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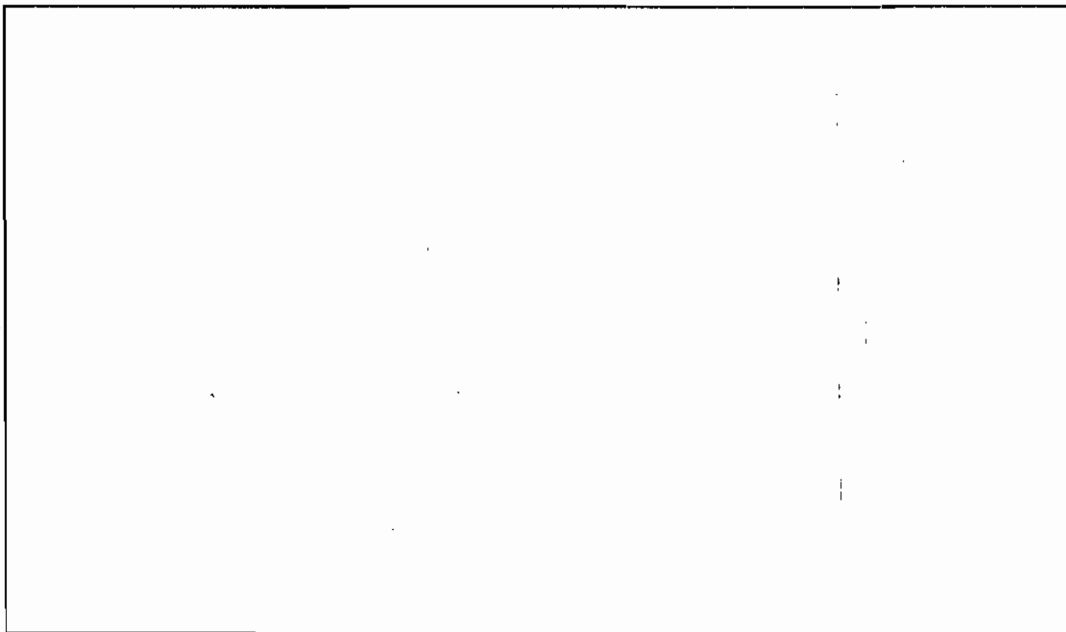

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JAMAICA'S EXPERIENCE WITH INDIRECT INSTRUMENTS - LESSONS FOR THE CARIBBEAN

Mr. David Marston
International Monetary Fund

JAMAICA

Financial Sector Reform in Jamaica 1985-1992
Possible Lessons for the Caribbean 1/

Prepared by David Marston

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Table of Contents

		Page Nos.
I.	Introduction	1
II.	Background	3
	1. The reform process: development of instruments	3
	a. First attempt	4
	b. Transition	5
	c. Second attempt	5
	2. Monetary control	6
	3. Impact of reforms on intermediation	11
	4. ECCB--experience of a currency board	13
	5. Financial sector reform in the Caribbean	16
III.	Conclusion and Lessons	18

Text Tables

1.	Modalities of Monetary Control in the Caribbean (Pre-Reform)	2
2.	Jamaica: Factors Affecting Reserve Money, 1985-92	8
3.	Jamaica: Indicators of Intermediation--Competition	12
4.	Jamaica: Selected Indicators--ECCB Vis-à-Vis Other	14

Charts

1.	Jamaica--Inflation and Exchange Rate Trends	2a
2.	Jamaica--Economic Indicators	8a
3.	Jamaica--Monetary Sector Developments	12a

I. Introduction

Approaches to monetary management in the English-speaking Caribbean evolved from the commonly shared colonial experience. Until relatively recently, currency and exchange arrangements were linked in a very direct way to the pound sterling. At the turn of the century, the principal medium of exchange in the West Indies was United Kingdom currency. This arrangement gave way to the authorization of Colonial governments to issue currency via Currency boards: the Board of Commission of Currency in Jamaica was established in 1939; and, the British Caribbean Currency Board (BCCB) was established in 1950 for countries of the Eastern Caribbean. These Boards issued notes, coins, and, the British West Indian dollar, fully backed by sterling. As countries gained independence these arrangements were replaced by the establishment of central banks in the post 1960 period; Jamaica 1960; Trinidad and Guyana 1965, and Barbados 1972. The BCCB was dissolved and replaced by the Eastern Caribbean Currency Authority (ECCA), and in 1976, after a period of depreciation of the pound sterling, the link between the Eastern Caribbean dollar and the pound was broken and the Eastern Caribbean (EC) dollar was pegged to the U.S. dollars at the cross rate prevailing at the time. The ECCA was subsequently modified to a Central bank (the Eastern Caribbean Central Bank (ECCB))in 1983, with some relaxation in the foreign exchange cover requirements of its currency issue.

All Caricom currencies were pegged to the U.S. dollar in the 1970's and the EC, Barbados and Bahamian dollars have maintained a fixed parity since then. Subsequent disequilibria in Jamaica, Guyana and Trinidad led to devaluations, while foreign exchange shortages threatened the convertibility of these currencies (Chart 1). Economic performance among member countries has been varied, though notably, the members of the ECCB and, up through the 1980's Barbados, have enjoyed fairly low inflation and positive growth.

Early and subsequent currency board arrangements in the Eastern Caribbean have operated within strict rules. Credit to member governments by the ECCB has been restricted and a statutory foreign exchange cover has been maintained with a fixed parity. In contrast, other Central banks of the region have at various times been in breach of the credit limits on accommodation to Government established by their Acts. Through the 1980's, all Central banks administratively set interest rates, in particular a floor deposit rate and in Barbados and Jamaica a maximum lending rate; utilized global and/or activity specific credit ceilings (Table 1); engaged in subsidized refinance operations designed to stimulate particular sectors; and became involved in various exchange rate guarantee schemes. The first of these Central banks to attempt a comprehensive break with this tradition was the Bank of Jamaica (BOJ).

This paper reviews the Jamaican experience with the use of indirect instruments over the period 1985-1992. It further evaluates the efficacy ofthese instruments in monetary control and the impact of their use on intermediation and competition in the financial system. As a contrast, the paper also briefly evaluates the alternate experience of the currency board arrangements of the ECCB, and draws some lessons from both paths for other Caribbean countries.

Table 1. Jamaica: Modalities of Monetary Control in the Caribbean (Pre-Reform)

	Limits on Goverment Credit	Reserve Requirement	Liquid Asset Ratio (LAR)	Interest Rate Controls	Credit-ceilings	Reserve Cover
maica	• 30 percent of estimate revenue • Security holdings 40 percent	20	24	FDR 1/ MLR 2/		--
yana	• 15 percent of average revenue of three previous years • Security holdings 30 percent	6 demand 5 other	41	FDR	--	--
:inidad id Tobago	• 15 percent of revenues • Security holdings seven times capital		16 banks 5 nonbanks	FDR	--	--
arbados	• n.a.	8	23	FDR MLR	3/	--
CCB	• Advances: 5 percent of three previous years revenue • Securities-Tbills: 10 percent Other securities: 15 percent currency	6	--	FDR		60

