A Proposal for a Currency Board

in a Democratic Burma

by

Sean Turnell*

Abstract

This paper argues that a currency board will provide a newly-democratic Burma with the stable monetary system it will need after decades of currency debasement under military rule. An old idea that has successfully re-emerged in recent years in a number of countries, currency boards are relatively simple and transparent institutions that can provide stability, predictability and credibility to an emerging economy's monetary institutions. Currency boards impose certain constraints on the ability of governments to conduct discretionary economic policies. The advantages they bring in establishing confidence in the currency, however, outweighs such considerations in countries whose greater need is the establishment of the sound foundations of a market economy.

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* The author is a member of the Economics Department at Macquarie University, and a former Senior Analyst at the Reserve Bank of Australia.

The 'Currency Board' arrangement is a plan desperately needed in a country rebuilding itself, and where there had been a widespread mistrust of government and the banking system.

Peter Nicholl
Governor, Central Bank of Bosnia and Herzegovina

Introduction

Burma's economy is a disaster. Forty years of inept economic management under military-rule has reduced a once relatively prosperous economy, the ubiquitous 'rice bowl of Asia', into a country that qualifies as 'least developed' by the World Bank. Extreme poverty, endemic corruption, rampant inflation, negligible foreign exchange reserves, large monetised budget deficits, foreign debt arrears and a currency that barely qualifies as a means of exchange - are all features of Burma's economy and symptoms of a country in broader socio-political distress. Burma's economic and social problems are such that in all likelihood they can only be solved with the advent of a new political regime enjoying democratic legitimacy. Even then, however, the task will be extraordinarily difficult. In the development stakes Burma will begin a long way behind, and there are many competitors for the overseas investment and markets that Burma will need to attain any measure of prosperity.

A necessary first step in reforming Burma's economy and, indeed, in providing for healthy democratic structures more generally, will be to establish confidence and stability in the currency. There is, as Keynes observed (1919, p.220), 'no subtler, no surer means of overturning the existing basis of society than to debauch the currency'. Burma's military regimes *have* debauched the currency and they *have* overturned society. Righting this endemic practice should be a priority for a new and democratic government.

Restoring confidence in Burma's currency and in its monetary and financial system will be greatly aided by the use of a currency board. Relatively simple structures, currency boards can be used in the place of a central bank. Unlike a central bank though, their purpose is narrowly and simply defined to that of being the issuers of currency. What further distinguishes currency boards though, is that they can only issue the domestic currency to the extent that it is backed by a foreign 'anchor' currency, to which the domestic currency is freely convertible at an exchange rate fixed by *law*. In a pure currency board system the stability of the domestic currency becomes that of the anchor currency.

Currency boards have no control over monetary base, which fluctuates according to the reserves of the anchor currency, and therefore cannot determine a discretionary monetary policy. Currency boards cannot allow for the monetisation of government debt either, which puts some constraint on the use of fiscal policy too. In the context of Burma, and given the propensity of the military regimes to resort to money financing, this will be no bad thing and will do much to foster international and local investor confidence. Lender of last resort facilities for the banking system are also problematic in a currency board system, but such arrangements can at least be partially replaced by the opening up of Burma's financial system to foreign institutions and the application of the global Basle Accord.

One of the most attractive features of a currency board for Burma is that it does not require substantial economic reform *before* it can provide for a sound and stable currency. This will, in itself, greatly aid the process of achieving these same reforms and for establishing an economy that functions around the rule of law.

The paper will proceed by first examining some recent experiences with currency boards in a number of inflation-prone and transition economies. The remainder of the paper will be spent in examining currency boards themselves, their essential features and their implications for macroeconomic and banking policy. The paper will highlight throughout the specific circumstances of Burma, and the potential benefits a currency board could bring.

Recent Currency Board Arrangements

Although an idea dating back to the nineteenth century, currency boards have come back into vogue in recent years.[1] There are currently 14 currency boards (or currency board-like systems) in operation around the world in countries with widely varying economies. Though down on the 50 or so that were in place at the beginning of the 1950s, it is a substantial increase on the few residual colonial systems that were the sole remaining examples of currency boards in the early 1980s (Enoch and Gulde 1998, p.40). For many years out of intellectual fashion, the disappointing performance of central banks, especially in developing countries, has seen the idea re-emerge in a 'new wave' of currency boards established in the last decade or so.[2]

The most relevant of these to Burma, and the primary reason for the resurgence of interest in currency boards, have been the experiences in the 1990s of a number of transition and/or inflation-prone countries in introducing currency board systems. Argentina, Estonia, Lithuania, Bulgaria and Bosnia-Herzegovina are all examples of such countries and their experiences have largely been extremely positive. Argentina introduced its version of a currency board in 1991, whereupon its long experience of very high (sometimes *hyper*) inflation was brought to a halt (Bennett 1994, p.24). Argentina's is not a pure currency board and its required ratio of anchor currency to currency on issue is only 66 percent, though in practice it never usually goes below 90 percent. This has meant that Argentina's currency, the peso, has come under occasional attack from speculators not entirely convinced that its central bank will hold to the currency board arrangements. On 21 January 1999 Argentina's President, Carlos Menem, announced that his Government intended to

[1] The intellectual genealogy of currency boards can be traced as far back as the 1820s, and the controversies in the United Kingdom surrounding the transition from the era of 'free banking' to that of the Bank of England as the monopoly issuer of currency. For more on the early history of currency boards, see Hanke and Schuler (1993).

