

Realizing the Goal of Caribbean Monetary Union

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Abstract

The origins of a monetary union between Caribbean Community (Caricom) members date back to 1990 but today, having already missed its proposed inauguration by six years, the region still has a long way to go in realizing this goal. To put the various convergence criteria in perspective, this paper discusses the implications that establishing a monetary union will have on regional monetary policy, fiscal policy, and trade and growth. It then makes an assessment of how far the region has come in preparing itself for monetary union before going on to suggest a number of policy actions that will facilitate the creation of the necessary economic and political environment conducive to sustainable convergence amongst Caricom members, and by extension a successful monetary union. In this regard, the paper emphasizes the need for adjusting and enhancing the convergence criteria, establishing *ex-ante* a set of fiscal rules with credible sanctions against non-conformers, and giving greater independence to central banks. Ultimately, however, it also recognizes that the initiative will never actually be launched unless leaders of Caricom nations make the requisite political commitment to a union that binds them not only monetarily, but fiscally too.

¹ This should be considered a working paper, written to elicit comments and further debate in the subject area. The views are those of the author alone and should not be interpreted as those of the Bank of Guyana or Overseas Development Institute.

I. INTRODUCTION

The initial movement towards monetary union within Caricom dates back to 1990 when the Governors of Caricom central banks were given a mandate by heads of state to undertake a study into the feasibility of a monetary union. A flurry of research by leading economists, drawn from the region and beyond, culminated in a report by the Governors of Caricom central banks to heads of state in 1992 proposing how the region should move towards Caribbean monetary union (CMU). The Committee of Caricom Central Bank Governors was established and charged with the responsibility of overseeing and coordinating the necessary stabilization policies for the move towards CMU. It was proposed that such a union would include all members of Caricom² and recommended that a fully operational common currency be in place by the year 2000.

With 2000 long gone, this paper presents the Caricom region's achievements to date in realizing its goal of monetary union, and takes stock of how far it is yet to go. More importantly, from a region-wide perspective rather than a country-level analysis, it seeks to establish what actions still need to be taken for Caricom to realistically establish a viable and sustainable monetary union. This presentation will *not* cover the theoretical advantages and disadvantages of forming a currency union³ and the issue of whether the Caricom region should move in this direction. To the extent that the region is serious about establishing a CMU, it is the belief of the author that efforts should focus on investigating *how*, as opposed to *whether*, this can be achieved.

The establishment of a monetary union is not without controversy. By compatible member countries adopting a single currency between them they anticipate a level of fiscal and monetary performance that is superior to one in which it functions individually. In theory, this will enhance the economic performance of member countries and, therefore, that of the union as a whole. As countries within the union establish greater economic credibility so too does their common currency, which in turn facilitates a stronger position on international trade and capital markets. However, in order to achieve this, potential member countries must first meet a set of

² At the time this included the Bahamas, Barbados, Belize, the ECCU area (which includes Antigua and Barbuda, Dominica, Grenada, Montserrat, St.Kitts and Nevis, St.Lucia, and St.Vincent and the Grenadines), Guyana, Jamaica, and Trinidad and Tobago. Suriname and Haiti joined Caricom in 1995 and 1999, respectively, but at present only Suriname is being considered for CMU.

often stringent criteria designed to ensure they all converge towards common macroeconomic positions. For many this will require the equivalent of putting on a fiscal and monetary straightjacket which may do little to enhance the socio-economic status of its populace and is likely to be politically unpopular. Furthermore, a stronger currency *vis a vis* those of its trade partners may reduce the competitiveness of member countries exported goods.

In light of this, the paper is organized as follows: Section II provides a background to CMU by discussing its implications for the monetary and fiscal policies of member countries, as well as the trade and growth prospects of the region, before outlining the five convergence criteria. Section III makes a brief assessment of how far Caricom members have come in meeting the convergence criteria. Section IV focuses on what actions need to be taken by Caribbean policymakers to achieve a viable and sustainable monetary union. Section V concludes by summarizing the main findings of the paper and provides suggestions for further research.

II. BACKGROUND

Implications of forming a monetary union

To understand why the Committee of Central Bank Governors established convergence criteria that member countries must satisfy before forming a CMU, an appreciation of the implications once such a union has been formed is required. There are a myriad of such implications for member countries, but for the purpose of this study I will be focusing on three of the larger issues: monetary policy; fiscal policy; and trade and growth.

Implications for monetary policy

Not only does CMU entail each member country having its domestic currency replaced by a regional one – the Caribbean Dollar - and thus the loss of seigniorage revenues obtained from printing its own money,⁴ but monetary policy must be surrendered to a regional central bank - the Caribbean Monetary Authority (CMA). Foreign exchange reserves will be pooled, as will

³ For a discussion of these see Farrell (1994) and Worrell (2003).

⁴ Though this would be partly offset by the sharing of seigniorage revenues by the CMA.

decision-making on how those reserves will be utilised. Individual member countries will be confronted with a monetary policy that no longer serves purely their own needs but those of the region as a whole. This could be potentially debilitating for some members within the union, as to some extent has been the case for Germany and France under European Monetary Union (EMU). However, Williams et al (2001) have shown that countries within an already established monetary union within the Caricom region - the Eastern Caribbean Currency Union (ECCU) - have achieved greater balance of payments protection than the West African CFA Franc zone⁵ countries from the pooling of reserves.⁶

It is important to consider the transmission mechanism of monetary policy in member states prior to CMU since if they are very different between countries then the response to monetary policy steps taken by the CMA may vary. The factors affecting this include:

- The financial depth of members' economies: This is low in the Caricom region due to low levels of domestic credit to enterprises and households.
- The maturity structure of debt: Since this varies across member states the transmission mechanism will affect different members in different ways.
- Legal structures and alternative financing on capital markets: Member states with better credit ratings will be able to respond differently to those with poorer ones.

Furthermore, the uncertainty that the economic environment will have changed once the monetary mechanisms have impacted on their target variables is compounded by the fact that economic agents in the Caribbean do not respond to changes in interest rates as much as they do in more advanced economies. Worrell (2000) found that investment expenditure in the Caribbean is more elastic to interest rate changes than consumption expenditure. This will have implications for the sustainable expansionary path of Caricom economies.⁷

⁵ CFA stands for "Communauté financière africaine" and is an established monetary union between members of the Central African Economic and Monetary Union (CAEMC – Cameroon, Chad, Congo, Central African Republic, Equatorial Guinea, and Gabon) and approximately half the members of the Economic Community of West African States (ECOWAS – Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo). The other members of ECOWAS (Cape Verde, The Gambia, Ghana, Guinea, Liberia, Nigeria, and Sierra Leone) have declared their intention to join the CFA Franc zone, except for Cape Verde which has its currency pegged to the euro with the support of Portugal.

⁶ Unanticipated changes in the terms of trade lowered reserves in the CFA relative to the ECCU, which may reflect a greater reliance on primary commodities in the CFA compared with services in the ECCU.

⁷ Since a significant increase in the interest rate will result in a larger proportional fall in investment.

Implications for fiscal policy

A well functioning monetary union requires all member states to be aware of the spillover effect of their national policies, especially their budgetary ones. The fiscal position of most Caricom members has deteriorated over the past 5 years due to sharp increases in expenditure, rather than a fall in revenues (Sahay, 2005). Such expansionary fiscal policies put pressure on inflation, thus requiring an adjustment in monetary policy. Furthermore, Kufa, Pellechio and Rizavi (2003) suggest that being part of a monetary union may have attenuated the deterioration of the ECCU's fiscal position. Since the deterioration was not accompanied by exchange rate depreciation, higher interest rates or inflation, member countries had little incentive for fiscal discipline.