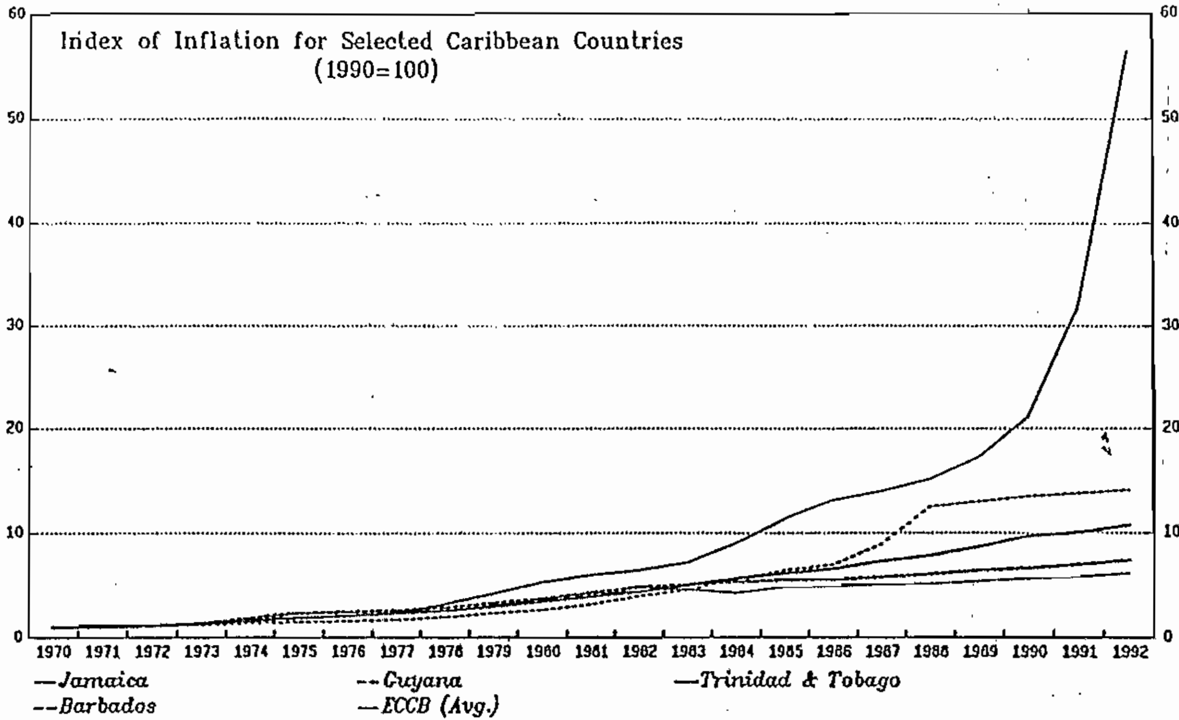
Source: Data from Central bank laws and annual reports of survey countries.

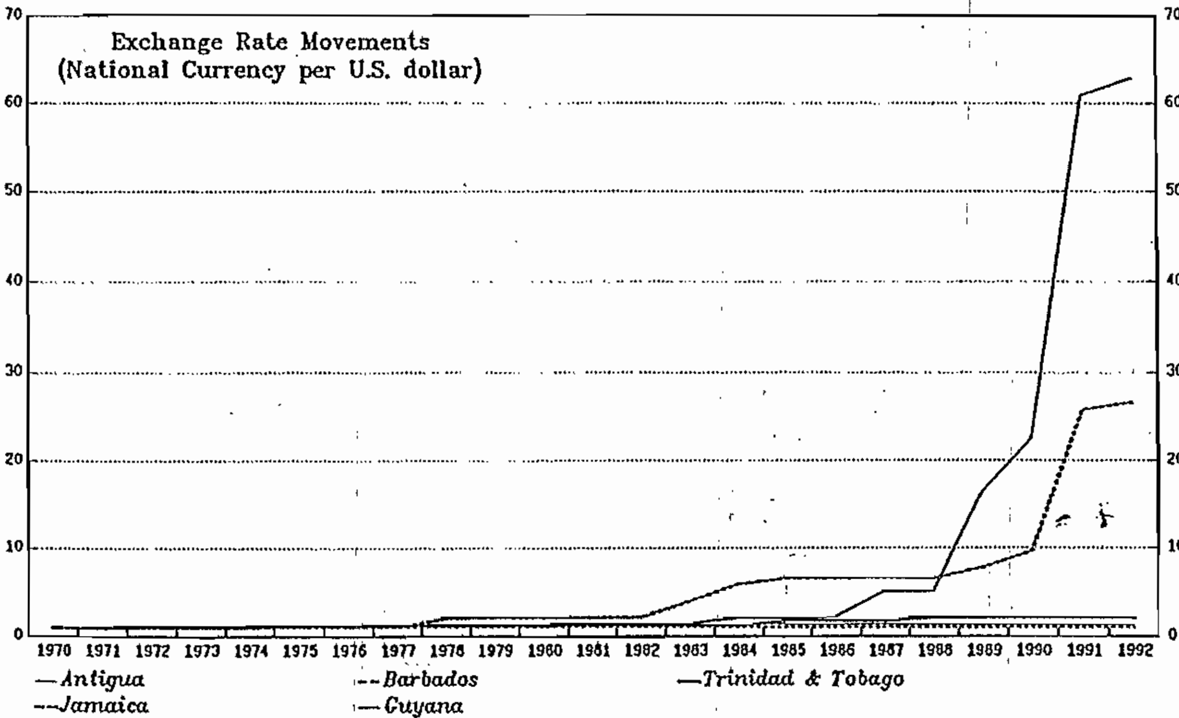
1/ FDR = Floor Deposit Rate.

2/ MLR = Maximum Lending Rate.

3/ Provision applied through moral suasion to achieve sectoral distribution.

CHART 1
INFLATION AND EXCHANGE RATE TRENDS





Source: International Financial Statistics.

II. Background

There have been two distinct phases in the use of indirect instruments in Jamaica. The first encompassed the period 1985-1989. In this period interest rate controls on intermediation were removed; a program to remunerate reserve requirements was instituted, and the liquid assets ratio was phased out. Open market type operations replaced credit ceilings as the primary instrument of control. The period 1989-1991 saw significant reversals as credit ceilings were reimposed and the liquid assets ratio reintroduced in response to a surge in credit and exchange rate pressures. A second phase in using indirect instruments was initiated in late 1991 coincident with the adoption of a more liberal foreign exchange system.

1. The reform process: development of instruments

The initiatives to move from direct to indirect instruments of monetary control in Jamaica were first attempted in 1985. Prior to this the system of monetary management had involved: global credit ceilings and directed credit operations through sector specific refinance windows operated by the BOJ and selective activity specific credit ceilings; a statutory saving deposit floor rate, and a maximum mortgage lending rate; interest subsidies not only on refinance operations but also through specialized agencies; a non-interest bearing cash reserve ratio (which differed between banks and nonbank financial institutions) and a noncash liquid asset requirement.

This system of monetary management existed in conjunction with rigid current and capital account restrictions and a fixed exchange rate through 1983. Problems of large fiscal deficits (averaging 16 percent of GDP over the period 1981-1985) were aggravated by a failure to adjust to foreign exchange shortfalls arising from a marked contraction in the bauxite/alumina industry, the country's major export sector. 1/ Despite some monetary tightening, through increases to the floor deposit rate and the cash reserve ratio, by 1982/83 a parallel foreign exchange market had assumed importance. Through a series of dual exchange rate arrangements, the rate was eventually unified in November 1983, and through a competitive auction mechanism, it was allowed to float through September 1985, when the Central bank intervened to raise the value of the currency.