[2] The first of these new wave currency boards was that of Hong Kong, installed in 1983 in the wake of the negotiations over the handing back of the territory to China. Hong Kong's currency board, formally the Hong Kong Monetary Authority (HKMA), anchors the Hong Kong dollar to the US dollar. The HKMA is not a 'pure' currency board, and has a number of central bank-like discretionary powers. Notwithstanding the expectations of its critics, Hong Kong's currency arrangements proved extraordinarily robust in the face of Asia's recent financial turmoil. For details of the HKMA, see the official website at <http://www.info.gov.hk/hkma/>. Pre-dating the Hong Kong arrangements are the range of currency board systems in the small territories that remain dependencies of the United Kingdom and France. Such systems are in place in Gibraltar, Djibouti, the Falkland Islands, Bermuda, the Cayman and Faroe Islands and a number of even smaller territories. There are also a number of Caribbean countries, members of the East Caribbean Central Bank (ECCB) that are, through this institution, subject to a currency board-like system (Enoch and Gulde 1998, p.40).

dollarise - that is, replace the peso with the US dollar in what is, in one sense, the ultimate form of a currency board.[3]

Estonia's currency board was instituted in 1993, and remains perhaps the single most successful of the currency boards in place in the transition economies.[4] Until 1992 a member of the ruble area, Estonia faced the need to create its own currency and to give it value. Estonia subsequently fixed its new currency against the German mark (and therefore subsequently the euro). Positive results followed almost immediately, with inflation sharply arrested and funds repatriated during the initial years of independence from the Soviet Union flowing back into the country. Indeed, the principle problem in Estonia's experience has been a swelling money base, bringing inflationary pressures (of an altogether different and more benign kind to that which previously derived from a lack of faith in the currency) but increasing reserve coverage substantially.[5] Estonia's growth rates have also substantially outperformed its Baltic neighbours. Estonia's success prompted Lithuania (in 1994) to likewise institute a currency board (Williamson 1995, pp.6-7).

Perhaps most instructive for Burma of all the 'new wave' currency board arrangements has been that of Bosnia-Herzegovina. A country devastated by civil war (and foreign interference), Bosnia-Herzegovina's currency board was mandated by the Dayton Peace Accord - which says something of the support currency boards enjoy for use in national reconstruction programs. Bosnia-Herzegovina's currency board, called the 'Central Bank of Bosnia and Herzegovina (CBBH)', was established in August 1997 and has the sole task of safeguarding the currency. The CBBH is a *pure* currency board. The domestic currency, the Konvertible Marka (better known by its acronym, KM) is backed 1 to 1 by reserves of German marks (and implicitly now by an equivalent level of euros). The CBBH is not allowed to lend to the government nor take up any of its bonds nor any other public or private sector liabilities. The CBBH does not provide lender of last resort facilities to the banking system. Since its establishment, the CBBH has been remarkably successful, and throughout Bosnia-Herzegovina KM's circulate freely (without discount) alongside the German mark.[6]

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[3] For more on Argentina's currency board-like arrangement, and its travails, see Hanke and Schuler (1999).

[4] As shall be examined in more detail below, Estonia's currency board is maintained within one of the two departments that make up the Bank of Estonia. Quite a number of the present day currency board systems are labeled as 'banks' or 'central banks', promulgating a degree of semantic confusion.

[5] For more details of Estonia's experiences with a currency board, see Bennett (1993 and 1994), Judy (1995), Balino *et al* (1997), Ghosh, Gulde and Wolfe (1998) and Schuler (1998). See also the Bank of Estonia website at <http://www.ee/epbe/>.

[6] For more detail on the Central Bank of Bosnia and Herzegovina, see the official website at <http://cbbh.gov.ba/>. For more on the background to its establishment, see Hanke (1997). This brief survey of recent experiences in the use of currency boards can be supplemented by recent empirical investigations undertaken by the IMF and others. Formal econometric analysis undertaken for the IMF by Ghosh, Gulde and Wolf (1998) found that the existence of a currency board historically results in an

Features of Currency Boards

As noted in the introduction to this paper, the most distinctive feature of a currency board is that the currency it issues is backed by reserves of a foreign anchor currency. In a 'pure' or 'orthodox' currency board, these reserves should be at least 100 percent of the issued currency.[7] The rate at which the domestic currency is exchanged must be permanently fixed by law, and the currency board must be ready to exchange the domestic currency on demand. In the interests of reserve cover though, the currency board should not convert bank deposits into the local or anchor currency. Similarly, a pure currency board is prohibited from acquiring domestic government or private commercial securities. Pure currency boards are essentially passive institutions that issue and destroy currency according to movements in anchor reserves, and do not engage in any other activity. Such currency boards are the most simple, but also the most restrictive in terms of policy. They are also the most credible.