Governments must make a commitment to avoid excessive public sector deficits and ensure that their fiscal policies do not contradict an effective, externally executed, monetary policy. This will bring about a harmonization of fiscal policy within the union, requiring structural changes in the composition of expenditure and the coordination of taxes. For example, Mishra (2006) found Guyana's spending on education is 3% of GDP per capita per student, compared to Jamaica's 116%. Tax harmonization has gathered significant attention in recent years as Caricom members have exhibited an inclination to coordinate tax structures to overcome tax competition (especially with the advent of the Caribbean Single Market and Economy (CSME) and its subsequent freeing up of human and capital resources) and fiscal erosion. Some success has been achieved in areas such as double taxation and a harmonized corporate tax structure, and with the drafting of a common Investment Code and a Financial Services Act by the Caricom Secretariat.

While issues of tax harmonization have some bearing on CMU, they are beyond the scope of this paper. More relevant to this study is the provision of mechanisms to correct underperformance of member states in achieving and, perhaps more importantly, *maintaining* the fiscal rules laid down in the convergence criteria. Fundamentally, the recommendations of this paper embody what needs to be done in this regard and will receive considerable attention in section IV.

Implications for trade and growth

The Common External Tariff (CET) has gone some way in encouraging growth in intra-regional trade, and it is hoped that adopting a single currency will further enhance this (as transaction

costs and exchange rate uncertainties are eliminated between members) and consequently, growth too.⁸ However, intra-regional trade among Caricom members is estimated at only 8-10% of total trade,⁹ compared with approximately 60% in the EU. This limits the intra-regional trade benefits of forming a CMU since the largest potential gains¹⁰ will be realised in their trade with *extra-regional* trading partners, and may act to divert trade *away* from intra-regional partners.

Rose and van Wincoop (2001) estimated that the reduction in transaction costs as a result of EMU offset the losses from surrendering monetary independence to an external authority. The boost in trade from monetary union ranges from Baldwin's (2006) best estimate of 9% (with regard to the euro-area) to Rose's (2000) extravagant estimate of 235% (with reference to a much wider survey of (mostly developing) countries). Baldwin also acknowledges that EMU provides a unique opportunity to analyze the impact of forming a currency union since it has a control group,¹¹ finding no evidence of trade diversion away from the 3 non-members. Instead their trade with the euro-area has increased by almost as much as the euro-founding members. Regarding the Caribbean, Egoume-Bossogo and Chandima (2002) found Caricom membership had a positive impact on bilateral intra-regional trade, suggesting that further integration would allow the region to realize its full intra-trade, and therefore its growth, potential.¹² However, they also found that while the existence of the ECCU has not constrained trade among the larger Caricom area, controlling for the latter, the ECCU is not trade creating among its members.

Worrell (2003) observes that Caricom countries have been able to maintain stable, low inflation with sustained growth only when exchange rates are pegged to the US dollar.¹³ Furthermore, multiple studies have shown that exchange rate flexibility is inappropriate for small open

⁸ Unlike in the EMU, the primary motive of CMU is to impose monetary and fiscal credibility on its members, and that enhancing trade is only a secondary consideration.

⁹ And Williams (2006) suggests that this would be more in the region of 3-5% if intra-regional oil exports from Trinidad and Tobago are excluded.

¹⁰ And losses, should the single currency strengthen *vis a vis* its main trading partners such that it makes members' goods less competitive.

¹¹ The 3 countries that did not join in 1999 – Denmark, Sweden and the UK.

¹² However, it should also be noted that, Caricom's trade with the rest of the world has also risen, fueled notably by the trade-diverting impact of reductions in the CET arrangement's and despite the negative impact of the declining preferential access to EU markets for bananas.

¹³ This is because changes in the exchange rates of small, very open economies do not result in switches in expenditure towards the production for export and the consumption of import substitutes, rendering the nominal exchange rate ineffective as a shock absorber or adjustment policy.

economies and that a pegged exchange rate might be advantageous (IMF (1997); Eichengreen et al (1998); and Dornbusch (2001)). Straughn (2003), for example, found that exchange rate variability is prohibitive to trade between some Caricom countries. It should, however, also be recognized that a fixed exchange rate regime can encourage fiscal profligacy. Tornell and Velasco (2000) argue that a fixed exchange rate may provide less discipline for policy makers than a flexible one because countries can run expansionary policies for longer before macroeconomic variables indicate an exchange rate adjustment is necessary. They suggest that being in a monetary union can exacerbate this as foreign exchange reserves are pooled. In this regard, Duttgupta and Tolosa (2006) found that Caribbean countries with fixed pegs and in currency unions demonstrate greater “free-riding” behaviour than those with flexible regimes.

Therefore, the CMA intends to have the Caribbean dollar pegged to the US dollar¹⁴ at a rate of 1:1 for a transitional period, after which it will float freely. Initially pegging to the US dollar will provide credibility to the new monetary regime as Caricom countries will essentially be forced to import the monetary and fiscal stability of the US. In the longer-run, having a flexible regime will overcome the temptation for CMU members to “free-ride” via fiscal profligacy. Consequently, this will involve members with flexible regimes¹⁵ making long-term commitments to the fiscal and structural adjustments required in switching to a fixed regime. Some appear unwilling to do so, even when the alternatives are severe penalties in terms of high interest rates, an uncertain climate for investment and low growth potential (Worrell, 2003). In addition an asymmetric incentive problem may develop whereby countries without relative fiscal and monetary credibility will be happy to join the union, but those with such credibility will not, thus putting a strain on the whole union. This dilemma is faced by the Bahamas, Barbados, Belize and the ECCU, who have maintained a peg with the US dollar and been relatively fiscally prudent.

¹⁴ While Rose’s (2000) research tying trade growth with colonial relationships may suggest Caricom countries might consider pegging their currencies to sterling or the euro, Caribbean foreign transactions (on the capital and current account) are overwhelmingly denominated in US\$, the entire regions’ tourism industry is priced in US\$, for non-tourism based extra-regional exports 50% or more of their income is in US\$ (except Suriname), and approximately 60% of the regions trade is with the US. Furthermore, changes in the US\$ value of sterling and the euro have relatively little impact, and no other currency is of significant importance to Caricom (Worrell, 2003).

Convergence Criteria

Considering these implications, the Committee of Central Bank Governors established a set of criteria to facilitate the smooth transition of CMU. They would also signal a country's willingness and commitment to adhere to the constraints of monetary union, and act as a screen for members to assess another's capacity to adopt and maintain a sound fiscal stance. The so-called 3-12-36-15 criteria were introduced in 1992, whereby each member country must:

1. Hold external reserves equal to at least 3 months of imports for at least 1 year.
2. Maintain a stable exchange rate for at least 3 years (i.e. the exchange rate is not to fluctuate by more than 1.5% during the 3 years prior to monetary union).
3. Have external debt service obligations of no more than 15% of exports.

However, these alone were deemed insufficient to ensure the sustainability of a monetary union and the following criteria were later added, whereby each member country must:

4. Contain fiscal deficits below 3% of GDP.
5. In the year prior to monetary union, have an inflation rate within 1.5% of the median of the 3 countries with the lowest (but positive) rates.

III. ASSESSMENT OF CONVERGENCE

This section will briefly bring the reader up to speed on where the Caricom countries¹⁶ stand in meeting the five convergence criteria and also consider the region's historical experience in discussing whether these countries are in fact converging.

Import Cover Criterion

Appendix 1 shows that, over the period 2004-2005, the import cover criteria was met by all Caricom member countries except Belize and Suriname.¹⁷ The historical data shows that Belize,

¹⁵ Guyana, Jamaica, Suriname, and Trinidad and Tobago.

