Predictors of Currency Crises in Fixed Exchange Regimes: Lessons for the Caribbean from the Case of Argentina

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Paper presented at the XXXIV Annual Monetary Studies Conference
Georgetown, Guyana
November 12-16, 2002

PRESENTATION

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SECTION 1

Introduction

In treating with currency crises over the past four decades, it had become popular for the international financial institutions to suggest devaluations as a prescription for every economic crisis. The implication was that the currency value was inappropriate. The case of Latin America is replete with examples. This has been standard fare in International Monetary Fund programmes for the past thirty years or more. As some countries floated their currencies, it was recognized that the floating of the currency took tremendous pressure off authorities to make continuous monetary and fiscal policy adjustments. More countries, particularly developed countries, chose that system. As a greater number of countries floated their currencies, the exchange rate became less and less of an issue in macroeconomic management programmes, and in fact, in developed countries the exchange rate became almost unimportant.

Developing countries too were encouraged to float their exchange rates. This, it was argued, was the easiest route to opening their economies and permitting financial liberalisation to help to promote economic growth. While this worked for developed countries, the road was more rocky for developing countries. Indeed, the responses of developed and developing countries to the floating of the exchange rate proved to be very different.

Ricardo Hausmann et al (1999) speaks to this. He argues that the European experience suggests that letting the exchange rate go

- allows for lower interest rates
- has little effect on the price level, and
- allows output to recover

While in the Latin American case it

- leads to an increase in interest rates
- has a large inflationary effect; and
- causes a major decline in output

The recommendation that developing countries float their exchange rates invariably led to major depreciations of the currency and to increasing levels of volatility.

A few countries dared to be different. Argentina was one such country. At the same time, fixed exchange rate systems and Currency Board systems continued to be used successfully by a number of developing countries. Several Caribbean countries were among them - Barbados, Bahamas, Belize, the East Caribbean States and a number of other countries outside the region: the first three having fixed exchange rates and the latter both a fixed exchange rate and a currency board system. The distinction for Argentina was that it was the only Latin American country which had chosen a fixed exchange rate regime and a Currency Board system.

Argentina became the country which the world watched. After a history of 8 major stabilisation programmes in 40 years, most of them based on a fixed exchange rate or a

pre-announced exchange rate depreciation, Argentina put in place a convertibility plan in 1991. Argentina's experience with several currency crises encouraged the Argentina Government to conclude that stability could only be returned to Argentina if the exchange rate was pegged. The choice of a Currency Board system was a further safeguard. This programme linked the peso to the U.S. dollar at the rate of US$1 to 1 peso and guaranteed convertibility to U.S. dollars; the domestic currency base was fully backed by the foreign exchange reserves of the Central Bank. From April 1991 the convertibility law and the reliability of the exchange rate determined the stability of the Argentine economy. The reform helped to control hyperinflation immediately and the programme assisted the country in emerging from a series of crises and led to eleven years of relative stability.

In the first 8 years following the programme, the economy became more open, exchange controls were removed, a major privatization programme was launched, business productivity rose and the country's export base was diversified.

Argentina's fixed exchange rate regime was held up by the IMF as an example of the success of a currency peg in bringing about stability. It was argued that it was this peg which allowed the country to withstand the strain of the Tequila effect in 1995, the South East Asian crisis and the Russian currency crisis. However, weakened by the contagion from the 1995 crisis, the devaluation by Brazil in 1999 put severe pressure on the Argentine economy, and the external account deteriorated despite several IMF programmes.

In January 2002 Argentina was forced to devalue its currency. This followed consistent and substantial capital flight, and several unsuccessful measures to lock down the banking system. The currency was devalued in the first instance by 29% and after trying unsuccessfully to defend the rate, the currency was allowed to float. At the end of October 2002 one U.S. dollar was equivalent to 3.525 pesos.

There is a school of though that the current crisis in Argentina took root because Argentina held on to fixed exchange rates for too long. Following the currency crises of the mid-1990s, the burning question begun to surface again as to whether currency crises could be predicted. The Argentina situation spurred the further question of whether these difficulties were avoidable and whether they were caused by the fixed exchange rate peg.

Section 2 deals with the issue of defining a currency crisis. The next section (Section 3) identifies predisposing factors and shows how they may lead to currency crises. Section 4 discusses the extent to which they were evident in Argentina and Section 5 goes on to discuss which indicators are more critical for fixed exchange rate economies. Section 6 discusses the similarities and differences between Argentina and those Caribbean countries with fixed exchange rates, and the paper concludes with a discussion of the lessons to be learned from the Argentina situation.

SECTION 2

Definition of a Crisis

The definition of currency crises has been the subject of some debate but generally crises can be defined as a very significant depreciation in the currency (Frankel and Rose, 1995). Others have defined a currency crisis as a situation in which a country's currency is depreciated and/or its international reserves are seriously depleted (Eichengreen, Rose and Wyplosz, 1996). The second definition is probably more generally accepted and is the one which will be used here. Some researchers seek to quantify the definition. One suggests that a depreciation must be in excess of 25%, and there must also be a 10% increase in the rate of depreciation before a currency can be considered to be in crisis (Frankel and Rose 1996). However, this is probably bringing too high a level of specificity to a problem that is really about confidence. Irrespective of which definition one uses it is generally agreed that currency crises are usually accelerated, though not necessarily caused by, speculation against the target currency, and are usually accompanied by a view among speculators that the currency will be devalued anyway and that speculators should reduce their losses or maximize their profits while they can. It is often thought however, that while speculators can precipitate the crisis that there are always factors already there which point to a devaluation of the currency, and that speculators only advance the date of exhaustion of foreign reserves.

Currency Values and Confidence

A determination of whether a crisis is imminent must be taken against the background of the country's history of financial stability. A depreciation of a particular size in one

country may not spark a crisis while a less significant currency depreciation in another might. One can therefore say fairly definitely that where a country has a history of currency crises any significant depreciation in the currency is likely to lead to expectations of another currency crisis. In a country like Argentina which had such a long history of currency crises, any significant depreciation would have sparked a crisis. For this reason, a fixed exchange rate peg was an excellent opportunity for the country to get itself out of the syndrome of constant devaluations. Many developing countries in the Caribbean and elsewhere continued to use such regimes and it was transplanted to many of the post-USSR regimes where political, social and economic turmoil required the stability of a currency peg.

Many of the factors to be monitored by fixed exchange rate economies, if they are to avoid currency crises are basically no different from those which floating rate economies must be concerned with if they are to ensure stable economies. In the case of fixed exchange rate economies, these factors become more critical since the adjustment is not in the exchange rate but in the level of reserve adequacy. While few of these predictors, on their own, can precipitate a crisis, together they indicate an impending crisis.

SECTION 3

Predictors of Currency Crises

This paper deals more with how such crises can be avoided, but it is critical to identify the warning signals; so that the first order of business is to list and analyse potential warning signals. This section identifies such signals, and then discusses each one.