In practice, as well as in theory, a number of alternative systems to 'pure' currency boards are possible. A less than pure arrangement, for example, could be one in which there was less than 100 percent anchor reserves for the amount of currency on issue. This would allow for greater room to pursue discretionary monetary policies, and/or allow for the provision of lender of last resort facilities to the banking system, but has the obvious pitfall of clouding the transparency and credibility of the system. As noted above, Argentina has maintained less than 100 percent reserves - with the result that its arrangements suffer from doubts as to its credibility and which have led to speculative attacks against the exchange rate.

Though a currency board holds reserves denominated in the anchor currency, these need not be in actual notes and coin. Indeed, by far the substantial component should not be - since by holding anchor currency denominated government securities (zero risk, like currency), the currency board country can yield substantial seigniorage revenues (more of which below).[8]

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inflation rate 3.5 percent below that of the average outcome under alternative exchange rate regimes. They also found that currency boards achieved this without any apparent negative effects for economic growth. Similar superior macroeconomic performances for currency boards are claimed in Schuler (1996) and Hanke (1998a).

[7] Currency boards in the past have usually held greater than 100 percent reserves - for the most part the product of accumulated seigniorage (more of which below). Such a buffer provides a margin to allow for fluctuations in the value of the anchor currency denominated securities.

[8] The reserves should therefore be a mix - of highly liquid short-term anchor country government securities, anchor country bank deposits and cash, and higher yielding but less liquid longer-term anchor country government securities.

The provision of sufficient reserves of the anchor currency could initially be a problem for a currency board in Burma, not least because the present military regime is likely to leave very little in the way of foreign reserves. As such, in the early period of its operations these might have to be sought from international agencies such as the IMF, World Bank, Asian Development Bank or from other countries. This should not present any difficulties. Such reserves are not at risk to the lender so long as an appropriate exchange rate to the anchor is chosen and the currency board is properly run. At worst, the lender is exposed to holding an equivalent amount of local currency. It is perhaps the case that this issue is already resolved in any case, for in 1992 legislation was passed in the United States Congress that 'directed the IMF to use U.S. quota contributions to establish currency boards, if appropriate' (Hanke 1998a, p.5). Burma is also likely to be assisted in this and in other ways by the considerable goodwill that the arrival of democracy is likely to yield to it. Of course, it is also precisely in the provision of financial aid such as this that institutions such as the IMF and World Bank were designed for - and what they remain best able to provide.[9]

In the longer run Burma should be in a position to generate substantial reserves of the anchor currency through trade and investment. Under the military governments that have ruled Burma since 1962, the country's exports have stagnated badly - and now account for less than one-sixth of what they were before the Second World War (Khin Maung Kyi *et al* 1998, pp.81-82). Chronic balance of payments deficits have been the norm under the current military regime, the self-styled 'State Peace and Development Council (SPDC)', which has only been able to finance them in recent years via concessional finance from China. Other, more beneficial forms of foreign investment, have been stymied by the problems of Burma's macroeconomy which, together with the political difficulties that have made the country into a pariah state, has reduced investment flows to a trickle. There is, however, room for substantial optimism for Burma's trade and investment position under a future democratic government - not least because the current position is so dire. A mere approximation of the type of growth in exports and inward investment experienced by its neighbours should place Burma very well indeed.[10] This, in turn, will be greatly aided by a currency board. Burma remains a country of great natural resources and with a realistic, convertible and unified exchange rate in place, will price its labour force well below its competitors. All of this, together with the legal and civil structures of a functioning democracy, should make Burma an attractive location for investment and as a source for labour-intensive manufactured goods.

[9] The three core principles for which the IMF was formed was to ensure exchange rate stability, convertibility and freedom from exchange restrictions - three principles assured under a currency board (de Vries 1986, p.3).
[10] See, for example, the estimates in Khin Maung Kyi *et al* (1998), p.83.

Implications for Monetary and Fiscal Policy

A currency board system is rule based. In its pure form neither it, nor any other institution of government, has any discretionary control over monetary management. A currency board can have no control over the domestic rate of interest, nor be in a position to conduct open market operations or any other activity typically employed by central banks to influence domestic monetary conditions. The activities of the currency board rather, are passive and automatic, and limited to the issuing or destruction of domestic currency in response to changes in its stock of the anchor currency.