¹⁶ For the purpose of this assessment, while the ECCU area is made up of seven countries, it will be considered as one country.

¹⁷ Note, however, that Guyana borders very close to not satisfying this criterion.

save for a few close years in the early 2000's, has struggled to meet this criterion over the 1991-2005 period. Suriname's experience has been more sporadic, having satisfied the criterion in the mid-late 1990's, falling behind in 1999-2000, coming back in 2001-2002, before falling behind again ever since. With the exception of the ECCU area and Guyana, all Caricom countries have at some point over the 1991-2005 period fallen short of meeting this criterion. Furthermore, continued high oil prices could reduce reserves in the coming years, as evidenced by a lower average import cover in 2005 when compared with 2004. However, the fact that most countries in the Caricom region have higher import covers today, as compared with the early 1990's, suggests that concerted efforts are being made by members to converge on this criterion.

Exchange Rate Stability Criterion

Appendix 2 shows that, for those Caricom countries that have a flexible exchange rate regime, over the period from 2003-2005 the only country to maintain a stable exchange rate (within the 1.5% band) is Trinidad and Tobago. Only over the last two years has Guyana experienced some form of exchange rate stability, but preliminary evidence to date in 2006 suggests that it will be able to satisfy this criterion by 2007. Over the period 1993-2005, Jamaica has been unsuccessful at maintaining the required stability for even one year and the prospects for its stability remain bleak. Suriname's experience, again, has been (wildly) sporadic, going through periods of very high appreciation, moderate depreciation and even a few years of absolute stability. Over the last three years it has managed to bring its exchange rate volatility down, but the real test will come over the next two years to see whether it can consistently achieve this criterion.

Debt Service Ratio Criterion

Appendix 3 shows that for the six countries in which data were available in 2005, all satisfied this criterion except Belize and the ECCU area. The last available data for Jamaica, which was 2004, showed that its debt service ratio was almost twice that set by the criteria. However, the most recent data for Suriname, which was 2003, was well within the ratio set by the criteria. The historical data shows that all countries, with the exception of Belize, the ECCU area and Jamaica have been successful at bringing their debt service ratios down to within the level set.

Fiscal Deficit Criterion

Appendix 4 shows that for the six countries in which data was available in 2005, only the ECCU area and Trinidad and Tobago satisfied this criterion.¹⁸ The last available data for the Bahamas, which was 2004, showed that it fell short of the required rate. However, the most recent data for Suriname, which was 2004, showed that it was well within the required ratio. Perhaps most worrying for countries not having met this criterion is that the historical data shows, on average, these countries made considerable efforts to bring their fiscal deficits within respectable limits in the early-mid 1990's, only to see their fiscal position deteriorate over the past 5-7 years, largely associated with increased expenditure on infrastructural projects and relief efforts in response to natural disasters. This suggests that the region is far from convergence on this criterion.

Price Stability Criterion

Appendix 5 shows that the upper limit on the threshold figure was 5.2%¹⁹ and, due to higher region-wide energy and food prices combined with strong demand and supply obstacles in some countries, only three Caricom countries satisfied this criterion – Bahamas, Belize and the ECCU area. The historical data shows Jamaica and Suriname have had inflation rates consistently higher than the rest of the region. Almost all the other countries in the region have been successful at maintaining a relatively low inflation. Since 2000, Bahamas, Barbados, Belize and the ECCU area have consistently had the lowest rates of inflation, but of the eight countries considered for CMU there have only ever been three or four that have satisfied this criterion in any given year. Again, this does not bode well for region-wide convergence on this criterion.

Overall Assessment

It is clear from Appendices 1-5 that *none of the Caricom countries satisfy all the criteria*. The country that comes closest is Trinidad and Tobago, having satisfied four out of the five criteria in 2005. The Bahamas and the ECCU area had met three of the five, but the Bahamas, with its currency already pegged 1:1 to the US dollar, has no interest in being part of CMU. If the ECCU area and Trinidad and Tobago were able to meet all five criteria soon, a big question hangs over whether a CMU would be viable and sustainable with just two members. Barbados and Guyana

¹⁸ Although these two countries are at the opposite ends of the scale, with the ECCU area registering a deficit and Trinidad and Tobago posting a healthy surplus on account of a rise in the price of its most valuable asset – oil.

lag behind, meeting only two of the five criteria, and Belize and Jamaica are furthest behind satisfying just one. This suggests that, to the extent the convergence criteria reflect the Caricom region's readiness to form a monetary union; it is still a long way from realizing its goal.

IV. ACTIONS THAT NEED TO BE TAKEN

Before addressing the question of what needs to be done to reach the goal of CMU, we may want to ask ourselves whether Caricom members should in fact wait for convergence on the criteria before establishing a single currency *or* establish a single currency to leverage the attainment of macroeconomic convergence between members. After all, CMU entry *per se* may provide a substantial impetus for trade expansion, which may in turn result in countries satisfying the convergence criteria *ex post* rather than *ex ante* (Frankel and Rose, 1997).

In an attempt to answer this question, it may be informative to consider some of the research conducted into Optimum Currency Areas (OCA).²⁰ Anthony and Hallett (2000) have argued that while Caricom countries do not satisfy the traditional OCA criteria, the establishment of the monetary union itself might create those convergent OCA conditions in the future. This is because CMU will encourage more trade among Caricom members as they take advantage of lower transaction costs and the elimination of exchange rate uncertainties, and as trade increases the structural divergences between members will reduce. Consequently, it could be presumed that CMU members would experience convergence in their monetary and fiscal positions.

However, empirical evidence suggests that this is unlikely to occur. Frankel and Rose (1997) found that OCA conditions could be experienced only if members of a currency union engage in *intra-industry* trade, which usually only occurs in manufactured goods in large (broad-based) economies. If Caricom countries do take advantage of economies of scale that result from the

¹⁹ Belize's inflation rate (3.7%) plus the allowed variance of 1.5%.

²⁰ As advocated by the pioneering research into monetary integration by Mundell (1961). He recognized the formation of a currency union would generate a positive outcome if the countries concerned displayed the following characteristics, or OCA properties: 1. Economic openness and strong trade between members, 2. Similar economic structures and susceptibility towards similar shocks and preferences, 3. A good degree of factor mobility and wage and price flexibility, 4. The existence of a system of fiscal transfers between members as a substitute.

CSME, it is likely to increase *inter-industry* trade between members as they are too small and un-diversified to create any other pattern of trade. Evidence from the CFA Franc zone found that forming a currency union did bring about price, monetary and fiscal stability, but this only served to give CFA countries access to cheaper capital and development assistance, and did not lead to greater regional trade and growth (Frankel and Rose, 1997). Moreover, Anthony and Hallett (2000) assert that more inter-industry trade will encourage specialization, which will lead to less economic convergence, not more, and make Caricom countries more vulnerable to asymmetric shocks, not less. This would be the opposite of one of its intended goals.

Nevertheless, the introduction of the CSME in January 2006 is testimony to the desire of Caricom economies to more fully integrate. As in Europe's case, the establishment of an economic union was considered a prerequisite for forming a monetary union. Likewise, the Caricom region must first exhibit a sustained period of economic integration before moving too quickly towards monetary union, and in this regard it may be prudent to give this process more time so that a clear assessment can be made of the impact of CSME.

While the CSME promotes economic *cooperation*, the Caricom region as a whole must demonstrate more economic *harmonization* between members if it is to successfully achieve a strong and sustainable monetary union. To do this, and in light of the evidence pointing to the need for Caricom members to convergence on the criteria before establishing a single currency, the following section will discuss a number of options open to Caricom policymakers. The objective here is not to simply provide a menu of budgetary adjustments that will ensure member countries merely meet the convergence criteria, but to propose a number of actions that will facilitate the creation of the necessary economic and political environment conducive to the transition towards sustainable convergence among Caricom members.

