



MACROECONOMIC CONVERGENCE IN CARICOM

by

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INTRODUCTION

The Caribbean Community (CARICOM) comprises a set of highly open economies with limited natural resources¹. These are mainly small states whether viewed in terms of gross domestic product (GDP) population or land area, although there are relatively large variations between the territories. For example, Guyana which is located on the mainland of South America is larger than England while St. Kitts and Nevis has a land area of 261 square kilometres. The countries rely heavily on tourism and international financial services, sugar production, bauxite, bananas and petroleum products. Some of the countries have achieved reasonably high living standards; Barbados, for example, has been consistently in the top 20 countries on the United Nations Index of Development. However, the group produces well below its potential and therefore unemployment is generally high and there are pockets of poverty.

For almost four decades these countries have been trying to integrate their economies in an effort to quicken the pace of development. In 1992, the countries reached a stage in the integration movement, at which it was agreed that a single market should be pursued. Convergence criteria were established to determine eligibility for entry into a currency union which would be the centrepiece of the arrangement. Performance with respect to the convergence criteria is monitored on a semi-annual basis and there is now a body of statistics dating from the early 1990s.

While much progress has been made with regard to the establishment of the Single Market, the formation of the monetary union has remained elusive. Since convergence is so vital to monetary union it is necessary to assess the extent to which the Caribbean economies are converging. The three main sections in this paper deal, in order, with the background to integration, the degree of

¹ The group comprises Antigua/Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St. Kitts/Nevis, St. Lucia, St. Vincent, Suriname and Trinidad and Tobago.

convergence among the countries and the factors which influenced the convergence outcomes.

THE BACKGROUND

Efforts at economic integration among Caribbean countries predate the more recent movement towards the formation of economic blocs which took root during the 1990s. A free trade area, which was instituted by several of the English-speaking countries in 1967, gave way to a customs union in 1973 but each failed for various reasons, to raise growth rates and transform the economies. In 1989, a decision was taken to deepen the integration movement through the formation of the Caricom Single Market and Economy (CSME), the centrepiece of which would be a monetary union and common currency. Fourteen countries are signatories to the CSME, including Suriname, which is a former colony of the Netherlands, and Haiti which is French-speaking.

It is generally agreed that monetary integration has a higher degree of success if the economies in question are converging, i.e. their macroeconomic fundamentals and policies approach each other. When there are significant differences in performance, countries will react differently to shocks, thus necessitating country-specific responses which may be injurious to the entire group. Moreover, it might be necessary to institute costly transfer mechanisms to offset the impact of these shocks on the most countries. However, convergence does not mean equality since short-run departures are expected. (For a discussion on the rationale for convergence, see Sturm and Nikolaus, 2005).

In order for convergence to be meaningful, it should take place with respect to some target. In the run-up to European Monetary Union, the debate on an appropriate support mechanism was resolved by the Delors Report (1989) which pointed out that economic convergence was necessary for monetary union. In recognition of the fact that the various European countries were not all at the

same stage of readiness, the Maastricht Treaty which underpins the European Union, specified a number of convergence targets for the group. These related to the inflation rate, exchange rate stability, long-term interest rates, the fiscal deficit and public sector debt. Artis (1992, p.303) and de Grauwe (1996, p.1) note that these criteria were so strict very few European countries were able to achieve them in 1991.

In the case of the Caribbean, it was also the disparities in economic performance that helped to push the case for convergence criteria. In 1991, for example, growth rates ranged between -3.9% and 7.8%, inflation rates between 4.4% and 70.3% and the external current account as a percentage of GDP, between -20.6% and 6.1%.

In 1992 the Caricom countries agreed on convergence criteria for exchange rate stability, foreign exchange holdings and external debt-servicing. Exchange rate stability would reduce the risk associated with cross-border transactions, while the import cover rule and the debt-servicing criterion would ensure the adequacy of foreign exchange holdings. In 2003 it was agreed to include criteria relating to the fiscal deficit and inflation, a reflection of the link between fiscal outcomes and balance of payments viability as well as a recognition of the fact that rapid price increases could be destabilising.

