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**Alternative Monetary Regimes in the Caribbean**

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**ALTERNATIVE MONETARY REGIMES IN THE CARIBBEAN**

**by**

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## *I. Introduction*

The issue of how to structure an appropriate monetary regime<sup>1</sup> has for a very long time occupied the attention of economists. Current international financial problems have served to intensify this debate. In spite of the amount of research into this issue, however, there is little consensus on the link between the choice of monetary regimes and economic performance. There are many reasons for this; at a theoretical level, it is difficult to delineate a clear relationship between the monetary regime and various economic performance measures because of the indeterminate nature of the causal relationship between the monetary regime and macroeconomic variables. For example, fixed exchange rate regimes are thought to have a positive impact on trade and output because it reduces exchange rate uncertainty. On the other hand it can also reduce trade and output by restricting relative price adjustments. Another reason for the difficulty of determining a clear and unambiguous relationship between the monetary regime and economic performance is the problem trying to distinguish between the impact of the monetary regime on economic performance from other factors impacting on economic performance. Further empirical research on these issues seems, therefore, to be the only way of resolving the policy dilemma of determining which monetary regime is most appropriate, especially in small open economies. This paper, which is work in progress, attempts to provide some empirical answers to questions surrounding the link between the monetary regime and economic performance in the Caribbean. Section II of the paper therefore looks at the various types of exchange rate regimes around the world and the Caribbean, as well as, the generic aspects of currency boards and central banks (which reflect the institutional extremes in the context of monetary regimes), section III looks at the evolution of monetary regimes in CARICOM countries, section IV looks at economic performances under different regimes in the Caribbean and section V concludes.

### **A Taxonomy of Monetary Regimes**

Monetary regimes can be classified by the degree of discretion and flexibility they offer policy-makers. These regimes can also either be exchange rate based or monetary rule based frameworks. In fact, the customary distinction between fixed and flexible regimes masks the broad range of regimes which span a continuum from the classic single peg to basket pegs, cooperative agreements, currency boards, target zones, crawling pegs and dirty floats to pure floats. In the Caribbean three basic types of regimes have emerged, a currency board type arrangement, fixed peg with capital controls frameworks and flexible rate regimes. Some ambiguity is inevitable when attempting to define a currency board.

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<sup>1</sup> A monetary regime is defined in this paper as the institutions, conventions and rules governing the operation of the monetary system in countries. It includes the structure and powers of the monetary authority, the exchange rate arrangement and rules governing the relationship between the monetary authority and other stakeholders in the financial system (government, financial institutions and the public).

In principle, a currency board is defined as an arrangement in which 100% of base money creation is matched by foreign exchange reserves at a pre-announced exchange rate. However, in practice this is almost never the case as some flexibility is always involved. For example, the foreign exchange reserves backing required by law for the Eastern Caribbean dollar was at one point 100%, it was subsequently reduced to 70% and now stands at 60%.<sup>2</sup> In light of this we follow Ghosh, Gulde and Wolf (1998) and define currency boards in this study as those countries which are mandated by law to have at least 50% backing for their local currency.

Arguments in favor of currency board arrangements center on their ability to solve time consistency problems (Kyddland and Prescott 1977) and, in the context of the recent literature on currency crisis, their hypothetical ability to deter self-fulfilling runs and other undesirable multiple equilibria (Davies and Vines 1995). In fact, currency boards have recently been proposed for Indonesia and Russia, as a remedy for addressing economic and currency crises in these two countries. Once found all over the British colonies and in a few other countries, currency boards fell into disrepute and disuse in the 1950s and 1960s. Their disrepute seems now to have been based more on an association with colonialism than with their intrinsic demerits. They also went into disuse due to the intellectual appeal of central banks that permit activist and discretionary monetary policies. Consequently, nearly all the currency boards that had been in existence (some seventy in all) at the turn of the century, became central banks in the last five decades.

In the 1990s, there is increased interest in currency boards. Argentina, Bulgaria, Estonia, and Lithuania have adopted them. Hong Kong which had continued with its currency board since colonial times, abandoned it during the oil crisis in 1974 but returned to it in 1983. The recent interest in currency boards has spawned diametrically opposed views on currency boards. One group has been intensely enthusiastic about them while another group is much less so.<sup>3</sup> Even though much has been written about currency boards, there is little in the way of empirical research on them, particularly comparing the performance of currency boards with the central banks that replaced them.

Pegged regimes are supposed to limit excessive monetary expansion. This greater discipline it is argued also tends to generate greater confidence in the domestic currency which, in turn, leads to lower inflation for a given rate of monetary expansion. This greater confidence is also expected to lower real interest rates and promote faster output growth. Since a currency boards is essentially an extension of pegged regimes the

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<sup>2</sup> The actual foreign exchange reserves backing is nonetheless over 80% in most countries and is at about 99% in St. Kitts Nevis.

<sup>3</sup> Among them are Hanke and Schuller (1994), Walters and Hanke (1994), form the leaders of the enthusiastic group, while, Anna Schwartz (1993), Bennett (1994), John Williamson (1995) are in the less enthusiastic group. Even the latter claim that currency boards would be more appropriate under some circumstances for some countries compared to central banks.

difference between these two regime types is largely one of degree. Thus, currency boards is expected to have greater discipline and confidence when compared to pegged regimes. This extra credibility, however, comes at a price. Currency boards are more constraining on credit policy and the ability of the authority to adjust the exchange rate par. More generally, the cost depends on the susceptibility of the economy to shocks and the absence or ineffectiveness of alternative policy instruments. Another costs is the reduced ability of the central bank to act as lender of last resort in the face of liquidity problems.

Friedman (1953) has been the main proponent of flexible regimes. He argued that these regimes are desirable because they facilitate national relative price adjustment which helps the BOP to adjust, particularly when domestic wages and prices are sticky. This helps to maintain the relative competitiveness of countries. Others have argued that flexible regimes generate too much exchange rate uncertainty which hampers investment and trade. It is therefore obvious that much of the questions about the suitability of various monetary regimes in different environments remains largely unanswered, especially in the Caribbean<sup>4</sup>. This research seeks to redress this situation.

It is also useful to compare the generic aspects of currency boards and central banks since they represent the institutional polar extremes for monetary regimes in the Caribbean. First, a central bank has discretionary power over money while a currency board in its strictest incarnation has no such power. A central bank can behave like a currency board, but a currency board cannot behave like a central bank. Second, a central bank can function with a fixed exchange rate, an adjustable peg, or a flexible exchange rate. A currency board usually has a fixed rate (some small change from the par value can take place as in the case of Hong Kong). This makes money supply largely endogenous in a currency board.