Discretionary fiscal policy is likewise limited in a currency-board system. A pure currency board cannot accept any other liabilities save that of the currency on issue. This means that a currency board cannot accept government bonds nor lend to the government in any way. Significantly, this means that a budget deficit cannot be 'monetised'.[11] Government spending under a currency board arrangement, therefore, is limited to taxation receipts plus whatever can be raised by the sale of government securities to the private sector. The political pressures to spend vastly in excess of their ability to raise funds is, as Judy (1995) notes, often 'overwhelming in nascent democracies undergoing difficult economic and political transitions'. Currency boards can provide something in the way of a counter to these pressures.

The principle virtue of a currency board then is precisely the same as its policy limitations. By imposing more transparent and rule-based monetary and fiscal policies, currency boards bring with them the expectation that accompanying policies must likewise be responsible and rule-based. Above all, a currency board symbolises a country's serious intent to maintain a sound currency and a stable exchange rate. The credibilty that a currency board brings to this intention in the eyes of international and domestic investors is its greatest promise.

In the case of Burma, the limitations on discretionary macroeconomic policies prescribed by a currency board is almost certainly a virtue. Burma's economic problems since military rule began are many and varied, but a great proportion

[11] This is the principle reason why their advocates claim that currency boards bring with them a superior performance on inflation than alternative monetary regimes. It is not the only one. Another is the idea that under a currency board, domestic inflation is bound to that of the anchor currency country through arbitrage. So long as relative purchasing power parity holds between the anchor currency country and the currency board country, arbitrage should ensure that (within limits) domestic prices do not diverge from the prices prevailing in the anchor country. In practice these 'limits' can be quite wide. There are, after all, a very wide range of goods that are not 'tradable' and, therefore, not subject to the price discipline arbitrage will impose. Nevertheless, the idea is clearly not without foundation given the increasing integration of markets. Schuler (1998) found that price inflation for tradable goods in Hong Kong and the United States showed no discernible divergence following Hong Kong's adoption of the US dollar as its anchor currency in 1983. Divergences in price inflation were apparent in non-tradable goods sectors.

extend directly and indirectly from the 'need' to maintain Asia's second largest standing army (after China's). The commitment of resources to this end are reflected in Burma's chronic fiscal imbalances, which have never been below 7 percent of GDP in the 1990s (Economist Intelligence Unit 1998).

In the absence of a functioning tax system, and the ability to source funds from abroad, Burma's military regimes have resorted to monetisation as the primary means of financing budget deficits. Some idea of the extent to which the printing press has been employed can be gleaned from the fact that notes in circulation have increased at an average annual rate of 31 percent since 1988 (EIU 1998, p.16). Not surprisingly, this has fueled chronic inflation, which on the current regime's own figures has averaged over 20 percent per annum over the same period.[12] The official figures greatly underestimate inflation in Burma, not least because they are calculated using the official exchange rate for import prices. And, of course, they exclude Burma's enormous 'informal' economy, through which Burma's citizens conduct a great proportion of their economic activity.[13]

Choice of Anchor Currency

The choice of the foreign anchor currency is one of the most difficult but crucial questions faced by the architects of a currency board. Of most relevance to the selection of the anchor currency though are the following considerations:

1) The anchor currency must be one that is widely accepted as an international reserve currency. A fairly obvious point perhaps, but one that narrows the set of choices rather dramatically in practice. In the current environment there are probably only three currencies that fit this criteria; the United States dollar, the Japanese yen and the euro of the European Community. Given the newness of the latter currency, and the limited involvement of Europe in Burma (now and in all likelihood in the future), the euro could be discarded as well, leaving the choice down to the dollar and the yen. Together these two currencies provide the bulk of foreign exchange reserves held by central banks around the world. Both currencies are floating, though subject to occasional coordinated intervention from central banks.

[12] Though cited from EIU (1998, p.16), these statistics are those of the Burmese government. The reliability of these is less than assured, a fact no better illustrated than in this example. What has happened in Burma, for example, such that the money supply can increase by an average of 31 percent and the rate of inflation by 'only' 20 percent? *Some* growth has occurred in real output over this period, but hardly enough to account for the 'missing' money.
[13] Estimates of the size of Burma's 'black economy' vary, but there is something of a unanimity that it is at least equal in size to the formal economy (United States of America, Department of State (State Department) 1999).

Of the fourteen currency boards currently in operation, ten use the US dollar as the anchor currency, three use the German mark (euro) and one the Singapore dollar (Enoch and Gulde 1998, p.40).

2) The anchor currency should also be one in which a substantial proportion of the trade of the country concerned is denominated. An anchor currency divorced from the trade of the currency board country poses the risk that exchange rate changes will damage competitiveness. This could be of particular importance to a country such as Burma which, post-democratisation, will be competing with a number of other low-wage Asian countries for markets and investment. This issue is given added importance when we consider that, under a strict currency board system, future growth in money base must come from external sources, including a positive trade balance. Though other commodities and other likely exports would need to be considered, Burma's traditional export staple, rice, is denominated in US dollars in world commodity markets.

