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**Article**

## Hard currency and sound credit: A financial agenda for Central Europe

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European Investment Bank (EIB), Luxembourg

*Suggested Citation:* Dornbusch, Rudi; Giavazzi, Francesco (1999) : Hard currency and sound credit: A financial agenda for Central Europe, EIB Papers, ISSN 0257-7755, European Investment Bank (EIB), Luxembourg, Vol. 4, Iss. 2, pp. 24-32

This Version is available at:

<https://hdl.handle.net/10419/44784>

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## Second Prize

### **Hard currency and sound credit: A financial agenda for Central Europe**

***Rudi Dornbusch & Francesco Giavazzi***

This paper argues that Central Europe should draw the lessons from the Asian and Mexican crises: hard money and sound credit are essential in a world where capital is intensely mobile, contagion pervasive and the economic and social costs of crises nothing short of formidable. We argue that Central European countries should adopt a currency board using the euro as their reference currency. In this part of the world a currency board system is eminently plausible because trade patterns link the region closely to the markets of the European Union. Moreover, the appearance of the euro, in conjunction with the intense desire of the East to become integrated in the European market, removes the traditional nationalist objections to a currency board. The argument for moving now is *opportunity*. Europe is in the midst of a historic transformation that affords governments with an absolutely unique opportunity to do those things which ordinarily are politically impossible.



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# Hard currency and sound credit: A financial agenda for Central Europe

## 1. Introduction

What do Hungary, Poland or the Czech Republic have to lose in giving up their monetary sovereignty and national control of mismanaged financial systems? Nothing. In fact, their hope for strong economic progress and the ambitions to fully join the European Union can be leveraged by bold steps in the area of currency and finance. This paper argues that Central Europe should draw the lessons from the Asian and Mexican crises: hard money and sound credit are essential in a world where capital is intensely mobile, contagion pervasive and the economic and social costs of crises nothing short of formidable.

*The appearance of the euro, coupled with the desire to be integrated in the EU, removes the traditional nationalist objections to a currency board.*

Central Europe is in a special position to draw this lesson: its credit system urgently needs repair and the experience with bad banks and fragile currency arrangements elsewhere ought to strengthen awareness and resolve to deal with this issue urgently. The Asian crises demonstrated that countries with a sound financial system and a currency board could stand up to the crisis, as shown in Hong Kong and Argentina, somewhat battered but clearly far less damaged than others (1).

In Eastern Europe a currency board system is eminently plausible because trade patterns link the region closely to the markets of the European Union. Moreover, the appearance now of the euro, in conjunction with the intense desire of the East to become integrated in the European market, removes the traditional nationalist objections to a currency board.

The crises of Mexico, Asia and more recently Brazil, make it clear that exchange rate policy, and financial policy more broadly, can no longer be treated in a business as usual fashion. The economic and social costs of mismanaged currency and financial systems are formidable. As pointed out by Fischer (1999) there are two ways out: controls on international capital flows, as part of a new international architecture, or a better management at the country level. A new international system designed to limit capital mobility is unlikely to materialise: Key countries including the US and Germany do not favour capital controls even if their effectiveness as a crisis prevention mechanism could be demonstrated in theory and implemented in practice. That puts the burden on countries to put in place a stronger financial structure both in terms of currency arrangements and bank balance sheets. A currency board is not a luxury, but a first best strategy to avoid crisis exposure. At the same time it provides important impetus for integration in the world economy by lengthening horizons, limiting government discretion and reducing risk premia. As such it puts in place a strong mechanism for economic development.

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1) See IMF (1998) chapter IV as well as the extensive material collected on the Asia website of Nouriel Roubini (<http://www.stern.nyu.edu/nroubini/asia>).

## 2. Currency crises: A brief post-mortem

An anatomy of the crises in Mexico and Brazil, or of the events in Asia, reveals a conjunction of four elements:

- Large volumes of short term, foreign-currency denominated external credit;
- bad banks and a pervasive lack of balance sheet transparency;
- discretionary and hence less than fully credible exchange rate arrangements;
- central banks that run off reserves in support of the currency without accompanying tightening of domestic credit. The set of circumstances translates a mere speculative attack into a financial and economic disaster.

The mechanism of a crisis is straightforward. A currency comes under pressure either because authorities lower interest rates below world levels adjusted for risk or because the currency has become overvalued. Capital outflows deplete reserves, often this happens off the balance sheets as central banks gamble away reserves in the forward market. Interest rates cannot be raised because the bad balance sheets of the financial system make it too fragile to withstand tight money. When reserves are gone, the currency goes. At this stage the fact that debt exposure is large, liquid and foreign-currency denominated takes over to sink the ship. The rest is history.