Third, a central bank holds domestic assets such as loans and advances to the Government and to the commercial banks. A currency board usually does not hold much domestic assets and is legally constrained in terms of lending either to the Government or banks. Moreover, without (or with a few) domestic assets it cannot effectively influence the supply, availability, and cost of money. Fourth, a central bank has a battery of monetary instruments ranging from discount rate policy, reserve requirements, overall portfolio ceilings, deposit rate controls, and a variety of other selective controls. A currency board usually has none. Finally, a central bank can influence the link between the level of foreign assets and the money supply by engaging in open market operations to "sterilize" capital inflows and outflows, thus breaking a direct link between external reserves and the money supply. A currency board usually cannot initiate any such action. In fact, its main attribute is the preservation of the link that is found between reserves and the domestic money supply.

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<sup>4</sup> The exception to this is a study by McCarthy and Zanalda (1996) on Caribbean countries.

The above comparison highlights the fact that there are some fundamental institutional differences between different monetary regimes which should predispose them to facilitate certain economic outcomes. The important questions, however, relate to how they actually perform in areas such as inflation, monetary discipline, fiscal management and economic growth. A review of the evolution of monetary regimes in the region is also instructive as it serves to highlight the performance of various regimes as the economic environment changed. It also highlights the structures and conventions that worked and those which did not.

### **The Evolution of Monetary Regimes in the Caribbean**

Monetary regimes in different CARICOM countries have evolved from a similar past into three broad regime types. This to a large extent was due to the influence of the monetary system set up by the British and Dutch for their colonies in the region and by the perceived needs of these newly independent territories. In what follows, a brief historical review of the development of monetary regimes in CARICOM countries will be outlined to provide perspective on the underlying factors driving changes in these regimes. The structure of the monetary system in these jurisdictions in their early stages of development, though broadly similar, had subtle differences and different development parts which influenced the regime structures in place today and the way these regimes impacted on economic performance. The three broad types of systems that have emerged today will also be reviewed in an effort to determine the components of particular regimes which seem to have worked best.

#### **The Bahamas**

In the Bahamas, as in other former British territories, the Central Bank evolved out of a currency board arrangement. The Currency Board introduced in 1919 was simply charged with the responsibility for the issuance and redemption of Bahamian currency. The natural development of the financial sector coupled with the devaluation of the Pound Sterling (to which the Bahamas Dollar was pegged) in 1967 intensified the call for new monetary arrangements to better deal with the changing environment. In particular, there was a need for discretionary exchange rate arrangements in light of the instability of the Pound Sterling which caused instability of the local currency under the currency board arrangement.

These problems eventually led to the introduction of a new monetary arrangements with the Bahamian Dollar which was now pegged to the US Dollar. This development together with an increasing need for better monitoring and supervision of the banking sector, led to the establishment of the Bahamas Monetary Authority (BMA) in 1968. The BMA was able to issue currency, supervise banks and advise government but was unable to set reserve requirements or use instruments of monetary and credit controls. The weaknesses inherent in this type of arrangements were subsequently exposed by the inability of the BMA to do anything about the sharp expansion in money supply that

occurred as banks converted Sterling denominated assets to Bahamian dollar denominated assets. The BMA was similarly hamstrung when OPEC raised oil prices in the early 1970's creating balance of payments problems for the Bahamas. Indeed, one of the only policy option open to the authorities was to adjust the exchange rate, which was done very frequently between 1970 and 1974.

To address some of the shortcomings of the BMA arrangements, a fully fledged Central Bank was introduced in 1974. The Central Bank was charged with the responsibilities of the precursor BMA but it was also charged with managing the country's exchange control regulations, issuing and market development for government securities and the setting of reserve requirements. The central goal of monetary policy pursued by the Central Bank was and still is to support the fixed parity between the Bahamas and US dollars, while allowing the pursuit of other development objectives. The main instrument of monetary policy was reserve requirements, changes in the Bank's re-discount rate, selective credit controls and moral suasion.

## **Barbados**

The Eastern Caribbean Central Currency Area (ECCA), a currency board arrangement was discarded and a Central Bank set up in 1972. Under the ECCA the currency was partially backed and there were strict limitations on the extent of government borrowing from the monetary authorities. At the inception of the Central Bank, liquidity problems in the banking sector, rising inflation and a deteriorating balance of payments position, required a considerable degree of discretionary action to manage the situation. This would not have been possible under the currency board arrangement. Reserve requirements, credit controls and interest rate controls were introduced to manage the situation. The primary goal of the Central Bank was again to maintain exchange rate stability. As the importance of Sterling fell off, the Barbadian dollar was re-pegged to the US Dollar. The strong commitment to the peg in those early days was reflected in the level of reserve requirement - as high as 25% in the late 1970s. During the economic difficulties in the early 1980's and 1990's, the Central Bank was pressured into lending to the government in 1981 and 1991 which exacerbated the economic difficulties. This reflected the downside of discretionary policy under Central Bank arrangements, that is, the discretion to implement flawed policies.

## **Belize**

The Belize Board of Commissions of Currency, a currency board, was established in 1884 and continued operations until 1976. In 1976, the Belize Monetary Authority (BZMA) succeeded the currency board and was vested with slightly broader powers than its precursor institution. In addition to issuing currency, it was expected to regulate commercial banking operations, initiate appropriate monetary policies, be a banker to the government and to manage the country's foreign exchange reserves. The tools of monetary policy open to the BZMA were treasury bills, the re-discount rate, reserve requirements and selective credit controls. The BZMA was required to hold external

assets of no less than 50% of the local currency in circulation and its domestic liabilities compared to 100% under the old currency board.

In 1982, the Central Bank of Belize was established. In addition to the powers of the previous BZMA, the Central Bank could also set minimum and maximum rates of interest. The new legislative framework also allowed the Central Bank to hold treasury bills up to 5 times its paid up capital and reserves. It also reduced the backing of external assets to 40%. Moreover, from 1993 the Central Bank was allowed to lend the government up to 20% of current government revenue, up from 15% which obtained previously.

### **The Eastern Caribbean**

The evolution of the monetary system in OECS countries went through three basic stages. The ECCA, a currency board, was established in 1965 as a successor to the British Caribbean Currency Board (BCCB) after Guyana and Trinidad and Tobago withdrew to form their own central banks. The BCCB required 100% Sterling backing for the BCCB dollar. The successor ECCA was only required to hold 70% backing in foreign assets, which was further reduced to 60% in 1975. The ECCA could also invest up to 10% of the estimated revenues of the participating governments in treasury bills and up to 15% of its demand liabilities in long term government securities. Even with its charged operating procedures, however, the ECCA still largely functioned as a money changer, a clearing system for banks and a means of affecting foreign payments on behalf of banks.

The second phase began when Barbados left the ECCA to set up its own Central Bank between 1972 and 1974. During this overlapping period both institutions cooperated to effect a smooth transition. The Eastern Caribbean dollar was pegged to Sterling but as with other Caribbean territories its peg was switched to the US dollar in 1976.

The third phase began with the establishment of the Eastern Caribbean Central Bank (ECCB) in 1983 after several years of difficult negotiations. The ECCB had all the powers of a traditional central bank, that is, the bank could now regulate credit, fix interest rates, establish reserve requirements and carry out bank supervision. The rules based system of the old ECCA was, however largely preserved, especially the 60% backing by external assets required for the EC dollar. This would restrict the scope for monetary policy. Active monetary policy was therefore not used much except for a 4% floor on deposit rates. Nevertheless, the development objectives of the ECCB were still actively pursued, especially its capital market development programme.