1. Changes to existing convergence criteria and introducing additional ones

For the most part, in facilitating the move towards CMU the convergence criteria are appropriate. Nevertheless, the following sub-section will address some of the enhancements that could be made to ensure the criteria are met and maintained.

Firstly, the requirements on foreign reserves and exchange rate stability will ensure some monetary and fiscal convergence, but the proviso that these reserves be held for just one year may not be sufficient to keep exchange rates stable for three years. Countries should demonstrate a good track record of ensuring that their foreign reserves adequately meet the import demands of its population otherwise it will face a deteriorating debt situation. It is recommended that the time period on this criterion be extended to holding sufficient reserves for 3 years prior to entry into the currency union.

Secondly, many of the convergence criteria follow those established by the EU under EMU.²¹ The extent to which small, open and essentially still developing countries, such as those in Caricom, can emulate the conditions placed on more developed countries is questionable and may ultimately prevent any member ever achieving all the criteria. For example, appendix 6 shows that the average fiscal deficit across the region over the period 1991-2005 was 3.1%, suggesting that the criteria set for this is representative of the Caricom region's experience. However, this figure is offset by the fiscal surplus that oil-rich Trinidad and Tobago enjoys. Taking this country out of the equation gives an average fiscal deficit of 3.6%, and when looking at 2000-2005 the average deficit is 5%. It may therefore be appropriate to re-set this criterion to a more realistic interim target of 4%, but have a binding agreement that commits members to reduce it to 3% within two to three years after having formed the currency union.

Appendix 6 also highlights that the convergence criteria could be tightened up with respect to the criterion on import ratios (increasing it to 4 months) and the debt service ratios (reducing it to 13%). Moreover, given the regions exposure to varied shocks which have asymmetric impacts, there may be a need to base the convergence criteria on target bands instead of specific values.

Furthermore, additional criteria should be introduced to better prepare members for CMU and to enhance the stability and sustainability of the union once formed. Indeed, it would be in the best interests of member states to also embrace the following as convergence criteria:

²¹ Such as the criteria on fiscal deficits, price stability and exchange rate stability.

Limits to public sector (gross) debt

This is crucial to the establishment and sustainability of CMU. As public debts rise countries increasingly borrow on capital markets, causing interest rates to rise. This raises the debt burden for other members as well as adversely affecting investment and economic activity. An unsustainable debt ratio also poses the threat of default. If bonds of a defaulting country are widely distributed among members in the union²² then these countries face pressure to bail out the defaulter to avoid disruption and contagion in the financial system. Therefore, focusing purely on external debt ratios does not necessarily give an indication of the underlying fiscal difficulties faced by a member since external debt may be unsustainably high even if debt service ratios remain within the 15% of exports. Domestic debt levels may also be significant. Furthermore, stabilizing a country's debt ratio is not sufficient in achieving a sustainable debt level. It will only become sustainable when future primary balances are sufficient to meet the service obligations on existing *and* future debt (Kufa, Pellechio and Rizavi, 2003).

In 2003, fourteen of the fifteen Caribbean countries ranked in the worlds top thirty indebted emerging market countries (Sahay, 2005). Reducing their stock of debt is crucial to the region's development. Ironically, the ECCU area failed to meet the debt service ratio criterion because it has done just this – over the period 2004-2005 its debt service ratio increased from 33.1% to 42.7%, but as a result its debt stock fell by 8.2%. Introducing this criterion would not be without controversy since debt levels vary widely across the region.²³ Nevertheless, Pattillo, Poirson and Ricci (2002) found that external public debt may begin to have an adverse impact on economic growth when it reaches about 40% of GDP²⁴, and most Caricom members exceed this ratio.

While EMU adopted this criterion (no more than 60% of GDP, or a declining trend if greater), several members have since exceeded the limit (for example, Italy and Greece have total external debts of more than 100% of GDP). Debt ratios within Caricom currently run anywhere between 8.9% (for Trinidad and Tobago) and 139.6% (for Guyana) of GDP. Appendix 7 shows that some

²² Or, as in the case of the Caribbean, where a high percentage of commercial banks assets are held in the form of government liabilities, as will be addressed later in the paper.

²³ And some members are likely to resent the special treatment Guyana receives, having qualified for HIPC debt relief.

²⁴ This is because high debt will either crowd-out private investment or create expectations that future debt-service obligations will be met by increases in taxes and a reduction of public investment.

countries over the period 1991-2005 have been successful at bringing their ratios down (such as Trinidad and Tobago), while others have had the opposite experience (such as Belize). Appendix 6 shows that the average debt-to-GDP ratio for the region over the period 1991-2005 was 63%, and over the period 2000-2005 the average was 55%. This suggests that setting a limit similar to that adopted by EMU (with commitments to lower the limit over a period of time for those unable to meet this criterion) would be appropriate for CMU.

Interest rate convergence

The lack of financial depth in the Caricom region suggests that member states are not as sensitive to interest rate changes as more developed economies, making this a highly controversial criterion. This is thought unlikely to occur any time soon because interest rate variance between members reflect structural differences, a variety of monetary regimes and lack of capital mobility. However, this is an important criterion since it will be harder for members to converge when interest rates vary widely within the region.²⁵ Furthermore, the interest rate would be the same among all members once CMU is implemented and members need to give themselves sufficient time to adjust to this. In this regard, harmonizing monetary regimes (see central bank coordination later) may assist in making this a viable additional convergence criterion.

Interest rates within Caricom currently run anywhere between 2.6% (in Guyana) and 8.6% (in Suriname). Appendix 8 shows that over the period 1991-2005 the ECCU area, Barbados and Bahamas have consistently had the lowest rates in the region, and Jamaica and Suriname have had the highest. Appendix 6 shows that the much higher interest rates in these latter two countries pulls the 1991-2005 period average up to 8.2%, which is likely to be prohibitive to encouraging investment in the region.²⁶ The downward trend in interest rates across the region in recent years (with the average over the 2000-2005 period being 5.9%), suggests that the rate could be comparable to those in developed markets. As such, establishing a criterion that encourages the attainment of an interest rate that more closely matches the average of the three Caricom members with the lowest rate (as is the case for joining the euro) should be introduced.

²⁵ Since high interest rates attract capital away from members with lower rates, and discourage investment in members with high interest rates in favour of those with low rates.

2. Establishing sanctions to discourage profligacy

With the surrender of monetary policy to the CMA, the only instrument national governments will have at their disposal for influencing macroeconomic stability and growth is fiscal policy. ‘Fiscal smoothing’ may therefore be a temptation (indeed, even a necessity) for national governments to pursue. However, it is vital to ensure that fiscal policy instruments are consistent with a stable monetary environment and potential member countries must make the necessary adjustments to meet the convergence criteria and harmonize fiscal policies. As mentioned earlier, there has been some success in achieving this in areas such as double taxation and a harmonized corporate tax structure.

Fiscal profligacy not only affects public debt levels and its consequent problems mentioned above, but in Caricom it also has implications for the stability of the financial system since commercial banks’ domestic claims on the government typically represent a significant percentage of their total domestic assets (Jahjah, 2001). Moreover, under CMU a fiscal crisis in one country will force an easing of monetary policy, therefore endangering price stability in the whole union. In sum, fiscal negligence on the part of even one member erodes the stability such a union is supposed to bring as other members become vulnerable to the quick spread of crises.

