From Gold Standard to Currency Board Arrangements: A Case of Déjà Vu?

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Abstract: In their quest for an appropriate exchange rate regime amidst dynamic international monetary environment countries sometimes transform a previously discarded exchange rate system into a new guise. Such is the case regarding the historic gold standard and the current increased occurrence of currency board arrangements. Despite striking similarities between them i.r.o. their operational mechanics, core structural ingredients and their focus on common policy objectives, the contradiction arises that the gold standard is regarded as a defunct non-starter whereas currency boards are in vogue as a solution for especially emerging countries' economic policy woes. By analysing and comparing the two systems, this paper addresses the contradiction, concluding that, regardless of far ranging similarities, currency board arrangements as a fixed exchange rate system are more likely to be utilized as an exchange rate regime than a gold standard.

Keywords: Exchange rate regimes, Fixed exchange rates, Currency boards, Gold standard

1 Introduction

An interesting feature of exchange rate history is the revival of previously discarded exchange rate regimes after a decade or more. This is hardly surprising. New theoretical and empirical insights, together with the changing global economic and political environment, ensures constant change – even backward – in exchange rate thought. There is no exchange rate regime that does not contain elements of some or other previous regime. Accordingly, a return to exchange rate regimes similar to those of the 19th century became evident during the last decade of the 20th and early 21st century. The historical gold standard and its permutations portray remarkable resemblance to current exchange rate regimes like dollarisation and currency boards. Both the gold standard (GS) and currency board arrangements (CBA's) are fixed exchange rate regimes relying on full coverage of the domestic money by an external reserve money, as well as an automatic mechanism for the restoration of external disequilibrium. These regimes or mechanisms apply an external commitment rule that binds the policy hands of governments or discretionary authorities. In so doing they enhance policy credibility and try to keep inflation low. Examples currently abound of research on the implementation of super-fixed exchange rate regimes that have congruities with the GS, such as dollarisation and CBA's.

The question naturally arises whether the CBA's really differ from the GS, and if not, whether they will be prone to meet the same fate as the former. This question becomes even more relevant because of the remarkable similarities between them. A comparison between the two regimes is naturally complicated by the fact that both are not easily demarcated because each one includes various strands or permutations. To keep the following discussion within the limited allocated space and to promote comparability, this paper focuses on only one specific version of each regime: the so-called classical (pure) gold standard and a classical (orthodox) currency board arrangement. Even though these are not perfectly demarcated, they at least provide a workable basis for comparing the two systems.

This paper attempts to identify similarities and differences in the two regimes' structure and operation. It also aims to compare the positive and negative attributes of the two systems in order to arrive at a judgement regarding their suitability and sustainability as fixed exchange rate systems. Section 2 discusses and compares the nature and underlying principles of the two regimes, whereas section 3 focuses on the operation of the two regimes. Section 4 elucidates the positive attributes and section 5 the negative attributes of the two regimes, whilst section 6 provides concluding comparisons and statements.

2 Nature and Underlying Principles of the Two Regimes

Exchange rate regimes like a GS or a CBA are intended to prevent inflationary policies and preserve long term exchange rate and price stability, as well as integrate the participating countries into the world economy (Desquilbet and Nenovsky, 2004: 2). They furthermore aim to instill transparency, stability and credibility in the particular exchange rate regime through their specifically constructed nature and underlying principles.

2.1 The Nature and Principles of the Gold Standard (GS)

Although there is no definitive date for the start of GS, the classical GS lasted about 40 years up to 1914 (Eun and Resnick, 2004:28). Although the GS in its broad definition lasted close to a century, the *classical* GS was in use roughly from the 1870s to the outbreak of WWI in 1914. The GS had an endogenous, almost accidental origin and was not externally enforced or established (Kydland and Wynne, 2002). Desquilbet and Nanovsky (2004:10) are of the opinion that the GS was driven largely by informal private practice and market forces during the evolution of money. For the period of the GS, currency holders were allowed to freely exchange their money, i.e. coins and notes, into gold at the central bank (Halm, 1975: 9). All the participating countries in the GS were committed to guarantee free convertibility of their domestic currencies into gold at a pre-established fixed gold price and exchange rate. Only limited movements in exchange rates could exist between the upper and lower limits of the gold points.

Through its commitment to a gold parity and its principle of full convertibility, the GS provided a global collective good (international money) with which to stabilize the international monetary regime (Halm, 1975). The principle of free minting of gold and free movement of capital meant that transactors could freely import and export gold. Consequently, the GS was a system grounded in the firmly held confidence in a domestic commitment mechanism (later becoming an international one) and was furthermore based on a historical evolution of gold as a type of money possessing a trusted intrinsic value (Bordo, 2004).