There are three key messages from this anatomy. First, there needs to be automaticity in the link between reserve losses and tightening of domestic credit, otherwise the currency is undefendable. Second, the balance sheet of the financial system must be strong enough so that it does not cave in when rates rise. Third, a good regulatory system avoids value-at-risk exposure (directly and second-hand) in terms of mismatching of denomination and maturity that can bring down the financial system overnight. With these issues in mind we now look at policy design.

## 3. Currency boards as poison pills

*Currency boards are a poison pill: failure to stick to the commitment amounts to a catastrophic outcome.*

Only a decade ago, currency boards were either unknown except to a handful of monetary historians or else thought to be positively eccentric arrangements. They have gained in stature for two reasons. First, experience in the area of central banking and research have emerged with the central message of credible commitment: but the *credible* part is hard to achieve, and the *commitment* part hard to believe; the two together are built up over time. There is no magic to substitute for persistence: If a crisis does come, it has the silver lining of providing an early test of determination. If an attack is fended off, that goes to the credit side of the ledger with increased stability and lower risk premia.

Alternative exchange rate arrangements go from the proverbial fully flexible rate that exists nowhere, to dirty floating, a managed system of crawling bands in the style of Williamson (1996), to fixed rates until further notice, to currency boards and in the extreme full use of an external currency. In principle any one of these systems can do the job, together with wage price flexibility and an appropriate setting for central bank credit. Experience suggests, however, that flexible rates are uncomfortably volatile. Fixed rates, by contrast, have a way of getting out of line with reality and credibility. Dirty floating is no system, and rules-based managed rates solve no problem – they accept inflation and seemingly offer some flexibility of the real exchange rate but they lack

credibility because of an insufficient commitment and an ambiguous division of adjustment between wages and prices on one side and the exchange rate on the other. The European experience with the EMS, and its collapse in 1992, is there to remind us that rules-based managed exchange rates hardly survive the abolition of capital controls.

Currency boards are a poison pill: failure to stick to the commitment amounts to a catastrophic outcome. And because it is a poison pill, if other essential prerequisites are met, it achieves credibility, which translates into low interest rates and long economic horizons. It is not a panacea, but it is the radical opposite of the hand-to-mouth stability, until further notice, that characterises many emerging market economies.

*First, there is a commitment to a fixed exchange rate. Second, money creation or destruction is rigidly linked to reserve flows.*

The commitment to a currency board involves two elements. First, there is a major institutional commitment of a fixed exchange rate relative to a major currency, say the euro. Second, the central bank is subjected to that fixed rate commitment in that money creation or destruction is rigidly linked to reserve flows. Sometimes there is a third element, namely that the reference currency has legal tender status. This combination of measures assures that monetary policy is put on automatic pilot or literally outsourced – like investment banking services or high tech, it is best supplied from abroad.

Of course, there are objections to currency boards (2). First and foremost, they take away discretion and substitute a rigid set of rules. That is an old-fashioned objection that does not hold up easily to modern scrutiny. Rules-based central banking is in; discretion has been discredited in the inflationary experience of the 1970s in industrial countries, and throughout the emerging market world in the past decade. Flexibility is desirable, but you can only afford it if your central bank is the Fed or the Buba: Elsewhere its practice has left a trail of poor performance.

The second key argument against currency boards is the sheer cost of setting up the scheme. There needs to be a credible backing of the money stock – perhaps not 100 percent, but surely a very substantial portion. This raises the question of whether a country's international or domestic credit should be applied to this investment in institutional capital or rather applied to more conventional forms of capital formation. The question is easily resolved in the aftermath of hyperinflation when local money has become negligible relative to reserves or GDP; it is a hard issue in countries that are substantially monetised. The issue is made worse in that seignorage – the revenue from annual money creation – is foregone since the central bank has to acquire reserves as a counterpart of growth in real money supply rather than just using the printing press.

There is no way of belittling these limitations of a commitment to a currency board. The only argument that can be brought is that the hidden costs of an unstable macroeconomic performance are vast and that when and if it comes to a currency crisis they are phenomenal. Moreover, the integration benefits of a hard money regime – in terms of economic horizons and reduced risk premia may well translate into extra growth which easily finances the loss of seignorage and amortises the set-up cost all by themselves.

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2) For discussion of these objections see Williamson (1995) and Roubini (1998) as well as Balino and others (1997) and the references indicated there.

*A currency board becomes a mechanism to assert the ambition to be part of the EU, and a willingness to adopt institutions which cement that bridge.*

The third argument involves sovereignty: Like the flag, language and culture, a country's money is a quintessential expression of its national identity. The argument is serious enough for Mexico, or Israel – although the currency board option and outright dollarisation are hot topics in many Central American countries. In the European context, however, it cuts the other way. Western Europe has just taken the dramatic step of creating the euro and the European Monetary Union. This has two implications. First, it is no longer necessary to run a currency board with Germany as the reference, something that for a country like Poland might have been touchy in view of history. Furthermore, and very important, Eastern Europe is more than keen to integrate with the European Union, collecting the benefits of access to trade and capital markets, pulling away from the post-war experience and asserting its historical place as European economies. A currency board thus becomes a springboard to implement the wider political agenda, a mechanism to assert the fundamental ambition to be part of the European Union and the willingness to adopt institutions, which cement that bridge.