The fixed parity to the US dollar has continued and the rate has not changed since 1976 when the EC dollar was re-pegged to the US dollar. The authorities have also moved to more flexible foreign exchange arrangements, with the removal of exchange controls on the current account in 1995.



## **Guyana**

Guyana opted out of the BCCB in 1965 to form its own Central Bank. The Central Bank had all the powers normally associated with a central bank. The Guyana dollar was pegged to sterling until 1975 when the currency was pegged to the US dollar. By 1984, significant balance of payments and other problems were bringing heavy pressure to bear on the exchange rate. In an attempt to maintain some stability, the currency was devalued and pegged to a basket of currencies in 1994, with the US dollar serving as the intervention currency. Thereafter, various flexible regimes for the foreign exchange market were tried. In the face of a thriving black market in foreign currency, the government established the 'cambio system' which was designed to trade foreign exchange at market rates, in an effort to eliminate the black market. Eventually, a floating exchange rate regime was introduced in 1990. The exchange rate is now determined on a daily basis by the average free market rates of all dealers, with the Bank of Guyana intervening from time to time to smooth out large temporary problems. The system moved to a fully flexible system in 1995 when exchange control regulations were abolished.

## **Jamaica**

The monetary framework in Jamaica evolved out of the Board of Commissioners of Currency, a currency board which existed between 1939 and 1961 and had the statutory authority for the issue of the domestic currency. The Bank of Jamaica (BOJ) was established by the Bank of Jamaica Act in 1960 and commenced operations in 1961. The BOJ was responsible for exchange rate and monetary policy, as well as, for the regulation of banking in Jamaica. From 1961 to 1973 the Jamaican dollar was pegged to the Pound Sterling. However, as with other territories, the devaluation of Sterling and the fact that the US was now Jamaica's major trading partner led to the Jamaican dollar being re-pegged to the US dollar in January 1973. From as early as 1977, however, this fixed exchange rate regime had begun to unravel driven by external shocks, which created balance of payments problems. Despite active interventions by the BOJ, fiscal indiscipline and poor terms of trade began to put pressure on foreign exchange reserves and hence on the fixed peg. Between 1978 and 1983, therefore, there were a number of devaluations. In 1983, an auction system for foreign exchange was introduced which signaled the beginning of a flexible exchange rate regime in Jamaica. Between 1983 and 1988 there was a period of relatively good economic performance. In the aftermath of Hurricane Gilbert in 1988, however, the rebuilding exercises created large public sector deficits which once again placed pressure on the exchange rate. In 1990, therefore, the foreign exchange market was fully liberalised. Under this new system, the purchase and sale of foreign exchange was executed by authorised dealers and the exchange rate was determined by the interplay of the demand and supply for foreign exchange- in effect a change to a floating (managed) exchange rate regime. Exchange controls were abolished in 1992 to formalise the floating exchange rate regime.

## **Suriname**

The Monetary arrangements in Suriname evolved in a slightly different way than the system in the British West Indies. Firstly, the Central Bank of Suriname was established in 1957, much earlier than those in the English speaking Caribbean. Moreover, prior to this a commercial bank was responsible for the issue of the Surinamese Guilder for more than 10 years, with the bank being assisted by the Bank Commissioner which provided guidelines for the conduct of monetary policy. There were amendments to the central bank legislation in 1968 and 1975, the first was designed to improve the ability of the Central Bank to regulate banks while the latter gave the Central Bank added powers of intervention in the areas of open market operations, lending to government and credit controls. In its early years, the Central Bank focused on managing inflation, encouraging growth and supporting the fixed parity of the Surinamese Guilder. Later, the Bank became very accommodating in its lending to government during the period of political instability (1980-1988). The Surinamese guilder remained fixed to the US dollar from 1970 to 1994. In that time there was only one devaluation, despite significant economic problems, especially huge balance of payment and fiscal deficits. As foreign exchange reserves fell, the authorities resorted to harsher trade and exchange restrictions. These restrictions led, however, to the development of a thriving black market in foreign currencies, as the Surinamese guilder was significantly overvalued at the official rate and since fiscal and balance of payment dis-equilibria were not corrected.

In an attempt to deal with these problems, a multiple or dual exchange rate system was introduced in 1992 with different fixed parity for certain exports and imports. By 1992, as much as 8 exchange rates were in use in Suriname. In 1993, a more flexible system of foreign exchange management was introduced where currencies were brought at quite competitive rates by financial institutions but the sale of such currencies were still restricted. These new arrangements posed a threat to the parallel market for foreign exchange but the restriction in the sale of currency still gave that market the edge.

In July 1994, the various exchange rates were unified. The quoted exchange rate was now a weighted average of the bank and non-bank cambio rates. The demand side of the foreign exchange market in Suriname is, however, still regulated. The system is therefore not a float in the true sense of the word but a more restricted version of a floating exchange rate regime.

## **Trinidad and Tobago**

The Central Bank of Trinidad and Tobago was established in 1964. Previously, Trinidad and Tobago had operated under the British Caribbean Currency Board which served basically as issuer of local currency which was backed 100% by Sterling. From 1964 to 1976, Trinidad and Tobago operated a system of fixed parity to the Pound Sterling. Thereafter, the local currency was pegged to the US dollar. The fixed parity system did not perform well in the face of falling oil prices. Monetary tightening in the form of higher reserve requirements, credit controls and re-discount rates were all inadequate to

deal with this situation and the balance of payments and fiscal positions deteriorated. Exchange controls and direct trade restrictions were also used in an attempt to stem the decline in international reserves but these policy initiatives also proved to be inadequate. Indeed, exchange controls led to foreign exchange transactions increasingly being carried out outside of the formal financial sector and the Trinidad and Tobago dollar had to be devalued a number of times before 1993.

In 1988 therefore, the government resorted to seeking financial assistance from the IMF under the Compensatory Financing Facility and a Stand-by Arrangement and, later the World Bank under a Structural Adjustment Loan. Conditionalities under these programmes required the liberalisation of the trade, exchange and financial sectors. These shifts in the policy regime led in 1993 to the government taking the decision to abolish exchange controls on the current and capital accounts and to float the Trinidad and Tobago Dollar. The value of the Trinidad and Tobago dollar was now determined on the basis of daily demand and supply of foreign exchange in the banking system, with the Central Bank intervening from time to time as the situation warranted.