The main predictors of currency crises are identified here as:

1. Inadequacy of foreign exchange reserves;
2. Problems of purchasing power parity/overvalued exchange rate;
3. Large and persistent current account deficits;
4. High levels of foreign debt;
5. Large fiscal deficits;
6. Low debt service capacity;
7. High interest rates;
8. Drying up of foreign capital inflows; and
9. Sovereign debt default

Other factors which may predispose a country to crisis are:

a. Uncertainty about the currency;
b. Political instability;
c. Low or negative rates of growth of GDP;
d. Weakness of the financial system;
e. Speculative attacks; and
f. Herding

Warning Signals

1. Inadequacy of Foreign Exchange Reserves

Inadequate reserves is one of the surest signs of an impending crisis. Falling foreign exchange liquidity results in the inability to meet external debt obligations and to make payments for necessary imports of goods and services. Each country should have a

threshold below which it is not prepared to allow foreign exchange holdings to decline and which would signal that there is a balance of payments problem

2. *Overvalued exchange rate*

An overvalued exchange rate makes exports expensive and imports cheaper, thus reducing the rate at which a country can accumulate foreign exchange reserves and increases outflows for the financing of external goods and services. While this cannot cause a currency crisis, it can constrain the rate of foreign exchange accumulation, and slow the rate of economic growth – factors that are very important for creating sound economic fundamentals.

3. *Current Account Deficits*

In the pre-1990s it was generally believed that most currency crises were a result of large and persistent current account deficits. However, a large number of recent empirical studies have not been able to definitively conclude that large current account deficits caused currency crises, though there was some admission that an increase in the current account deficit raises the probability of a crisis, broadly defined.

Edwards (2000) concluded that, in spite of recent claims of the irrelevancy of current account deficits, the evidence provides a support for the view that large deficits should nevertheless be a cause for concern. However, he was careful to point out that it does not mean that only when there is large current account deficits can there be a currency crisis.

Very often the issue, it has been argued, hangs on sustainability of the deficit. Some theorists argue that a country can run a current account deficit for a limited period, but no deficit is sustainable indefinitely. A distinction is often made between a deficit which results from fiscal imbalances and one which results from investment. The latter, it is argued should not be a matter of concern at all as it is important to focus, not only on the persistence of the current account deficit, but also on whether it is leading to higher investments. This view is held also by Sachs et al (1996) who argued that policy actions that result in higher investment opportunities will necessarily generate deterioration in the country's current account, but that this is not problematic.

4. High levels of Foreign Debt

Similarly, it is argued that rapid increases in developing countries' foreign debt are not necessarily a sign of increased vulnerability as long as they too create greater investment opportunities. A more critical warning signal is the maturity of the debt, as has been shown by the experience of South East Asia. High levels of short-term debt can lead to greater levels of volatility than high levels of long-term debt particularly where money markets are very developed.

5. Large fiscal deficits

Where large fiscal deficits are financed by printing of money, fiscal policy tends to be expansionary and if the country is not engaged in domestically produced goods, this leads to higher levels of imports, to larger outflows of foreign exchange and to lower foreign exchange reserves. Attempts to increase taxes to meet these expenditures can reduce

surpluses available for investment and lead ultimately to a contraction in the economy. Expenditure control is therefore usually advocated.

6. Debt Service capability

The size of the debt itself is probably less important than the ability to service it, i.e., the debt service ratio. Where the debt is large and interest rates are low, the same size debt can be more sustainable than in a high interest rates regime. Invariably, however, foreign borrowing tends to be at floating rates and the margins on emerging market debt widen at precisely the time when countries can least afford high interest rates. The size of domestic debt, though not as critical as that of foreign debt can also be burdensome where interest rates are high. Where there is lack of confidence in the economy, authorities are forced to compensate investors in order to pre-empt capital flight. A country with current high debt service ratios, signals to potential investors that the debt could become unsustainable.

7. High interest rates

High interest rates, whether domestic or international, make borrowing expensive and make a reasonable return on productive investment difficult, so that potential investors then switch to buying government securities, thus distorting the investment choices of individuals and delaying economic recovery. It also cripples a government's ability to discharge its other obligations.

8. Drying up of foreign capital inflows

The reluctance of investors to invest in an economy is usually a sign that problems have reached crisis proportions. Where investors decide to divest themselves of a country's securities, high interest rates can sometimes fail to discourage them from doing so if they feel that the offered returns cannot adequately compensate them for likely risks. Very often an accompanying feature is sales of foreign debt at deep discounts. The deterioration becomes rapid, as the discounts become a sign of lack of confidence in the currency.

9. Sovereign debt default

Sovereign debt default is usually a proximate cause of any currency crisis but is usually a culmination of increasing difficulties with debt repayment. This is not a predictor. The economy is in crisis.

Other Contributing Factors

a) Uncertainty about the currency peg

Uncertainty about the commitment to the currency peg can also lead to a currency crisis. This can be unrelated to the valuation of the currency. Where the market feels that a currency adjustment or a change in the currency peg is about to occur, this can lead to uncertainties and to speculation against the currency.

b) Political Instability

While political instability does not necessarily cause a currency crisis, it can contribute to a crisis, particularly where it coincides with an already existing lack of confidence in the currency. This is illustrated from the recent case of Brazil, where the currency was under severe pressure prior to the election of President Lula. Uncertainty about the election outcome caused increased volatility and led to further depreciation of the currency.

c) Low or negative rates of growth of GDP

Low or negative growth rates, if sustained over a long period of time, can also contribute to economic crises. This is particularly so where the debt burden is burdensome or interest rates are high and the country cannot grow itself out of its difficulties. In these circumstances, where the exchange rate is floating, consistent depreciations can ensue. Where the exchange rate is fixed, a foreign exchange crisis can result.

d) Weakness of the financial system

A currency crisis can also result from a poorly regulated financial system which is integrated with the international economy if this leads to a lack of confidence in the system. This was the case in one South East Asian country in 1997 where regulators permitted significant off-balance sheet liabilities without appropriate capital provisioning. This led to the collapse of several banks and aggravated the currency crisis.

In the case of Japan, under-providing for corporate debt has been a continuing problem which has contributed to the weakness of the banking system, to the downgrading of Japanese debt and to depreciation of the currency.

e) Speculative attacks

In the early literature on currency crises, e.g., (Krugman (1979)), it was usually argued that speculative attacks arose because the target government was engaged in the uncontrollable issue of currency to finance budget deficits, and that the central bank was intent on holding the exchange rate fixed by selling foreign exchange reserves at the target rate. It was also generally believed that such crises arose because of inconsistencies between domestic and exchange rate policies. In this pre-1993 period theorists agreed that currencies were attacked because there were some underlying inconsistencies in the nation's policies, and that investors were merely safeguarding themselves.

Since 1993, speculative attacks became more deliberate as the psychology of the market changed. Indeed, such attacks began to be a factor observed with greater frequency in explaining currency crises, possibly because in developed markets, and in the new industrialized countries, significant gains are possible. In 1992, the Pound Sterling was forced to exit the exchange rate mechanism of the European Monetary System because of speculation against it. Gains by speculators were tremendous. Since then the view has increasingly been held that currency crises can also occur because of the manipulation by large agents in countries whose currencies would otherwise have been sound had there been no speculative attack. However, this is less likely to be the case in small developing countries since the gains to speculators are not likely to be significant.

Second generation crisis models, represented by Obstfeld (1994) attempted to seek answers to why Governments might choose to defend a fixed exchange rate. It was argued that defence of an exchange rate was a matter of trade-offs and not simply a blind matter of defence at any cost.