3) A related consideration is that the anchor currency ideally would be one in which the currency board country could expect flows of foreign investment. As with the issue of trade, the importance of this simply relates to the fact that the currency board should be able to count on an intertemporal growth in money base.

As noted above, the great majority of present-day currency board arrangements anchor their domestic currencies against the US dollar. The *de facto* global reserve currency, in the view of this author a convincing argument for an alternative to the dollar, which could only realistically rely upon considerations two and three above, would be hard to make. The Federal Reserve System is by no means a perfect central bank, but it maintains a global reach and credibility in financial markets unmatched by any other central bank. This is especially true when one considers the attributes of any similar institution in Asia, including the Bank of Japan.

The case for anchoring the Burmese currency against the yen rather than the US dollar could only be because of a possible predominance over the American currency in likely Burmese trade and inward investment. A decade ago such a case could be argued much more strongly than it can now. Fueled by a high domestic saving rate, booming share and real estate markets and aggressive and successful exporters, Japanese banks expanded dramatically worldwide in the 1980s - but especially into Southeast Asia. A rising yen meant that these capital flows accompanied, and facilitated, the relocation of productive capacities of Japanese firms into the region. In the 1980s there was an active integration of the Japanese economy into the future economic development of Southeast Asia (Peek and

Rosengren 1997, *passim*). In the 1990s, however, the tide has turned. The collapse of Japan's real estate 'bubble', sharp declines in its share market and substantial increases in the level of non-performing loans on the books of its banks, has resulted in a dramatic shrinkage of Japanese investment into Southeast Asia. In 1998 Japanese direct foreign investment into the region declined by 71 percent. Even more instructive as to the scale of the retreat has been the shrinkage in Japanese bank lending - from 40 percent of all lending in Asia in 1996, to 28 percent in 1999 (Bank for International Settlements (BIS) 1999, pp.16-18).

There is much to suggest that Japan's problems, moreover, are structural and not amenable to speedy macroeconomic-policy solutions. The continuing failure of Japanese banks to write down bad loans and their under-capitalisation compared to their global competitors (and to the international Basle Accords) means that private sector capital flows from Japan are not likely to match the levels of the 1980s in any foreseeable future. Worse, the secular trend towards ever-growing budget deficits in Japan, its high government debt to GDP ratio, the likely need for more bank 'rescues' and the enormous *hidden* liabilities arising from its aging population, all suggest that Japan in the near future may need to keep for itself all the savings-investment gap it can generate. The Japanese currency, in short, may not provide the stable anchor required for a successful currency board (Peek and Rosengren 1998, *passim*).[14]

Exchange Rate

If the choice of the anchor currency is a crucial decision in the establishment of a currency board, then clearly so too will be the rate at which the local currency will be fixed against it.[15] Fixing at too high a rate will damage Burma's export and foreign investment prospects, and will reduce the credibility that the exchange rate can be maintained. Fixing at too low a rate will stimulate local production, will

[14] A further potential hurdle for the use of yen as an anchor currency is the legacy of its role in the Second World War as the anchor currency of the Japanese occupation forces.

[15] Burma's current exchange rate arrangements are no less chaotic than any other area of the macroeconomy. Exchange 'rate' is, in fact, a misnomer in Burma, for there are a number of exchange *rates* to come to terms with. There is, firstly, the *'official'* exchange rate. This currently stands at a rate of 6 kyat (Burma's currency, abbreviated to Kt) to US$1. As Khin Mung Kyi *et al* (1998, p.95) note, this grossly over-valued rate is 'simply a mechanism for enriching the privileged few in the military and their associates', who are the only people with access to foreign exchange at this rate. Secondly, there is a *customs valuation* rate, presently standing at Kt100 to US$1. Thirdly, the Burmese Government publishes something it refers to as the 'official *market'* rate - the rate offered by the few authorised foreign exchange dealers - which, at September 1998, stood at Kt300 to US$1. Finally, there is the exchange rate prevailing in the 'black market'. This fluctuates widely, both through time and across the different regions in Burma, but reached Kt450 to US$1 during the worst period of the Asian economic crisis of 1997 (Department of State 1999). The response of the regime to this rapid decline in the value of the currency was all too typical - amounting to little more than the simple expedient of arresting foreign exchange dealers and revoking the foreign exchange licenses of many of the private banks (Khin Maung Kyi *et al* 1998, pp.98-99).

attract capital inflow and be less of a problem generally, but *could* lead to inflation through the subsequent expansion in money base.

It is the collapsing value of the Burmese currency that a currency board is primarily designed to stop. At the same time, the currency board must also bring about an end to the extreme divergences between 'market' and 'official' rates of exchange. The currency board should begin, therefore, in a position in which the domestic currency is neither over nor under valued. There is little reason, in short, not to choose the market rate of exchange for the domestic currency that prevails at the time the currency board is established. This has been the approach taken in establishing most of the currency boards currently in operation.