The introduction of a competitive price foreign exchange auction in 1984 was accompanied by a dismantling of import controls through licenses and quotas. A negative import list approach was adopted and a schedule for eventual elimination of the list was outlined. With respect to monetary management, it was recognized that existing arrangements were ineffective in the more market-based economic environment. Commercial banks were circumventing credit ceilings through deposit placements with nonbank

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1/ Export receipts declined from a gross value of US$732 million in 1980 to US$275 million in 1985; net foreign exchange earnings from the sector declined from US$380 to US$190 million over the same period.

affiliates, stimulated by differential reserve and capital requirements on nonbanks. Further, the liquid asset ratio, which required investment in treasury bills (which were at times in insufficient supply) had resulted in low yields on government paper and offsetting high interest rates on private sector loans. The high interest rates were considered by the authorities to be inconsistent with the stated policy objective of stimulating growth.

a. First attempt

A program to reform monetary management was outlined in September 1985. In the preceding months, reserve requirements on commercial banks had been increased four times from 14 to 20 percent. This served to remove much of the excess liquidity created in part by the use of credit ceilings.

The program of reform initially involved the removal of interest rate restrictions on lending (September 1985) and the indexation of the minimum saving deposit floor rate to the market determined time deposit rate (October 1985). Simultaneously, credit ceilings were eliminated (October 1985) and open market type operations using a BOJ certificate of deposit in the context of a reserve money program, were instituted as of November 1985.

In support of these operations, the internal interest rate structure of the BOJ was revised and in May 1986, a formal refinance window to provide lender of last resort support was reactivated. In addition to this window, the Bank operated a Liquidity Support facility (LSF), where securitised lending was provided under rules that: (a) such lending could not exceed three working days; (b) there could be no more than two applications per month; (c) a third application in a subsequent month would trigger inspection by the supervision department; (d) rates were indexed to the marginal lending rate plus a spread. Further, penalties for breaches of reserve requirements were introduced and a more penal rediscount policy was adopted to discourage the early encashment of government securities at the Bank, and encourage secondary trading.

In addressing interest rate distortions, a three year schedule for the elimination of the Liquid Assets ratio (LAR) was announced in November 1985. As well, in February 1986, a program to remunerate required reserves was started with the payment of interest on 15 percent of required reserves. The proportion of the reserve requirement earning interest was subsequently increased to 30 percent in 1988.

With respect to other instruments used in this first phase of indirect monetary management, the BOJ in 1985 introduced a Pre-shipment financing facility and a Bankers Export Guarantee facility, to channel credit to the export sector at preferred but indexed rates of interest. This facility had operational ceilings based on the liability base of the applicant bank. The persistence of excess liquidity, however, obviated the need for active use of these facilities and by 1989 they were wound down as outstanding credits matured.

Though used on an ad-hoc basis, the Bank at times (in consultation and through the Ministry of Finance), transferred public enterprise deposits from the commercial banks to the BOJ. This was used primarily to deal with lumpy liquidity flows caused by transactions of the monopoly oil importing public enterprise.

In 1987, the Government of Jamaica initiated a program of external debt conversions. To sterilize the liquidity implications of such conversions, an Equity Investment Bond was issued to fund such conversions. The instrument was of five to seven year maturity and offered on a tender basis to insurance companies, pension funds and other long-term investors. Bonds could be traded but were generally held on portfolio. In this first phase approximately US$32 million was converted through this method and in subsequent years through 1992, another US$75 million was converted.

b. Transition

Credit ceilings were reintroduced in September 1989 in response to mounting exchange pressures and credit expansion. As well, banks were advised of the reimposition of the liquid assets ratio in October, and in November the indexation of the minimum deposit floor was replaced with a step adjustment of the savings deposit rate by 5 percentage points. In January 1990, the reserve requirement on banks was increased and the previous program of paying interest on a proportion of the requirement was reversed.

The credit ceilings remained in force through January 1991, when they were abandoned because the BOJ practice of providing exemptions, as well as circumvention through off-balance sheet transactions, had made them ineffectual. The liquid assets ratio (the scheduled removal of which had been completed in March 1988), was reintroduced and progressively increased to 33.5 percent in January 1991, before being again eliminated in April of 1991.

c. Second attempt

The Saving deposit floor rate was eliminated in October 1990, and with the removal of credit ceilings and the LAR in early 1991, a second phase of management through indirect instruments was entered. In 1991, the Bank initiated reverse repurchase transactions, in part replacing the liquidity support window, the rules of which had been applied loosely. Further the rediscount rate was adjusted regularly and a volume ceiling on BOJ rediscounting was instituted in part to encourage secondary trading outside the BOJ.

Finally a program to equalize the reserve requirements between the commercial and nonbanks at levels close to the higher requirement applied to the banks, progressively reduced the liquidity of the financial system, and reduced the incentive for disintermediation.

2. Monetary control

The move to indirect instruments was initiated in a context of a series of stabilization programs that sought to use the exchange rate as a nominal anchor. As a safeguard, in program after 1957 a trigger mechanism was introduced whereby there would be automatic rate adjustment for any appreciation of the Jamaican dollar beyond an agreed threshold was instituted in Stand-by programs after 1987. In practice, however, a fixed exchange rate regime was adopted, despite the use of an auction mechanism for rate determination. This "fix" at US$1=J$5.50, was "maintained" from 1985-1988 in spite of sustained demand pressures in the economy. 1/

Consumer price increases, which had averaged 24 percent per annum in 1983-85, fell to average 9 percent during 1986-88. This substantial abatement was initially achieved through a tightening of domestic policies in 1985, but was sustained in part through a cross subsidization program funded by savings from the fall in international oil prices. 2/

The underlying demand pressures throughout the period were in part reflective of an ongoing fiscal imbalance. While the overall public sector deficit was reduced sharply from a high of 20 percent in 1983 to 5.5 percent of GDP in 1986, there was little further improvement within the 1986-89 period. The correction primarily reflected an improvement in the central government's position: however, the tighter stance of monetary policy which this entailed was eroded by the rapid increase in the losses of the BOJ. Whereas the central government reduced its net indebtedness to the BOJ by J$2.0 billion in the 1985-88 period, the cumulative cash losses of the BOJ increased by J$5.2 billion. These losses reflected: (a) the increased expenditure for exchange subsidies paid to customers with exchange guarantees; (b) exchange losses on official debt incurred in the settlement of payment arrears and debt service payments, after the devaluations of 1983-85; and increasingly, (c) the cost of central bank securities used in open market operations and interest payments on required reserves. The Bank's income position was also undermined by the Government's practice to postpone interest payments on its paper held by the BOJ. Thus despite tax

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1/ Throughout the period there were instances of auction arrears with deliveries to successful applicants delayed by up to four auctions. By 1986, this precipitated the exclusion of selected bidders (selected on the basis of relative size of foreign exchange demand) from the auction, whose demand was then settled on a medium-term basis. To augment further the foreign exchange supply, the authorities pre-sold US$ 190 million in accounts receivable; undertook US$154 million in exceptional refinancing; and, divested assets in foreign currency amounting to US$154.6 million in the period 1985-1989.

2/ Electricity prices for residential consumers were reduced, but prices for commercial/industrial users were increased. Part of the gains accruing to the electricity company were used to subsidize consumption of basic foods, the controlled prices of which were lowered by 20 percent.

reform and expenditure measures, the improvement in the Central government's position was achieved partially by a shift in the fiscal burden to the BOJ, and was supported by one-off divestment of public assets, which averaged 2 percentage points of GDP in 1987 and 1988.

