CURRENCY BOARD AGREEMENT AND ITS ROLE IN THE DEVELOPING COUNTRIES

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ABSTRACT

Currency Board Agreement (CBA) is a popular tool for curbing hyperinflation processes in developing countries. This paper will discuss the role of CBA in the transition economies in Eastern Europe. The advantages and disadvantages of establishing a currency board versus a central bank will be presented briefly. The focus will be on the future development of economies, operating under a Currency Board (CB). The argument is that in the long run the CB mechanism is cruelly stifling the already embattled economies in the specific circumstances of post-communist Europe. In support of this viewpoint, the principles of the economic theory of fixed exchange rates will be presented.

INTRODUCTION

A necessary condition for a country's economy to advance is the predictability of the price level. The economic agents should be reasonably certain that the prices tomorrow are comparable with the prices today, or otherwise informed decision-making becomes impossible. It is a basic tenet of modern economics that inflation is usually well correlated with a corresponding increase in the growth rate of money supply (Milton, 1992; Mishkin, 1992; Fischer, Dornbusch & Schmalensee, 1988). Therefore, a simple prescription for reigning over inflation is designing a system, which prevents money supply from uncontrollable increases.

A currency board agreement CBA is such a system. In essence it pegs the currency of the embattled country to the currency of a low-inflation developed country. As it will be explained below, this simple monetary rule generates automatic reactions inside the afflicted economy, that lead very often to subduing the growth in money supply and inflation. This automatic mechanism unfortunately has the tendency to be pro-cycle oriented. The result is that once a developing country goes into economic difficulties, the system of the CBA starts re-iterating these difficulties, thus burying the economy into deeper recession.

The truth is that this system is not devoid of its own attractive features. First, it is automatic and therefore independent of the decision making process of corrupt or incompetent authorities. Second, it is theoretically sound. As David Hume argued in the 18th century, the system tends to regulate the value of the price level in the economy by means of generating automatic changes in the money supply (Ingram & Dunn, 1993). Unfortunately, it's being argued that today's world is in many ways different from Hume's world by having institutions (like trade unions, minimum wage laws, etc.) that didn't exist in Hume's time. This arguably neutralizes a great deal of the power of the specie-flow mechanism, especially in the case when the CBA economy goes into recession. Third, CBA tends to stabilize the exchange rate with the major trading partners, thereby reducing the foreign exchange risks in international trade by a great deal. Basically, the main remaining systemic risk is the risk of curbing the CBA itself because of economic reasons (Argentina) or political strife (post-communist countries). This feature is especially attractive for small open economies like most of the East European economies (Bulgaria, Estonia, Lithuania). Fourth, the CBA is politically fashionable in today's East European world, since it serves well the ambitions of these countries to ascend the European Union.

On the negative side, the CBA mechanism is cruelly stifling transition economies in Eastern Europe. In the specific circumstances of post-communist Europe, CBA are "kiss of death" for the already embattled economies. We will use arguments from the economic theory of fixed exchange rates to defend this view.

LITERATURE REVIEW

Kopcke (1999) expresses the opinion that currency boards represent a beginning in the evolution of monetary regimes for emerging economies, but currency boards alone cannot ensure success. The author reviews the design of currency boards, the choice of reserve currency and exchange rate, and the role of a currency board in fiscal and monetary policy. Kopcke's work discusses the merits of currency boards, but admits that currency boards cannot fully insulate their economies from the consequences of changing conditions in world markets. Currency boards provide a foundation for new currencies and give them a quick start, limit the rate of inflation in the developing economy and reflect a country's commitment to a responsible fiscal policy. Although a currency board guarantees the backing of its base money, faith in its currency rests on traders' and investors' confidence in the economy's financial institutions, capital markets, and fiscal management. The author concludes that currency boards represent a start rather than a destination, for the design of monetary institutions. Currency boards can offer emerging economies a temporary shield, but they are not the magic wands that will resolve all the problems and guarantee the triumph of the developing countries.

Anne-Marie Gulde, Juha Kahkonen and Peter Keller's paper (2000) discusses the pros and cons of currency board arrangements in the context of accession to the European Union (EU) and the Euro Zone. The topic is essential for a number of International Monetary Fund (IMF) member countries, getting ready for EU and EMU membership to which they attach great importance for both political and economic reasons. The argument is organized around three main themes: 1.Experience with currency boards in general; 2. Experience with currency boards in transition economies; 3. Strategies for transition to the Euro in currency board countries. After considering the pros and cons, the paper presents a positive answer, but comments that these countries need to maintain strict policy discipline and be prepared to deal with large capital inflows and asymmetric shocks, in order to preserve the viability of their CBAs throughout the process.