One answer was that a stable exchange rate was important in encouraging international trade and investment. A second was that the country may have had a history of inflation and believed that a fixed exchange rate was a means of guarding against a recurrence and a third was that the exchange rate may have become a symbol of national pride. In the case of small countries, even where there is no history of inflation, it is generally believed that a fixed exchange rate can help to encourage international trade and investment and can bring predictability to international financial transactions.

f) Herding

The tendency to follow the herd instinct is not usually considered to be speculative but a special form of self-protection. It has been further suggested that fund managers tend to follow the leader, because the cost of being wrong while in a minority, is less acceptable than the cost of being wrong while in a majority. This herd behaviour aggravates the demise of the currency. However, it is also argued that there has to be some reason for the underlying loss of confidence for such herding to take place. Hence one is back to the indicators, since herding is unlikely to occur against a currency if the indications of pending crisis do not exist.

Indeed, if investors believe that the cost to the country of maintaining the exchange rate is growing faster than the odds that it will be able to hold off devaluation, they will want to get out of that currency ahead of devaluation, even in the absence of a speculative attack, just in the interest of self-preservation. But in so doing, they worsen the country's ability to hold off the devaluation. Essentially, the argument is made that a currency crisis arises because of the inconsistency of economic policies, irrespective of the exchange rate regime, and that financial markets merely accelerate the event.

Third country considerations

Third generation currency crisis models also include among the factors which explain currency crises, a number of considerations relating to third countries and which have nothing to do with the economic fundamentals discussed earlier or indeed with the policies of the subject country. These refer to contagion, proximity and the impact of regional groupings.

i) **Contagion**

Contagion can occur where there are international trade and financial associations or exposure to the country whose currency is under pressure. It also occurred between Russian and Brazil at the time of the Russian crisis, despite their distance from each other. Contagion also led to the South East Asian crisis affecting Japan and even the U.S., through exposure of U.S. banks to South East Asia. In an era

of financial liberalization, contagion needs not be limited to countries which are part of the same geographical grouping.

ii) Proximity

However, proximity to a country experiencing currency crisis can impact on its neighbours. This was the case in South East Asia between Malaysia, Korea and Thailand. Proximity does not always have an adverse impact however. If the economy is strong it may ride out the problems – as did Singapore, despite its proximity to other countries in South East Asia.

iii) Regional Groupings

Being part of a regional grouping can also impact negatively on one country if a member of the group is experiencing difficulties. This was so in the MERCOSUR arrangement when Argentina started to encounter problems which impacted adversely on Brazil and on Uruguay and occurred in relation to Mexico and its neighbours in 1994, giving rise to the term "tequila crisis".

Social and Political contributors to currency crises

Factors which are increasingly being included as predictors of financial crises include widespread corruption and cronyism. It has more recently been agreed that social factors and poorly functioning rule of law can also precipitate currency crises. These theories arose out of the South East Asian experience when it was felt that corruption, cronyism and an ineffective rule of law had contributed to the crisis there. These factors however,

usually aggravate a crisis but rarely cause it. They were not new aspects in the South East Asia system which occurred during or just prior to the crisis, and the system, though imperfect, had functioned effectively in that environment previously.

SECTION 4

Analysis: How these indicators applied to Argentina

In the analysis that follows, these indicators of impending crisis are applied to Argentina with a view to analyzing whether the currency crisis of 2001 – 2002 could have been predicted and therefore could possibly have been avoided.

(i) Argentina: Purchasing power parity. Was the currency overvalued?

Because of the fixed parity to the dollar, Argentina was unable to respond to the appreciation of its currency. Hence, Federal Reserve interest rate hikes in 1999 and 2000, and a steady appreciation of the dollar impacted Argentina negatively.

Analysts have shown that the Argentine Peso was heavily overvalued (Barclays Capital, 2001). Other evidence was in the lack of competitiveness of the manufacturing sector, the lack of growth of the beef industry in a country which at one time met a major portion of the world's beef demand, contrasting sharply with the growth and competitiveness of Brazil, another MERCOSUR country.

Mussa (2002) notes that "If the U.S. dollar had not been so strong in recent years, Argentina would have had a more competitive exchange rate vis-à-vis important

European trading partners, contributing both to somewhat better growth and a better balance of payments." Relative to its major trading partner its currency placed it at a disadvantage in the post-1999 period (see Chart 3).

(ii) Argentina: deficits on the current account of the balance of payments

Though Argentina recorded trade surpluses, the current account of the balance of payments was often in deficit (See Table 1). This in itself might not have been a problem, but much of the capital inflows were by way of loans. Though a positive trade balance occurred in 1999 due to rising world prices for a number of commodity exports and a dip in imports, the account was still in deficit.

Despite major efforts, the current account of the balance of payments remained in deficit and by end-2000 was projected to be around 3.1% of GDP, principally as a result of high interest payments.

Argentina: High Levels of Foreign debt

Between 1991 and 1999 Argentina's external indebtedness rose two and a half times, to reach US$144.6 billion. The debt-GDP ratio rose from 28.4% to 51%. (IDB 2001). It is frequently pointed out that Argentina's debt to GDP ratio compares favourably with an average of 50% in several European countries (Mussa 2002). The issue, as he notes, was not the debt to GDP ratio itself but the prospects of it not being brought under control given the high debt service obligations.

Mussa argues that failure to run a sufficiently prudent fiscal policy that effectively restrained the increases in public debt while the economy was performing well, contributed to the later collapse of Argentine reforms.

Estimates by the IDB (2001) indicate that at the end of 2000 approximately 80% of the debt was medium or long term. It is noteworthy that the majority of the debt was therefore not volatile short-term debt. While the composition of the debt showed a well-structured portfolio, the problem was the high debt service ratio relative to exports of goods and services.

4. Argentina: Large Fiscal Deficits

Declining tax revenues and increasing expenditures drove the fiscal deficit up sharply in 1999 to close to double the level of the year before. At end-1999, the deficit of the consolidated public sector represented 4.1% of GDP (IDB 2001) (see table 2). The administration engaged in aggressive fiscal policies, cutting expenditures and collecting income tax payments in advance and engaging in debt for bond swaps. These were one-time gains but nominal revenues remained sluggish.

In 2000, Argentina took a bold step, similar to that taken by Barbados in 1991, to cut public service salaries, stepped up its tax collection efforts and passed legislation to control spending in the provinces; but by that time it was too late.

5. Argentina: Debt service capacity

With little prospect of generating a substantial fiscal surplus that would pay off its debts as they matured, the Argentine government faced a large and continuing need to borrow to finance amortisations. In 2000 the external public debt service as a ratio of exports of goods and services was 79.6%. This information did not make for a receptive market and default became inevitable.

6. Argentina: High interest rates

Towards 2000, high interest rates also made the cost of raising debt quite costly, a development which was a certain indication of impending crisis in Argentina. In the international capital markets in the late 2000, interest rate spreads on Argentine sovereign debt had risen to about 750 basis points above U.S. Treasuries. This pointed to concerns in financial markets about debt sustainability.

7. Argentina: Drying up of foreign Capital flows

During the early 1990s, Argentina had been a preferred creditor in the financial markets. Except for a short period in 1999 after the problems of the Brazilian Real, the capital markets had been constantly open to it since 1991. By late 2000, Argentina was the largest emerging market borrower, controlling 20% of its asset class. In less than a year later, Argentina was shut out of the markets, an example of how quickly fortunes in these markets can be reversed.

8. Argentina: Sovereign default

Sovereign default closes the creditor out of the markets after several years and is preceded by years of negotiation, write downs, debt forgiveness, rescheduling, haircuts and several other accommodations. The result is a loss of confidence by the market which can take years to be rebuilt. By the time the country has reached this point, this is not an indicator of impending crisis. It is in crisis.