Notwithstanding the improvement in the Central Government's position with the BOJ, there were substantial intra-quarter and intra-year variation in BOJ accommodation of the Government. Budget expenditures in Jamaica are typically front-loaded and tax receipts and reimbursable project flows back-ended. Primary issues of Government securities on the other hand, constrained in part by the domestic debt ceilings set by Parliament, in the main, covered maturing bills and interest. The BOJ therefore became integral to the budget financing process with intra-period financing fluctuating by up to 3 points of GDP per quarter. While in principle such swings could be offset by countercyclical open market operations, there were difficulties in achieving targets. BOJ accommodation, while partially offset by revenue flows towards the end period of the budget, was not always covered, due to mismatches in the receipt of reimbursed donor inflows. Current period accommodation did not always coincide with reimbursement for past period expenditures, and very often did not result in reimbursement at all, as budget execution was not specific to reimbursable projects. Hence, despite offsetting open market operations intra-period, there was an inherent bias towards interest rate pressure due to higher domestic borrowing and exchange rate pressures due to the nonreceipt of foreign financing (in cases due to lack of counterpart funds).

In this context of a fixed exchange rate and a weak underlying fiscal position, the newly acquired indirect monetary instruments were applied bluntly and at times inconsistently. Charts 2, Period 1, presents a synopsis of the results of this first attempt at monetary control through indirect instruments. An expansion in the Net Domestic assets of the BOJ and a conversion of excess liquidity to credit expansion, did not consistently elicit an appropriate interest rate adjustment (Table 2). 1/ The result was that there was need for sustained extraordinary support to

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1/ The effectiveness of certificate placement as a monetary instrument was in part undermined by the interest rate strategy pursued. Certificates were initially offered based on a interest rate tender, but in May 1986 this system was replaced by a volume tender. Through this interest rates were managed downwards and with reducing interest rates, commercial banks opted to facilitate renewed private sector credit demand at higher interest rates. The result was a reduction in excess liquid asset holdings by 10 percentage points over 1986-88 and a sharp expansion in private lending from an annual rate of 10 percent in 1985 to average 33 percent in 1987-89. By mid-1888, interest rate tenders were resumed but with implicit interest rate caps.

Table 2. Jamaica: Factors Affecting Reserve Money, 1985-92

(Change as percent of reserve money at beginning of period)

	1985	1986	1987	1988	1989	1990	1991	1992
Autonomous factors								
Net Foreign Assets	27.0	18.7	46.0	15.7	-18.7	26.1	3.1	47.4
Net Claims on Publ. sec.	-49.2	-6.6	-73.3	-19.4	-27.8	-38.7	-83.8	-116.4
BOJ Losses	67.2	50.9	40.9	43.7	37.1	38.8	55.5	55.2
Other	21.4	--	9.3	4.0	19.2	-11.1	85.6	-39.0
Policy factors								
Net Credit to banks	0.3	-1.4	5.4	22.5	8.4	-22.3	-1.2	--
OMO	-28.8	-37.9	-1.2	-70.7	-36.2	-6.7	-52.7	26.2
Reserve money	26.5	32.4	16.6	32.3	10.5	25.1	56.6	84.8

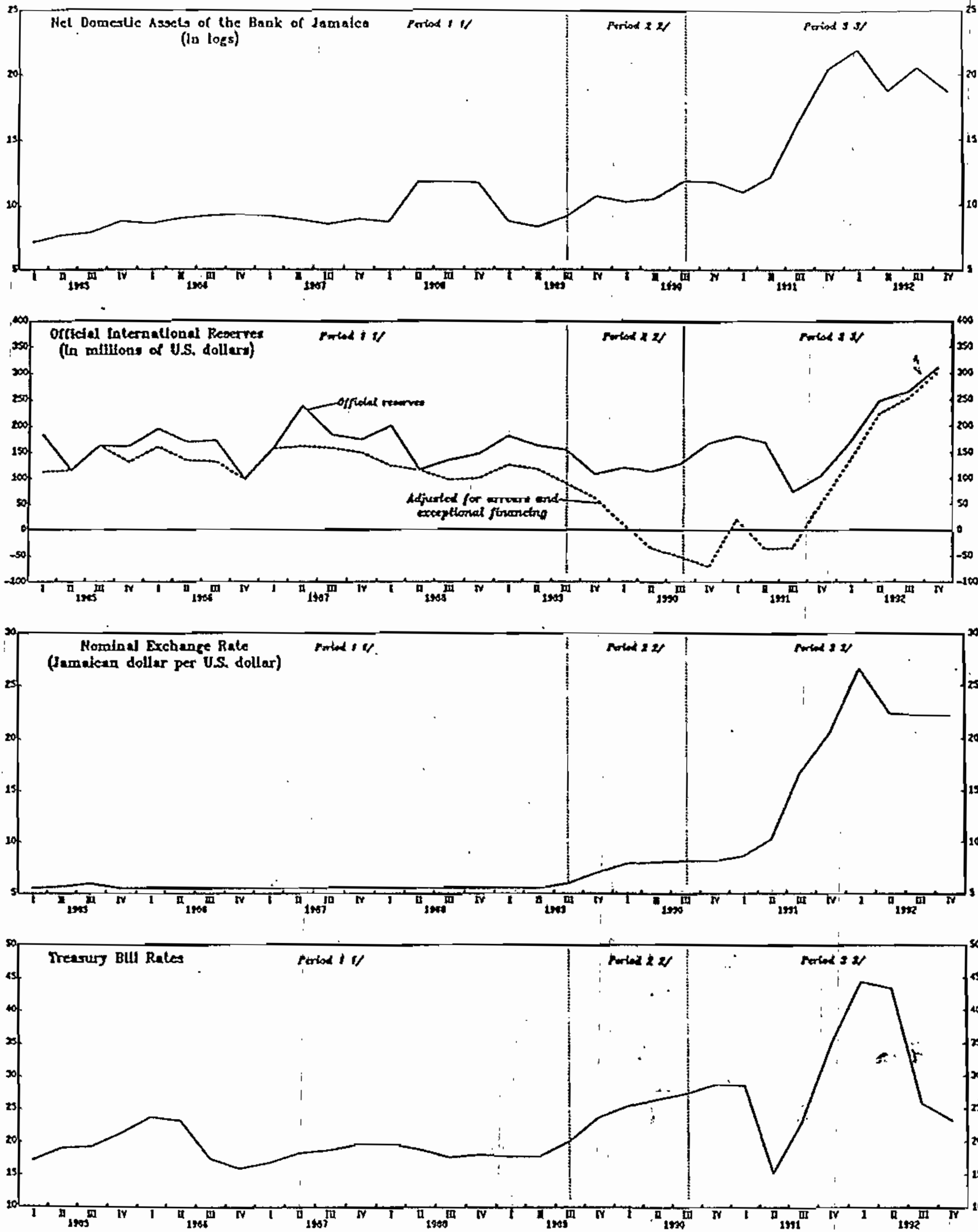
Source: Data from Bank of Jamaica "Statistical Digest."

1/ Positive sign indicates an increase in assets or a decline in liabilities, an expansionary factor; negative sign indicates a decrease in assets or an increase in liabilities, a contractionary factor.

2/ Includes interest payments on Bank of Jamaica Certificates of deposit.

3/ Net placements of Bank of Jamaica Certificates of Deposit.

CHART 2
JAMAICA
ECONOMIC INDICATORS



Sources: Bank of Jamaica; and staff estimates.