Jeffrey Miller (2001) in The Bulgarian Currency Board, analyzes the situation in Bulgaria under the CBA established in 1997. His paper takes a long-term prospective and assesses the board's immediate impact, as well as its prospects for the future. Miller reviews the macroeconomic performance of the Bulgarian economy, the structure, advantages and disadvantages of the currency board. The author concludes that the currency board has brought needed discipline to the Bulgarian economy and the government budget is under control. As a result the inflation has decreased considerably and the economy is beginning to grow. There are still problems that need to be addressed: servicing the large foreign debt, the current account deficit and declining exports. The solution is growth. Improved productivity will ensure the long-term viability of the board. Miller points that the political problem is the biggest one. The currency board restricts the options that the Government has. A major concern is whether the automatic adjustment mechanisms, which maintain balance-of-payments equilibrium under a currency board, will create so much economic pain that they will not be politically sustainable. If political uncertainty diminishes confidence that currency board arrangement will survive, the currency board could lose credibility, increasing the risk of speculation against the Bulgarian currency. The author's conclusion is that a strong political support is vital for the success of the currency board in Bulgaria.

Gulde (1999) makes the argument that the CB in Bulgaria, though controversial and difficult to put into practice, has been an essential factor in the success of the country's stabilization program. The paper summarizes the process of choosing a currency board as a stabilization tool. The author reviews the initial macroeconomic and structural condition to accentuate that the CB is the ideal solution to the problems of high inflation and systemic banking crisis. The article discusses some reorganization and transition issues as well as the implementation experience of the Bulgarian currency board. In conclusion it states that CB served perfectly the role it was designed for - radical reduction of annual inflation and interest rates, and cure for the banking crisis. Bulgaria's experience emphasizes the power of a credible, rule-based system to rapidly change perceptions and economic behavior. But Gulde warns about three lessons, the most important of which is that a currency board is only one element of the stabilization program of a developing country. The long-term survival depends in the same way on the implementation of proper supporting actions.

Hanke and Schuler (1999) suggest that dollarization is desirable for Argentina, because Argentina is not willing to make its currency board-like system orthodox. An orthodox currency board has no discretion in monetary policy; market forces alone determine the money supply.

The authors consider the benefits and costs of dollarization. Dollarization is using a foreign currency as predominant or exclusive legal tender. The main advantage of dollarization over a currency board is that dollarization has greater credibility, because it is harder to reverse. The main advantage of a currency board over dollarization is that a currency board retains seigniorage domestically. The main cost would be losing the profit from issuing the monetary base (seignorage). Under an orthodox currency board, the country retains the profit. The major benefit of dollarization would be reduced interest rates and eliminated currency risk. This conventional benefit-cost framework leads to the conclusion that the benefits of dollarizing Argentina outweigh the costs.

THEORETICAL FRAMEWORK

Currency Board Arrangement is a partial case of a fixed exchange rate regime. What basically happens is that the central bank of the country under consideration assumes the obligation to sell a unit of its currency to anyone demanding it for a pre-specified fixed number of units of a foreign currency. Alternatively, the central bank assumes the obligation to purchase a pre-specified number of units of foreign currency in exchange for one unit of its own currency. For example, the Bulgarian CBA specifies that one Bulgarian Lev (BLV) will be exchanged for one Deutche mark (DM). The Argentinean CBA specifies that one peso (APS) will be exchanged for $1US.

This ostensibly simple arrangement spurs automatic reactions in the CBA economy. These effects were described in the 18th century by the English economist David Hume, and the mechanism through which they got realized came to be known as specie-flow mechanism (Ingram & Dunn, 1993). In essence, this mechanism works through changes in the money supply in the CB country that lead to ensuing changes in the price level.

A brief description of the specie-flow mechanism will be given, only to the extent to clarify the views on the future of the East European economies. Let's assume for a beginning that the economy of a CBA country is prospering. Among other things, this implies that the GDP is growing rapidly; the foreigners are stampeding to purchase this country's products, foreign investors are eager to invest in the country (i.e. purchase financial or physical assets in this country), etc. This implies that the foreign demand for domestic currency units is pretty high, and quite naturally, the exchange rate of the domestic currency unit has the tendency to appreciate. Having in mind the Bulgarian CBA, the exchange rate tends to increase from 1DM/1BLV to say 1.5DM/1BLV.