Not only can running high fiscal deficits cause macroeconomic instability, but they represent an opportunity cost in terms of growth potential. Gupta *et al* (2002) provide empirical evidence showing the benefit to economic growth when fiscal deficits are reduced. They found that a 1% reduction in the fiscal deficit to GDP ratio can lead to an average increase in per capita growth of 0.25-0.5% as the overall composition of public expenditure shifts towards more productive uses.

Crucially important for the transition towards CMU is to prevent a “weighing-in” effect whereby countries impose excessively restrictive and artificial measures to meet the convergence criteria only to loosen them afterwards, thus causing a ‘boom-bust’ cycle. Therefore, potential members of CMU must not only be encouraged to reach but, more importantly, *maintain* the fiscal rules set in the convergence criteria. The EU has had problems preventing some member countries exceeding the 3% of GDP rule for fiscal deficits (for example, Portugal’s is currently running at

²⁶ Although it would certainly attract “hot” money.

4%), and the 60% of GDP rule for total debt (for example, Italy's is more than 100%). Since it is not viable for member countries to pull out of a monetary union (although public opinion in Germany supports this), solutions need to be provided to get member countries "back on track."

The likes of Bredenkamp and Deppler (1990), Begg *et al* (1991) and Dornbusch (1997) argue fiscal constraints are not necessary or even desirable since private financial markets will impose the necessary discipline, as reflected in the differences in the cost of borrowing to states on the basis of their fiscal positions. However, the discipline that financial markets might impose is less relevant to the developing countries of the Caribbean because member states are small, financial markets are not well developed or integrated, an active secondary market in government debt does not exist, and there is limited availability of external finance for (some) members. Creating a regional securities market (as has recently been proposed by the Committee of Central Bank Governors) could contribute to improving efficiency in the market for debt, resulting in different interest rates based on fiscal performance. But it could also lead to excessive government debt issuance throughout the region and ultimately attenuate fiscal deterioration and enhance negative externalities among members.

Collier (1991) argues that the monetary authority in a monetary union provides an "agency of restraint" over macroeconomic policies generally. This is likely to be more effective if there is some external link, for example, an external currency peg. However, there is serious debate over the effectiveness (and the willingness) of this external agency of restraint, as Guillaume and Stasavage (2000) argue has been the case in the CFA Franc zone.²⁷ They found that the monetary union was not enough to provide fiscal discipline, and that it could only promote fiscal discipline if the hands of the fiscal authorities are also tied by a strong set of fiscal restraints.

Consequently, the Caricom Secretariat must impose common discipline on national fiscal policies, especially considering the prevalence of relatively weak institutions in the Caribbean. Masson and Pattillo (2001) suggest fiscal targets can lead to creative accounting rather than real fiscal adjustment when the budget process is not transparent. Easterly (1999) found that fiscal adjustments in many countries with IMF and World Bank programs resulted in the decumulation

²⁷ Where there is a fixed peg to euro and a guarantee of convertibility of their currency from the French Treasury.

of government assets through privatizations, cuts in private investment, accumulation of hidden liabilities, or expenditure postponement. Therefore, not only should the convergence criteria be made *permanent* once CMU has been inaugurated, but a set of fiscal rules must be established, *ex-ante* that encourage members to pursue sound, sustainable and transparent fiscal policies which enforces penalties for non-conformers. In this regard, Caricom policymakers can learn from the EMU's 'Stability and Growth Pact' and adjust these rules accordingly.

There are a number of initiatives that could be pursued in this area. Masson and Pattillo (2001) argue it is not clear whether a sanction mechanism (such as denial of access to regional structural funds, as in the case of EMU) is a credible way to deter violations of fiscal restraint since there is little likelihood that fines will be paid. It may be more effective to consider a system where a country's membership to the union is temporarily suspended. However, Jahjah (2001), while recognizing that the sanctions must be credible and enforceable, asserts that redistributing seigniorage revenues conditional on the fiscal stance of a government does give more incentive to implement a sound fiscal policy. He also suggests that when one country experiences a fiscal crisis the alternative (to not having sanctions) of fiscal coordination between union members can exacerbate the problem. This is because a transfer from other members to the country facing the crisis reduces the fiscal discipline of the receiving government, thereby increasing the risk of a crisis. Beetsma and Bovenberg (2001) observe that this in turn could complicate the conduct of monetary policy by the central bank and prevent it from achieving its objective of price stability.

Given the high exposure of banks to government default mentioned above, the central bank could be forced to intervene by directly buying government securities or by providing liquidity to troubled banks when faced with a financial crisis. Bailing-out a government with an unsustainable fiscal policy would have implications for the viability of the exchange rate and value of the currency, not to mention the moral hazard it creates (Masson and Pattillo, 2001). To prevent this, agreements within a monetary union should be made to ban direct central bank financing and access to favourable financing (as is the case under EMU). This could be taken one step further by insisting that each member is responsible for servicing its own public debt, even in a fiscal crisis.

Unfortunately, even the iron-clad and credible prohibition on central banks financing government deficits is not enough to ensure fiscal discipline since such formal rules against bailouts are rarely observed, especially in countries with weak fiscal and monetary institutions and a lack of strong public support for low inflation (Masson and Pattillo, 2001). Large fiscal deficits make it more possible that central banks will yield to bailout pressures – either directly (by financing it) or indirectly (by lowering interest rates). The latter channel would be especially difficult to rule out since there could be other plausible reasons for loosening monetary policy. Furthermore, laying down binding rules that stipulate no bail-out will be undertaken by the central bank or other member states is unlikely to occur in the Caribbean given their susceptibility to external shocks. Instead, a Regional Catastrophic Fund has been proposed where fiscal deficits will receive financing (up to a limit) under exceptional circumstances.

Opponents of imposing fiscal constraints argue that there is a need for greater fiscal flexibility to offset the loss of national monetary policy flexibility in response to shocks. Defenders, however, point to the fact that when the Caricom Secretariat evaluates whether sanctions should be applied to non-conforming members, it takes into account cyclical downturns. Moreover, the rules are intended to force countries to reduce fiscal deficits before downturns occur such that it would have room to operate discretionary fiscal expansion once in a downturn or when suffering an adverse shock. However, Masson and Pattillo (2001) recognize that in developing countries the challenge of achieving fiscal sustainability is more demanding than in developed ones, so room for maneuver during downturns is small. In addition weaker fiscal positions in developing countries mean that the potential to limit counter-cyclical fiscal policies may be less.

In addition to establishing fiscal rules, to meet the convergence criteria national central banks must work with their respective Treasuries in coordinating monetary and fiscal policies. Conflict between the central bank and the treasury increases uncertainty in financial markets and the probability of price and output instability, and reduces the credibility of macroeconomic policies (Worrell, 2000). Laurens and de la Piedra (1998) suggest that a clear delineation of responsibilities between the central bank and the treasury will suffice where they both coordinate their objectives and responsibilities. Worrell (2000), however, argues that consistent policies are assured only when the fiscal and monetary authorities share the preferences of the general public

– a dynamic process involving the interaction of such authorities with financial markets and the public. It is crucial that an ongoing dialogue between the central bank, treasury and financial markets on economic performance, policy and prospects is maintained as such an arrangement provides for fiscal and monetary discipline through the sanction of informed public opinion.

3. Greater independence for national central banks

A significant implication of forming a monetary union not discussed in earlier parts of this paper is the effect it will have on the national central banks (NCB's). Ultimately, NCB's must relinquish control of their monetary policies. The establishment of a CMA will effectively mean that operational activities become centralized in the Caricom region. The Caricom Secretariat envisages the CMA to be independent (but accountable to the council of finance ministers), responsible for price and exchange rate stability, have tight limits to which it can finance members' fiscal deficits, and have surveillance authority over members' external borrowing.