1/ Period 1 = First attempt at indirect instruments; with auction system.
2/ Period 2 = Transition or return to direct instruments; step adjustments to exchange rate.
3/ Period 3 = Second attempt at indirect instruments; exchange market liberalization interbank system.

maintain Net International Reserve levels. With a sharp acceleration in theNDA in 1988 (several quarters in advance of Hurricane related reconstruction related credit which was financed in part by increased refinancing by the BOJ) extraordinary borrowing and official arrear accumulation increased in the face of a fixed exchange rate. These fundamentals, coupled with speculation arising from a change in political administration and some disjuncture in policy direction, resulted in increased demand for foreign exchange.

Despite increased placement of Certificates of Deposit, issues were largely undersubscribed as the implied cut-off, arising from targeting interest rates, was inappropriate given market expectations. Further, what absorption occurred was in part nullified by increased accommodation of commercial banks arising from a breakdown in the management of the Liquidity Support Facility and inadequate rates on the facility. It was not until September 1989 that increased penalties on encashment of government securities were imposed and new, more restrictive guidelines on the use of the LSF were outlined. As exchange pressures mounted and, with the diversion of flows from the official auction, the exchange rate slipped to US$1-J$6.15. Credit ceilings were reimposed, and banks were put on notice for the reintroduction of the liquid assets ratio.

Notwithstanding the reintroduction of direct controls, the exchange system progressively unravelled over the period (Charts 2, Period 2). Despite the suspension of the foreign exchange auction system in November 1989, and the re-introduction of an official peg, a forward market continued. Demand pressures continued, facilitated by official exemptions to credit ceilings and circumvention of these ceilings through off-balance sheet transactions. The result was further accumulation of external arrears and increased importance of the forward market, which evolved to a differential of 10-12 percent above the spot peg. At the spot rate, bids were accepted at the fixed exchange rate of US$1-J$7, in a queue. The result was the accumulation of commercial payment arrears amounting to US$177 million by August 1990, which had a guaranteed exchange rate. This, combined with increased diversion to a street market and the forward market, precipitated the liberalization of the exchange system and the establishment of an interbank foreign exchange market in September of 1990.

Through the interbank foreign exchange market, the exchange rate quickly depreciated as agents moved away from local currency into U.S. dollars and foreign currency accounts. By March of 1992, the Jamaican dollar had depreciated in real terms by 46.5 percent with respect to its pre-liberalization level in 1990. In the period April-May of 1992, the currency appreciated in nominal terms from US$1-J$29.6 to US$1-J$22.5. Annualized monthly inflation which had risen to 80 percent in December 1991, moderated sharply to 40 percent by end 1992 (Charts 2, Period 3).

The primary factors underlying the stabilization were a substantial fiscal tightening in the first two quarters of 1992, and a sharp increase in nominal interest rates which resulted in an interest differential in favor

of domestic liabilities. In achieving this, approximately J$4.0 billion in Certificate of Deposits were auctioned with stop out rates as high as 20 percent in real terms. In addition interest rates increased as liquidity tightened due to the program to equalize reserve requirements between banks and nonbanks. Through July 1989, the reserve differential between banks and nonbanks was 15.5 percentage points, which declined to 8 percentage points in 1992, but increased to 10 percentage points by the end of that year as banks' reserve requirements increased to 25 percent. The nonbank share of credit expansion increased from 16 percent in 1985 to 30 percent in 1989, before declining to 26.3 percent in 1992. The effectiveness of monetary policy was threatened by the growth of the nonbank sector owing to a higher credit multiplier of the financial system caused by faster growth of NFI's relative to banks, which introduced an increasingly important element of credit expansion, not directly controlled by the BOJ.

Therefore, even when the BoJ restricted the amount of reserves available to banks, a large increase in credit occurred through a shift in deposits from banks to nonbanks. In times of credit tightness, NFI's with a lower reserve requirement were in a position to attract deposits from banks to themselves by raising their interest rates. Further, banks themselves established NFI's to indirectly benefit from the lower reserve and capital features of the NFI's.

The combined effect of these measures on interest rates precipitated strong private capital inflows throughout 1992 and a reconversion to domestic deposits from the accumulation of foreign currency deposits.

Assessment

During the period under review the efficacy of indirect instruments was closely related to the overall stance of policy. As mentioned before, despite the sharp improvement in Central government finances over the period, this was partially mitigated by the injection of liquidity into the banking system through the quasi-fiscal losses of the BOJ. As a result, open-market type operations were overwhelmed and became ineffectual, as placements increasingly were only offsetting an exponential growth in interest payments.

In reaction to the increased interest costs of open-market operations, there was more active use of unremunerated cash reserve requirements. In addition to taxing productive investment through spreads, the higher reserve requirement reduced the money multiplier. This meant that a given reduction in broad money required a larger issue of Certificates, increasing the marginal cost of open market operations still further. Further an aggressive open-market effort as was adopted in 1992, raised nominal interest rates, which in term led to concerns about growth, and the reintroduction of unsustainable interest rate caps. This tendency to flip-flop between direct and indirect instruments of control, was a direct consequence of an overwhelmed monetary policy.

3. Impact of reforms on intermediation

The pattern of financial intermediation over both phases of indirect monetary management evolved in tandem with the experience in monetary control and in response to the reforms (Table 3). The M2/GDP and M3/GDP (M3 defined to include nonbank deposits) indicators of relative size of the financial system and private savings, grew through 1983, but declined in 1983-84 consequent on rising inflation, negative interest rates and currencysubstitution. With the reforms of 1985-89 a "stable" exchange rate and low inflation, these ratios grew strongly, peaking in 1988 with the intermediation of post-hurricane reinsurance inflows. The loss of control and currency speculation in 1989, resulted in substantial decline in 1989-91, but with stabilization, these ratios resumed pre-reform levels in 1992 (Chart 3).

Intermediation through commercial banks increased throughout the period with cessation of the selective rediscounting facility of the BOJ. However, nonbank intermediation became increasingly important as shown in the M3/GDP ratio owing to the differential reserve ratio and capital requirements. This tendency moderated after 1990, with the program for reserve equalization, and the announced intention to increase the capital requirements of nonbanks (Chart 3).

Private sector credit as a proportion of total credit grew on a sustained basis consequent on the removal of credit ceilings, interest rate caps and the reduction of the liquid assets ratio. These rates of growth were above targets in the 1987-89 period consequent on a reduction in rates, but credit slowed in 1990 as credit ceilings were reintroduced. With the decline in interest rates in 1991, credit again surged but moderated in 1992 with the sharp increase in interest rates.

The reform process had a generally positive impact on banking efficiency. Net interest spreads which had averaged 8.8 percentage points in the pre-reform period, fell to 7.7 percent in the 1985-89 period. This reflected at least in part the program to remunerate reserve requirements and increased competition made possible by the removal of credit ceilings in 1985. The decision to cease paying interest on reserves in 1990 and, the re-introduction of the LAR and credit ceilings during 1991, led to increased spreads once again. These peaked in 1992, when despite the removal of credit ceilings and the LAR, reserve requirements increased by 5 percentage points.

Income from loans which had been repressed by credit ceilings and maximum lending rates in the pre-reform period, increased sharply in the reform period. The increase can also be attributed to the surge in private credit mentioned above, and the switch from low-yielding government paper into loans, that the phase out of the LAR made possible. Again this source of income declined sharply in 1992 in part reflecting the sharp fall in loan demand arising from the stabilization effort.