By law, however, the domestic (Bulgarian) central bank must keep the exchange rate at the targeted exchange rate of 1DM/1BLV. The only way to accomplish this is to increase the supply of levs, so that the clearing exchange rate will fall from 1.5DM/1BLV to 1DM/1BLV. The Bulgarian central bank starts selling Bulgarian levs on the foreign exchange market and this quickly brings the exchange rate to its fixed-by-law value of 1DM/1BLV. In practice this is done as the central bank buys from the commercial banks Bulgarian Government securities, thus disseminating levs resource to the banks. The banks start selling levs at the foreign market and purchasing foreign currency, since they are certain that the DM (well, the Euro!) is undervalued and it will soon appreciate.

The bottom line is that the Bulgarian economy starts enjoying a higher stock of money supply. Everybody is happy. Consumers see more money into their hands, and they start spending more on big- and small-ticket items. Firms start producing more, since they anticipate greater demand. In order to be able to carry on this expansion, firms start borrowing more from the banks and the latter are more than willing to accommodate the increased demand for loans, since they see lots of bank reserves, that need to be invested somewhere for a return. The economy is burgeoning and the country is prospering even more.

This escalating prosperity however plants the seeds of its own demise. As the demand (domestic and foreign) for domestic goods and services increases more and more, it is only a matter of time when the economy will reach the limit of its capacity, beyond which it cannot produce more. The increased demand starts being checked not by increase in the supply but by increase in prices. The price level starts increasing. This on its behalf starts rendering the domestic goods and services more and more expensive for the foreigners. The foreign demand for goods and services (and the derivative foreign demand for domestic currency) starts fading. This checks the increase in the money supply, the derivative economic boom and price level. The latter effect is the essence of the inflation-curbing properties of the CBA.

Now assume that for some reasons, the CBA economy is in recession. There are plenty of reasons why this may be true. To name some, most of the East European economies are in a transition stage, moving from a centrally planned economy to a free-market economy. This implies that there are a lot of structural inefficiencies in such an economy that contribute to negative performance. The loss of markets and the ensuing chaos after the demise of the Council for Economic Help is a second cause. In the particular case of Bulgaria, the United Nations embargo on remaining Yugoslavia and the war in the former Yugoslavia were potent negative factors for that country's economy.

Hume's mechanism starts working in the opposite direction. Money supply begins to shrink, thus pushing the economy into an even deeper recession. Theoretically, this will continue until the price level drops so low that the domestic goods, services and assets become attractive for the foreigners, so that they start purchasing domestic production and investing in this country. Then the specie-flow mechanism will once again start working for the embattled economy.

THE ADVANTAGES AND DISADVANTAGES OF ESTABLISHING A CB VERSUS A CENTRAL BANK

In most countries today the monetary authority is the central bank that has a monopoly of issuing the currency of a country. Its power is unrestricted by monetary rules, such as a binding commitment to a particular exchange rate or inflation rate (Schuler, 2001). Only a small number of countries had central banks before the 20th century, mainly in Europe. Until after WWII, countries had a variety of monetary systems, which generally provided lower inflation and better monetary performance than central banks have done. One such monetary system is the currency board, which enjoyed a revival of interest in the 1990s. Currency boards are suitable in any country where the national currency is not performing well in the long run as the major internationally traded currencies (Schuler, 2001). In most developing countries, establishing currency boards would significantly improve the quality of the national currency. Milton Friedman (1992) expresses the opinion that a fixed exchange rate with a major international currency is the easiest way to a stable and fully convertible currency for developing countries. Historically, currency boards have worked well in relatively large, close economies as well as in small open ones.

As of today, a few countries have established currency board systems, which operate in place of a central bank. Some of them are: Argentina, where Argentinean peso (APS) is pegged 1 to 1 to the US dollar, in Bulgaria, 1 lev (LV) equals 1 Deutschemark (DM). Lithuania established an exchange rate of 4 litas = $1 US and in Estonia 8 kroons = 1DM. (Source: IMF) The main benefits to be derived by a currency board agreement are as follows:

1. Foreign exchange risk between the domestic country and its major trading partners is significantly lowered, because full, unlimited convertibility is maintained between a county's currency and the anchor currency at a fixed exchange rate. Basically the foreign exchange risk is non-existent with the country to which the currency is fixed. In countries like Argentina where this is hardly the case, the foreign exchange risk is accompanied by a devaluation (currency board failure) risk.
2. Domestic interest rates and inflation are aligned with those of the country to whose currency the domestic currency is pegged. Because of the fixed exchange rate, the interest rates and inflation in the currency board tend to be almost

the same as those in the anchor-currency country. This is an automatic consequence from the Hume mechanism. There are exceptions in countries replacing highly inflationary central banks with currency boards, because the prices are initially low in terms of US dollar or Deutschemarks. (Schuler, 2001) There is a period of catch-up price increases and inflation is higher than in the anchor-currency country. Price increases narrow and annual inflation falls. This happened in Argentina and is happening in Eastern Europe. Low inflation and interest rates are the immediate obvious advantages of establishing a CB. In Bulgaria for example the annual interest rates dropped from 242.4% in March 1997 to 3.7% in September 1997 and 3.0% in Dec.1997. The annual inflation drastically fell down from 92613.2% in March 1997 to 58.6% in September 1997 and 7.8% in Dec.1997 (Source: Bulgarian National Bank).

3. Using currency issued by a currency board rather than using foreign currency, such as US dollars, directly captures seigniorage for the domestic government. Profits are generated (seigniorage) from the difference between the interest earned on the reserve assets and the expense of maintaining liabilities - notes and coins in circulation.

4. Financial discipline is achieved. The passive and automatic monetary policy of a CB has its advantages - corrupt governments cannot print money to finance hefty deficits and thereby create inflation.

The above mentioned benefits make the domestic economy a far friendlier place to make business for both foreign and domestic companies.

A major problem with currency boards is that once the economy starts going down, the automatic forces make it go deeper and deeper into troublesome waters. To support the currency value the domestic central bank needs to sell more and more of its foreign currency reserves. At some point these reserves may just get depleted and then the country declares devaluation of its currency to restore the equilibrium. The International Monetary Fund is a major source of short- and middle-term loans to meet such difficulties, which usually stem from imbalance in the current account of the country (Ingram & Dunn, 1993). The currency board has no responsibility for acting as a lender of last resort to protect banks from losses. Bank failures have been common in the recent currency board-like systems, which have inherited many banking problems from the central banking system that preceded them. That was the case in Bulgaria in 1996 and 1997.

To summarize, the main advantages of CB are: predictability and rule-based nature of a currency board, low inflation, stable exchange rate, full convertibility, and international acceptability (Hanke, Steve & Schuler, 1999). Strict discipline also brings benefits - profligate governments cannot print more money to fund large deficits. The negative feature of the currency board is that the country is no longer able to govern its money supply and when the economy is weak, the country falls into even deeper downturn.

CBA AND PRESENT DAY EAST EUROPEAN ECONOMIES

In a word, the automatic prescription of the CBA mechanism for treating a recession is "even a worse recession". This is also known as "classic medicine". When an economy is developing well, the CBA makes it even better. When an economy is doing badly, it becomes even worse.

These pro-cyclical reactions of the CBA mechanism make it extremely inadequate as a means of helping a transitional economy change its course. It is a stifling coffin that buries an economy even deeper. It is true that CBA curbs inflation and establishes a relative stability in the economy, but this is more the stillness of death rather than the warm harmony of prosperity.

To make the things even worse, today's economies differ markedly from the economies in Hume's time. For example, in the recession case, it is very difficult for the price level to fall fast. There are a number of reasons for this. First, this is the natural tendency of workers to support increases in salaries and to vehemently oppose income drops. Second, East European economies are characterized (as almost anywhere in Europe for that matter) with powerful trade unions that work energetically against income level cut offs. Third comes the minimum wage law that restricts the ability of a recession economy to adjust to money supply decrease pressures. Fourth, the developing economies are as a rule characterized with weaker level of competition than the developed economies. This contributes ceteris paribus to a tendency of the price level to increase faster and to drop down slower in the developing economies than the developed ones. All these factors and others make the money supply based process of adjusting (aka classical medicine) extremely painful and of dubious value for the long-term development of a developing economy, say an East European one.

To bring some historical evidence that CBA and fixed exchange rate arrangements in general quite often hurt the long-term development of the corresponding countries, two cases come to mind: Britain of the 1920s (Ingram & Dunn, 1993) and Argentina of the 1990s (Press releases).

