of the lender of last resort function. At the currency board proponents' side, there seems to be some confusion of what a LOLR is supposed to do and what not. Dornbusch and Calvo are right that there is no sense in printing money to help banks with bad loans to pay their creditors. Such a bail-out could well be inflationary as the broad money supply increases permanently. Here, the right solution would indeed be to finance the bail-out either via some depository insurance fund or out of the general government budget.

However, the classic LOLR-function is different from this scenario: The LOLR is to provide banks with liquidity should there be a *liquidity crisis* (not a *solvency crisis*) due to financial distress of some market participant. This provision is supposed to keep the faith in the stability of the banking system as a whole and keep depositors from starting a bank run. As the liquidity injection would only be temporary (the bank which receives the injection would have to pay back the money as soon as it is able to liquidate assets), there is no danger of an inflationary push. Most of the time the central bank does not even have to actually provide liquidity in order to keep the faith in the financial system's stability. Merely being prepared to step in when things go bad greatly reduces the systemic risk.

A currency board, however, cannot act as lender of last resort – at least not if it plays by the rule and does not accumulate excess reserves. Thus, the systemic risk of the financial sector remains. While Roy/Betz (2000) are right that in principle, commercial banks with access to the international capital market or the anchor currency's central bank's discount window could act as LOLR to the financial system, in times of crisis, those banks will be reluctant to do so: With both the risk that the country might exit the currency board as well as the default risk for companies and banks in that country (when the government stays in the CB)

increasing, such an involvement becomes more and more risky. International banks might refrain from pouring more money into the troubled market while investors might refrain from providing banks who want to increase their involvement with fresh loans. Unfortunately, thus especially in times when a LOLR would be needed, international banks will be increasingly reluctant to take on this function.

The only possible way out would be that the whole financial system is dominated by one large, foreign bank. As Caprio et al. (1996) note, central to being able to act as a LOLR is the ability to determine whether a bank is insolvent or illiquid. As a private bank does not have the information about other banks' solvency a central bank with supervisory functions might have, this distinction is almost impossible for a private institution to make. Only a single foreign bank running most of the banking system would be a solution: First, it would have access to the foreign central bank's lending facilities. Second, it knows its solvency position. However, such an arrangement would come with costs: A single bank dominating the financial sector would lead to higher retail loan interest rates as competition would be low. So, the choice within a CB is between having high, monopolistically determined interest rates or a systemic risk which – just as the exchange rate risk – increases in a downturn and becomes practically non-existent during good times and thus acts as a pro-cyclical element. This lesson becomes even more important when combined with the argument of a loss of monetary policy. Of course, an Eastern European central bank would have problems going with its interest rate below Frankfurt. However, when not having fixed the domestic currency with a CB, but with a softer arrangement, there is always a devaluation as a solution of last resort. While of course, there is the danger of importing inflation and igniting a wage-price-spiral and the central bank will not necessarily be able to lower its interest rate, export demand can be stimulated, compensating for weak domestic demand. And if the central bank

manages to convince the markets that a large devaluation now is in the past and not in the future, interest rates actually might come down as exchange rate and systemic risk premia fall. Within a CB, such a move is not a viable option: As the credible peg has created incentives to borrow in foreign currency, firms, banks and private agents will be indebted in dollar-denominated debt. With a devaluation, their real debt burden increases thus pushing them into bankruptcy. As Joebges (2000) concludes from examining the EMS crisis in 1992 and several emerging market crisis, countries with a low degree of foreign currency indebtedness can weather a devaluation much better than those who have borrowed heavily in foreign currency. In fact, not only European countries being forced out of the EMS in 1992 managed the devaluation quite well, even Brazil weathered the devaluation of its Real reasonably well – far better than anything one can now expect from Argentina.

The strong procyclical reaction of interest rates in a CB lead us to the last point against currency boards: The necessity of fiscal preparedness. If in a crisis, real interest rates can go through the roof and reach 30 percent, the government should not be indebted too heavily. With interest rates of 30 percent, the stock of debt doubles roughly every 28 months. Even for a country with a public debt of below 50 percent, this might quickly become unsustainable. With public debt attaining unsustainable levels, the default risk for the country increases, again amplifying the process of rising interest rates and rising debt levels. A country without a currency board could at least always pay its debt denominated in domestic currency by printing money. Here, inflation and exchange rate risks would exist, but the default risk would be smaller than in a CB-system.

Taking all these points together, a currency board system might act very strongly pro-cyclical – which is at the heart of the Argentinean problem. In times in which any other sensible central bank would lower interest rates (before exiting the CB, Argentina has experienced more than 40 consecutive months of recession while prices have been falling during most of

the slump), increasing exchange rate, systemic and default risks push up the interest rate to unbearable levels – thus keeping the country in a recession cum debt deadlock. In late 2001, it was evident that Argentina's economy could not be revived without lower interest rates. At the same time, risk premiums and thus interest rates remained high since there was no realistic scenario under which the economy would begin to grow at a strong pace again – a vicious circle without any natural market mechanism providing a way out. Figure 1 shows the relevance of these risk premiums relative to the underlying US federal funds rate.⁸ As we can see in the figure, these risk premiums showed a steady upward trend from late 1999 on, with exploding risk premia from late 2000 on.