A fourth objection deals with a real issue in many countries, not so, however, in Central Europe. This is the point that a country with a diversified geographic trading pattern, say Hong Kong, does not have a natural reference country. In Central Europe, in a rapid change from the past decades, trade is already centred on the European Union: one third to one half of total trade (see Table 1) happens with the EU. Economic geography and the entry into the European Union that lies ahead will reinforce these trade patterns. The euro is the natural reference currency.

**Table 1.** Key indicators for Central and Eastern Europe

|             | Seignorage<br>(% GDP) | Inflation | Openness<br>vis-à-vis EU-15 | Credit<br>rating | Exchange rate regime                                      |
|-------------|-----------------------|-----------|-----------------------------|------------------|---|
| BULGARIA    | 10                    | 343       | 36                          | 0,63             | Currency Board, fixed at 1 BGN per DEM (since 05/06/1999) |
| CZECH. REP. | 3                     | 9         | 45                          | 6,25             | Managed Float   |
| ESTONIA     | 9                     | 28        | 73                          | 0                | Currency Board, fixed at 8 EEK per DEM (since 06/1992)    |
| HUNGARY     | 10                    | 22        | 39                          | 4,38             | Crawling peg (70% EUR, 30% USD) with a band: +/-2.25%     |
| LATVIA      | -2                    | 22        | 30                          | 5                | Pegged to the SDR: 0.7997 LVL per SDR                     |
| LITHUANIA   | 4                     | 36        | 37                          | 3,44             | Currency Board, fixed at 4 LTL per USD (since 04/1994)    |
| POLAND      | 6                     | 24        | 29                          | 4,58             | Crawling peg (55% EUR, 45% USD) with a band: +/-15%       |
| ROMANIA     | 6                     | 91        | 25                          | 2,55             | Managed Float   |
| SLOVAK REP. | 8                     | 9         | 37                          | 4,38             | Managed Float   |
| SLOVENIA    | 3                     | 13        | 64                          | 6,46             | Managed Float   |

Notes: Seignorage is defined as the change in M1 in percent of GDP. For Hungary and Latvia, change in M2. Averages 1994-96. Source: OECD Short-Term Economic Indicators, Transition Economies, March 1997. Inflation: Average 1994-97. Source: IMF. World Economic Outlook, May 1998. Openness: Imports plus exports/GDP. Trade flows are vis-à-vis EU-15. Average 1994-96. Source: IMF, Directions of Trade, Yearbook 1997. Credit Rating: The top credit rating is 10 (e.g. Germany). Italy's rating is 8.33. Source: Euromoney, March 1997. Exchange Rate Regime: ERBD, Transition Report, update, April 1998 updated by the authors.

Adopting a currency board does not seem totally essential to moving ahead; a *sine qua non* like open markets, for example. It represents a leap and an uncomfortable change in policy-making toward rules and away from discretion and opportunism. Except in the aftermath of a financial blow-out, and even then, the cost-benefit calculus is not all clear cut. Our contention is that the leap is worth taking to avoid further sub-performance and, possibly, to harvest critical growth bonuses from a better capital market integration. The bond market is watching and imposing harsh costs on aberrant policy makers; the implication is to throw in the towel, get a first-rate currency set-up and abandon the illusion that turning the currency dials is a way to exploit residual money illusion.

A non-argument deserves exposure: the argument is that a currency board condemns a country to a balanced budget. This is, of course, not the case. True, seignorage revenue is lost, but beyond that argument, there is of course both the potential for domestic and foreign public debt. There is no argument whatsoever that a currency board requires a balanced budget; that would be the case only if a government had lost all access to credit and was using raw money creation as its way of life, on the way to hyperinflation. In fact, one might well argue the opposite: a currency board clears the ground for a domestic-currency public debt by reducing the risk premium and it enhances a country's international standing by providing transparent institutions. This point is reinforced by the financial institutions recommended in the next section.

#### 4. The need for sound credit

No exchange rate regime can stand up to a speculative attack unless interest rates can rise to reward the holding of domestic currency denominated assets, and thus raise the cost of carry of a speculative position. That is true whether the rate is fixed, managed or flexible and it applies to a currency board just as well. In fact, it has been said that a currency board transforms balance of payments crises into banking crises. That somewhat overstates the special arrangements of a currency board – it is not possible under any fixed rate regime, except with unlimited reserves, to defend the currency without raising rates – but it certainly puts the emphasis in the right place. A sound financial system is the critical counterpart of a credible exchange rate arrangement. Without it, the monetary authorities cannot defend the exchange rate and it is a short step from vulnerability to defeat (3).