In the 1920s, the British Chancellor of the Exchequer Winston Churchill solemnly announced that Britain is to return to the gold standard. Gold standard is a monetary regime that is pretty similar to CBA in that the currency of a country is pegged to gold as opposed to the currency of another country. The result was that for twelve long years, British economy was agonizing in a deep recession. This recession was a direct consequence of the pro-cyclical features of the fixed exchange rate arrangements. At the same time, the French were enjoying a prospering economy, albeit accompanied by some inflation. The reason for that was the flexible exchange rate regime, with respect to gold, was embraced by France.

Argentina adopted its currency board in 1991. During the first several years the economy was going well due to the monetary stability and a sense of security brought by the fixed exchange rate regime. In the mid 1990s things went astray. The US dollar appreciated due in part to the strong dollar policy stance adopted by the US Federal Reserve and US Treasury. In January 1999 Brazil let its currency, the real, flow with respect to the dollar. The real depreciated and thus Brazilian goods became more competitive comparing to Argentine ones. The overall appreciation of the US dollar and the devaluation of Brazil's real adversely affected Argentina's competitive position, particularly in Latin American markets (Economic Trends, 2001). Later Chile also let its currency flow, and that added to the difficulties of the Argentinean economy. To regain its edge without depreciating the peso, Argentina had to lower domestic goods prices. Since 1999, consumer prices have been falling. Argentina's economy, particularly its labor markets, is not very flexible (Economic Trends, 2001). Prices adjust slowly and as they do, output and employment, as a general rule, fall. For the last three years, Argentina has mired in a deep recession, and it is a matter of time when the CBA will just crumble due to lack of foreign exchange reserves to maintain the artificial and devoid of economic rationality exchange rate of one peso equal to one US dollar.

It is true that immediately after the imposition of a CBA most countries score some improvement in their GDP growth. Still, the reason for this is the short-term peace coming with the CBA, which of course removes some important inefficiencies in the economy (say, foreign exchange risk, profit repatriation uncertainty, etc.). It is naïve to believe, however, that any essential change has occurred in the economy that will lead it to a sustained growth. Indeed, the CBA is too simple of a device and simple things rarely work in the economy. The essence of CBA may be described as a lack of flexibility and this of course puts its toll on the economy.

As it was mentioned in the introduction, most of the East European countries look at the CBA arrangement as a necessary step in their efforts to ascend the European Union. A better strategy for these countries would be to complete to a certain degree their transition to a market economy by enjoying the freedom to set their own monetary policy and goals, and at a later point to enter the European Union and the European Monetary System. Or they may strive to enter the European Union but not the European Monetary System. Indeed, by entering the monetary system at an early date these East European countries risk falling into the position of some of the poorest states in the US (Mississippi, Arkansas, etc.) where money supply is scarce, prices and salaries are low, and they are only agricultural appendices to the affluent states. The mechanism which will render these East European countries the role of the ugly duckling in United Europe will be the same unforgiving specie flow mechanism which rules the money flows between countries with fixed exchange rates and between the districts of a single country. The result will be that the East European countries will become ever poorer when compared with the opulent Western relatives. It is not occasional that countries like Denmark and UK are not in a hurry to enter the European Monetary Union. While their currencies are without any doubt closely linked to the Euro due to the fact that the bulk of their trade is with the Euro zone, these countries still retain some freedom in helping their economies in rainy days. This privilege is however denied to the members of the European Monetary Union and East European countries like Bulgaria and Estonia. One may say that from a monetary point of view, Bulgaria and Estonia are already within the European Union. The forecast for the future of these East European countries and the poorer members of the EU (Greece, Portugal, Spain, etc.) is that they will continue becoming poorer and poorer in relative terms compared to the leaders in the Union.

CONCLUSION

East European countries established the CBA in an attempt to curb their hyperinflation. This paper claims that in general, ceteris paribus, for a developing country (to which currency boards are usually applied) the currency board agreement is non-sustainable in the long run. Indeed, in developing countries in general competition is less developed in comparison with developed countries. This leads to a tendency in prices to go up. Therefore this leads to an effect of neutralizing of the "hammering" effects of the board, what translates into larger decreases in the money supply to obtain the same effect. Finally, the economy goes into shambles and political or economic (foreign reserve depletion) forces just lead to currency board abandonment. Most probably this will be the case for Argentina in the near future. The Eastern European countries can eschew this fate only if they succeed in joining the European Monetary Union before that. The latter of course does not mean that after entering the Union, their currency troubles will be over. On the contrary, they most probably will remain the poor cousins of the Western Europeans and the currency board will just "help" them in this.

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