The targets for the convergence criteria are as follows:

The Exchange Rate Criterion

A stable exchange rate for 36 months (in the case of the floating rate countries, fluctuations in the exchange rate were to remain in the a 1.5 per cent band over a period of 36 months).

Import Cover Criterion

Three months' imports of foreign exchange reserves for at least 12 months.

Fiscal Criterion

A Fiscal Deficit equivalent to no more than 3.0 per cent of Gross Domestic Product (GDP).

Inflation Criterion

An inflation rate within plus or minus 1.5 per cent of the median for the three countries with the lowest (but positive) rates of inflation in the previous year

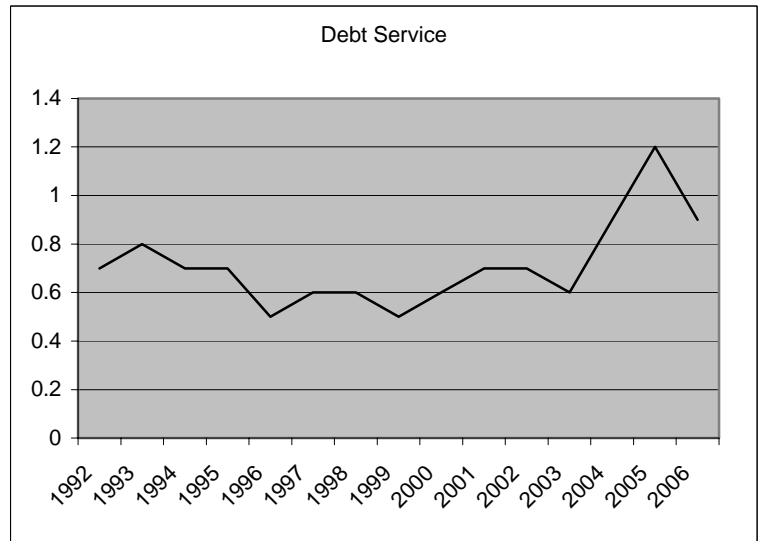
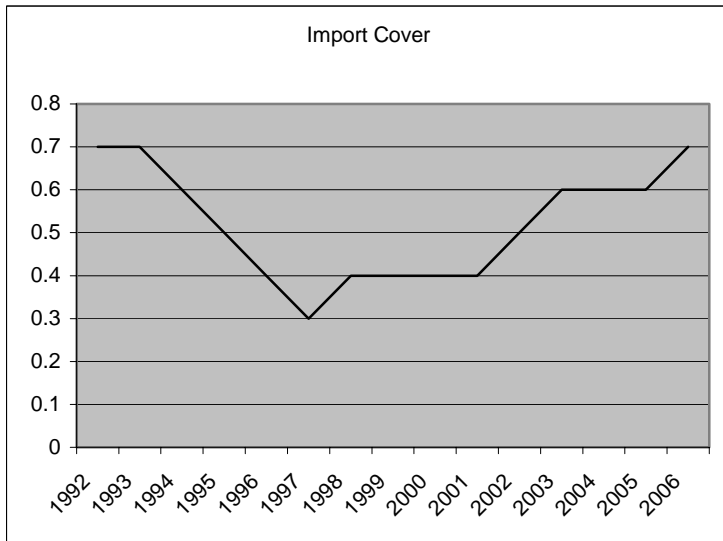
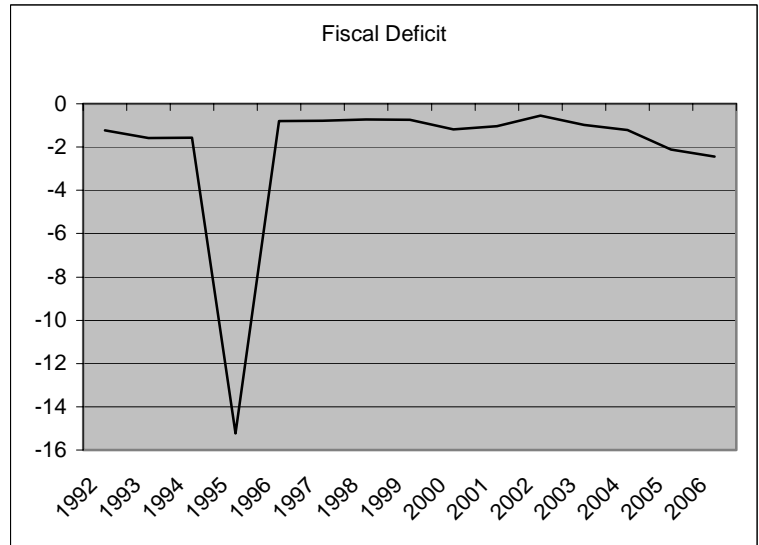
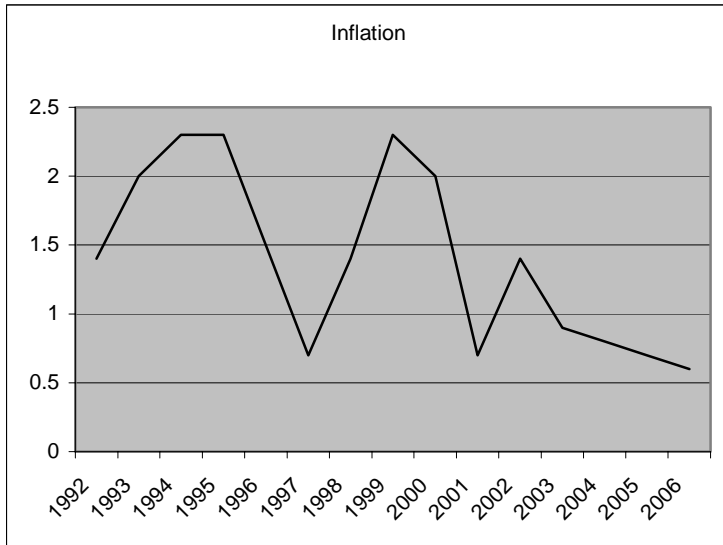
Debt Service Criterion