Table 3. Jamaica: Indicators of Intermediation--Competition

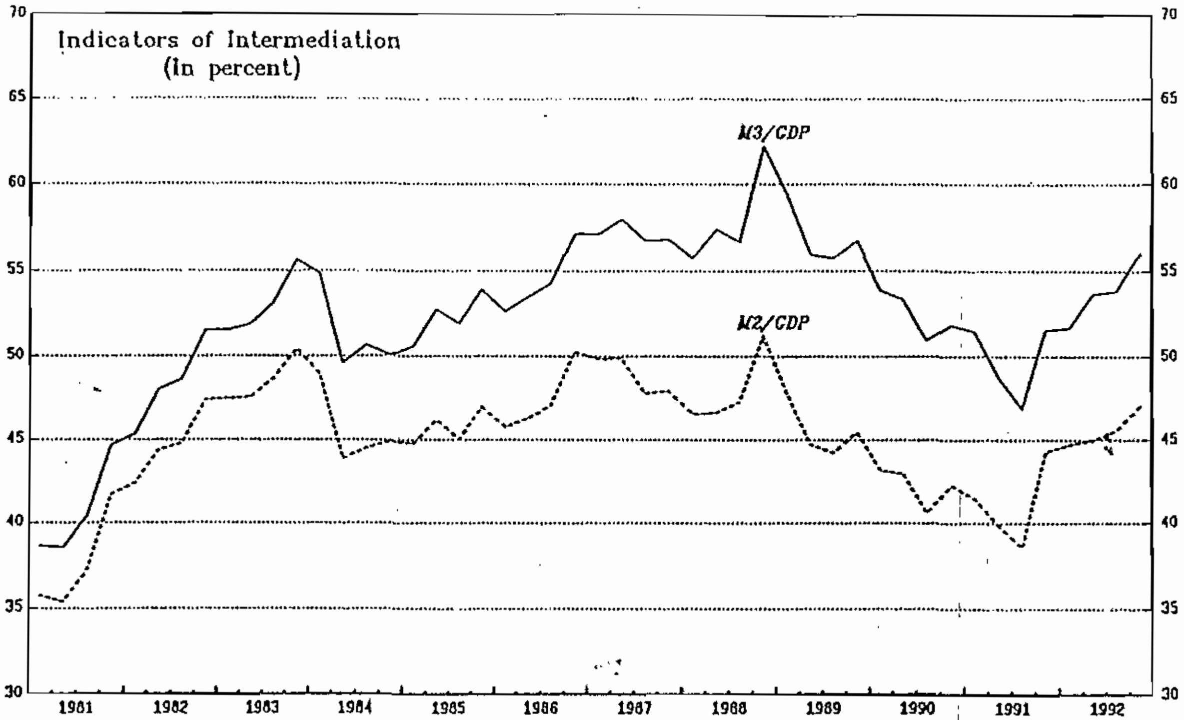
	Pre-Reform 191-84	Reform 1985-89	Post Reform		
			1990	1991	1992
Intermediation					
M_2/GDP 1/	45.7	47.7	42.2	44.2	46.9
M_3/GDP 2/	50.3	56.6	51.8	50.9	56.0
Private credit/Domestic credit	35.4	63.9	121.1	166.2	127.7
Commbank assets/Banking system asset	41.7	43.4	47.0	48.0	55.0
Competition					
M_2/M_3	91.2	84.3	82.0	85.8	84.0
Net interest spread	8.8	7.7	7.8	10.6	19.7
Loan income/Total income	6.3	25.7	31.4	28.3	12.0
Securities market					
Paper holdings by nonbank/Total					
• Treasury bills	10.7	41.6	57.7	68.0	64.0
• Certificates of deposit	n.a.	n.a.	40.4	53.1	51.0

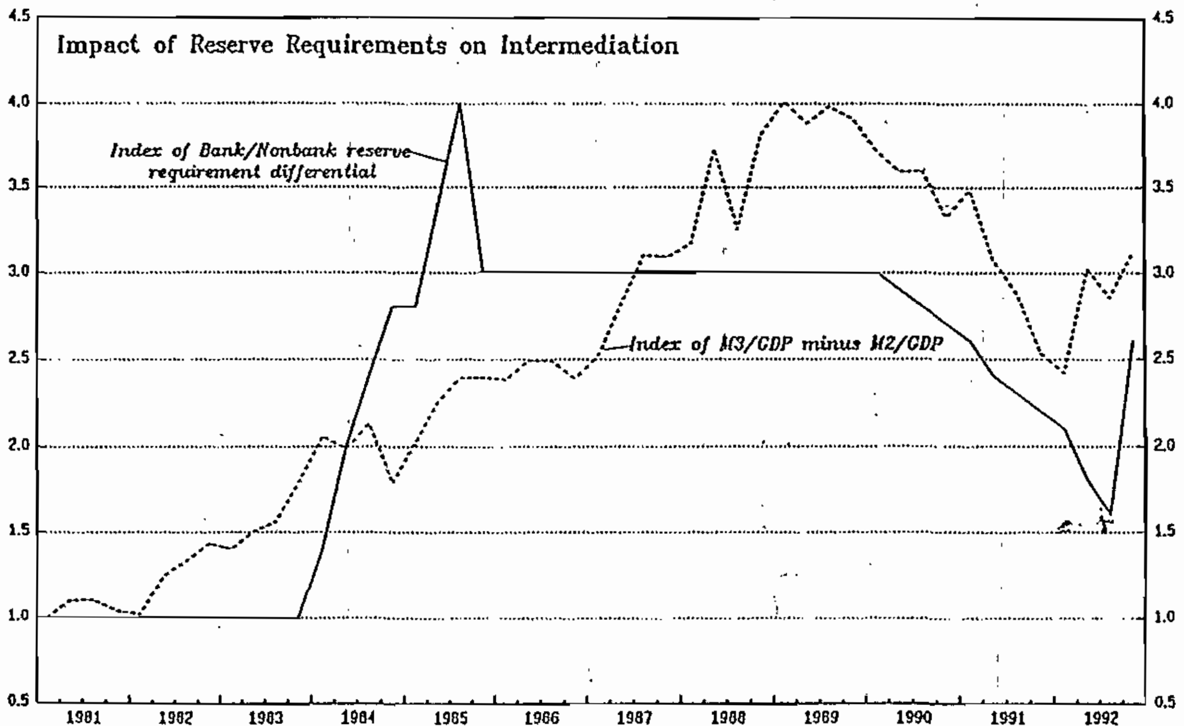
Source: Bank of Jamaica: various "Statistical Digest" and "Monetary Series."

1/ M2 defined as currency in circulation plus demand de deposits and quasi-money

2/ M3 defined as M2 plus deposits of nonbank financial intermediaries.

CHART 3
JAMAICA
MONETARY SECTOR DEVELOPMENTS





Sources: Bank of Jamaica; and staff estimates.

While the data indicates increased holdings of government paper by the nonbank sector, the development of the securities market over both periods of reform was constrained by the almost non-existence of a secondary market for securities. One major impediment to secondary activity was the willingness of the BOJ to make a market, albeit on an artificial basis. The price quotes of the BOJ were for long periods below market which resulted in trades being primarily with BOJ. The active participation of the BOJ was partly in response to the low capitalization of brokers, which prevented them from handling large trades. Further impediments related to an accounting practice which did not permit some holders to recognize temporary decreases in value below par if the security was held as a long term asset. Finally, tax codes inhibited trading by certain classes of investors, and tended to restrict secondary activity to institutions whose income from individual trades was not taxed. In the case of others, the withholding tax levied on a taxable holder of a security at maturity was levied on the full yield from the date of issue. A taxable buyer was therefore required to negotiate a price which took into account the split in the net of tax benefit accruing. This tended to be cumbersome and restrained secondary trading.