However, there will be a certain degree of decentralization in the region. NCB's will still be left with the responsibility for managing their reserves (and those of the governments), providing liquidity, running the payment systems and supervising the domestic banking system. They will have a duty to insist on a sound fiscal performance from their respective governments. For instance, they must follow the example set in 2005 by the German Bundesbank President who resisted calls from the German finance minister to sell gold reserves in an effort to fund public expenditure. NCB's will perhaps have more pressure to perform more tasks, such as more economic research, and maybe in the future a system will evolve whereby NCB's specialize in certain areas, as is the case in the USA under the Federal Reserve System.

These changes will present significant challenges to the NCB's of the Caricom under their present arrangements, since they do not have a strong track-record of pursuing anti-inflationary policies and are generally regarded as not being independent enough from their respective governments. For example, research by Mahadeva and Sterne (2000) shows that Caricom countries rank among the lowest in the world in terms of overall central bank independence.

The prevailing opinion, not without its critics, is that an autonomous central bank is the most hopeful mechanism for achieving low inflation (Worrell, 2000). In this regard, the seminal work of Cukierman *et al* (1992) endeavoured to explain cross country differentials in inflation by the degree of central bank independence. They found a negative relationship between the degree of central bank independence and the rate of inflation in industrial countries²⁸ but that this relationship does not hold for developing countries. Worrell and Belgrave (1997) extended this analysis and applied it to Caricom countries. They found that, while the Caribbean appears to be closer to the industrial country average than to developing countries, many of the variables that define central bank independence have no significant impact on inflationary performance. Other studies show that the political muscle of interest groups (Posen, 1993), political vulnerability and instability, and central bank turnover in politically volatile periods (Cukierman and Webb, 1995) provide a better explanation as to why developing countries have, on average, higher and more variable inflation than industrial economies.

While this evidence may not strengthen the case for central bank independence in small, open economies like the Caricom region, the importance of this issue to establishing a successful CMU cannot be underestimated. The newly established CMA must convince markets that it complies with its core mandate of maintaining price stability and that it is genuinely independent from government interference. To do this it must, in case of doubt, always lean in favour of a tight monetary policy stance. However, this has not always been the case in Caricom NCB's. If monetary authorities do not assert their credibility *before* a monetary union is formed then it is unlikely that the CMA will be able to effectively do this. Anthony and Hallett (2000) go even further by suggesting that if the CMA's policies are run by the present crop of central bankers in the region, then there is little reason to expect they will apply new discipline. Furthermore, national governments must make the necessary adjustments to the realities of the system they will face once the CMA is created. National governments have become accustomed to influencing monetary policies in Caricom countries and for the CMA to function as intended NCB's must gain greater independence prior to monetary union. Not only will this enable the "testing of waters" for national governments but, more importantly, it will facilitate a smoother transition to an external authority affirming its mandate and independence.

²⁸ That is, on average, more independence correlates with lower inflation.

Following this argument, therefore, NCB's should be granted *full* operational independence and mandated to maintain a low inflation rate. Worrell asserts that NCB's "should be empowered by law and precedent to apply the tools of monetary policy without prior approval of the treasury, prohibited by law and custom from lending to the government on non-market terms, and accountable to parliament" (2000:3). NCB's must first gain credibility by consistently achieving low inflation before (political, economic and social) credibility is given to the CMA. Moreover, if the CMA cannot build a reputation for price stability and impose fiscal austerity, the probability of devaluation will increase. Worrell (2000) also recognizes that when a government pursues an expansionary fiscal policy it trivializes the notion of central bank independence since no matter what instrument the central bank uses, low inflation will be unattainable.

This is why the issue of central bank independence *along with* imposing fiscal discipline must first be addressed in potential member countries before a CMA can realistically be sustained. However, this is not to say that the central bank and government cannot cooperate with respect to monetary and fiscal policy. Indeed, a review of the literature affirms that effective monetary-fiscal cooperation is the only framework within which policy can be successfully conducted in small open economies like the Caribbean.²⁹ By the two not cooperating, fiscally imprudent governments with high public sector borrowing requirements will face increased expectations of higher inflation, a depreciation of the exchange rate, and a rise in taxes. NCB's will be forced to react by raising interest rates to avoid capital flight. In addition, fiscal indiscipline is compounded by governments borrowing more than the legal limit from their central bank,³⁰ which will cause monetary targets to be exceeded. Alternatively, the government could turn to international financial markets to finance their deficit, further adding to their excessive debts. Ultimately, this will harm their credit ratings and punish them through higher interest rates.

Since governments typically favour a more relaxed monetary stance, NCB's may have to demonstrate their independence in order to achieve low inflation, as has been the case in the euro area over the past few years with the European Central Bank (ECB) rejecting calls from Germany and France to lower interest rates. The CMA must also enforce tight limits on

²⁹ See for example, Eijffinger and de Haan (1996); Fry (1997); Demertzis et al (1999); Valila (1999).

³⁰ Who must honour cheques written by the government so as not to lose public confidence in fiscal policy.

financing member countries fiscal deficits, ideally not financing them at all. National governments could, of course, circumvent these restrictions by financing their deficits through increased external borrowing, as has been the case in the CFA Franc zone. Therefore, the CMA must implement, at its inception, binding rules that impose restrictions on members' borrowing from domestic *and* external markets.

There is also no reason to expect that NCB's monetary policies cannot be coordinated between potential CMU members prior to its launch. Indeed, this should be encouraged since it will better prepare NCB's for the transition to the CMA and strengthen commitments to monetary union. Many central banks over the past decade (the ECB included) have moved towards adopting an explicit inflation target (or range), and Caricom NCB's could adopt this approach in an effort to coordinate monetary policy. Other forms of targets could also be coordinated, such as money (supply and reserve) and exchange rate targets, with each assigned various levels of priority. As mentioned above, given the Caribbean's susceptibility to external shocks (which impact members unevenly) a single target may be less appropriate.

4. Increasing public awareness and giving CMU higher priority in the CSME framework.

It almost goes without saying that monetary union, regardless of its perceived economic advantages, will never come to fruition if the political support for it is non-existent. While the political leaders of Caricom countries have signaled their intention to move towards monetary union, the initiative has not been embraced with the requisite commitment by them. This lack of political will was also evident in the build up to EMU as many EU members expressed apprehensions. Potential members of CMU also seem anxious to allow an external authority (in this case Caricom) to impinge upon the sovereignty of their fiscal policy.

Cohen (2003) argues that the key ingredient in forming a sustainable monetary union is commitment as it requires an upward shift in the delegation of formal authority and entails a loss of sovereignty. This requires an alliance of allies – other states with similar preferences and disposition to act cooperatively. In practice, such allies are not that plentiful. A major obstacle to the establishment of a monetary union is the collective action they require. Overcoming these

obstacles has proved very difficult, as evidenced by the fact that the Euro is the *only* monetary union to be formed in the post-war period, and this has only been a recent development.

For the sustainability of a monetary union, Cohen further states that economic linkages on their own are not enough and appear to be of secondary importance to political linkages. Either a powerful ‘hegemon’ or a community of equally committed members is required to ensure sovereign governments receive the necessary incentives to stick to bargains. He observes that the reason why monetary unions are so uncommon is that there are few places where a suitably committed hegemon or necessary sense of community exists. The EMU is a case where a sufficiently powerful hegemon (Germany) existed to ensure monetary union was achieved, but that the Caricom region lacks a hegemon or the local sense of solidarity sufficient to sustain the requisite degree of commitment. Lastly, Cohen suggests that because the Caribbean has close trade links with a large hegemon (USA) it may inhibit the success of CMU since there is less incentive for a mutual commitment between members.