### **The Three Type of Monetary Regimes that have Evolved in the Region**

From the information contained above, it is evident, that although most monetary regimes in CARICOM evolved out of similar past, economic developments<sup>5</sup> and their own peculiar economic structures have played a large part in shaping the different regimes that are in place today. It is clear also that three distinct types of monetary regimes have developed in CARICOM countries. The first type, the currency board arrangement, is located in the group of countries in the Eastern Caribbean whose economies are dependent largely on tourism, agriculture, remittances and external assistance for hard currency. These countries recognising their vulnerability to external shocks have put in place a common currency and Central Bank (ECCB), fixed their currency to the US dollar and refrained from monetizing the public debt. Exchange controls were also put in place but they were and still are liberally administered. This region retains most elements of the rules based system, in that, it is still mandated by law that its local currency is backed by 60% of foreign assets. There are also limits on how much individual governments can borrow from the ECCB and monetary policy is not actively pursued. This arrangement has some elements of an orthodox currency board but discretion is still exercised, especially in the area of capital market development and the regulation and supervision of financial institutions. In terms of classification, therefore, the Eastern Caribbean monetary arrangement falls more neatly into the currency board class.

The second type of monetary regime that has evolved is located in countries which consider themselves large enough to have their own central banks and who have

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<sup>5</sup> Changes to the international monetary system (the collapse of the Bretton Woods System), external economic shocks (changes in the price of oil and bauxite) and economic and financial liberalisation.

occasionally used monetary financing of the public debt. This has, however, been sparingly used because they are aware of their particular circumstances impose constraints on their ability to monetise public debt, preventing unsustainable expansions of the money supply. These countries maintain fix pegs with the US dollar and have capital controls in place. In Belize's case, the Central Bank must maintain foreign assets of not less than 40% as backing for the domestic currency and government is constrained to borrowing not more than 20% of average current revenues, features which are vestiges of the former currency board arrangement. Following Ghosh, Gulde and Wolf (1998), however, we classify this arrangement as a fixed peg regime rather than a currency board because the criterion of at least 50% backing of the local currency by external assets is not satisfied in this case. The monetary regimes in these countries could, therefore, most accurately be described as fixed peg arrangements with capital controls which are liberally administered and, with discretionary powers in the conduct of monetary policy.

The third type of monetary regime that has developed is the flexible rate arrangements or managed floating exchange rate arrangements. This type of regime has developed in the larger territories (commodity exporters) that have their own central banks and have not always been successful in maintaining the stability of their exchange rate as commodity prices fluctuated. The boom in commodity prices seems to have encouraged the expansion of the public sector beyond sustainable levels. The fall in commodity prices triggered falling exchange reserves, which, together with overly accommodating financing of fiscal deficits by the central banks, inevitably weakened the exchange rate in those countries. The adjustment programmes that followed had as part of them, financial liberalisation elements, which provided the bridge to the floating (managed) exchange rate regime.

In these countries the exchange rate is now determined by the interplay of the demand and supply for foreign exchange (mostly US dollars) with periodic intervention by the central bank to buy and sell foreign currency to moderate fluctuation in the rate. Capital controls have also been abolished (except Suriname<sup>6</sup>) and although there are no restrictions on the central banks financing of fiscal deficits. Nevertheless, fiscal rectitude is the order of the day because the authorities recognise that endemic fiscal imbalances have serious implications for the stability of the exchange rate.

These three types have evolved over a period of exceptional change in the region and a good question would seem to be whether these types are going to continue evolving. For now, it appears that these monetary regimes are unlikely to change dramatically in the near future. What is evident is that there has been a marked trend to the liberalisation of the financial systems in the region, which has manifested itself in capital controls being increasingly liberally administered if not removed altogether. Even in the OECS, nationals of these countries can now keep foreign currency deposits of up to US\$100,000.

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<sup>6</sup> In the case of Suriname, however, there are still restriction in the demand side for foreign exchange.

The recent spate of currency crisis in Asia have, however, renewed debate on the question of whether more open (discretionary) approaches to the monetary regime is desirable, especially in small open economic systems. This increasing reservation has particular relevance to the removal of restrictions on the capital account of the balance of payments. One cannot therefore say with confidence that the trend to more open monetary systems will continue to have an impact on the evolution of monetary regimes in the Caribbean (see Appendix 1).

### **The Economic Performance under Alternative Monetary Regimes**

The Central issue is this paper in spite of the discussion of the features of various monetary regimes, is their ability to promote monetary and price stability and facilitate growth. It is therefore important to review how key economic indicators have changed as monetary systems evolved in the Caribbean. To facilitate this review, the countries in the region would be categorised as either fixed peg, currency board or floating (managed) and the average performance under these three types of monetary regimes analysed.

The data used is annual data on inflation, the rate of growth of M1, the growth rate of real GDP and the ratio of the overall fiscal deficit to GDP covering the period 1970 to 1997. The currency board class, based on our classification criterion of at least 50% backing for the domestic currency, resulted in a data set for this group which comprised observations for OECS countries for the full period, observation for Barbados for 1970 and 1971 and Belize from 1970 to 1981. The pegged rate regime group comprised observations for The Bahamas for the full period, Barbados from 1972 to 1997, Belize from 1982 to 1997, Guyana from 1970 to 1989, Jamaica from 1970 to 1989, Suriname from 1970 to 1994 and Trinidad and Tobago from 1970 to 1993. The managed floating regime group comprised observations from Guyana for the years 1990 to 1997, Jamaica for the years 1990 to 1997, Suriname for the years 1995 and 1997 and for Trinidad and Tobago for the years 1994 to 1997.

It appears from the data that those countries operating under the currency board arrangement have better inflation performance than either those operating under a fixed peg or a floating rate regime. It also appears that the lower inflation has in large part been due to a lower average rate of monetary expansion, presumably caused by the restrictions on the scope for discretionary credit policy (see Appendices 2A, 2B and 2C). This would in turn result in greater discipline and more confidence than under the simple fixed peg or floating rate arrangements.

For those countries that experienced very high inflation, this was caused in many cases by external shocks of one sort or another (oil price increase of 1973/74 and 1978/79), structural imbalances (huge persistent fiscal deficits) and adjustment to more realistic relative prices (devaluations and depreciations when the exchange rate regime changed from fixed to floating). Those countries that experienced the most prolonged instability were largely those with serious structural problems (over-valued exchange rates) and those that had the least success in managing their fiscal expenditure in line with falling

revenues. In fact, the movement to floating exchange rate regimes was in large part an effort to correct some of these structural problems, as well as an effort to liberalise the foreign exchange market.

The countries that adopted the floating rate regime experienced the highest average inflation of the three type of arrangements (see Appendix 2A), but this to be expected as the most drastic adjustment of exchange rates accrued in the two years following the floatation of these currencies, which in turn generated very high inflation rates. The reasonably good inflation performance of these floating exchange rate regime countries is, however, much better after the initial period of adjustment. In fact, the average inflation rate for these countries, excepting Jamaica, after the large initial correction is comparable to the currency board arrangement countries.

It is therefore uncertain whether these countries in the fullness of time can categorically be said to have a manifestly higher inflation rate than the other two types of monetary regimes. In this respect, an important factor underlying the overall inflation performance of these countries would be the extent to which monetary expansion is kept in check. It is noteworthy that Jamaica is the only country among the floaters which did not get a handle on monetary expansion. In fact if Jamaica is excluded from this group and the year of regime change plus 2 (the years when most of the adjustment took place) the performance of the floaters in terms of monetary restraint is much closer to the two other regime types. The currency board arrangement in effect seems to have enforced an amount of discipline in governments, leading to much better performances in terms of inflation.