Assessment

The effect of the reforms on intermediation and banking efficiency was generally positive notwithstanding the variability of impact over the period. Some of the increased activity in the financial sector however was predicated on the different regulatory requirements between commercial and nonbank institutions. There was a sharp increase in the number of nonbanks, which, while increasing competition at one point caused some instability in the system when one nonbank folded in 1987. Further, as the market deepened, new products (e.g., leasing, factoring, and underwriting) and new ownership structures (e.g., Insurance companies and Building societies which were regulated by their own legislation, merged with banks to offer more "one-stop" universal services) provided new challenges and problems to the existing regulatory framework. A new Financial Institutions Act was not passed until December 1992.

4. ECCB - experience of a currency board

In contrast to the difficulties experienced in monetary management by Jamaica, greater stability has been associated with the unified currency area governed by the ECCB. Table 4, indicates member countries of the common currency area have consistently experienced lower inflation and higher real growth than other Caribbean countries. Not surprisingly there has been renewed interest in the notion of a rule-based unified currency area for the English-speaking Caribbean. 1/

1/ See "Options for Monetary Integration in the Caribbean," Codrington, Hilaire, Robinson and Samuel-June 1991. Also, "A Common Currency for the Caribbean"--Report to the West India Commission--March 1991.

Table 4. Jamaica: Selected Indicators--ECCB Vis-à-Vis Other 1/

(Percent per annum)

	1987	1988	1989	1990	1991	1992
ECCB 2/						
Real G.D.P.	6.5	9.5	5.9	4.8	4.0	n.a.
C.P.I	2.3	1.9	4.9	3.9	3.5	4.0
M_2	15.6	8.2	14.1	10.6	8.3	7.7
Net domestic credit	5.9	2.6	22.0	11.6	9.0	8.9
Other Caribbean 3/						
Real G.D.P.	3.1	0.4	1.8	1.2	2.0	3.0
C.P.I.	12.3	15.1	30.3	24.9	41.8	37.7
M_2	27.3	19.8	15.1	25.0	42.6	24.5
Net domestic credit	12.1	18.9	3.3	4.8	6.3	16.7

Source: International Financial Statistics.

1/ Indicators derived by consolidating national data for both groups and is unweighted.

2/ Includes members of the common currency area, Antigua, Dominica, Grenada, St. Kitts, St. Lucia and St. Vincent. Data for Monserratt and Anguilla was not available.

3/ Includes: Barbados, Guyana, Jamaica and Trinidad and Tobago.

A principal objective of the ECCB is to safeguard a common pool of reserves in order to preserve the parity of the EC dollar to the U.S. dollar. The ECCB is the depository of the external assets of participating governments and requires members to transfer or withdraw foreign reserves resulting from their external transactions from a common pool. In safeguarding this pool, the Bank develops area-wide monetary aggregate targets, which operationally it seeks to achieve through a combination of rules and discretionary direct and indirect instruments. The requirement of a minimum reserve cover of 60 percent for reserve money has been consistently exceeded by wide margins,and borrowing limits by member governments are strictly enforced.

With currency issue constrained by the reserve cover, and, given the limited financing role of the ECCB to member countries, adjustment to imbalances is in principle fairly automatic and inflexible. Unless members can induce an inflow of capital or access secondary reserves, lower foreign exchange earnings result in reduced imports.

The achievement of exchange rate stability, and low area-wide inflation should not obscure underlying pressures among member countries of the currency area. Antigua and Grenada for example, whom together account for approximately 35 percent of area-wide M2, have run fiscal deficits averaging 2.0 and 5.7 percent of GDP over 1988-92. As these are not monetized by the ECCB, price outturn remains favorable. Nonetheless, these deficits have to a significant degree, been financed by the accumulation of domestic and external arrears. In Antigua, central government arrears were equivalent to 3.0 percent of GDP per year on average during 1988-92, while in Grenada they have been equivalent on average to 2.8 percent of GDP during the same period. The stock of external arrears was equivalent to 59 percent and 8 percent of GDP for Antigua and Grenada respectively, in 1992. Domestic arrears comprise past due bills to suppliers, unpaid interest on treasury bills and bonds held by the private sector and the National Insurance schemes, and overdue contributions to those schemes. In addition to arrears, the Insurance schemes are required to hold a portion of their reserves in the form of fixed rate government securities.

This mode of financing inhibits the development of a domestic securities market, as an arrear is in effect a forced non-tradeable instrument. Moreover the requirement to invest in paper at below market rates distorts interest rates. Further, to the extent that this becomes institutionalized, the prospect of issuing debt instruments to clear these arrears is less viable as confidence in the willingness or ability to repay is eroded. This could have been a constraint on the rapid development of vibrant domestic securities markets in the Eastern Caribbean, where placements of government securities are limited (due primarily to the generally strong fiscal positions of member countries) and tend to be ad hoc and project related. Finally, while arrear financing is unsustainable, a scenario is conceivable whereby the ECCB may by default feel obliged to "bail-out" these members rather than forcing the severe fiscal adjustment necessary.

5. Financial sector reform in the Caribbean

Increasingly, countries in the Caribbean have been liberalizing their exchange and trade arrangements and reforming their financial markets to make them more market responsive. In April 1993, Trinidad and Tobago removed exchange controls on current and capital transactions and floated the TT dollar. Guyana, since the "Dealers in Foreign Currency Act" of March 1990, and the subsequent rate unification in February 1991, has had a market-determined exchange rate. Since 1975 the Barbados dollar has been pegged to the US dollar at a fixed rate and in recent periods the authorities have undertaken stabilization programs that resulted in real wage declines in order to defend the fixed rate. Payments and transfers for current international transactions are in the main free from restrictions, while there are restrictions on the capital account.

In monetary management, Trinidad and Tobago removed the secondary reserve requirement on banks in 1991, and ceased providing advances for reserve deficiencies in 1992. Interest rates have been market-determined, and the primary monetary policy instrument has been the variation in the rediscount rate of the CBTT. As of June 1991, Guyana conducts a monthly treasury bill auction which serves as both a debt raising as well as a monetary management tool. However, the auction has been influenced by the liquid assets requirement, which was 35 percent at end of 1992. Credit ceilings and administered interest rates have been abandoned. To absorb excess liquidity in 1991, commercial banks were required to convert 75-80 percent of their excess reserves into variable interest debentures with maturity of three years.

Barbados has eliminated the ceiling on interest rates for nonbanks and removed the ceiling on the average lending rate. The use of indicative credit ceilings for individual banks has also ceased. Preferential interest rate schemes are still operational, however, and the interest rate structure is managed through a minimum deposit rate and a notional spread. A secondary security reserve requirement (23 percent in 1992) has also applied to banks.

The above reforms have been occurring in the context of an improved fiscal environment. For all countries there has been improved overall public sector balances; reduced domestic financing needs of the government; and, increased reliance on security placements to raise debt, and consequently reduced central bank accommodation and base money pressures. Despite these conditions, certain features underlying the operation of the financial markets in these countries are similar to Jamaica, and which could complicate monetary management.

Firstly, in terms of the supply of reserve money, Guyana, Barbados and Trinidad, notwithstanding the improvement in public finances, have experienced quasi-fiscal pressures on the money supply. In Guyana, these pressures arise from Bank of Guyana (BOG) losses which was equivalent to around 15 percent of GDP in 1992. These losses in part arose from exchange

guarantees provided in the past to public enterprises, in the face of substantial exchange depreciation. Losses have also been driven by interest payments on Special Reserve Deposits (SRD's) issued to absorb excess liquidity. The liquidity impact of these losses in 1992 amounted to the equivalent of 19 percent of the stock of currency at the end of the year. The Government has "compensated" the BOG for such losses through the issue of non-interest bearing government debentures.