Conversely, Masson and Pattillo (2001) point out that if the political determination to join a monetary union is strong, as is the case of Nigeria and Ghana wanting to form one for the whole of the Economic Community of West Africa States (ECOWAS) region in West Africa, then this could suggest that convergence criteria will not be applied rigorously (enough). This raises the chances that the monetary union may not be sustainable.

Nevertheless, it is generally recognized that the political will for monetary union is a necessary prerequisite. Prime Minister Arthur of Barbados, who has lead responsibility for the implementation of the CSME, commented in 2005 that “the convergence project will go nowhere unless there is substantial political engagement on the matter of monetary convergence” (Williams, 2006). His sentiments were backed up by Governor Williams of the Central Bank of Trinidad and Tobago when he stated in 2006 that “we (the Caribbean region) need to summon up the political will and achieve public buy-in to make this initiative a success.” Member countries must recognize the convergence criteria in their economic targets, and the criteria must form an integral part of the planning and budgeting cycle if they are to be achieved and sustained.

Central banks the world over are notoriously cautious with respect to communicating opinions and policy stances for fear of upsetting markets. However, in an effort to overcome public uncertainties surrounding monetary union, Caricom NCB's have a responsibility to disseminate accurate and timely information to enhance greater understanding for the mechanics of the process. This should be part of a wider initiative by NCB's to improve their communication with the public and private sector so that policy actions are better aligned with expectations. Indeed, Worrell comments: "through the information it gives to the public, the authority with which the governor speaks and the plausibility of its analysis, the (central) bank has the opportunity to make a major impact on public perceptions of economic performance and policy, and therefore on the targets that society, through its representatives, seeks for itself" (2000:15).

V. CONCLUSION

This study has sought to identify what needs to be done to realize monetary union amongst Caricom members. In doing so it has considered the implications of CMU for monetary and fiscal policy, and trade and growth. Adopting a single currency will require member countries to relinquish control of their monetary policy to an external authority, which will bring difficult adjustments to a monetary policy that serves the region as a whole instead of its individual units. Member countries must also be aware of the spillover effect of excessive fiscal deficits since they will have inflationary pressures and require an adjustment in monetary policy. To overcome these problems, potential members will have to harmonize fiscal policies. Adopting a single currency that is initially pegged to the US dollar will eliminate transactions costs and exchange rate uncertainties, in theory allowing the region to realize its full intra-trade, and therefore its growth, potential. However, the very low level of intra-regional trade within the Caribbean may prove to be a stumbling block in this regard as exchange rate stability with the regions largest trading partner (the USA) may only serve to increase extra-regional trade.

Criteria that potential members must satisfy before forming CMU have been established, and a brief assessment of regional convergence based on these finds that no Caricom country satisfies all the criteria. Only Trinidad and Tobago, and possibly the ECCU area, are close to meeting all

the convergence criteria, but it is questionable whether forming CMU with just these members would be viable and sustainable. Clearly, actions need to be taken to facilitate the creation of the necessary economic and political environment conducive to the transition towards CMU. In this regard, one of the main findings of this paper is that, in addition to enhancing the convergence criteria to include limits on public sector debt and convergence on interest rates, a set of fiscal rules with credible sanctions against non-conformers need to be established *ex-ante*. Furthermore, central banks should be given greater independence, in part, to compel national governments in making the necessary adjustments towards an externally executed monetary policy by an independent monetary authority. Ultimately, however, it also recognizes that the initiative will never actually be launched unless leaders of Caricom nations make the requisite political commitment to a union that binds them not only monetarily, but fiscally too.

Needless to say, once potential members have met the convergence criteria the implementation of a monetary union will not happen overnight. In addition to establishing the necessary legal structure, operating framework and logistics of monetary integration, there are a number of other issues that will require considerable attention in the build-up to CMU. In this regard, policymakers will require further research on structural reforms within Caricom since countries differ in their dependence on certain industries and there is an acute awareness of the need for diversification. Furthermore, CMU is likely to follow a path similar to EMU, where a core of countries initially formed the euro and others joined later. This will require continuous reform to “finely tune” the system and operations of the CMA, and to ensure that there is sufficient flexibility to allow smooth adjustments in the economic system, especially with respect to labour market flexibility.³¹ In this regard, brain-drain induced intra and (especially) extra regional migration in the Caribbean will put pressures on the fiscal positions of countries. Further research into how policymakers can overcome these by enhancing private sector growth and re-orientating their education systems towards providing skills in demand within the region and retaining highly-skilled workers will also be important for a successful monetary union.

³¹ Which has been a problem in Germany since it joined the euro

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Appendix 1: IMPORT COVER RATIO (Number of months of cover)															
Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	2.1	1.8	2.1	2.3	2.1	2.0	2.3	3.1	3.1	2.4	2.2	2.8	3.8	5.5	4.5
Barbados	0.2	2.5	1.9	2.9	2.9	3.8	3.4	3.2	3.4	5.5	9.2	9.5	8.8	5.9	5.6
Belize	2.7	2.6	2.0	1.3	1.3	2.7	2.5	1.6	2.1	3.2	3.2	3.2	2.1	1.4	1.6
EC Currency Union	5.4	6.7	6.0	6.0	6.6	6.1	6.1	7.0	4.7	4.7	6.2	7.3	8.0	8.9	8.4
Guyana	4.8	5.2	6.6	6.4	6.5	6.8	5.0	3.9	4.0	4.3	4.1	4.1	4.1	3.1	3.0
Jamaica	0.8	2.2	2.6	4.1	3.2	4.0	2.8	3.0	2.7	3.1	5.5	4.6	3.1	4.7	4.7
Suriname	0.0	0.0	1.0	2.5	4.9	3.8	4.2	3.1	1.3	0.9	4.6	3.9	2.9	2.9	2.5
Trinidad & Tobago	...	3.1	2.2	1.6	3.7	4.7	0.0	4.4	4.5	5.8	7.3	7.4	7.8	9.7	7.8

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

Appendix 2: EXCHANGE RATES (% change on previous year)													
Country	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barbados	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belize	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EC Currency Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Guyana	3.8	10.4	(1.9)	0.7	0.9	14.4	9.5	2.5	3.6	1.8	2.8	0.6	(0.6)
Jamaica	47.3	2.1	19.2	(12.3)	4.9	1.6	11.3	9.9	4.2	7.6	18.8	1.7	4.9
Suriname	na	na	1.7	(1.5)	0.0	0.0	145.1	121.1	0.0	15.9	3.9	3.8	1.1
Trinidad & Tobago	37.2	0.0	1.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

Appendix 3: DEBT SERVICE RATIO (as a % of GDP)															
Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	4.6	5.6	5.0	5.6	5.1	5.5	5.5	5.2	5.4	4.1	5.0	5.6	13.6	3.4	2.8
Barbados	25.1	23.7	15.7	9.3	12.6	11.5	9.4	7.0	7.9	5.7	5.8	8.2	8.6	7.7	6.7
Belize	5.8	4.7	5.3	8.1	9.9	9.6	9.0	9.8	8.1	9.8	14.7	15.2	13.6	16.3	35.6
EC Currency Union	3.5	4.3	4.0	3.6	4.4	3.8	4.2	10.4	17.1	19.3	27.3	29.1	27.8	33.1	42.7
Guyana	20.3	19.9	20.5	22.2	21.8	18.8	22.1	23.8	13.3	16.0	10.9	8.6	9.6	7.5	7.5
Jamaica	32.2	27.9	24.8	20.3	17.9	16.3	15.8	20.9	16.9	13.4	18.9	25.5	23.5	27.8	na
Suriname	na	5.9	2.0	3.5	1.0	4.2	4.9	3.3	4.4	23.3	11.2	10.0	8.8	na	na
Trinidad & Tobago	20.0	26.7	30.3	25.2	15.0	13.4	15.4	9.9	8.0	7.9	3.7	4.4	3.8	4.7	2.0