Argentina: Other Contributors

Contagion was a problem for Argentina given the problems of its neighbour Brazil in 1999. Special arrangements with Brazil through MERCOSUR made it especially vulnerable to a currency crisis in Brazil, since it was part of the geographical grouping (see chart 4).

Social and political factors such as the growing gap between rich and poor and rising unemployment have been cited as additional areas of concern. However, these were not the cause of the crisis, but made it less amenable to an easy solution. Restraint in spending which would have helped the macroeconomic situation was, in that situation, socially unacceptable.

SECTION 5

Fixed Exchange Rate Countries- special importance of some Indicators

1. Uncertainty about the peg

For fixed exchange rate countries it is important that there be complete confidence in the exchange rate peg and in the durability of the exchange rate over the long term. Any

expectation of a change in the currency peg has the potential to lead to capital flight, speculation against the currency or at the minimum, avoidance of the currency for international transactions.

In 1999, it is argued, discussions by Argentina's officials about possible dollarisation and later proposals to link the Peso to the Euro caused uncertainty among investors and contributed to capital flight.

It has been also argued (Mussa 2002) that there was no appropriate exit strategy from the fixed exchange rate regimes. However, Krugman in an article (1996 has noted that invariably, for developing countries, a shift from a fixed to a floating rate leads to massive devaluation of the currency even where statistics do not suggest any overvaluation of the currency. This suggests that a shift in the regime would have been very costly for Argentina.

2. Fixed Exchange Rate countries and debt service capability

When countries with floating exchange rates are unable to service their foreign debt and must borrow to do so, this generally leads to massive depreciations of the currency. In the case of fixed exchange rate regimes, it can lead to capital flight, foreign exchange shortages and collapse of the exchange rate peg. Floating exchange rate regimes – provided they do not default – may be able to recover from currency depreciations associated with rescheduling and other accommodations. Fixed exchange rate regimes have much fewer options.

3. Fixed Exchange Rate Regimes and High levels of short-term foreign debt.

Sustainability is influenced by the market's perception of the country's ability to service the debt, the country's history of debt management and to some extent, the fiscal capacity to raise sufficient revenues to service the debt. Where debt levels are inordinately high, particularly where much of the debt is short-term, currency crises can be precipitated.

This is more especially the case for fixed exchange regimes where the tools of monetary policy are more limited. It is therefore even more essential for fixed exchange rate regimes to avoid situations of high levels of short-term foreign debt, and to take action early to repay maturing long-term debt.

4. Fixed Exchange Rate Regimes and large Fiscal deficits

Large fiscal deficits financed by money creation lead to high levels of inflation, and in countries which have a high propensity to import, to a draw down of foreign exchange reserves. For fixed exchange rate regimes, this can involve foreign exchange shortages and the development of unofficial markets and underground economies as well as the end of the fixed exchange rate regime. The avoidance of large fiscal deficits, though important for all exchange rate regimes, is therefore critical for fixed exchange rate regimes.

5. Foreign Exchange Adequacy

The adequacy of foreign exchange reserves is the single most important prerequisite for the maintenance of fixed exchange rate regimes. Unlike floating rate regimes which have the advantage of benefiting from the recourse to depreciation of the currency, fixed exchange rate regimes have none.

6. Capital Controls

It has been argued by Krugman (1996) that countries which peg their currencies to the U.S. dollar must adapt the monetary policies of the country to which they peg. While it is true to say that the scope for having a monetary policy which is different from that of the U.S. is difficult, it is not altogether accurate to say that monetary policy must mimic that of the U.S. or the country to which the currency is pegged.

Where there are no capital controls this may well be true. However, where capital controls exist there is some scope for having a monetary policy which differs from that of the U.S. provided the differential between local and foreign interest rates is sufficiently wide in favour of the domestic country to discourage capital flight. Experience tends to determine this margin but it is influenced by the changing global economic outlook and by investor expectations.

SECTION 6

Similarities and Differences between Argentina and the Caribbean

In the Caribbean, there are several fixed exchange rate regimes : Barbados, Bahamas, Belize and the East Caribbean States. However, there are several differences between the case of Argentina and those fixed exchange rate regimes in the Caribbean.

Firstly, fixed exchange rate regimes in the Caribbean do not have the history of currency crisis which Argentina exhibited over the past 40 years. Fixed exchange regimes in the Caribbean have for the most part stuck to the chosen exchange rate peg and this has led to a tremendous amount of stability in the region. This obtains for both Currency Board systems and for central banks which from time to time provide funding for government. Also, to date, the Caribbean has been largely insulated from much of the contagion which affects Latin American countries when their neighbours experience exchange rate difficulties. It is suggested that the risks of contagion are reduced when the neighbour's exchange rates are fixed. What is most affected is access to capital markets during periods of instability in a neighbouring economy. This was the effect of Jamaica's difficulties for the Caribbean region in the1980s. Hausmann et al (1999) using the EMBI index demonstrates much more severe effects from one Latin American neighbour to another. In Latin America (as in the Caribbean) he confirmed that interest rates moved the least in counties with no exchange rate flexibility (Hausmann et al 1999, p7).

While the current account of the balance of payments may be in deficit in some Caribbean countries, for the most part, the Caribbean experience suggests that there are

significant capital inflows used for real investment, leading to a capital and financial surplus in the balance of payments (see table 6). In these circumstances a current account deficit can occur without portending a crisis. Current account deficits, though important, therefore tend not to be indicators of impending crises, unless they are exceptionally large and persistent.

With a few exceptions, there has been fiscal discipline in most Caribbean countries. For example, in Barbados over the past 10 years the fiscal deficit has been under 2.5% of GDP with the exception of 2001 (see table 3 and 4). Belize was an exception in 2000 and 2001 (table 5).

In the Caribbean there is an absence of volatility from short-term capital flows, principally because the capital markets are not very developed, so that capital tends to be long term. In addition, in all the fixed exchange rate regimes in the region there is still some measure of capital controls in place and regulatory practices tend to discourage "hot" money.

To date, there have been no significant defaults in Barbados, the Bahamas or Belize - and until recently, OECS countries had not issued borrowings on the international market. There is no uncertainty about currency values and Caribbean countries with fixed exchange rates have never seriously entertained the notion of dollarisation. In addition, there is not widespread holding of US dollar assets in fixed exchange rate regimes in the Caribbean. This is a major difference between Latin America, where dollar assets are

routinely held, and Caribbean fixed exchange rate countries. Individuals freely hold domestic assets without demanding a higher interest rate. However, interest rates tend to be somewhat higher in floating rate Caribbean countries and dollar holdings by individuals are greater. The proposition put forward by Hausmann et al (1999) that fixed exchange rate regimes have lower real interest rates in Latin America also appears to be the case in the Caribbean, but low interest rates do not however appear to have any relevance as a predictor of the financial health of the economy – note the case of Japan in the 1990s – though the reverse usually portends difficulties.

Most importantly, for most countries, the fixed exchange rate is a matter of national pride and citizens are prepared to engage in other painful adjustments in order to maintain the exchange rate. This was the experience of Barbados in 1991 – 92 when government workers agreed to a wage cut and the private sector to a wage freeze. Though difficult in any circumstances, this is more likely to be achievable in fixed exchange rate systems where nominal wages do not react as swiftly as in flexible exchange regimes where real shocks are transmitted more quickly through the exchange rate.