External debt service payments that amount to no more than 15 per cent of exports of goods and services

THE MEASUREMENT OF CONVERGENCE IN CARICOM

The Caribbean Centre for Money and Finance, an arm of the University of the West Indies has since the early 1990s published information on the countries' performance with respect to the convergence criteria. The data include the annual average outcomes for the group and the yearly coefficient of variation which is a measure of how close the individual outcomes cluster around each other. This statistic should therefore vary inversely with the degree of convergence. A similar approach to the measurement of convergence, using the standard deviation, is employed by Neven and Gouyette (1995) to measure regional convergence in Europe. The coefficient of variation is not provided for the exchange rate criterion, because of the way in which it is measured. The trends in the coefficient of variation for the group's performance in relation to the convergence indicators are shown in Figure 1.

Figure 1: Coefficient of Variation



Inflation Criterion

With respect to inflation rates, the average for the group has fallen significantly since the mid 1990s. Between 1991 and 1996 the average rate of

inflation was constantly in double digits, largely influenced by hyperinflation in Suriname which was experimenting with various exchange rate regimes. Since then a double digit average was recorded on only two occasions. The average rate of inflation was above the target in every year except 2001, a year in which inflation moderated in every country except Barbados and Belize.

Using the coefficient of variation as a guide, it would appear that there was general convergence with respect to inflation between 1991 and 2006. However, this was most discernible from 2002 to 2006 when there was a constant decline in the coefficient of variation.

Fiscal Deficit

The average fiscal deficit to GDP ratio was below the target for most of the time. The exception was from 1997 to 2003 when widening deficits were recorded for Barbados, Belize, the OECS group, Guyana, Jamaica and Suriname. The coefficient of variation, apart from some erratic behaviour in the mid-1990s, was flat for most of the time. However, it has fallen a little since 2002, indicative of a tendency towards increased convergence.

Import Cover

The countries have never had difficulty meeting the target for the import cover. Indeed, the difference between the average import cover and the target has been on the increase throughout the period. The significant pick-up in the average scores in recent years is due to the good performances by the East Caribbean Currency Union and Trinidad and Tobago. This divergence in country performances is mirrored in the values for the coefficient of variation which shows a definite rising trend from about 2001.