Because new gold production did not add much to the existing stock of gold, the GS ensured stable low-growth in the money supply and stability in the price levels of participating countries (Bordo, 2004, 2). Although the record shows that the GS did not achieve fundamental and comprehensive international stability (Bloomfield, 1959), it nevertheless achieved relative success in this regard since, according to Catao and Solomou (2003: 3), several factors backed up the long period of price stability under the GS.

2.2 The Nature and Principles of Currency Board Arrangements

Schuler (2003a) mentions that countries adopt CBA's because of their simplicity, transparency, and rule-bound nature. Another reason for the renewed interest in CBA's stems from the fact that they counteract an excessive issue of money notes by government, thereby preventing self-fulfilling runs and other undesirable consequences (Ghosh *et al*., 1998: 4). As a result, CBA's were back in fashion since the 1990's, appearing in the form of a second generation-type driven by policy ideology, macroeconomic consequences and regime choice optimality (Ho, 2002: 2). For example, Lithuania, Hong Kong, Estonia and Bulgaria have established CBA's, although they do not fully resemble *classical* CBA's.

Just like a GS, a classical (orthodox) CBA maintains a legally established fixed exchange rate, but keeps net reserves not in gold but in foreign assets (dollars or euros) equal to 100 percent of its domestic monetary liabilities to ensure convertibility. Consequently, the monetary base is determined and completely backed by foreign exchange reserves, which in turn is determined by the surplus in the balance of payments. The fact that a classic CBA is based on a legislative commitment of full coverage of domestic notes and coins by an anchor currency at a fixed exchange rate, reinforces its credibility (Schuler, 2003b).

Surplus foreign reserves in a CBA (say 105-110%) cannot be used for monetary policy purposes so that there is actually no room for any discretionary policy actions in local currency assets. Interest rates in a trusted CBA will converge, although not completely, to that of the anchor country. A classical CBA also does not sterilise reserve flows, grant domestic credit, or manage liquidity like a normal central bank. These

features allow a CBA to provide an implicit low-inflation commitment because it has no discretion over monetary policy and cannot run out of foreign exchange reserves if there is speculation against its exchange rate (Hanke and Schuler, 2003).

3 Operation and Adjustment of the GS and CBA regimes

The classical GS represented a gold-specie regime where the disciplinary effect of an automatic adjustment constituted an important force assuring the stability of the regime. The operating prescriptions of the GS required the money supply of a country to move in the same direction as its gold stock, thus ensuring a link between the money supply and the balance of payments so that equilibrium and price stability could be restored if disturbed. For example, a current account or balance of payments (Bop) disequilibrium under the GS was automatically equilibrated by the price-specie flow mechanism where arbitrage in gold kept countries' price levels in line (Knafo, 2003). A country with a current account deficit would experience an outflow of gold, due to higher price levels, whereas countries with surpluses would have an inflow of gold due to lower prices. Reserve losses would curtail the local money and credit supply, increase local interest rates and curb price increases, thus restoring equilibrium (Halm, 1975: 10). On the other hand, an inflow of gold would increase the money supply and facilitate increased spending by the citizens of the country. The increased demand for goods and services in turn would increase domestic prices relatively to that of other countries, subsequently leading to a decline in export competitiveness and export volumes. The increased imports and declining exports subsequently narrow the deficit on the country's trade balance and cause gold to flow out of the country until equilibrium is restored. In this way the GS countries' price levels and money supplies would be kept in line (see Bordo, 2004: 4). An adjustment in the BOP was furthermore augmented by short-term capital flows stemming from the interest rate differentials that followed the changes in the money supply.

In comparison with the GS a CBA, as noted previously, employs a foreign anchor currency instead of gold to fix its exchange rate. It also applies strict discipline on the issuing of domestic money through a full foreign currency backing in order to instill or "import" external discipline on the economy, and to defend the currency against a speculative attack. This supports the operation of an automatic and transparent adjustment mechanism that would restore macroeconomic equilibrium and keep the established exchange rate at official parity. This is very similar to the old gold standard with its fixed gold parities and confirmed convertibility. For example, in the case of a classical CBA a current account deficit will also lead to a contraction of the domestic money supply (or banking system reserves) as the private sector converts its domestic currency holdings into foreign reserves in order to settle import payments. This increases interest rates, attracts foreign capital flows, and lowers income. It also curbs consumption and decreases imports, thereby transmitting deflationary influences on absorption, which in turn improves the current account deficit (see Kopcke, 1999: 26). In addition, the above contractionary effect will reduce the demand for the country's production factors and decrease the country's prices relative to that of other countries. However, such a contractionary policy might entail a significant cost if factor markets are rigid (see section 5).