In the transition period, Burma's currency board *could* follow the example of Argentina in 1991, which allowed a floating exchange rate within upper and lower bands in the two months prior to the imposition of the fixed rate.[16]

'Dollarisation'

Given that, under a pure currency board, the domestic currency must be fully backed by foreign reserves, a question that naturally arises is why a local currency is required at all. Why not simply circulate the anchor currency? As noted above, this is a question currently under consideration in Argentina, a country whose domestic currency has had a long history of poor credibility.

Notwithstanding the surety that might be yielded by using the anchor currency in circulation, three reasons stand out for maintaining a domestic currency in a country such as Burma.

The first of these is simply the recognition that a national currency is important symbolically as a statement of independence and national unity. Ephemeral notions perhaps, but no less powerful for that if the controversies in Europe over the introduction of the euro are any guide. For a multi-ethnic state such as Burma, newly emerging from military rule and attempting to tap into a new national sentiment, this issue is likely to be even more important.

A second reason why Burma should retain a national currency, but one backed by foreign reserves, is more tangible and concerns seigniorage. As noted above, a currency board in Burma would not back the local currency against foreign notes and coin, but against anchor currency denominated government securities. These securities, the assets of the currency board, are interest bearing. Its liabilities, currency on issue, are not. The seigniorage income from this, less the costs of

[16] Argentina subsequently chose to fix at the lower of these bands.

actually operating the currency board (which would increase with the degree the currency board deviated from its 'pure' form) adds to the stock of anchor reserves or, alternatively, could be income passed on to the government.[17]

A third reason for Burma to continue with a national currency is so that it can maintain a degree of flexibility with regard to the anchor currency. Not with the exchange rate against the anchor - but with regard to the choice of the anchor itself. This could be important in the (unlikely) event that the anchor currency country itself became a source of serious inflation. This issue could also become important if Burma was to find that its trade and investment was increasingly to be written in a currency other than the anchor (or Burma wanted its trade and investment to move in that direction). So long as this other currency was as stable as the previous anchor, there is nothing in principle to disavow such a move. Of course, confidence that the currency could continue to be exchanged against the old anchor would be critical during the transition period of such a move, and it would not be a decision to be entered into lightly. Because the issue of anchor flexibility could only become important in the longer term, it is not something that should feature prominently in the initial design of the currency board.

Banking Policy

As noted above, the operation of a pure currency board arrangement necessarily precludes the provision of lender-of-last-resort (LLR) facilities to the commercial banking sector. When bank failure occurs under an LLR facility, the central monetary authority (usually a central bank) is effectively forced to acquire a proportion of the liabilities of the failed institutions. But the liabilities of a pure currency board (otherwise simply the notes and coin on issue) must be fully backed by reserves of the anchor currency. The provision of an LLR facility, therefore, could result in the erosion of reserves and places in jeopardy the operation of the entire system. Of course, it also undermines the transparency and independence of a currency board arrangement.

Should a currency board be established such that it holds anchor reserves in excess of 100 percent of the currency on issue, then clearly this would leave a margin to provide for an LLR facility. The Bank of Estonia has attempted something along these lines. It is divided into two departments - an 'Issue Department' that contains the currency board, and a 'Banking Department' that undertakes a range of traditional central bank activities, including limited assistance to the financial sector. It is the Banking Department that holds the 'excess reserves' of the currency board, and its activities are limited to the extent of these. Bank failures were a feature of Estonia's early experiences under its currency board arrangements, and

[17] The issue of the seigniorage benefits of national currencies is comprehensively argued in Fischer (1982).

assistance was provided to the problem institutions. In the end, however, these could not be supported by the limited amount of assistance available, and so the problem banks were either 'rationalised' through merger or liquidated (Bennett 1993, pp.456-467). In the view of this author, even such a minimal LLR arrangement should be resisted in Burma's case. It cannot be guaranteed that bank losses would not exceed any excess reserves margin and the attempt to ensure that such losses did not erode core reserves makes for a much more complex institution. It also makes for an institution that is much less transparent than is necessary, and much more susceptible to political interference.

To a large extent modern bank supervision practice has, in any case, moved beyond LLR facilities as the appropriate guarantors of financial system stability. Indeed, to the extent that they create moral hazard, they have come to be regarded as more of a problem than a solution, especially amongst developing and transition economies.[18] The best policy for Burma to adopt will be simply to let problem financial institutions fail. Given the size of the existing institutions and their likely financial condition, this is probably all for the better in any case.[19] An ideal solution to the likely problems of Burma's existing banks could be to 'rationalise' their liabilities into one or more 'bridge banks' along the lines of those adopted in Malaysia, Indonesia and Japan - and thereafter to supervise them by a rigorous application of the Basle Accords.[20]

An immediate policy which should be adopted upon the establishment of a currency board in Burma is to open the country's financial system to foreign banks. In times when the absence of LLR facilities *was* regarded as a systematic problem, it was foreign banks (with their risk dispersed and, in any case, somebody else's problem) in currency board systems that were regarded as the pillars that ensured financial stability. In a country as poor as Burma, and with decades of the abuses detailed above together with the time it is likely to take for a properly functioning indigenous financial sector to emerge, it is foreign banks that

[18] But not limited to them, as the 'savings and loans' crisis in the United States in the late 1980s amply demonstrated.