Debt Service Criterion

Since 1992, the average debt service ratio was higher than the target only in 2005. It would appear that, while some of the countries have high debt to GDP

ratios, the debt was so structured that amortization was not a major burden. Some convergence in country performances was observed between 1992 and 1996, but since then, if anything, the outcomes have been diverging. Debt service became less of a problem for Trinidad and Tobago but was more burdensome in Belize and the East Caribbean Currency Union.

The use of the coefficient of variation to measure the degree of convergence shows that there have been periods of convergence and divergence with respect to each variable. Using this method, it is difficult to measure the overall degree of convergence. This is particularly true if, as in this case, convergence with respect to one variable is accompanied by, or leads to, divergence in respect of one or more of the other variables. Moreover, while the coefficient of variation is an indication of how close the individual country values are to each other, it is silent on how they relate to the targets. In this case, what is required is some composite measure of convergence in relation to the targets.

An alternative approach could be to devise an index of convergence which is some weighted composite of overall performance². First, the convergence criteria are weighted according to their perceived importance to the CARICOM countries. An understanding of the dynamics of Caricom economies would suggest the following ranking of the convergence criteria, and suggested weights in descending order:

Exchange Rate Stability (30)

There is no denying the fact that periods of unstable rates have seriously damaged the economies of some of the territories with floating exchange rates. This is why all of these countries place a very high premium on

² Two popular approaches to the measurement of convergence have been in terms of beta and sigma convergence, but these techniques are mainly employed where the target variable is the growth of real output per head.

exchange rate stability. Indeed, although Trinidad and Tobago officially has a floating rate, it has been fixed for all intents and purposes by the willingness of the monetary authorities to intervene in the market when necessary to preserve the value of the currency.

The Import Cover (25)

This criterion is also important to the small, open economies in the Caribbean since all economic activity is driven by the availability of foreign exchange. Foreign exchange is required for the overwhelming proportion of consumption and investment activities as well as the repayment of foreign debt.

The Fiscal Deficit (20)

Imprudent management of the public sector has been a major cause of macroeconomic imbalance in Caricom countries. Since the 1980s the majority of these countries have had to resort to stabilisation programmes with the International Monetary Fund because of runaway spending by governments. The fiscal deficit impacts both available reserves and exchange rate stability.

The External Debt Service Ratio (15)

If foreign reserves are healthy and the exchange rate the stable, these countries can service their foreign debt without a great deal of difficulty, as has been shown.

The Inflation Rate (10)

High inflation is undesirable, but it is not as critical a destabiliser as exchange rate instability, falling foreign reserves or a runaway fiscal deficit.

TABLE 1

| TARGETS | WEIGHTS |
|-------------------------|------------|
| Exchange Rate Stability | 30 |
| Import/Reserves Cover | 25 |
| Fiscal Deficit | 20 |
| External Debt Service | 15 |
| Inflation | 10 |
| | 100 |

Next, we need to assign values the group's performance with respect to achieving the various targets. A performance score of 100 indicates that the average score of the group of countries is equivalent to, or better, the target. Thereafter, the values are reduced by increments of 20 as the group average diverges from the target by larger and larger amounts; 20 is assigned for the lowest level of attainment. Table 2 shows the overall performance grid.