One of the arguments in the literature against the use of currency board arrangements is the notion that currency boards are likely to deliver lower economic growth performances, ostensibly because of real exchange rate overvaluation or because of the restriction on an independent credit policy. Far from having lower growth rates, the annual average real growth rate was 5.03% for currency board countries compared to 4.43% and 2.5% for "floaters" and "peggers" respectively. While one would hesitate to ascribe the better growth performance to the monetary regime alone<sup>7</sup>, the opposite proposition that currency boards are associated with lower growth finds no support in the data.

## Conclusion

The fact that floating rate countries have increasingly focused on getting their macro-economic performance right bodes well for the future, as this discipline acts as a stabilising force on the exchange rate. Indeed, the present disciplined approach of virtually all the countries in the region in terms of fiscal management and prudent

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<sup>7</sup> McCarty and Zanalda (1996) do in fact argue that the better growth performance of the Currency board countries relative to other countries in the Caribbean is in part due to greater concessionary flows to currency board countries during the period 1970 to 1997.

monetary and credit policies have been driven by an understanding of how the excesses of the past in these areas contributed to instability and poor economic performance. If this approach continues these countries are likely to continue their good performance in the area of inflation control.

The floating rate regime countries will, however, have to be particularly careful that their foreign exchange markets maintain a level of stability as inflation in their jurisdictions is driven by import prices. In this respect the ability to intervene meaningfully in the foreign exchange market is essential. This of course depends on the level of foreign exchange reserves available to the central bank. Stability is also dependent, however, on the extent of speculative activity in the foreign exchange market and the prevalence of foreign portfolio investments and the volatility of such investments. An important problem is that the last two factors are not totally within the control of the authorities in some countries and these factors have serious implications for stability of the exchange rate and therefore for the rate of inflation. The authorities can be prudent in their fiscal affairs and the approach to monetary policy but factors which are still outside the control of the authorities can have a huge impact on stability.

It is obvious therefore that success hinges not only on the action of the monetary and fiscal authorities but also on the institutional structure and incentives in sectors other than the monetary and fiscal arenas. The monetary arrangements is therefore only part of the puzzle. The ability of the authorities to get a handle on these risks will in large measure determine their level of success in maintaining stable exchange rate and controlling inflation.

Of course, the present prudent approach by authorities in these countries to managing their monetary (and fiscal) affairs is dependent on their discretion and wisdom whereas the policy stance in the currency board area is to a large extent based on a rule-based system. Countries operating under the latter system is of course less likely to change their current approach than the fixed pegged or floating rate regime countries because there are specific legal and institutional barriers to discretionary monetary policy. This is the critical point for the appropriateness of a particular monetary regime, whether at the margin policy will depart from prudence, especially when terms of trade worsens and the revenue side of government operations deteriorates.

The old but still relevant question of whether a discretionary system is better than a rules based system is therefore once again the crux of the dilemma and the determination of this question hangs largely on the type of incentive structure faced by the monetary and fiscal authorities.

Important questions that still have to be answered include whether different monetary regimes generated different inflation management performance because of the monetary arrangement or because of some other country specific factors. Another important question is that of causality. For example, do particular monetary regime generate lower inflation or is it simply that countries with low inflation are predisposed to adopting a

particular regime, that is the regime choice is endogenous. Finally, the question of contamination also needs to be dealt with. For instance, a country may pursue policies which are inconsistent with the maintenance of a peg, inflationary pressures may therefore be released when the peg is abandoned, misleadingly attributing the inflation increases to the successor regime. These issues will be dealt with in a more formal analytical framework (similar to Ghosh, Gulde and Wolf (1998)) to allow for robustness tests on some of the questions raised above, in the final part of this research.



## Bibliography

- Alsina, L. and Lawrence H. Summers (1993), "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence." Journal of Banking and Credit, Vol. 25. No 2, May.
- Bennett, Adam G. G. (1995). "Currency Boards: Issues and Experiences." International Monetary Fund.
- Basu. S. K. (1971). Review of Current Banking Theory and Practice. Macmillan.
- Cukierman, Alex, Pantelis Kalaitzidakis, Lawrence H. Summers. and Steven Webb (1993), "Central Bank Independence, Growth, Investment, and Real Rates." Carnegie-Rochester Conference Series on Public Policy, Vol. 39.
- Calvo, Guillermo. W. Max Corden. Stanley Fischer. Alan Walters. and Guillermo Perry (1996). "Currency Boards and External Shocks: How Much Pain? How Much Gain?" World Bank and Latin American Studies. Proceedings.
- Davies. G. and D. Vines (1995). "Equilibrium Currency Crisis" CEPR Discussion Paper No. 1239.
- Fischer, Stanley (1982), "Siegnoirage and the Case for National Money." Journal of Political Economy, Vol. 90.
- (1991). "Growth, Macroeconomics and Development." NBER Macroeconomics Annual.
- Goldsmith, Raymond W. (1983). The Financial Development of India 1860-1977. Oxford University Press.
- Ghosh. A., Gulde. A.. and H. Wolf (1998). "Currency Boards: The Ultimate Fix?". IMF Working Paper No. 8.
- Greaves. Ida (1953). "Colonial Monetary Conditions." Colonial Research Studies. and No. 10. HMSO.
- Hanke. Steve H and Kurt A. Schuller (1991). "Teeth for the Bulgarian Lev: A Currency Board Solution." International Freedom Foundation.
- Kemmerer, E.W. (1919). Modern Currency Reform. Macmillan.
- Kydland, D. and E. Prescott (1977), "Rules rather than Discretion: The Inconsistency of Optimal Plans", Journal of political Economy, Volume 85: 3 : 473-91.
- Liviatan, Nissan (1993) (Ed) "Proceedings of a Conference on Currency Substitution and Currency Boards," World Bank Discussion Paper, No. 207, World Bank.
- Perrson, Torstan and Guido Tabellini (1993), "Designing Institutions for Monetary Strategy" "Central Bank Independence, Growth, Investment, and Real Rates." Carnegie Rochester Conference Series on Public Policy, Vol. 39.

Schuller, Kurt A. (1992), Currency Boards Ph.D. Dissertation, George Mason University, (Unpublished). Schuller Home Page, Internet.

Roubini, Nouriel and Jeffery Sachs (1989). "Government Spending and Budget Deficits in Industrial Countries," Economic Policy, No. 8.

Schwartz, Anna J. "Currency Boards: Their Past, Present and Possible Future Role," Carnegie- Rochester Conference Series on Public Policy, Vol. 39.

Taylor, John B. (1993), "Discretion versus Policy Rules in Practice" Carnegie-Rochester Conference Series on Public Policy, Vol. 39.

