

## COMMON EXCHANGE RATE STRATEGIES FOR THE CARICOM REGION

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by

DeLisle Worrell  
Research Department  
Central Bank of Barbados

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Devising a common exchange rate strategy for a group of independent countries is extraordinarily difficult. Exchange rate choices for single countries are themselves a bone of contention, partly because of the inadequate theoretical foundations for exchange rate choice (particularly for small open economies) and partly because of confusion as to the objectives and efficacy of exchange rate policies in practice. Co-ordination for several countries adds the further difficulty of dovetailing disparate policies, different production activities, different marketing arrangements, differing kinds of adaptation to economic events at home and abroad and different objectives on the part of the member countries of the union.

The present study casts a blind eye on the theoretical issues, although they deserve to be mentioned. We do not have a fully articulated theory establishing the relationship between nominal exchange rates (the value of local currency in terms of US dollars, sterling and other currencies) and changes in the real exchange rate, a term which should be used to refer to the relative price of the same basket of goods at home and abroad. The real exchange rate is what really matters; it determines whether locals and foreigners will want to buy the things we produce. We do not have good explanations of systematic divergences between the prices of exports and imports which are among the most important effects of exchange rate changes. The

theory also offers inadequate treatment of time. Efforts to distinguish between short, medium and long term effects are useful conceptually but are not readily translated into useable policy. Partly because of these theoretical inadequacies there is no consensus on whether devaluation improves the competitiveness of small open economies and if so under what circumstances.

To add to our difficulties there is confusion about the objectives of exchange rate policy. If the exchange rate does not have positive effects, maybe we should make a fixed exchange rate, a target and avoid the unsettling effects of a moving rate. This the "fiscal discipline" argument. If the exchange rate is used as an instrument, what should be the target? Is it to be the balance of trade, the balance of payments, the rate of inflation, the real exchange rate or the rate of growth? Should we try for stable values of the target in the short run, in the medium run or in the long term? And what policies would we need to support the exchange rate strategy? What changes are we expecting in the mix of production, in the technology and in other structural factors over the period of the exchange rate strategy? What units of measurement are we using for exchange rate changes?

We know of no way of resolving all these issues, so we arbitrarily choose a particular specification among the many possibilities. We presume that the exchange rate will be used

as an instrument to adjust the balance of trade and that the time horizon is one year at a time; we take it that policies which are in place will continue in force provided they are feasible. If they are not we will have to make a choice based on our own judgement. The yardstick for measuring exchange rate changes will be the US dollar. If anyone were to make a different choice among the possible alternatives the conclusions of this study would have to be re-evaluated.

Regional leaders in the Caribbean seem to be most interested in the exchange rate effects on the balance of trade. Whether they should be more interested in another issue not addressed here. Although the most frequent complaint is about trade within Caricom, no one would seriously contemplate fixing the exchange rate mainly on the basis of Caricom trade, which accounts for less than 10% of total trade. It is the country's global external trade balance that matters.

We try to address the trade concerns by looking at alternative exchange rate strategies for the region on two bases. In the first place we settle on a global balance of trade target - that is, a target for the total trade of the country concerned - and derive an exchange rate strategy. Then we deduce the implications for regional trade to see whether they will prove acceptable on criteria which we prescribe. The second alternative is to work with a dual exchange rate system where there is a Caricom rate for transactions within the region combined with an entirely different exchange rate which each

individual country uses for its transactions with the rest of the world.

#### The Global Balance of Trade Target

What value should Caricom countries choose for their balance of trade target? They will hardly wish to choose a strategy which worsens the balance of trade (although on other criteria this might prove to be the preferred strategy) but they might choose between a strategy with neutral effects on trade and one which brings about specified improvements in the balance of trade. In the latter case, how much improvement would be desirable? These are not issues which can be resolved in the context of this paper, so we choose to present a strategy designed to ensure that the ratio of the trade balance to GDP for each country does not rise above an arbitrarily chosen value. It should not be difficult to suitably modify the calculations and conclusions to reflect alternatives to this choice.

We choose values for the trade:GDP ratio which we feel are sustainable in the medium to long term for each of the member countries of Caricom. We simulate a hypothetical exchange rate for the region to secure and maintain these target ratios.

We first calculate the elasticities which measure the effect of exchange rate changes on imports of goods and services, for each country. We need elasticities for each currency used in any country's trade and for each trading partner. For example, for

Jamaica there are elasticities measuring the impact of changes in the value of the currency on imports from the US, other elasticities for imports from the UK, and others for imports from Caricom countries, etc. There is a range of supply elasticities for exports, along the same lines. They measure how much additional product local suppliers will wish to put on the market, if they get better prices as a result of currency depreciation. By using import and export elasticities together we find out how any given change in exchange rates will effect each country's trade.