*A sound financial system is the critical counterpart of a credible exchange rate arrangement. In the former centrally planned economies this is a special issue.*

The need for repairing financial systems is obvious world-wide, from Japan and China to emerging and transition economies. But in the former centrally planned economies of Central and Eastern Europe there is a special issue: in the planned economy, credit was treated like electricity – it was allocated by the planning bureau with a view to meeting production targets. No surprise then that on the books of financial institutions are claims which have no prospect of recovery. Moreover, they are there side by side with the new credits of an emerging private sector. As financial repression is lifted and cross border capital flows become a possibility, the seriously impaired balance sheets become an unstable mass.

For our purposes, a sound financial system must have two characteristics. First, it cannot be burdened with substantial non-performing loans on its balance sheet. Bad loans imply a hole in the

3) The EBRD has made that point forcefully in its various transition reports and in loan programs emphasizing restructuring of the financial sector. See EBRD (1997). The requirements that a currency boards imposes on banks are also discussed in Santiprabhob (1997).

balance sheet, vulnerability of the institution and hence a process of adverse selection in which loan quality deteriorates as high rates are paid on the funding side and ever more risky loans are made on the lending side. An episode of increased market rates puts that mechanism of bank deterioration in the express lane. Next, the exposure of financial institutions, both in their own funding and that of loan customers, must be storm-proof. Large liquid and foreign-currency-denominated exposure of institutions or their customers tend to build up when domestic rates are high because the currency is less than fully credible, but institutions or corporations are willing to take the gamble of borrowing offshore at what seem to be bargain rates, forgetting about currency and liquidity exposure. The resulting mismatch of denomination and maturity implies a dramatic value at risk position for the national balance sheet.

The obvious answer to these issues is a financial system that is cleaned up of the legacy of bad loans and keenly supervised according to top standards. It is also clear that, politics quite aside, the institutional capacity to do this job is absent in most emerging markets including Central Europe. The answer has to be twofold. First and foremost, nothing is being gained by allowing impaired banks to go on functioning. The losses are already on the books and they are growing; all experience indicates that an early move to clean up avoids both large losses and possibly very large risks of financial crises. There is a fiscal cost to this clean up, but if the costs rise at more than the rate of interest, which they demonstrably do, early action is cheapest.

Second, the financial system needs substantial credibility of its balance sheet. The less the government is able to provide it by fiscal guarantees that backstop any supervisory failures, the more it has to be accomplished by pre-emptive measures. An effective way to accomplish this is to require banks to have offshore guarantees of their liabilities by high-grade foreign financial institutions (4). The mechanism has two advantages. First, it provides a lender of last resort, which reduces risk premia. Second, more importantly, it provides the supervisory function that domestic authorities are poor at implementing (5). Foreign institutions that guarantee will, of course, not only collect a fee (or partnership) but also inspect the books; their own money is at stake. This is a modern way for a small economy to take advantage of the international capital market to solve both capital and emergency supervision issues. It amounts to privatising both the lender of last resort and the supervisory function. These steps are more important the more strain there is already on public credit and the larger the institutional deficit. Moreover, in conjunction with a currency board, such a banking arrangement represents a remarkable highway to the international capital market.

***A way to accomplish financial credibility is to require that banks have offshore guarantees. It amounts to privatising both the lender of last resort and the supervisory function.***

## 5. Concluding remarks

There are important transition issues if only because cleaning up the financial system won't come overnight. Of course, that is not a reason for procrastination. There is also the very practical fact that the euro, while created, actually won't be available as hand-to-hand currency for another two years. There is also the perennial and very real question at what rate to commit the currency in the move to a currency board. In particular, should there not be one last devaluation, is the exchange rate not overly uncompetitive, etc. Finally, what is the rush; there is no crisis.

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4) In fact, Argentina has taken a step in that direction.

5) For an analysis of market-based bank supervision see Rochet and Tirole (1996) and Calomiris (1997).



*Europe is in the midst of a historic transformation that affords governments a unique opportunity.*

These issues are real and they cannot be swept away. It is also true that they will always be there and they will always be a reason for procrastination, except in the aftermath of an awesome crisis where the quest for establishing a firm ground overrides all details. Of course, waiting for a crisis is not a good answer if the issue is precisely to avoid crises.

The argument for moving now is *opportunity*. Europe is in the midst of a historic transformation that affords governments with an absolutely unique opportunity to do those things, which ordinarily are politically impossible. One has seen that in the run-up to the euro in Western Europe, say in Italy. Central Europe can harness the same forces and make the critical jump by capitalising on the dramatic end-of-century events of its partners in the European Union. A piggyback *euro* currency board has more political attraction and sheer plausibility than yet another IMF program.

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