Other contributors to crises such as the risk of contagion arising from being part of a regional grouping, have influenced the Caribbean region only temporarily. This was true, for example, when Jamaica was experiencing consistent devaluations in the 1970s and 1980s. However, in time, investors were able to distinguish the countries in the region which are in difficulties and those which were not. There was no need for fixed exchange rate regimes in the Caribbean to use interest rates aggressively to defend their

exchange rate from volatility in neighbouring countries with floating rates. Interest rates in neighbouring fixed exchange countries move very little when floating rate countries move rates aggressively. This is attributable to the continuing existence of some capital controls and to underdeveloped capital markets. This contrast sharply with Argentina where the fixed exchange rate was in a context of little capital controls - prior to the crisis.

Factors such as the adequacy of the legal framework and the quality of the rule of law as predictors of crises have not affected the region in any significant way since the Caribbean has a history of democratic governments which are among the oldest in the Commonwealth. Political stability has for the most part been a major feature of these economies. In addition, to date, the domestic banking systems in the fixed exchange rate regimes have for the most part been sound, well supervised and well managed. Consequently, the region with perhaps one exception has not experienced the effects which weak banking systems can have in precipitating crises. Where banking systems in any one country have come under pressure, there have been no contagion effects on other Caribbean countries. With increasing interlocking ownership systems within the region and as the Caribbean Singe Market and Economy becomes effective, this situation may well change and contagion is more likely to occur.

Generally, the economic and financial similarities with Argentina are few. The similarities which do exist are not generally described as predictors of currency crises in the literature. The major similarity is the fact that some Caribbean countries, like

Argentina, have fixed exchange rates. Another is in the inflexibility of the labour market, and a third is (in some Caribbean countries) high levels of unemployment. However, the similarities end very quickly, as close examination reveals fundamental differences in structure between Argentina and the Caribbean.

CONCLUSION

Many of the predictors of currency crises which have been discussed are general and apply to both fixed and flexible exchange rate regimes. To the extent that they tend to be more important for fixed exchange rate regimes than for floating, those countries in the Caribbean with fixed exchange rates should be mindful of these indicators. More especially, they need to ensure continuity of the peg, to be mindful of debt service capability and to be wary of high levels of short-term foreign debt. Furthermore, policy-makers must avoid large fiscal deficits, ensure foreign exchange adequacy, and build both foreign exchange and fiscal surpluses in good times in order to provide a strong platform for coping in downturns, and must exercise care in removing all capital controls.

Where fixed exchange rate regimes extend themselves both fiscally and in terms of indebtedness, reversals can occur quickly, and options are few. They therefore need to exercise greater vigilance and greater control than floating exchange rate regimes.

TABLE1

ARGENTINA

Economic Indicators

	1990	1994	1995	1996	1997	1998	2000
Gross Domestic Product – Annual Growth (%)							
Total GDP	-1.3	5.8	-2.8	5.5	8.1	3.9	-3.4
Nonfinancial public sector – Percentage of GDP (%)							
Current revenue	20.4	19.5	18.6	16.9	18.7	18.9	18.5
Current expenditure	20.9	18.4	18.4	17.8	19.1	19.1	20.1
Balance (- Deficit)	-1.5	-0.1	-0.5	-1.9	-1.5	-1.4	-2.5
Money and Credit – Percentage of GDP (%)							
Domestic credit	21.1	25.8	26.6	26.9	27.7	31.0	33.0
Money supply (MI)	1.9	5.7	5.7	6.4	6.5	6.9	6.8
Prices							
Consumer prices (annual growth rate)	2,315.5	4.2	3.4	0.2	0.5	0.9	-1.2
Balance of Payments – US$ million							
Current account	4,552	-10,992	-4,985	-6,521	-11,954	-14,372	-12,293
Trade balance	8,628	-4,139	2,357	1,760	-2,123	-3,117	2,175
Exports of goods	12,354	16,023	21,161	24,043	26,431	26,441	23,333
Imports of goods	3,726	20,162	18,804	22,283	28,554	29,558	25,508
Balance on services	-674	-3,692	-3,326	-3,366	-4,178	-4,407	-4,095
Net income receipts	-4,400	-3,567	-4,529	-5,331	-6,089	-7,375	-7,922
Net current transfers	998	406	513	416	436	527	507
Capital and financial account	-2,145	12,548	6,756	11,712	16,745	17,017	13,952
Change in reserves (- increase)	-3,121	-685	82	-3,875	-3,293	-3,438	-1,201
External debt – US$ million							
External debt	54,672	80,337	93,925	105,170	123,221	139,317	144,660
Actual debt-service payments	6,161	8,175	9,692	1,401.2	19,969	13,000	13,500

Sources: Ministry of Economic Affairs, Argentina. IDB Statistics and Quantitative Analysis Unit. IDB-ODI/REI

TABLE 2

ARGENTINA
Balance of Payments Indictors

	1999	2000	2001
ECONOMIC FORECASTS			
GDP - Real Change (%)	-3.4	-0.2	2.5
Balance of Payments (US$ billion)			
Current account balance	-12.4	-9.9	-9.8
Trade balance	-2.2	1.1	1.8
Exports	23.3	26.3	28.7
Imports	-25.5	-25.2	-27.0
I. External debt (US$ billion)	**144.6**	**150.4**	**156.0**
II. Fiscal balance/GDP (%)[1]	-4.2	-3.6	-3.1
EXPOSURE RATIOS HIGH SCENARIOS) (%)			
Multilateral public debt service[2]/External public debt service[3] (<50%)	8.3	10.4	10.8
External public debt service/G&S exports	81.5	79.6	77.9

Sources: Ministry of Economic Affairs, IMF, FIEL, IDB-REI/ODI

[1] Consolidated public sector
[2] Excluding debt to IMF.
[3] Based on unofficial preliminary IMF forecasts