It does not matter what currency we use as a numeraire to measure the exchange rate change - the US dollar, sterling, the SDR or any combination of currencies will do; we know the values of each trading currency used in the region in terms of US dollars, sterling and the SDR, and we can calculate their values in terms of any basket so long as we know the currencies that make up the basket and the weights assigned to them.

Instead of taking the changes in exchange rates for granted and deriving the effects on trade we wish to turn the procedure around, picking a balance of trade target and finding out what change in exchange rates is needed to secure that target. The objective is to ensure that the ratio of the balance of trade to expected GDP does not change; by how much would we have to devalue or revalue the currency, taking account of the effects that would have on the trade balance? In table 1 we present for

TABLE 1

## EXCHANGE RATE STRATEGY: TARGET TRADE RATIO

(PERCENTAGE CHANGES, LOCAL CURRENCY PER US DOLLAR)

| Year | Barbados | Guyana | Jamaica | Trinidad/<br>Tobago | Weighted<br>Average |
|------|----------|--------|---------|---------------------|---------------------|
| 1973 | -21.9    | 19.0   | 1.6     | -3.4                | -2.3                |
| 1974 | 4.6      | 228.9  | 3.5     | 4.9                 | 23.5                |
| 1975 | 3.1      | 1.0    | 3.7     | 1.1                 | 0                   |
| 1976 | 5.1      | 1.2    | 19.8    | 0.2                 | 6.0                 |
| 1977 | 5.4      | 1.0    | 3.0     | 16.5                | 8.7                 |
| 1978 | 9.9      | 29.5   | 7.5     | 5.7                 | 3.5                 |
| 1979 | 12.8     | 23.4   | 8.4     | 9.7                 | 3.3                 |
| 1980 | 9.5      | 12.2   | 8.2     | 15.7                | 12.6                |
| 1981 | 2.6      | 2.4    | 13.0    | 0.6                 | 3.7                 |
| 1982 | 2.9      | 303.7  | 13.6    |                     |                     |

Barbados, Guyana, Jamaica and Trinidad and Tobago the exchange rate changes which would have secured an unchanged balance of trade to GDP ratio for the period 1973 to 1982. The policies needed would have varied quite remarkably between countries. For example, in 1973 a significant devaluation is indicated for Guyana, with only negligible changes for Jamaica and Trinidad and Tobago. For Barbados, a marked revaluation is indicated. The implied strategy requires highly volatile rates for all countries, with several reversals in the direction of exchange rate changes and a wide range of magnitudes. These results raise questions about the policy of using the exchange rate to adjust the balance of trade, but we will sidestep that issue for the moment.

We now suppose that regional exchange rates were unified, by imposing on each country an exchange rate strategy which followed the weighted average of the changes calculated for the individual countries. This unified rate will have very different effects on the balance of trade for different countries; they are presented in table 2. In 1973, the region's currencies would have been jointly revalued by 2.3%, in contrast to the changes ranging from 21.9% revaluation to 19.3% devaluation that would have been in individual countries' interest. As a result of the joint strategy Trinidad/Tobago's trade balance would have deteriorated by an estimated 180% of its 1972 value, while Barbados' trade balance might have improved by 60%. The joint strategy, if

TABLE 2

## TRADE EFFECTS OF COMMON EXCHANGE RATE

(PERCENTAGE CHANGE IN TRADE BALANCE)

| Year | Barbados | Guyana | Jamaica | Trinidad/Tobago |
|------|----------|--------|---------|-----------------|
| 1973 | -59.9    | 5.9    | 34.1    | -180.1          |
| 1974 | 284.6    | 9.3    | 844.4   | 581.2           |
| 1975 | -146.7   | -54.9  | 0.6     | 88.8            |
| 1976 | -114.2   | -691.4 | 287.6   | 17,816.0        |
| 1977 | 221.7    | 368.8  | 1,360.8 | -1,287.3        |
| 1978 | -1.4     | -13.6  | 98.6    | 257.3           |
| 1979 | 334.9    | 11.8   | -466.9  | 2,169.7         |
| 1980 | -538.1   | -70.7  | 250.6   | 172.2           |
| 1981 | 161.8    | 173.2  | 3.6     | -279.5          |

pursued over the whole period, would have produced violent swings in the trade balances of Caricom member states.

Furthermore, the destabilisation of the balance of payments, severe as it is, is by no means the only economic fallout that the region would have to contend with. Prices, costs and output would also be affected; we could, if we wished, estimate these effects by applying the relevant elasticities to the joint exchange rate changes in table 1. However, the joint exchange rate strategy seems already highly problematic on the basis of balance of payments effects alone.