Policy Conclusions: How not to become a new Argentina

Thus, the first policy conclusion from Argentina is simple: Trying to stabilise the domestic economy with a currency board is a dangerous game. Of course, the Argentinean case has some special features: The shocks from the depreciation of the Brazilian real and the appreciation of the Dollar were admittedly extremely large. However, large shocks tend to happen from time to time, and a country should try to be prepared to such exogenous shock.

For countries with a currency board, but not yet hit by a crisis comparable to Brazil's devaluation, there are three precautions to take: First, while having the financial system dominated by some large foreign bank might lead to higher interest rates not only since they might not have as good information about local customers (Caprio et al. 1996, p. 32), but also from a higher degree of monopolisation in the financial sector, there might be some benefits from increased systemic stability. Another way of reducing this risk component could be that the currency board accumulates large excess reserves, for example from the returns on its

⁸ Devaluation risk has been computed as the spread of Argentinean interbank interest rates over interbank dollar interest rates. Systemic risk premium has been computed as the spread of Argentine interbank dollar interest rates over the US Federal Funds rate.

Dollar- or Euro-assets, so that it could act as LOLR. Third, as interest rates may sky-rocket in crisis times, the countries in question should aim at a very sound fiscal position –meaning being in surplus most of the time and not having any significant stock of public debt outstanding. However, it is unclear why a country which can subscribe itself to such a fiscal austerity should not be able to create an independent central bank which would credibly fight inflation via an inflation target –a far less risky solution.

Finally, the case for Argentina also provides a lesson for countries which consider outright dollarisation. Some of the argument concerning the strongly pro-cyclical element of a currency board also applies to a completely dollarised economy. For example, even under dollarisation, there will remain an exchange rate risk: As there will always be the possibility that the government passes a law in the future that all debts and deposits will change from their dollar denomination to some (new) local currency⁹, even complete adoption of the dollar will not bring perfect credibility, leaving the risk of deposit flights during a downturn. The same applies for the financial system risk and the default risk: Without having an efficient LOLR or the printing press to finance public debt, those risks remain and will act pro-cyclical.

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⁹ Which, by the way, is what Hausmann (2001) proposes for Argentina and what has happened to dollar denominated deposits in the Argentine banking sector.

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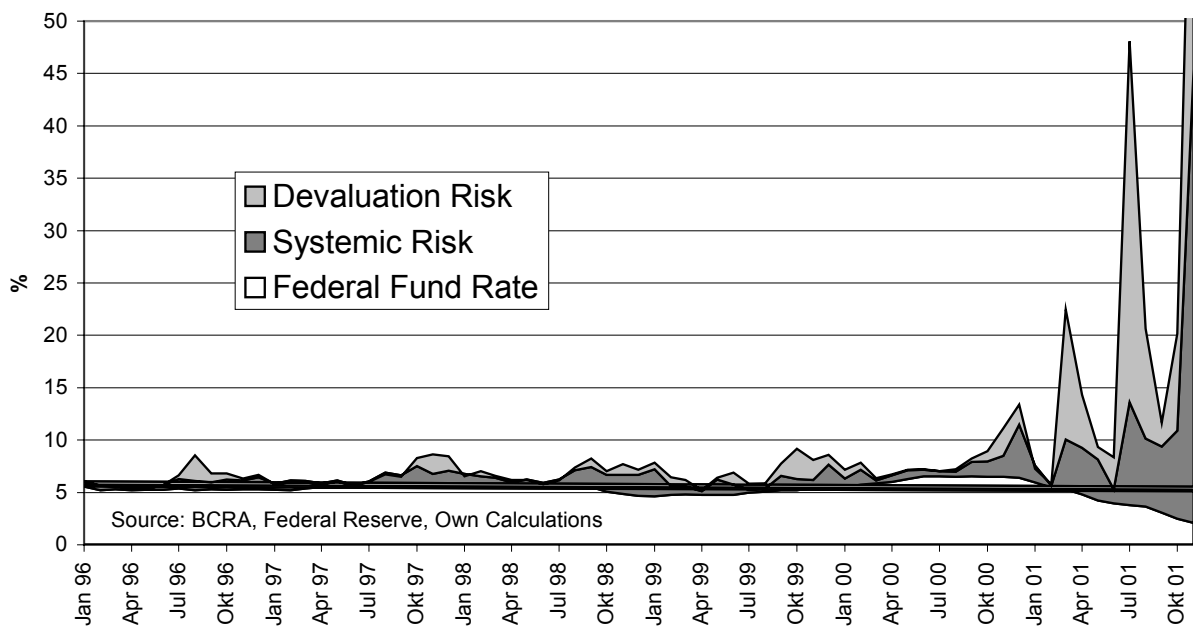


Figure 1: Different Components of Argentinean Interbank Rates