CHART 1

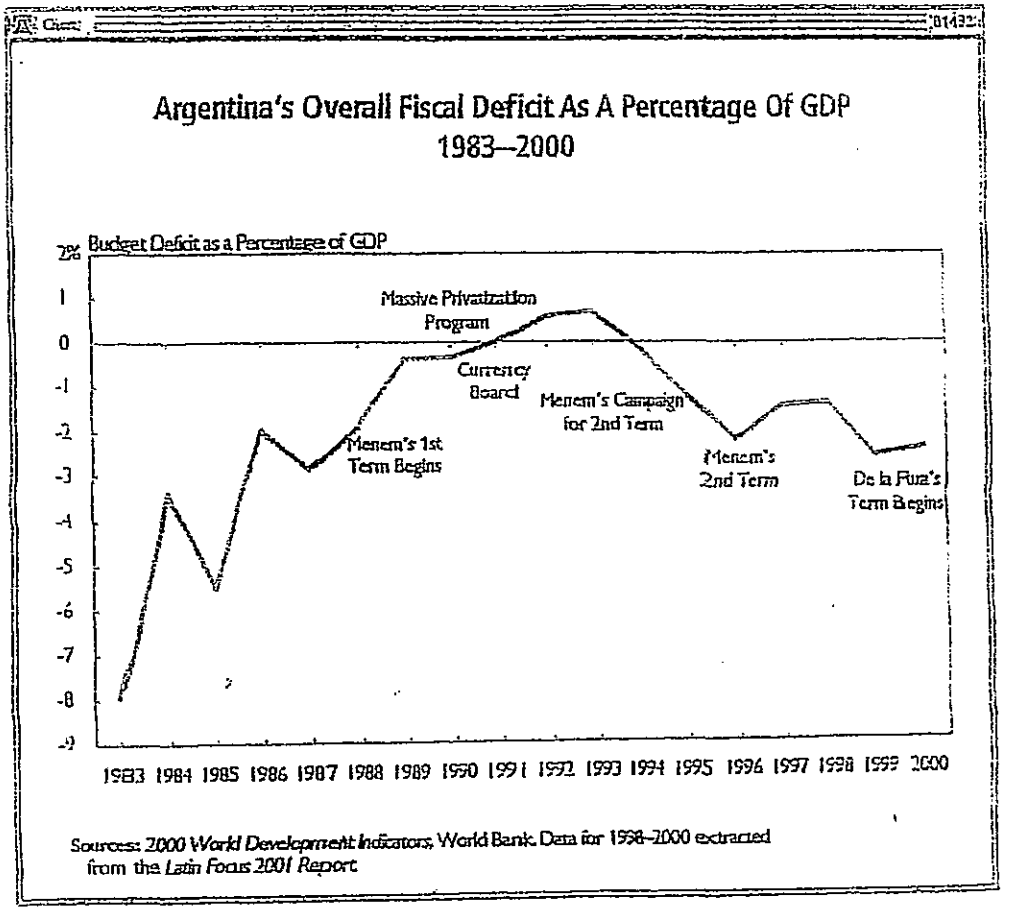

Argentina's Overall Fiscal Deficit As A Percentage Of GDP
1983–2000
Budget Deficit as a Percentage of GDP
2%
1
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
Massive Privatization Program
Currency Board
Menem's Campaign for 2nd Term
Menem's 1st Term Begins
Menem's 2nd Term
De la Rua's Term Begins
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000
Sources: 2000 World Development Indicators, World Bank. Data for 1998–2000 extracted from the Latin Focus 2001 Report

CHART 2

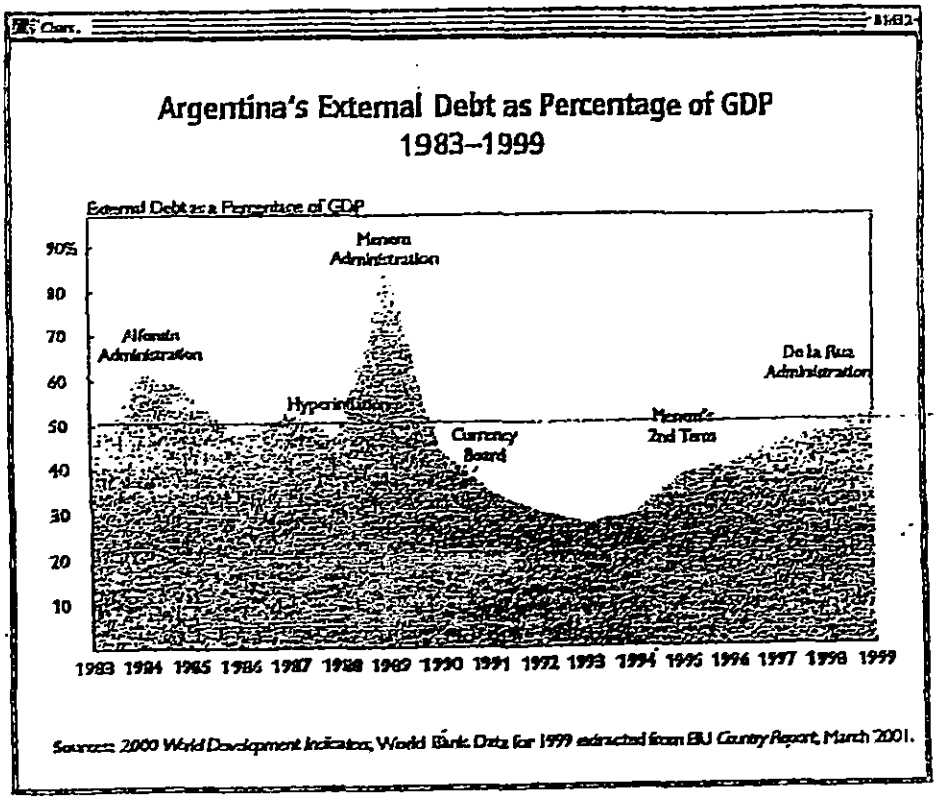

Argentina's External Debt as Percentage of GDP
1983–1999
External Debt as a Percentage of GDP
90%
80
70
60
50
40
30
20
10
Menem Administration
Alfonsin Administration
De la Rua Administration
Hyperinflation
Currency Board
Menem's 2nd Term
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999
Sources: 2000 World Development Indicators, World Bank. Data for 1999 extracted from EIU Country Report, March 2001.

CHART 3

ARGENTINA

Figure 3: Real Effective Exchange Rate
(1995=100)

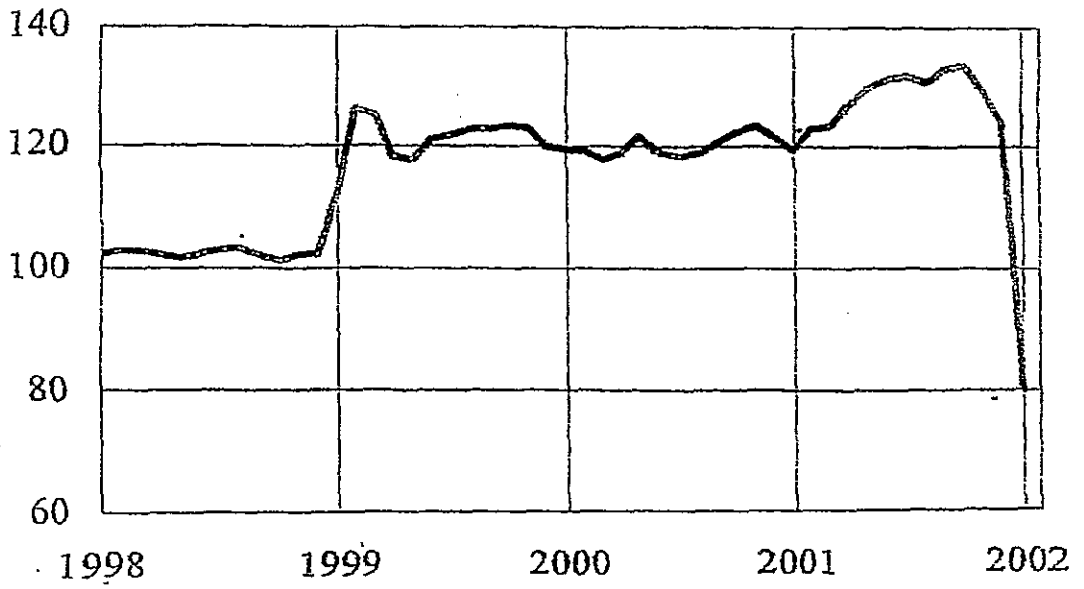
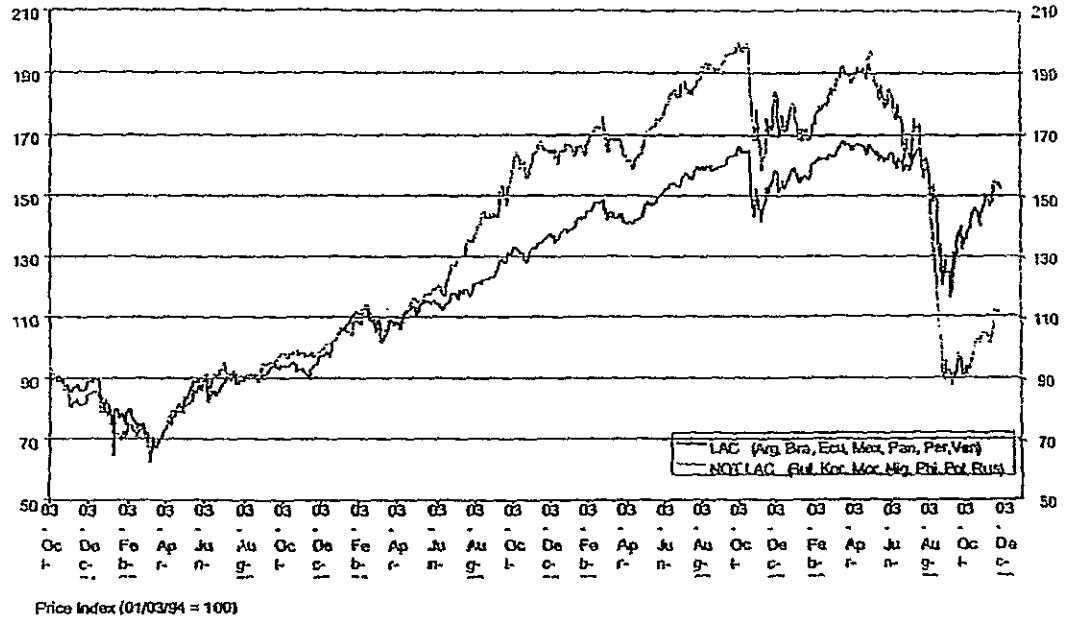