The Dual Exchange Rate Strategy

Under this alternative, countries would maintain their existing exchange rate strategies with respect to the rest of the world, but there would be a uniform Caricom rate. We are in effect creating a new Caricom currency - the Caricom unit of account (CUA) - which would have a variable parity in terms of US dollars. The CUA would be based on a weighted average of the actual US dollar values of all the regional member countries.

A CUA based on these principles will not in fact neutralise exchange rate effects on trade; when the currency of any member country is devalued the value of the CUA will also fall in terms of US dollars. The CUA is thereby devalued in terms of all members' currencies which have not been devalued. In a paper presented at the 1984 Conference of the Caribbean Monetary Studies Programme, Karl Bennett worked out a weighted rate which

may be used to illustrate this point. His tables based on the situation before and after a 33% devaluation of the Jamaican dollar demonstrate the resulting changes in exchange rate values in terms of his CUA (Table 3). The Jamaican dollar would have depreciated with respect to the CUA while other currencies would have appreciated with respect to the CUA.

Using the CUA splits the Jamaica devaluation with respect to the Trinidad dollar into two portions; the larger proportion is the Jamaican dollar depreciation with respect to the CUA and the smaller is the Trinidad dollar appreciation with respect to the CUA. The prices of Trinidad exports to Jamaica will rise by somewhat less than they would have under the current situation. However, this does not really leave the Trinidad economy any better off because Trinidadians now receive rather fewer US dollars per hundred Trinidad dollars at the time of settlement under the CUA arrangements. Trinidad exporters to Jamaica might achieve precisely this result without resorting to a CUA simply by shaving the margins on their export prices to Jamaica.

It is impossible to have an exchange rate policy for the region which will be neutral with respect to regional trade unless that policy forced global exchange rate changes in response to the regional market. No one will support such a strategy since Caricom trade is such a small portion of the region's total trade.

An unresolved issue of the dual exchange rate system is the gains to be made by swapping between the CUA and the US dollar.

TABLE 3

VALUE OF THE CUA\* IN REGIONAL CURRENCIES

| \$              | (1)<br>Initial Value | (2)<br>After Jamaican<br>devaluation | % Change |
|-----------------|----------------------|--------------------------------------|----------|
| Trinidad/Tobago | .957                 | .918                                 | -4.1     |
| Barbados        | .798                 | .765                                 | -4.1     |
| Belize          | .798                 | .765                                 | -4.1     |
| Guyana          | 1.20                 | 1.15                                 | -4.2     |
| ECCM            | 1.08                 | 1.03                                 | -4.6     |
| Jamaica         | 1.20                 | 1.53                                 | +27.5    |

$$\begin{aligned} *CUA = & .25 \text{ (US\$/TT\$)} + .20 \text{ (US\$/BDS\$)} + .20 \text{ (US\$/G\$)} \\ & + .20 \text{ (US\$/J\$)} + .10 \text{ (US\$/EC\$)} + .05 \text{ (US\$/Bel \$)} \end{aligned}$$

Source: Karl M. Bennett, 'Balance of Payments Policies and Caribbean Integration', Regional Programme for Monetary Studies, October 1984.

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19 30/11  
21

Presumably, exchange controls would be brought to bear to restrict the scope of such swaps. However, experience suggests that if the gains to be made from such swaps are large enough new institutional arrangements will come into being (outside the region if necessary) to facilitate them.

#### Restricted Exchange and Trade Regimes

The analysis will have to be modified to take account of exchange controls, import controls and other restrictions on trade. Severe import and exchange controls such as now operate in Guyana and Jamaica have cut imports at the expense of income, without much affecting the fundamental ratios of imports to income. They have also served to divert foreign transactions from the official markets and to encourage the establishment of black market exchange rates. They have influenced relative prices, created bottlenecks, reduced confidence in economic prospects and discouraged investment. Under these circumstances, the observed patterns of trade are not a good guide to the effects of the official exchange rates. For example in Guyana, by official admission, substantial amounts of trade completely circumvented the official channels. There is probably no official parity in the region of the existing one which will have any noticeable effect on Guyanese trade. In Jamaica, it appears that the recent severe devaluation of the official rate has served to unify the black market and the official rates. However, it is still unclear what proportion of

trade still goes through unofficial channels. This introduces a margin of error in estimating the effects of official exchange rate change. The unofficial market is much less significant in Barbados and Trinidad and Tobago, so the problem there is not acute. However, exchange control and import control harmonisation are clearly not on the cards.

Exchange rate strategies will have very little mitigating effect on regional transactions. Firms selling on the regional market will have to develop alternative strategies for dealing with fluctuating exchange rates. We ought to caution against exaggerated expectations from a regional exchange rate strategy.