4 Positive Attributes of the Two Regimes

A GS and a CBA similarly reduce international transaction cost and hence increase international trade and investment, especially through the certainty of a fixed exchange rate that they impart. Less effort goes into exchange rate forecasting and the hedging of foreign exchange rate risk, which will reduce transaction cost. Equally important is that both regimes facilitate the integration of the local economy with the international economy, or with a specific regional monetary union they intend to join. Interest rates will also drop under the two regimes due to lower inflation and lower risk premiums on international loans, thereby stimulating the inflow of more international saving and consequently enhancing domestic investment, economic growth and development. The further benefit of a restraint on irresponsible fiscal policies will be complemented by an improved flow of international capital. Indeed, modern-day CBA's are often established with

the express objective to prevent profligate governments from financing their large budgetary deficits by exploiting their central banks' printing presses, accordingly triggering an inflation which will be difficult to stop (however, see Roubini (2004) for an opposite point of view).

Both regimes are mechanisms for restoring stability in post-crisis and post-trauma economies. Such crises often stem from imprudent government policies that undermine the credibility of the country's macroeconomic policy-making at a later stage. Since the regimes are both founded on and operated according to the blind forces of externally imposed discipline and conservative rules, the public and economic agents in especially emerging countries trust them more than the discretionary policy of policy authorities and self-centered politicians. The two regimes are, moreover, transparent, and easy to understand by the local public.

The two exchange rate regimes also boost credibility in their monetary systems. The GS did so by providing a commodity-backed monetary regime based on gold and its accompanying prescriptions for stringent rules regarding a fixed exchange rate and currency convertibility, together with an automatic adjustment mechanism that eliminates economic shocks. These ensure long-term predictability of price movements which is crucial for business in general. A CBA, on the other hand, aspires to establish credibility by linking the domestic money through a legislative arrangement to a respected, stable foreign currency, such as the dollar or the euro through a 100 percent coverage ratio and guaranteed convertibility. However, the GS has the backing of a trusted commodity with a high intrinsic value, and therefore the credibility of the domestic money might be more secure than in case of a backing by a fallible paper currency. The fact that the GS is embedded in an international setting, together with the utilization of the system as an international arrangement followed by many counties in a systemic fraternity, might moreover endow it with more credibility.

5 Negative attributes of a GS and a CBA

The GS as well as a CBA entail that their countries cannot have an independent monetary policy dispensation with which to address country specific problems or exogenous shocks. The countries are not in a position to align their economic policy to their own specific needs, preferences, socio-economic conditions and development needs. In addition, the absence of a central bank acting as lender-of-last-resort (LOLR) also renders CBA's and a GS more susceptible to financial crisis. If a financial crisis looms or a large external shock is imminent, banks are threatened by an outflow of money with no central bank to assist them. A consequent banking crisis and systemic crises - which might become a foreign exchange and later on a political crisis - will subsequently debilitate the foundation of both the above regimes. Hence, the more prone an economy is to external shocks and speculation, the higher the cost of maintaining a GS and CBA will be. (Naturally, having an independent monetary policy and LOLR but applying them imprudently will cause even more damage).

Both a GS and a CBA might be threatened by termination by a government or politicians that have more liberal and self-centered interests (see Balino and Enoch, 1997: 4). Despite the fact that a GS or a CBA is embedded in legislation, it can be abolished either in a democratic or non-democratic way when its discipline and strict operation render unpopular results. Consequently, a GS and a CBA may find it difficult to convince the markets that their operating rules and convertibility will be respected when intimidating political and socio economic pressures are encountered. When market players observe or even imagine a small discrepancy between the economic reality and the monetary rule, they are likely to speculate against the system and try to force government to renege on the convertibility and fixed exchange rate system (see Roubini, 2004). If previous experiences of reneging on newly established policies cause speculators to expect the CBA to be vulnerable to attacks, they may indeed launch an attack against it. Such speculative attacks result in a sharp drop in the money supply, high interest rates, unemployment, and a resulting recession. Tsang (2000:4) calls this systemic risk, which is the perceived risk that the authority may give up a CBA for another more discretionary regime because of its economic cost. A GS can be terminated for the

same reasons, although it may be more difficult to do so because of its international nature and its portrayal as an international code of conduct and seal of good housekeeping.