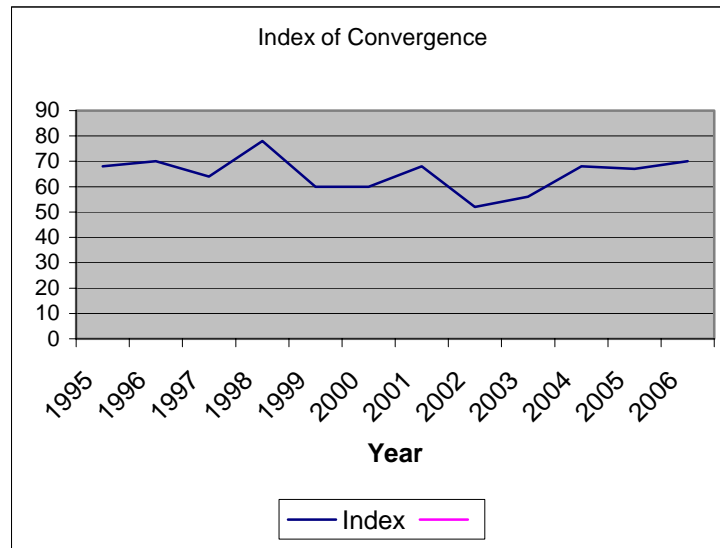
TABLE 2**PERFORMANCE SCORES**

| | Weight | 100 | 80 | 60 | 40 | 20 |
|------------------------|--------|--------------|--------------|--------------|--------------|-------------------|
| Exchange Rate (%) | 30 | 0 to 1.5 | 1.6 - 1.8 | 1.9 - 2.1 | 2.2 - 2.4 | above 2.4 |
| Import Cover (wks) | 25 | 13 or more | 10.4 - 12.9 | 7.8 - 10.3 | 5.2 - 7.7 | below 5.2 |
| Fiscal Deficit/GDP (%) | 20 | 3.5% or less | 3.1-3.6 | 3.7 - 4.2 | 4.2 - 4.8 | above 4.8 |
| Debt Service (%) | 15 | 15% or less | 15.1 - 18.0 | 18.1 - 21.0 | 21.1 - 24.0 | above 24.6 |
| Inflation (%) | 10 | On target | Target + 20% | Target + 40% | Target + 60% | Above target +60% |

Because of the way in which the exchange rate stability target is measured (i.e., on a 3-year average) a complete data series is only available from 1995

onward. This constrains the index to measuring convergence between 1995 and 2006.

Figure 2:



The resulting values of the index, based on the techniques described above, are shown in Figure 2. The two things to look at here are the annual values of, and the trend in, the index. Throughout the period, convergence around the targets has been only moderate, ranging between 52 and 78. The highest levels of convergence were recorded in 1996, 1998 and 2006. In each of these years the group averages for the import cover and fiscal deficit (two heavily-weighted criteria) met or bettered the targets. The top-weighted exchange rate stability criterion was within the target in 1998 and barely exceeded in 2006.

Although the earlier part of the period included some of the highest levels of convergence, it was also during those years that the index was quite erratic, indicating that little progress was being made overall. It was only between 2002 and 2006 that the index has shown a definite increasing trend. This

pattern signifies that since 2002 the group has been getting closer to the convergence targets.

REASONS FOR THE SLOW PACE OF CONVERGENCE

There are a number of explanations for the slow rate of convergence among Caricom countries. These include the existence of multiple exchange rate regimes, the impact of trade liberalisation, rising petroleum prices, conflicting priorities and the lack of a programme of co-ordination.

(i) Multiple Exchange Rate Regimes

In 1992 when the Caricom governments agreed to form the CSME only two territories - Jamaica and Guyana had floating exchange rates; all the other regional currencies were fixed at various parities to the US dollar. The existence of only two floating currencies minimised the probability of serious divergence among the exchange rates. However, the situation changed in 1993 when Trinidad and Tobago floated its currency. During the intervening years, Suriname and then Haiti, both with floating exchange rates, became members of Caricom.

By 2006, therefore, one-third of the Caricom countries had floating rate currencies. Moreover, between 1993 and 2006, there was significant deterioration in the rates of several of these currencies. For example, the Guyana and Jamaican currencies depreciated by 54.5% and 156.4%, respectively; the depreciation for the Trinidad and Tobago dollar was 10.5%. After joining the group in 1995, Suriname's currency fell from 450.6 to 2628.3 national units against the US dollar by 2003. The new unit which was instituted in 2004 registered a marginal decline in value by 2006.

There is general agreement that "the irrevocable fixing of exchange rates and thus the elimination of exchange rate fluctuations between participating countries is the constitutive element of a monetary union." (Sturm and

Nikolaus, 2005). This multiple exchange rate system is therefore a major obstacle to the achievement of convergence and the establishment of monetary union.