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

Appendix 4: FISCAL DECIFIT (as a % of GDP)															
Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	(3.9)	(3.1)	(3.0)	(0.7)	(1.0)	(1.7)	(3.5)	(1.9)	(1.1)	(0.2)	(1.9)	(2.7)	(4.0)	(3.6)	na
Barbados	(1.4)	(2.8)	(2.8)	(2.1)	0.8	(3.2)	(0.9)	(0.8)	(2.3)	(1.5)	(3.6)	(6.3)	(3.1)	(2.2)	(4.0)
Belize	4.9	(5.2)	(6.5)	(5.8)	(4.0)	(0.4)	(2.0)	(2.3)	(2.1)	(9.0)	(8.8)	(3.8)	(10.8)	(5.9)	(6.4)
EC Currency Union	(2.1)	(2.8)	(1.8)	(1.6)	(2.1)	(1.7)	(2.6)	(4.6)	(3.5)	(4.5)	(7.3)	(0.9)	(5.2)	(3.4)	(2.7)
Guyana	(0.2)	(0.2)	(0.1)	0.0	0.0	(1.6)	(6.9)	(6.8)	(2.0)	(7.3)	(9.6)	(7.1)	(7.1)	(4.9)	(12.9)
Jamaica	3.4	3.5	3.1	1.2	1.3	(4.1)	(7.1)	(7.0)	(5.5)	(0.2)	(5.6)	(7.9)	(7.8)	(4.5)	(4.3)
Suriname	(16.6)	(4.6)	(11.9)	(2.0)	3.5	(2.0)	(3.0)	(9.7)	(9.6)	(12.2)	3.2	(7.0)	0.2	(1.2)	na
Trinidad & Tobago	(0.2)	(2.8)	(0.2)	0.0	0.2	0.5	0.1	(1.9)	(3.2)	1.6	(0.1)	0.3	2.7	2.7	5.6

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

Appendix 5: INFLATION (% change on previous year)

Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	7.4	5.6	2.7	1.3	2.1	1.4	0.5	1.3	1.3	1.6	2.0	2.2	3.0	0.9	2.2
Barbados	6.0	6.1	1.1	0.7	1.9	2.4	7.7	(1.2)	1.6	2.4	2.8	0.2	1.6	1.4	6.1
Belize	4.5	2.4	1.5	2.6	2.9	6.4	1.0	(0.8)	(1.2)	0.6	1.1	2.3	2.6	3.1	3.7
EC Currency Union	4.4	3.0	2.1	1.7	3.5	2.2	3.0	2.9	2.9	3.4	0.5	3.0	1.5	2.4	4.3
Guyana	70.3	14.2	7.7	16.8	8.1	4.5	4.1	4.8	8.7	5.8	1.5	6.1	5.0	5.5	8.2
Jamaica	51.1	77.3	22.1	35.1	19.9	26.4	9.7	8.6	6.0	8.2	7.0	7.1	10.3	13.6	15.3
Suriname	26.0	43.7	143.5	368.5	235.6	(0.7)	7.1	22.9	112.8	76.2	4.9	28.4	13.9	9.0	15.8
Trinidad & Tobago	3.8	6.6	10.7	8.8	5.3	3.3	3.7	5.6	3.5	3.6	3.2	4.3	3.0	5.6	6.9

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

Appendix 6: CRITERION AVERAGES, 1991-2005

COUNTRY	Import Ratio Criteria	Exchange Rate Criteria¹	Debt Service Ratio Criteria	Fiscal Deficit Criteria	Inflation Rate Criteria	Total Public Debt Criteria*	Interest Rate Criteria*
Bahamas	2.8	0.0	5.5	(2.3)	2.4	8.6	4.7
Barbados	4.6	0.0	11.0	(2.4)	2.7	22.7	4.3
Belize	2.2	0.0	11.7	(4.5)	2.2	48.7	5.7
EC Currency Union	6.5	0.0	15.6	(3.1)	2.7	48.8	4.2
Guyana	4.8	3.7	16.0	(4.4)	11.4	257.5	9.8
Jamaica	3.4	9.3	21.6	(2.8)	21.2	61.5	18.9
Suriname	2.6	26.5	6.9	(5.2)	73.8	23.5	12.0
Trinidad & Tobago	5.0	3.2	12.7	0.4	5.2	33.0	5.7
Region-wide Average	3.99	5.34	12.63	-3.04	15.20	63.04	8.16

¹ 1993-2005 * Suggested Criterion

Appendix 7: TOTAL PUBLIC DEBT (as a % of GDP)															
Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	11.1	11.8	10.8	9.8	9.8	7.6	7.8	7.2	6.9	6.5	6.6	6.0	9.7	9.0	na
Barbados	24.6	23.7	21.3	29.5	19.2	18.1	15.8	14.4	15.9	19.6	26.3	30.5	28.2	29.0	24.6
Belize	34.8	30.1	31.7	32.7	31.3	36.0	39.2	41.1	36.7	54.8	57.8	62.0	76.2	82.1	84.2
EC Currency Union	32.1	30.7	32.9	na	na	na	na	na	na	45.0	51.4	60.4	66.1	65.1	55.1
Guyana	350.4	569.0	479.0	367.7	327.7	219.3	204.3	230.7	176.8	169.2	169.9	172.6	148.3	137.9	139.6
Jamaica	102.3	99.5	76.9	76.4	67.6	47.6	45.6	43.5	41.6	45.4	52.8	54.4	54.2	59.1	55.9
Suriname	na	5.8	1.9	na	26.2	19.2	17.3	19.1	28.9	34.1	40.9	35.1	29.7	na	na
Trinidad & Tobago	67.0	62.6	71.2	60.8	35.5	34.1	26.8	23.2	23.0	20.7	18.5	16.7	14.4	11.8	8.9

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

Appendix 8: INTEREST RATES (Commercial Bank Average 3-month Deposit Rate) %															
Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bahamas	7.1	6.1	5.2	4.5	4.7	5.1	5.3	5.5	4.5	3.9	4.2	4.0	3.8	3.7	3.1
Barbados	7.5	5.0	2.9	5.0	5.0	5.0	4.3	4.8	5.1	4.8	3.5	2.5	2.5	2.3	4.8
Belize	6.4	6.0	6.0	6.1	7.2	6.2	6.7	6.0	5.7	5.0	4.3	4.5	4.9	5.2	5.4
EC Currency Union	5.5	4.5	3.3	4.0	4.3	4.3	3.8	4.6	5.4	5.4	3.8	3.8	3.5	3.1	na
Guyana	29.2	18.2	10.9	12.8	12.9	10.4	8.4	8.0	9.3	7.4	7.2	3.7	2.8	2.6	2.6
Jamaica	29.9	23.7	42.6	31.2	26.0	22.2	13.8	15.9	14.2	13.7	14.4	9.6	9.3	8.5	8.3
Suriname	4.6	4.5	4.9	12.9	20.4	16.4	16.6	13.9	17.2	17.2	14.4	10.5	9.4	9.0	8.6
Trinidad & Tobago	5.7	7.8	7.8	7.2	6.3	6.5	6.5	6.8	6.4	6.6	6.6	3.5	3.1	2.7	2.7

Source: Caribbean Centre for Monetary Studies, Meeting of the Committee of Central Bank Governors, June 2nd, 2006.