A CBA operates more asymmetrically than a GS, since it is not international and universal in its operation. The anchor (reserve currency) country applies active monetary policy such that the interconnection between reserve movements, money supply, interest rates, prices etc. cannot be observed (Desquilbet and Nanovsky, 2004: 20). This results in an asymmetric form of adjustment inside the relevant country alone.

Another difficulty of both a GS and a CBA is that in a world of wage and price inflexibility the credibility and other benefits of the regimes may be outweighed by the cost of more volatile output and employment. This is attributable to the pressure that the automatic adjustment mechanism put on the internal economy in the absence of wage and price flexibility. Since both regimes are rigid and restrictive, the inflexibility might be an obstacle for growth and impart a tendency towards deflation in national income and employment. Most of the countries currently following CBA's are in any case small, open developing countries that can hardly afford to recede into such a deflationary position. Consequently, price and wage inflexibility complicate the introduction of a GS or a CBA under modern-day circumstances characterized by strong and militant labour force unions and oligopolistic markets. In addition to the foregoing, both regimes might become inappropriate in times of war, financial crisis and supply shocks, where a flexible escape course is called for.

One more consideration is that both regimes might become the victims of exchange rate misalignments over time, rendering them vulnerable to exchange rate speculation and currency crises. If a GS or a CBA country's inflation rate remains higher than that of the reserve currency country to which it has fixed, its currency can become overvalued in real terms, which will damage its competitiveness in international trade. In addition, since a GS or a CBA country will develop differently over time from the anchor country or other member countries in terms of their technological and industrial structure, price movements and asset values will differ relatively to that of the trading partners (Kopcke, 1999: 22). The CBA arrangement therefore does not provide a permanent foundation for its exchange rate dispensation. Another valid criticism is that the exchange rate link of the CBA country with that of the anchor country can become inappropriate over time in comparison with other non-anchor, yet important currencies, which will have similar distorting results.

In addition to the foregoing complicating aspects, both regimes are exposed to uncontrollable damaging external circumstances. A CBA, for example, harbours the possibility that the reserve currency country might engage in unstable economic and political policies resulting in high inflation and a loss of confidence in the anchor currency, with concomitant distorting capital flows and exchange rate movements. If these are transferred to the CBA country through the linkages with the reserve currency country, it will undermine the credibility of the CBA, causing speculation in its wake.

The GS is similarly exposed to the intricacies and vagaries of the gold mining industry and the volatility of the supply of gold. The production of gold and general behaviour of gold mines are not, in general, aligned to the needs of the world economy and the international monetary system. Furthermore, the exhaustion of gold as a durable resource also poses problems to the GS. Stemming from the above, both the GS and a CBA might have unstable nominal anchors (i.e. gold and the US dollar) which might impart disturbing monetary volatility on the country that has pegged to that specific anchor. However, the risk is greater in case of a CBA since the change or deterioration in the policies of the reserve country might emerge faster than the problems in a GS.

Both a GS and a CBA provide an option to exit the regime for another one that might be more suitable at a later stage. However, an exit from either a GS or a CBA might pose serious problems for the relevant county because of the probability of a speculative attack and concomitant currency convertibility crisis. The latter problem is compounded by a fractional reserve commercial banking system. The possibility of a GS or CBA collapsing stems from the fact that although the monetary base is fully backed by the foreign reserves of the anchor country, the broader monetary aggregates are not (Gertchev 2002).

The financial assets that can be exchanged for the anchor currency (dollars or gold) are not limited to the monetary base alone, but also include the total stock of bank deposits and liquid monetary assets. The latter stock adds up to a large multiple of the monetary base, which implies that the GS or CBA will not be able to avert a speculative onslaught when panic sets in (cf. Ho, 2002:13). This threat to the credibility might lead to distrust in the convertibility system and the entire GS or CBA regime. A mass sell-off of domestic money would imply a serious contraction of the monetary base and the money supply, which may spark a systemic banking crisis. Opting out of a CBA might be more complicated and even more dangerous than in case of the GS.

In the last instance, Gertchev (2002: 72) emphasizes that a GS is anchored in commodity money, but the money of a CBA is a fiat paper currency. According to him, the very low cost of producing fiat money enables the foreign money producer to supply the CBA with purposefully created foreign money, thereby increasing the stock of money in the CBA. This undermines the so-called automatic adjustment mechanism of a CBA. However, the 100 percent coverage of the local money mitigates such a view. More problematic is the fact that by getting access to the anchor country's financial markets and institutions, a CBA stifles the development of capitalism and financial infrastructure and institutions in the home country.