CHART 4

Correlation of Emerging Market Bond Prices across Disparate Regions

EMBI+ Price Index (1994-98)



Price Index (01/03/94 = 100)

TABLE 3

BARBADOS
ECONOMIC INDICATORS
($US MILLIONS)

	1999	2000	2001
ECONOMIC FORECASTS			
GDP- Real Change (%)	2.9	3.0	-2.9
Balance of Payments (US$ Millions)			
Current Account Balance	-147.3	-144.9	-93.8
Trade Balance	-714.1	-743.9	-681.1
Exports	275.2	286.4	271.1
Imports	-989.4	-1030.2	-952.2
I. External Debt (US$ millions)	396.4	521.1	694.5
II. Fiscal balance/GDP (%)	-2.3	-1.5	-3.6
EXPOSURE RATIOS HIGH SCENARIOS (%)			
Multilateral public debt service/External public debt service	N/A	N/A	N/A
External public debt service/G&S exports	7.45	5.4	5.3

Source: The Central Bank of Barbados' Balance of Payments Publication (2002)
The Economic and Financial Statistics (September 2002)
The Central Bank of Barbados' Forecasting Model

TABLE 4

BAHAMAS
ECONOMIC INDICATORS
($US MILLIONS)

	1999	2000	2001
ECONOMIC FORECASTS			
GDP- Real Change (%)	5.9	5.0	-0.5
Balance of Payments (US$ Millions)			
Current Account Balance	-409.3	-471.3	-346.8
Trade Balance	-1249.2	-1370.6	-1149.7
Exports	523.2	805.3	614.1
Imports	-1772.4	-2175.9	-1763.8
I. External Debt (US$ millions)	105.7	115.0	124.9
II. Fiscal balance/GDP (%)	-1.1	-0.3	-1.9
EXPOSURE RATIOS HIGH SCENARIOS (%)			
Multilateral public debt service/External public debt service	N/A	N/A	N/A
External public debt service/G&S exports	N/A	N/A	N/A

Source: The Central Bank of Bahamas Quarterly Economic Review (June 2002)
CCMS Report on the Economic Performance and Convergence of the Caribbean Region (May 24, 2002)

TABLE 5

BELIZE
ECONOMIC INDICATORS
($US MILLIONS)

	1999	2000	2001
ECONOMIC FORECASTS			
GDP- Real Change (%)	6.5	10.8	4.6
Balance of Payments (US$ Millions)			
Current Account Balance	-73.1	-151.6	-169.5
Trade Balance	-102.6	-173.2	-191.5
Exports	263.6	288.5	269.1
Imports	-366.2	-461.6	-460.6
I. External Debt (US$ millions)	252.5	423.7	475.0
II. Fiscal balance/GDP (%)	-2.2	-9.0	-7.9
EXPOSURE RATIOS HIGH SCENARIOS (%)			
Multilateral public debt service/External public debt service	N/A	N/A	N/A
External public debt service/G&S exports	N/A	N/A	N/A

Source: The Belize Statistical Digest 2001

TABLE 6

BALANCE OF PAYMENTS

OECS

(US$ Million)