While the Central Bank of Barbados is profitable, the pressures on reserve money has been from the scheme whereby it provides financing at preferential interest rates to the state-owned Barbados National Bank, which holds most of the non-performing credits to the Sugar sector. While in principle seasonal, this credit has been increasing and much of it could be unrecoverable. The flow in 1992 was equivalent of 16 percent of the stock of currency in circulation at the end of that year.

The Central Bank of Trinidad and Tobago (CBTT) has provided support to the state-owned Workers, National Commercial, and Cooperative banks, at below market rates. These banks have poor portfolios, and have required liquidity support which amounted to approximately 30 percent of base money in 1991. 1/ Beyond the issue of open ended and at times unpredictable sources of liquidity creation by these quasi fiscal pressures, is the fact that the arrangements facilitated the operation of essentially unsound intermediaries and weakened the role of interest rates. Further if these banks became too large to fail, the lender of last resort discretion of the CBTT bank may become compromised.

Like Jamaica also, the systems of monetary management have contributed to some disintermediation from the supervised financial system, with associated inefficiencies. Whereas in Jamaica, the case was one of high unremunerated reserve requirements causing increased intermediation through nonbanks, in Barbados, a managed interest rate structure, active use of reserve requirements, and indicative credit ceilings, resulted in a loss of bank deposits in the mid 1980's, to the Credit Unions. More recently, the commercial banks have lost some ground to commercial enterprises which accept deposits at higher interest rates, and increasingly perform as financial intermediaries. 2/

In Guyana, an administered system led to an overhang of excess liquidity equivalent to 35.3 percent of deposit liabilities in June 1992. This excess has been held in the form of Special Conversion debentures. The

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1/ In September 1993, these banks together accounting for 25 percent of total banking deposits, were consolidated into the First Citizens, in an effort to deal with a poor asset portfolio.

2/ The ratio of M2 to M3 declined from 90.8 percent in 1985 to 84.5 percent in 1992.

liquidity of these SCD's constrains the development of an interbank and secondary market, and makes monetary management difficult because of the unpredictability of encashments of these deposits. 1/

In Trinidad, where nonbanks have been consistently able to offer higher deposit rates due to a 12 point difference in bank to nonbank reserve requirements there has been some loss of market share to nonbanks. Importantly, since 1988, intermediation ratios to GDP have declined from 49.4 percent to 38.6 percent, in part due to an administered interest rate structure which resulted in negative deposit yields for most of the period.

As the case for all countries with a fixed exchange rate, monetary management has been complicated by changes in money supply occurring through movements in the Net International Reserves. The management framework of Trinidad, Barbados and Guyana, have until recently assumed fixed or fairly inflexible nominal exchange rates. Even with the recent adoption of market mechanisms for rate determination, there is still evidence of hesitancy to allow rates to adjust. As small open economies, external imbalances are quickly reflected in NIR changes. In principle, to maintain control over the money supply in such situations would require that the authorities sterilize such movements. Given historically weak foreign exchange positions however, the policy response to capital inflows is invariably to accumulate reserves with resultant increases in money supply. In other situations, because of a hesitancy to utilize interest rates due to concerns for real growth, the result of credit expansion is invariably reserve loss. These episodes have been frequent in the Caribbean, the latter being particularly common, given a history of generally weak and inconsistent fiscal positions. In the case of Trinidad, after reserve accumulation consequent on strong oil prices, there was a reserve loss of approximately US$3.0 billion over the ten year period 1982-1992. This was primarily in response to an increase in domestic credit from ratios equivalent to 9.2 percent of GDP in 1982, to a peak of 55 percent in 1988. Exchange rates and interest rates remained more or less flat throughout this episode.

III. Conclusion and Lessons

It is tautology that in any fixed exchange rate regime or if there is a desire for exchange rate stability, domestic policy is in effect endogenous to that arrangement. Without credible and consistent policy commitment to this rule, the tendency is for the regime to collapse. In this regard the experiences of Jamaica and the ECCB are instructive.

In Jamaica, while it was fairly simple to remove interest rate restrictions on the intermediation process, consensus on policy induced interest rate movements has been more difficult. The consequence of this

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1/ The M2/Gdp ratio fell from a peak of 130.6 percent in 1988, to 56.5 percent in 1991.

dichotomy was that while indicators of intermediation improved with the removal of credit and interest rate restrictions, monetary control was more elusive, owing to inconsistent response to poor fiscal performance. A currency-board arrangement however, need not guarantee fiscal prudence. Under a currency-board, budget deficits are feasible, but only to the extent the public, at home or abroad, are willing to buy government securities to finance that deficit. Where the market for such securities are weak or evolving as in the Eastern Caribbean, fiscal deficits have been more crudely financed and could pose a threat to the stability of the arrangement. With the renewed interest in currency-board type arrangements in the Caribbean, discussions may usefully also evaluate whether a currency-board per se solves the political underpinnings of budget deficits. A companion consideration may also be whether securities markets are sufficiently developed to support deficits where they arise under such arrangements.

A second and related issue relates to the impact of quasi-fiscal pressures on monetary policy. As mentioned before, all central banks reviewed are in one form or another involved in credit arrangements which have been sizeable and unpredictable. In Jamaica and Guyana, central bank losses threatened to be explosive as they became exponential when this form of credit was not adequately offset by fiscal adjustment. The Jamaican response during the review period to the resulting monetary expansion has been in the main, to flip flop between indirect and direct instruments of control. This ambivalence has proven to be damaging to credibility and confidence, and manifested in episodes of disintermediation from the domestic financial markets.

A second general lesson from the Jamaican experience relates to the need to view indirect instruments as performing two related roles. In the first place, they served to achieve intermediate monetary targets. In this regard, consistency between instruments is crucial and their full range needs to be constantly reviewed to ensure that they are operating in tandem. Lack of instrument synchronization was the essential reason undermining the authorities response to the 1989 episode of currency speculation. Further, in the context of the need for ongoing coordination in fiscal and monetary policy, it should be noted on the fiscal side that mismatches between project execution and reimbursement in foreign currency can put pressure on the exchange system.

A related role of indirect instruments is to facilitate the development of money markets, without which indirect instruments are less effective. To a large extent tax and accounting conventions hampered the development of secondary market activity in Jamaica. These combined with incorrect rediscount pricing reduced the incentive for investment in market making institutions. In Guyana, bank deposits are taxed at a lower rate than earnings on treasury bills which reduces the attractiveness of treasury bills and could inhibit the development of the market. In Trinidad, ceilings on domestic debt set by Parliament have been binding and outstanding treasury bills have not increased since 1989. As mentioned earlier, in the Eastern Caribbean, placements of government securities are

ad hoc and largely project related and confidence may have been affected by the episodes of arrears in some countries. These factors could all be constraining the development of primary securities markets and related institutions. In turn the absence of this market could impede the efficiency of indirect instruments.

These issues are likely to be relevant to other Caribbean Central banks as they adopt indirect instruments of control and more liberal exchange arrangements. Notwithstanding the difficulties in implementation however, the recent experience of Guyana and Jamaica suggest that with consistent macro-economic policy and coordinated instrument use, positive results in control, confidence and real growth are assured.

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