6 Conclusions on Comparing the Classical GS with a Classical CBA

Although there are different strands or variants of the GS and CBA's, this paper focused on their classical versions. Modern-day CBA's are separated by more than a century from the origin of the GS, yet display striking similarities with the latter. They are similar in that a GS as well as a CBA encourage high levels of credibility because they are based upon stringent commitments to convertibility and currency coverage and ensure a fixed exchange rate. Both regimes do not sterilize reserve flows and are intended to prevent excessive money growth and thus inflation, and they rely on automatic, rule-bound self-equilibrating mechanisms. The latter preclude discretionary interference from authorities, but if the necessary legislation to prevent government intervention in a GS or a CBA's monetary rules are doubted, their operations are severely undermined.

Both regimes present other benefits such as simplicity, transparency, commitment and the "import" of external discipline. Under favourable circumstances the two regimes lower interest rate levels and risk premiums; lower transaction costs and exchange rate risk hedging cost; reduce the possibility of banking and currency crises, and also generate favourable perceptions of the adopting countries. Furthermore, the two regimes similarly promote saving and domestic investment; increase foreign investment inflows; improve economic growth and employment, and also boost global trade.

Because of the rigidity and constraints of a GS and a CBA, both regimes might become costly to their internal economies during economic shocks when the nominal rate cannot change and the real exchange rate becomes misaligned. The central bank cannot actively counteract such and other events in order to cushion the economy against country specific shocks. The absence of a lender-of-last-resort function also leaves the CBA or GS more vulnerable to currency speculation and a systemic banking crisis in times of exogenous financial shocks.

Both regimes are not guaranteed of their unfettered continued existence. The political authorities in countries that adopt a GS or CBA can terminate the regime because they have to sacrifice their discretionary political sovereignty of managing their own economic and political affairs and must succumb to the blind forces of external rules and constraints. Still, this cuts both ways since it was precisely the abuse of this discretionary freedom and its concomitant inflationary instability that contributed to a return to e.g. CBA's as a preventative mechanism against government profligacy.

Despite all the foregoing similarities between the two regimes, there are also differences between them that generate a déjà vu impression of mistaken correspondence if not heeded. A GS involves higher resource costs, but as highlighted by authors like Desquilbet and Nanovsky, a CBA is not universal and symmetrical. The foreign country conducts discretionary monetary policy after its own liking and circum-

stances without paying attention to the CBA country, whereas the latter has to stick to the conditions and rules of the CBA. CBA's are therefore more asymmetrical because there are no interconnected reverse movements in the main macroeconomic variables.

Noteworthy is that a GS is a global standard requiring co-operation between countries to integrate policies, thus providing an environment for international integration. It may therefore be advanced that a GS provides more flexibility because it can allow easier temporary departure from its principles without damaging consequences. In case of a CBA this will cause permanent loss of confidence because it is more difficult to return to the status quo because confidence in fiat money, once shaken is very difficult to restore if deemed irreversible.

CBA's of a recent origin are constructed regimes that develop normally out of post-crisis economic strife or political turmoil, and did not develop spontaneously as was the case with the GS. The GS was part of a global monetary system, whereas CBA's are of a local or regional origin. CBA's are just as stable as the currency of the country (and thus the policies of the country) to which they are linked, since the foreign country may engage in actions that may be harmful to the link/ convertibility. A GS might therefore have more credibility because it is a global arrangement, more prestigious, and a seal of good housekeeping. Consequently, although exit options may be available to the two regimes to emigrate to a different exchange rate dispensation and although such a step might entail risky behaviour because of the doubt and uncertainty that surrounds it, the risk in case of a GS might be smaller.

An important aspect that currently distinguishes a GS from a CBA concerns perceptions about its feasibility. Keynes long ago referred to gold as a barbarous relic and many modern economists likewise regard the GS as an antiquated, defunct system which belongs to the past since no country follows or wishes to follow it anymore. To revive it currently is simply not a viable option and proposals to that effect are not realistic. Conversely, CBA's are more popular and do not nearly encounter the same resistance when recommended for those countries for whom they are deemed suitable. In fact, some of the current CBA's have not only been strongly recommended, but were actually forced upon some countries by the IMF as a qualifying condition for obtaining assistance from the organization. Strong support for CBA's rather than a GS also arises from transition countries that regard a CBA as a more appropriate stepping stone towards fulfilling the conditions for joining a monetary union such as the EMU.

Stemming from the foregoing, a CBA is currently a more practical and viable option in fixed exchange rate choice despite extensive similarities between the two regimes regarding their features, operation, envisaged outcomes as well as their positive and negative attributes.

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