(ii) The Impact of the New Global Trading Arrangements

The formation of the World Trade Organisation in 1995 ushered in the era of rules-based trade liberalisation. Under this process, members are required to gradually reduce barriers to merchandise trade, replacing quantitative restrictions with tariffs and generally lowering taxes on international trade. In addition, small developing countries like those in the region are confronted with the phasing out of preferential trading arrangements. Non-tariff barriers like standards of quality are now more important than they used to be.

Trade liberalisation has negatively impacted the export sectors and fiscal outcomes in Caricom economies. Since these activities are characterised by high-cost production, they cannot compete on price with low-cost imported substitutes. The result has been a slowdown in the accumulation of foreign reserves in some cases. Moreover, the reduction in tariffs constrains government revenue and pushes up the fiscal deficit where there are no countervailing increases in taxation. The negotiations associated with trade liberalisation have led to the diversion of scarce human and financial resources away from other priority areas into trade negotiations. Indeed, so costly are these exercises that the countries have had to pool their resources and seek help from friendly governments in order to maintain a presence at the table.

(iii) Rising Petroleum Prices

The price of petroleum products has risen steadily in recent times, from about US\$25 per barrel in 1999 to around US\$61 per barrel in 2006. All of the Caricom countries with the exception of Trinidad and Tobago are oil importers. The oil price increase resulted in higher foreign exchange outlays on fuel imports for the importing countries. In addition the higher oil prices have also

fuelled a general increase in import prices. Together, these developments have resulted in a rapid rise in the foreign reserves of Trinidad and Tobago while the other countries have registered little or modest increases or even reductions in their reserve holdings.

(iv) The Lack of a Programme of Co-ordination

The regional integration process in the Caribbean is hampered by the lack of supra-national decision-making institutions. Since the Heads of Government agreed to monetary union and the convergence criteria in 1992 there has been no establishment of institutions to ensure the success of these decisions. Such institutions as do exist have no authority to impose sanctions on countries which do not meet the convergence targets or refuse to take them into consideration in macroeconomic planning. Without this kind of institutional support, the convergence outcomes may be viewed simply as an information tool.

In contrast, during the run-up to the formation of the European Union, there were several supranational bodies which supported the integration process. These included the Council of the European Union, the European Council, the European Parliament and the European Commission. It was these institutions, not mere peer pressure that helped to impose discipline and maintain deadlines.

(v) Conflicting Priorities

There are adjustment costs associated with meeting the convergence targets and, given the absence of a co-ordinating body, countries often make choices which reflect their national priorities. This is a region where governments are expected to provide many services which the private sector provides in more developed societies. So that, a political decision to provide certain social services, may not pay due regard to the implications for the fiscal deficit

target. Countries which pursue a stable exchange rate may be willing, on occasion, to accept a higher fiscal deficit as a trade-off.

Two related questions in this regard are whether the right combination of criteria was chosen and if they were correctly designed.

CONCLUSIONS

Since the agreement to establish a monetary union in 1992, the degree of economic convergence between Caricom countries has been disappointing for a variety of reasons. The use of the coefficient of variation as a proxy for convergence in country performance shows that there has been some convergence with respect to each variable, but during different periods. However, this measure does not speak to whether the countries meet the convergence targets. An index of convergence, which measures performance with respect to the targets, shows no particular trend during the 1990s and early 2000s, but a steady, though moderate increase in convergence between 2002 and 2006.

In order to quicken the pace of integration, a number of things need to happen. For one, there has to be institutional and official support for a programme to have the convergence targets incorporated into the macroeconomic planning process in the region. If meeting the convergence targets is crucial to the success of the monetary union and the wider single market, it cannot be subjugated to country priorities.

Secondly, it may be necessary to re-examine the convergence criteria themselves. Such an examination would speak firstly to whether the five criteria which are being used are indeed the appropriate ones. One also needs to determine whether the criteria are being measured correctly; for example, the band for the exchange rate criterion may be too narrow. Another concern is that in some cases it would have been better to use ranges instead of points

for the targets. All of these issues will have to be addressed if the convergence process is to play its part in advancing the goal of regional unity.

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