	1993	1994	1995	1996	1997	1998(r)
ECCB Area						
Balance on Current Account	-209.4	-237.5	-217.9	-327.3	-379.6	-429.7
Goods	-678.4	-762.3	-767.0	-849.4	-913.9	-1040.2
Merchandise	-694.3	-785.4	-798.4	-879.3	-946.5	-1075.7
Stores & Bunkers	15.9	23.1	31.4	29.9	32.6	35.5
Services (Net)	521.6	573.2	502.8	524.0	566.8	577.2
Transfers (Net)	50.3	69.4	170.8	123.9	105.9	152.7
Income	-102.9	-117.8	-124.5	-125.8	-138.4	-119.4
Capital Flows (Net)	218.2	220.4	269.4	308.1	402.2	480.3
Overall Balance	8.8	-17.1	51.5	-19.2	22.6	50.6
Financing	-8.8	17.1	-51.5	19.2	-22.6	-50.6
Reserve Tranche & SDR Holding	-1.0	2.1	--	--	--	--
Changes in Reserves	5.7	-8.6	-49.2	22.0	-21.1	-50.9
ANGUILLA						
Balance on Current Account	-12.8	-11.4	-9.3	-20.3	-18.7	-19.0
Goods	-33.2	-37.4	-45.8	-51.1	-52.6	-59.7
Merchandise	-33.1	-37.3	-45.7	-51.0	-52.6	-59.6
Stores & Bunkers	-0.1	-0.1	-0.1	-0.1	--	-0.1
Services (Net)	27.7	36.7	27.9	29.6	37.1	41.5
Transfers (Net)	0.8	-1.4	16.1	7.4	0.7	1.1
Income	-8.1	-9.3	-7.5	-6.2	-3.9	-1.9
Capital Flows (Net)	10.0	5.2	13.1	21.9	20.7	20.9
Overall Balance	-2.8	-6.2	3.8	1.6	2.0	1.9
Financing	2.8	6.2	-3.8	-1.6	-2.0	-1.8
Reserve Tranche & SDR Holding	-0.1	--	--	--	--	--
Changes in Reserves	-1.1	0.2	-3.6	-1.7	-1.9	-1.8
ANTIGUA & BARBUDA						
Balance on Current Account	-0.5	-17.9	-0.6	-71.0	-70.1	-71.2
Goods	-220.5	-253.6	-248.6	-284.1	-287.9	-308.2
Merchandise	-231.7	-267.0	-268.8	-301.6	-308.6	-327.0
Stores & Bunkers	11.2	13.4	20.2	17.5	20.7	18.8
Services (Net)	245.6	261.4	205.5	205.8	231.2	237.6
Transfers (Net)	-2.7	0.9	69.2	31.7	12.3	25.7
Income	-22.9	-26.6	-26.7	-24.4	-25.7	-26.3
Capital Flows (Net)	7.2	18.3	14.1	59.6	73.1	79.9
Overall Balance	6.7	0.4	13.5	-11.4	3.0	8.7
Financing	-6.7	-0.4	-13.5	11.4	-3.0	-8.7
Reserve Tranche & SDR Holding	--	--	--	--	--	--
Changes in Reserves	12.2	-8.1	-13.6	11.7	-3.0	-8.7
DOMINICA						
Balance on Current Account	-22.6	-38.3	-45.6	-39.8	-36.9	-28.3
Goods	-43.0	-47.9	-52.9	-47.7	-53.9	-43.9
Merchandise	-43.1	-48.6	-53.9	-49.0	-55.0	-45.1
Stores & Bunkers	0.1	0.7	1.0	1.3	1.1	1.2
Services (Net)	18.1	13.5	12.8	16.5	23.4	22.0
Transfers (Net)	8.7	7.1	7.9	10.2	10.5	10.6
Income	-6.4	-11.0	-13.4	-18.8	-16.9	-17.0
Capital Flows (Net)	31.5	39.9	53.7	41.3	38.8	32.6
Overall Balance	8.9	1.6	8.1	1.5	1.9	4.3
Financing	-8.9	-1.6	-8.1	-1.5	-1.9	-4.3
Reserve Tranche & SDR Holding	-0.7	-0.3	--	--	--	--
Changes in Reserves	0.4	4.4	-7.0	-0.8	-0.7	-3.8
GRENADA						
Balance on Current Account	-43.6	-26.9	-40.8	-57.8	-77.0	-90.6
Goods	-95.6	-94.2	-105.2	-122.5	-138.1	-137.1
Merchandise	-96.6	-96.1	-107.9	-126.4	-141.1	-141.4
Stores & Bunkers	1.0	1.9	2.7	3.9	3.0	4.3
Services (Net)	46.7	60.3	60.7	60.8	58.1	43.4
Transfers (Net)	13.7	15.8	17.1	19.0	19.7	26.7
Income	-8.4	-8.8	-13.4	-15.1	-16.7	-23.6
Capital Flows (Net)	35.9	25.7	46.9	58.0	83.9	94.7
Overall Balance	-7.7	-1.2	6.1	0.2	6.9	4.1
Financing	7.7	1.2	-6.1	-0.2	-6.9	-4.1
Reserve Tranche & SDR Holding	--	-0.4	--	--	--	--
Changes in Reserves	-0.4	-4.1	-5.6	1.0	-7.0	-4.1

Cont'd

TABLE 6 cont'd

BALANCE OF PAYMENTS
OECS
(US$ Million)

	1993	1994	1995	1996	1997	1998(r)
MONTSERRAT						
Balance on Current Account	-7.6	-11.8	-2.7	13.6	-2.1	-9.1
Goods	-22.0	-27.1	-21.8	5.4	-19.3	-19.9
Merchandise	-22.0	-27.0	-21.7	5.5	-19.3	-19.9
Stores & Bunkers	--	-0.1	-0.1	-0.1	--	--
Services (Net)	12.1	12.9	8.8	-4.1	-1.4	-13.0
Transfers (Net)	5.6	6.5	12.2	13.6	19.3	23.4
Income	-3.3	-4.1	-1.9	-1.3	-0.7	0.4
Capital Flows (Net)	5.7	10.8	3.8	-13.6	4.8	22.6
Overall Balance	-1.9	-1.0	1.1	--	2.7	13.5
Financing	1.9	1.0	-1.1	--	-2.7	-13.5
Reserve Tranche & SDR Holding	--	-0.1	--	--	--	--
Changes in Reserves	0.4	-1.5	-1.2	0.1	-2.6	-13.5
ST.KITTS & NEVIS						
Balance on Current Account	-29.3	-24.1	-44.9	-65.2	-52.9	-42.0
Goods	-62.7	-69.7	-80.5	-92.8	-75.7	-88.5
Merchandise	-63.3	-70.4	-81.2	-93.7	-76.7	-90.0
Stores & Bunkers	0.6	0.7	0.7	0.9	1.0	1.5
Services (Net)	37.3	47.8	26.6	26.3	33.6	42.0
Transfers (Net)	8.0	10.9	20.0	17.2	17.2	30.4
Income	-11.9	-13.1	-11.0	-15.9	-28.0	-25.9
Capital Flows (Net)	28.9	24.9	47.3	64.6	56.6	52.6
Overall Balance	-0.4	0.8	2.4	-0.6	3.7	10.6
Financing	0.4	-0.8	-2.4	0.6	-3.7	-10.7
Reserve Tranche & SDR Holding	0.3	2.9	--	--	--	--
Changes in Reserves	-3.2	-2.3	-1.7	0.7	-3.3	-10.7
ST.LUCIA						
Balance on Current Account	-49.4	-48.6	-33.1	-55.4	-83.7	-67.1
Goods	-140.5	-165.7	-154.7	-181.0	-222.1	-225.5
Merchandise	-144.3	-170.7	-160.3	-187.8	-231.0	-232.8
Stores & Bunkers	3.8	5.0	5.6	6.8	8.9	7.3
Services (Net)	115.7	132.7	141.4	146.2	162.0	184.2
Transfers (Net)	9.2	17.8	19.2	13.2	13.0	19.5
Income	-33.8	-33.4	-39.0	-33.8	-36.6	-45.3
Capital Flows (Net)	59.9	52.4	38.4	48.6	88.7	76.6
Overall Balance	10.5	3.8	5.3	-6.8	5.0	9.5
Financing	-10.5	-3.8	-5.3	6.8	-5.0	-9.5
Reserve Tranche & SDR Holding	--	--	--	--	--	--
Changes in Reserves	-4.4	2.4	-5.2	6.9	-4.9	9.5
ST.VINCENT						
Balance on Current Account	-43.7	-58.2	-40.7	-31.5	-66.2	-62.6
Goods	-61.0	-66.5	-57.4	-75.5	-105.2	-116.3
Merchandise	-60.3	-68.2	-58.9	-75.2	-105.3	-116.3
Stores & Bunkers	-0.7	1.7	1.5	-0.3	0.1	--
Services (Net)	18.5	8.1	19.2	42.9	38.7	53.7
Transfers (Net)	7.0	11.8	9.2	11.6	13.0	14.1
Income	-8.2	-11.6	-11.7	-10.5	-12.7	-14.1
Capital Flows (Net)	39.1	43.1	42.0	31.9	65.2	70.2
Overall Balance	-4.6	-15.1	1.3	0.4	-1.0	7.6
Financing	4.6	15.1	-1.3	-0.4	-1.0	-7.5
Reserve Tranche & SDR Holding	-0.5	--	--	--	--	--
Changes in Reserves	1.8	0.3	-1.4	-0.4	1.1	-7.5

Source: East Caribbean Central Bank
Note: Errors & Omissions are included in Capital Flows

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