Viner, Jacob (1955), Studies in the Theory of International Trade. George Allen and Unwin Ltd.

Williamson, John, (1995). What Role for Currency Boards? Institute for International Economics, September.

Walters, Alan and Steve H. Hanke (1987), "Currency Boards," The New Palgrave: A Dictionary of Economics, Vol. 1, and (Eds.) J. Eatwell, M. Milgate and P. Newman, St. Martin's Press.

**APPENDIX I**  
**A Taxonomy of Monetary Regimes in CARICOM**

The Bahamas					Barbados			
Year	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Backing Rule	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Backing Rule
1970	UDP	Y	N	N	LLP (CB)	Y	N	Y
1971	UDP	Y	N	N	LLP (CB)	Y	N	Y
1972	UDP	Y	N	N	LLP	Y	N	Y
1973	UDP	Y	N	N	LLP	Y	N	Y
1974	UDP	Y	N	N	LLP	Y	N	N
1975	UDP	Y	N	N	LLP	Y	N	N
1976	UDP	Y	N	N	UDP	Y	N	N
1977	UDP	Y	N	N	UDP	Y	N	N
1978	UDP	Y	N	N	UDP	Y	N	N
1979	UDP	Y	N	N	UDP	Y	N	N
1980	UDP	Y	N	N	UDP	Y	N	N
1981	UDP	Y	N	N	UDP	Y	N	N
1982	UDP	Y	N	N	UDP	Y	N	N
1983	UDP	Y	N	N	UDP	Y	N	N
1984	UDP	Y	N	N	UDP	Y	N	N
1985	UDP	Y	N	N	UDP	Y	N	N
1986	UDP	Y	N	N	UDP	Y	N	N
1987	UDP	Y	N	N	UDP	Y	N	N
1988	UDP	Y	N	N	UDP	Y	N	N
1989	UDP	Y	N	N	UDP	Y	N	N
1990	UDP	Y	N	N	UDP	Y	N	N
1991	UDP	Y	N	N	UDP	Y	N	N
1992	UDP	Y	N	N	UDP	Y	N	N
1993	UDP	Y	N	N	UDP	Y	N	N
1994	UDP	Y	N	N	UDP	Y	N	N
1995	UDP	Y	N	N	UDP	Y	N	N
1996	UDP	Y	N	N	UDP	Y	N	N
1997	UDP	Y	N	N	UDP	Y	N	N

Appendix 1 (Cont'd)

Belize					Eastern Caribbean			
Year	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Backing Rule	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Banking Rule
1970	LLP (CB)	Y	Y	Y <sup>3</sup>	LLP	Y	Y	Y
1971	LLP (CB)	Y	Y	Y	LLP	Y	Y	Y
1972	LLP (CB)	Y	Y	Y	LLP	Y	Y	Y
1973	LLP (CB)	Y	Y	Y	LLP	Y	Y	Y
1974	LLP (CB)	Y	Y	Y	LLP	Y	Y	Y
1975	LLP (CB)	Y	Y	Y	LLP	Y	Y	Y
1976	LLP (CB)	Y	Y	Y <sup>4</sup>	UDP	Y	Y	Y
1977	UDP (CB)	Y	Y	Y	UDP	Y	Y	Y
1978	UDP (CB)	Y	Y	Y	UDP	Y	Y	Y
1979	UDP (CB)	Y	Y	Y	UDP	Y	Y	Y
1980	UDP (CB)	Y	Y	Y	UDP	Y	Y	Y
1981	UDP (CB)	Y	Y	Y	UDP	Y	Y	Y
1982	UDP	Y	Y <sup>1</sup>	Y <sup>5</sup>	UDP	Y	Y	Y
1983	UDP	Y	Y	Y	UDP	Y	Y	Y <sup>1</sup>
1984	UDP	Y	Y	Y	UDP	Y	Y	Y
1985	UDP	Y	Y	Y	UDP	Y	Y	Y
1986	UDP	Y	Y	Y	UDP	Y	Y	Y
1987	UDP	Y	Y	Y	UDP	Y	Y	Y
1988	UDP	Y	Y	Y	UDP	Y	Y	Y
1989	UDP	Y	Y	Y	UDP	Y	Y	Y
1990	UDP	Y	Y	Y	UDP	Y	Y	Y
1991	UDP	Y	Y	Y	UDP	Y	Y	Y
1992	UDP	Y	Y	Y	UDP	Y	Y	Y
1993	UDP	Y	Y <sup>2</sup>	Y	UDP	Y	Y	Y
1994	UDP	Y	Y	Y	UDP	Y	Y	Y
1995	UDP	Y	Y	Y	UDP	Y	Y	Y
1996	UDP	Y	Y	Y	UDP	Y	Y	Y
1997	UDP	Y	Y	Y	UDP	Y	Y	Y

## Appendix 1 (Cont'd)

Year	Guyana				Jamaica			
	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Backing Rule	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Banking Rule
1970	BWP	Y	N	N	BWP	Y	N	N
1971	BWP	Y	N	N	BWP	Y	N	N
1972	LLP	Y	N	N	LLP	Y	N	N
1973	LLP	Y	N	N	UDP	Y	N	N
1974	LLP	Y	N	N	UDP	Y	N	N
1975	UDP	Y	N	N	UDP	Y	N	N
1976	UDP	Y	N	N	UDP	Y	N	N
1977	UDP	Y	N	N	UDP	Y	N	N
1978	UDP	Y	N	N	UDP	Y	N	N
1979	UDP	Y	N	N	UDP	Y	N	N
1980	UDP	Y	N	N	UDP	Y	N	N
1981	UDP	Y	N	N	UDP	Y	N	N
1982	UDP	Y	N	N	UDP	Y	N	N
1983	UDP	Y	N	N	UDP	Y	N	N
1984	UDP	Y	N	N	UDP	Y	N	N
1985	UDP	Y	N	N	UDP	Y	N	N
1986	UDP	Y	N	N	UDP	Y	N	N
1987	UDP	Y	N	N	UDP	Y	N	N
1988	UDP	Y	N	N	UDP	Y	N	N
1989	UDP	Y	N	N	UDP	Y	N	N
1990	FL	N	N	N	FL	Y	N	N
1991	FL	N	N	N	FL	Y	N	N
1992	FL	N	N	N	FL	N	N	N
1993	FL	N	N	N	FL	N	N	N
1994	FL	N	N	N	FL	N	N	N
1995	FL	N	N	N	FL	N	N	N
1996	FL	N	N	N	FL	N	N	N
1997	FL	N	N	N	FL	N	N	N