[19] Burma has a number of very small institutions that are labeled 'banks', and a small number of joint venture institutions with foreign banks that do not seem to be active yet. Burma's financial system is extremely underdeveloped - as can be seen from the fact that the ratio of currency to M2 (that is, currency plus bank deposits) was an extraordinary 62 percent in 1998(State Department 1999). This figure suggests a profound mistrust in the banking system and a pronounced preference for liquidity over bank assets. By way of comparison, the ratio of currency to M2 in Thailand (the country that, in so many ways, provides a useful source of comparison to Burma) stood at 6 percent (Bank of Thailand 1999). Burma's financial system, in short, is a barely functioning one. For more details on the structure of Burma's banking system, see Pierce (1997).

[20] This is also roughly the approach adopted in Argentina. Rationalisation of the banking sector in Argentina has seen the number of banks operating in the country fall from 235 in December 1994, to 174 by June 1998 (Hanke and Schuler 1999, p.5). Argentina's central bank interprets stricter capital adequacy standards than those required under the Basle Accord, an approach Burma too could adopt in its attempt to create a credible indigenous financial sector.

could once more fulfill this function. Already subject to appropriate supervision and bringing with them relevant expertise and product innovation, foreign banks will also give Burma access to international capital markets.[21] Of course, in this context, it is especially important that Burma be open to the operation of banks from the anchor currency country - the least risky sources of foreign capital. In order to ensure this, bank regulation (Basle Accord) and other policies concerning banks (taxation, licensing and so on) should be as close as possible to that of the anchor currency country.[22]

As with the initial provision of reserves, the development of Burma's financial sector post-democracy could be an area in which international institutions could be at their most useful in providing aid. Not necessarily in the provision of funds, but in the establishment of appropriate regulatory frameworks such as the Basle Accords. Since the Asian financial crisis much time and effort has been spent by institutions such as the IMF, World Bank, the BIS and the ADB in examining the appropriate 'architecture' for domestic and international financial stability. Tapping this expertise should be a priority that will ensure Burma's longer-run financial autonomy from these same institutions.

Access

Conversion of the domestic currency into the anchor currency should be automatic, but this does not imply that individuals (or individual enterprises) should have access to the currency board for the purposes of exchange. As Hanke and Schuler (1991) note, multitudinous small scale transactions would be very costly administratively and, for a country the size and geographical diversity as Burma, would require an even more costly branch network. For these reasons access to the currency board could be limited to the commercial banks, whatever form these might ultimately take. Such an arrangement is typical of most currency boards in practice.[23]

[21] Such benefits have been apparent in the case of Argentina, which has allowed foreign banks to compete on an equal footing with domestic banks since 1994. In June 1998, foreign banks held over 63 percent of all deposits in privately owned commercial banks operating in Argentina (Hanke and Schuler 1999, p.5)
[22] For more on this idea, see Osband and Villaneva (1993), p.211.
[23] This is not, of course, an issue of principle and whatever arrangement is chosen, confidence that exchange is ultimately guaranteed remains paramount. In Estonia, anyone can exchange kroons for German marks (euros) at the central bank (Bennett 1993, p.453). In Argentina anyone can similarly exchange pesos for dollars at the central bank but, according to Hanke and Schule (1999, p.4), in practice only commercial banks have done so. For Burma, much will depend on the degree of confidence ultimately established in the commercial banks. Direct access to the currency board should be allowed, notwithstanding the costs above, should this prove to be wanting.

Exchange/Capital Controls

The operation of a pure currency board does not allow for exchange or capital controls since it guarantees the exchange of the domestic for anchor currency. Less than pure arrangements will allow the possibility for controls on capital flows, but clearly the currency board will be compromised in proportion to the extent that they are applied. Most existing currency board arrangements have no exchange or capital controls in place.

Instructive perhaps for Burma is the experience once more of Estonia. Initially exchange controls were instituted in Estonia because it was felt that the existing banking system was too fragile to cope with the capital outflows expected to follow automatic exchange. In the end a number of Estonian banks were wound up and the banking systems' assets and liabilities were rationalised. Following these reforms, the exchange controls were lifted (Judy 1995).

The robustness of currency board arrangements in the face of capital flows, long claimed by their advocates, were tested and upheld during the financial crises that began in Asia in 1997 and subsequently spread to emerging markets generally.