## Appendix 1 (Cont'd)

Year	Suriname				Trinidad and Tobago			
	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Backing Rule	Exchange Rate Regime	Exchange Controls	Restrictions on Government Borrowing	Banking Rule
1970	UDP	Y	N	N	BWP	Y	N	N
1971	UDP	Y	N	N	BWP	Y	N	N
1972	UDP	Y	N	N	LLP	Y	N	N
1973	UDP	Y	N	N	LLP	Y	N	N
1974	UDP	Y	N	N	LLP	Y	N	N
1975	UDP	Y	N	N	LLP	Y	N	N
1976	UDP	Y	N	N	UDP	Y	N	N
1977	UDP	Y	N	N	UDP	Y	N	N
1978	UDP	Y	N	N	UDP	Y	N	N
1979	UDP	Y	N	N	UDP	Y	N	N
1980	UDP	Y	N	N	UDP	Y	N	N
1981	UDP	Y	N	N	UDP	Y	N	N
1982	UDP	Y	N	N	UDP	Y	N	N
1983	UDP	Y	N	N	UDP	Y	N	N
1984	UDP	Y	N	N	UDP	Y	N	N
1985	UDP	Y	N	N	UDP	Y	N	N
1986	UDP	Y	N	N	UDP	Y	N	N
1987	UDP	Y	N	N	UDP	Y	N	N
1988	UDP	Y	N	N	UDP	Y	N	N
1989	UDP	Y	N	N	UDP	Y	N	N
1990	UDP	Y	N	N	UDP	Y	N	N
1991	UDP	Y	N	N	UDP	Y	N	N
1992	UDP	Y	N	N	UDP	Y	N	N
1993	UDP	Y	N	N	FL	N	N	N
1994	FL	Y	N	N	FL	N	N	N
1995	FL	Y	N	N	FL	N	N	N
1996	FL	Y	N	N	FL	N	N	N
1997	FL	Y	N	N	FL	N	N	N

Sources: IMF Annual Report on Exchange Arrangements and Exchange Restrictions, Various Issues.

IMF Occasional Paper # 154, Credibility without rules? Monetary Frameworks in the Post-Bretton Woods Era  
C. Cottarelli and C. Giannini, 1997.

The Financial Evolution of the Caribbean Community (1970-1996), L. Clarke and D. Darns (Eds.), 1997.

Notes: BWP=Bretton Wood Peg, CB=Currency Board, LLP=Pound Sterling Peg, FL= Floating Exchange Regime  
UDP=US Dollar Peg.

## Appendix 2A: Inflation Performance Under Different Monetary Regimes

INFLATION													
YEAR	Bahamas	Barbados	Belize	Guyana	Jamaica	Suriname	T&T	Ant. & Bar.	Dominica	Grenada	St. Kitts	St. Lucia	St. Vincent
1970	6.2	7.3		3.3	14.7	2.6	2.5	-	12.4			13.4	
1971	4.6	7.5		1	5.3	0.2	3.5	-	3.6			8.4	
1972	6.8	11.9		4.9	5.4	3.2	9.3	-	3.7			7.9	
1973	5.5	16.9		7.6	17.7	12.9	14.8	-	12.1			13.4	
1974	13.1	38.9		17.4	27.2	16.9	22	-	34.4			34.2	
1975	10.4	20.3		7.9	17.4	8.4	17	-	19.9			17.7	6.8
1976	4.3	5		9	9.8	10.1	10.7	-	10.9			9.7	11.3
1977	3.2	8.4		8.2	11.2	9.7	11.7	13.8	86.5	18.5		8.9	10.2
1978	6.1	9.5		15.2	34.9	8.8	10.3	6.1	-36.7	18.1		10.9	8.4
1979	9.1	13.2		17.8	29.1	14.8	14.7	16.3	-	20.9		9.4	15.6
1980	12.1	14.4		14.1	27.3	14.1	17.5	19	25.2	21.8	17.7	19.5	17.2
1981	11.1	14.6	11.2	22.1	12.7	8.8	14.3	11.5	13.3	18.8	10.5	15.1	12.7
1982	6	10.3	6.8	21.1	6.5	7.3	11.6	4.2	4.4	7.8	5.9	4.6	4.6
1983	4	5.2	5	14.9	11.6	4.4	15.2	2.3	4.1	6.1	2.3	1.5	1.5
1984	4	4.7	3.4	25.2	27.8	3.7	13.3	3.9	2.2	5.7	2.7	1.2	1.2
1985	4.6	3.9	4.2	15	25.7	10.9	7.6	1	3.7	2.5	2.6	1.4	1.4
1986	5.4	1.3	0.8	7.9	15.1	18.7	7.7	-	2.8	0.6	-	2	2
1987	5.8	3.3	2	28.7	6.7	53.4	10.8	-	4	-0.9	0.9	7.6	7.6
1988	4.4	4.8	5.3	39.9	8.3	7.3	7.8	-	2.9	4	0.2	0.8	0.8
1989	5.4	6.2	-	4	14.3	0.8	11.4	-	6.2	5.6	5.1	4.1	4.1
1990	4.7	3.1	3	3.7	22	21.7	11.1	-	3.2	2.7	4.2	4.7	4.7
1991	7.1	6.3	2.3	2.3	51.1	26	3.8	-	5.6	2.6	4.2	5.7	5.7
1992	5.7	6.1	2.3	2.6	77.3	43.7	6.4	-	5.5	3.8	2.9	5.1	5.1
1993	2.7	1.1	1.4	-	22.1	143.5	10.8	-	1.6	2.8	1.8	0.8	0.8
1994	1.4	0.1	2.6	-	35.1	368.5	8.8	-	-	2.6	2.6	5.8	5.8
1995	2.1	1.9	2.9	-	19.9	235.6	5.2	-	1.3	3	2.7	2.7	2.7
1996	1.4	2.4	6.4	7.9	26.4	-0.7	3.4	-	1.7	3.2	2.5	-2.3	3.6
1997	0.5	7.7	1	6.2	9.7	7	3.7	-	2.2	0.8	11.4	1	3
<b>Av(curr. Brd)<sup>1</sup></b>	<b>7.28</b>												
<b>Av(fixed peg)<sup>2</sup></b>	<b>11.21</b>												
<b>Av(float)<sup>3</sup></b>	<b>42.21</b>												

Source: IMF, IFS

Notes: 1. Based on data from six countries in the OECS, Barbados (1970-71) and Belize (1970-81).

2. Based on data for the Bahamas, Barbados (1972-97), Belize (1982-97), Guyana before 1990, Jamaica before 1990 Suriname before 1994 and Trinidad and Tobago before 1993.

3. Based on data for Guyana from 1990 onwards, Jamaica from 1990 onwards, Suriname from 1994 onwards, and T&T from 1993 onwards

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Appendix 2B: Growth in Money Base Under Different Monetary Regimes

% CHANGE IN M1													
YEAR	Bahamas	Barbados	Belize	Guyana	Jamaica	Suriname	T&T	Ant. & Bar.	Dominica	Grenada	St. Kitts	St. Lucia	St. Vin.
1970	-8.5	-1.9		1.2	14	7	8.5						
1971	-14.5	12.2		13.1	26.3	14.1	16.8			9.8			
1972	23.4	8.5		19.7	7.9	5.2	19.4			20.6			
1973	-5.3	9.4		12	26.4	28.9	0.7			9.2			
1974	-3.2	19.4		36.7	18.3	5.2	27			1			
1975	-5.3	20.3		56.4	24.9	20.5	45.4			22.8			
1976	5.2	6.8		4.2	5	17.5	45.7	27.9	9.6	37.8		40.8	20.4
1977	15.5	19.3	15.9	33	40.1	10.8	26.8	27.4	23.2	10.5		13.6	3.3
1978	19.7	18.5	45.9	5	20.1	12	29.1	-5	51.8	28.9		16.3	36.2
1979	29.1	38.3	2.4	-4.3	10.4	11.1	22.5	18.5	72	20		17.8	22.6
1980	-1.4	10.2	12.9	11.5	13.9	7.6	16.6	10.8	-9.9	6.1	-13.4	16.5	1.2
1981	5.3	11.9	-5	8.7	8.1	21.7	38.7	11.9	-2.5	10.1	229.7	1.6	18.6
1982	11.3	0.8	-0.4	25.3	13.1	17.7	37.3	-3.4	-3.9	11.7	-3.5	7.5	4.8
1983	10.8	24.4	7.6	17.4	21.6	8	-4.4	22.5		-2.5	8.2	1.4	16.3
1984	6.1	-2.3	17.9	20.2	23.7	26.9	-5.8	14.3	27.5	-12.7	6.1	8	17.8
1985	10.9	15.6	17.2	20.3	15.3	52.5	-1.5	17.2	-3.6	6.7	12.5	12.7	10
1986	19.8	11.8	21.2	19.4	40.8	39.6	-7.6	27.6	18.6	28.1	51.4	37.4	20.2
1987	11.4	18.1	18.7	51.4	5.2	27.1	3.9	26.6	58.4	7.2	10.9	25.6	-15.8
1988	7	12.4	-3	54.8	53	24.5	-13.6	15.9	-2.5	11.7	-12.3	14.4	17.8
1989	0.4	-12.5	22.1	34	-8.5	11.3	13.7	10.1	-1.9	6	26.3	12.3	11.5
1990	9.8	14.6	6.1	54.5	27.4	4	20.8	11.1	24.7	3.5	-2	6.3	5
1991	8.3	-5.9	11.6	65.5	94.7	28.2	13.4	7	5.1	-1.7	0.6	0.4	-17.5
1992	2.8	1.5	6.8	31.5	71.3	11.6	-7.7	8.9	17.3	23	7.9	26.4	51.1
1993	2	-5.1	7.9	26.6	26.2	87.6	16.3	1.1	-12.1	12.7	16.6	6.4	-0.3
1994	10.6	8.3	5.7	10.4	25.7	245.6	19.5	19.3	-1.8	12.1	-4.1	3.5	19.2
1995	7.1	-17	7.8	16.7	38	178.2	4.7	27.1	24.1	4.7	14.2	12.9	-0.1
1996	1	46.3	5.5	14.5	14.4	-2	6.1	-8.7	5.1	2	6.8	-6.9	6.1
1997													
Av(curr. Brd)1	13.82												
Av(fixed peg)2	14.56												
Avg(float)3	46.94												

Source: IMF, IFS

- Notes: 1. Same as Table 1.  
 2. Same as Table 1.  
 3. Same as Table 1.

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Appendix 2C: Fiscal Management Under Different Monetary Regimes

FISCAL BALANCE/GDP (%)													
YEAR	Bahamas	Barbados	Belize	Guyana	Jamaica	Suriname	T&T	Ant. & Bar.	Dominica	Grenada	St. Kitts	St. Lucia	St. Vin.
1970				-4.50			2.00						
1971				-5.88		-0.34	-3.26						
1972				-6.51		-0.28	-1.88						
1973	0.50			-16.28		-2.81							
1974	-5.27	-5.30		-2.30		-1.07							
1975	-1.92	-2.76		-6.57	-9.73	-0.23							
1976	-2.92	-7.06		-27.55	-14.62	-2.12	8.21						
1977	-2.90	-9.33	-5.72	-11.82	-16.77	-4.92	10.62						
1978	-3.00	-3.22	-1.08	-10.17	-13.71	-1.54	3.53						
1979	-0.63	-3.48	-1.77	-17.50	-12.64	1.28	-0.55						
1980	-0.60	-5.18	-1.52	-29.18	-15.49	1.53	7.39						
1981	-4.17	-8.13		-36.88	-13.58	-3.18	3.32						
1982	-1.21	-6.04		-66.25	-15.23	-5.40	-12.24						
1983	-4.65	-3.53		-40.33	-19.88	-17.52	-11.84	0.07	-6.35	0.12	-5.43	-2.66	
1984	-1.03	-5.81	-1.23	-44.47	-5.85	-15.23	-8.89	-2.65	-7.54	-11.53	-1.90	-0.93	0.43
1985	-1.53	-5.69	-3.39	-37.68	-8.25	-19.99	-5.08	-3.32	-2.86	-4.69	-4.56	-0.97	1.67
1986	-0.59	-4.63		-58.83		-24.72	-5.87	2.17	-1.12	-10.65	1.34	-0.60	3.21
1987	-0.93	-10.65		-42.45			-5.86	0.05	1.08	-13.59	1.16	-1.84	2.74
1988	-2.95	-3.99	7.13	-31.64			-5.69	-4.01	-1.11	-10.72	-7.49	2.74	-1.31
1989	-3.99	-1.94	-0.78	-6.96	1.17		-3.86	-4.21	-0.12	-15.28	-3.34	1.00	-4.24
1990	-2.43	-7.22	0.69	-21.69	2.72		-0.83	-1.77	-8.28	-10.37	-0.24	0.82	-0.71
1991	-3.68	-2.05	-5.10	-0.20	3.86	-16.60	-0.24	-1.66	6.47	-4.10	-2.01	0.57	0.25
1992	-3.05	-1.02	-5.18	-0.20	3.76	-5.20	-2.78	-0.40	1.26	-0.55	-1.05	-1.50	3.71
1993	-2.84	-2.62	-6.52	-0.07	3.34	-16.10	-0.16	-1.20	3.29	-0.72	-1.12	-0.62	4.09
1994	-0.66	-2.34	-5.91	0.02	3.20	3.30	-0.02	-2.40	0.82	-1.61	-2.60	-0.70	0.26
1995	-1.00	0.72	-3.99	-0.02	2.40	13.90	0.17	-2.44	3.15	0.05	-5.72	-1.46	2.12
1996	-1.70	-3.20	-0.38	-1.60	-5.10	-3.00	0.50	-1.56	2.63	-2.78	-5.01	-1.59	-1.38
1997	-3.80	-0.90	-2.00	-6.30	-8.20	-5.00	0.90	3.61	0.12	-0.60	-2.89	0.42	4.80
Av(cur. Brd) <sup>1</sup>	-1.70												
Av(fixd peg) <sup>2</sup>	-7.62												
Av(float) <sup>3</sup>	-0.54												

Source: IMF, IFS

Notes: 1. Same as Table 1.

2. Same as Table 1.

3. Same as Table 1.

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