Openness to foreign capital is not an end in itself, but a vehicle for the enhancement of economic growth and the transfer of modern technologies and techniques. This is an idea central to Khin Maung Ky *et al* (1998, p.32, more of which below), which makes the central assumption that a post-democratic Burma should 'welcome foreign investment in all sectors of the economy'. Citing the experiences of Singapore, Malaysia, Indonesia and Thailand, Khin Maung Ky *et al* place particular emphasis upon the role of multinational corporations in this process. Attracting foreign direct investment via multinational corporations will require a many faceted strategy, but it will be one greatly aided by the surety a currency board will bring with regard to a stable exchange rate and guaranteed convertibility.

Other Benefits

In the wake of the Asian financial crisis much thought has been given to reform of the global financial system, and in particular the when and why of financial 'bailouts'. The United States, with something of a veto over proposals that might emerge, has recently proposed that financial assistance to countries facing financial crises be conditional upon such countries having appropriate exchange rate regimes in place. Deciding that a key cause of the Asian turmoil was exchange rates pegged unrealistically against the dollar, the (then) Treasury Secretary, Robert Rubin, declared in April 1999 that currencies should either be floating or '*credibly* fixed via an institutional arrangement such as a currency board'. Given that a democratic Burma is a likely client of institutions such as the IMF and World Bank, and equally a likely recipient of aid from the United States, a currency board is certainly consistent with the *realpolitik* of our times.[24] More generally, there is likely to be ever greater demands from international institutions and donors for transparency in institutions enforced by the discipline of the market.[25] A democratic Burma can do little wrong by being, via a currency board, 'more royal than the king' in such matters.

Colonialism

One possible psychological obstacle to the establishment of a currency board, particularly for a country such as Burma, is their background as institutions of European colonialism. Currency boards were particularly prevalent amongst countries and regions locked within the British Empire. Established in order to provide for a stable and familiar currency in countries far from the imperial centre, while at the same time protecting the gold stocks of the Bank of England, currency boards were first employed, in Mauritius, in 1849. As noted by Schuler (1992), they 'became the monetary arrangement of choice' for British colonies thereafter. Burma itself had a currency board from 1947 to 1952 (Schuler 1992, p.22).[26] The present array of currency board arrangements, however, are not institutions of colonialism. They exist purely to establish credibility in the currency they issue, and are in no way subservient to institutions of the anchor currency country.

Burmese Economists

The author of this paper is not Burmese, and what has been outlined in this paper therefore is merely offered as part of the international debate that is currently taking place regarding the future of that country. For too long though the destiny of Burma has been shaped by those outside it, and those without the mandate of its people. As such, any proposal as far reaching as a currency board can only be

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[24] Of course, this issue assumes an even greater importance should the US dollar become the anchor currency in Burma.

[25] The conventional wisdom in the World Bank and similar institutions in the 1990s is that sound macroeconomic policies (by which is meant budget balance, low inflation and openness to trade) and sound institutions (the rule of law, minimal corruption and an efficient bureaucracy) are prerequisites for successful aid programs. This general philosophy is no better exemplified than in International Bank for Reconstruction and Development/The World Bank (1998).

[26] The 'Burma Currency Board' was established under the British Currency and Coinage Act of 1946. Headquartered in London, the Board held sterling and sterling denominated securities against 100 percent of the currency on issue (then the Burmese rupee). Prior to the Second World War, Burma had used the Indian rupee as the currency, issued (from 1935) by the Indian central bank. As noted by Schuler (1992, p.22), the Burma Currency Board was a most robust institution, maintaining the fixed exchange rate against sterling during a period of civil war and the incursions of the Chinese Koumintang forces. Burma's currency board was replaced by a central bank, the Union Bank of Burma, in July 1952 (Schuler 1992, p.22). For a most detailed account of Burma's first currency board, see Tun Wai (1953 and 1962).

decided with the expressed approval of the people of Burma, through the democracy that hopefully is imminent.

In 1998 a group of Burmese economists launched a report (Khin Maung Kyi, *et al*, 1998) which attempted to construct a strategy for the reconstruction of their country. This report did not go into specifics on an exchange rate regime, but it included the following broad recommendation:

> We favour the conservative Currency Board approach, of the type Burma has had in the past - a system which inflexibly links the issue of banknotes to foreign exchange reserves. In response to strong negative external shocks, recourse could be had to the IMF and the international capital market if necessary. Countries such as Argentina and Estonia have had success with this approach and their experience can be studied. Given the conditions likely to prevail in Burma for some decades to come, a supposedly independent central bank or monetary authority is, we feel, too liable to abuse by the state. Where there is no well-developed private sector which offers alternative employment, government officials cannot be expected to resist a government determined to print money to make the accounts balance (Khin Maung Kyi, *et al*, 1998).

Conclusion

Burma needs a currency board to re-establish a sound currency after nearly forty years of military mis-rule. Currency boards bring with them certain costs, particularly in the constraints they impose on policy activism, but in the case of Burma this is outweighed by the greater need for the institutional credibility and transparency a currency board will bring. The economic reconstruction of a democratic Burma will be extraordinarily difficult, but it will be made easier by the establishment of rule-based institutions such as a currency board.

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