



XXX Annual Monetary Studies Conference

The Central Bank of The Bahamas

In conjunction with

Caribbean Centre for Monetary Studies

**Stabilisation and the Jamaican Commercial Banking Sector
(1991 – 1997)**

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Sheraton Grand Resort
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October 26 – 30, 1998



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Sector (1991 - 1997)**

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The views expressed in this paper are those of the authors and not necessarily those of the Bank of Jamaica.

October 30, 1998

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1.0 Introduction

Prior to the early 1970's, increased capital accumulation and industrialization were perceived to have been the vehicles by which countries achieved sustained growth and development. Juxtaposed with this philosophy was the view that countries should develop domestic industries through a deliberate process of import substitution. By the mid-1970's, these emphases were partly superseded by a focus on agricultural development, driven largely by the growing recognition that import substitution strategies were unlikely to succeed.

Over the 1980's, the neoclassical emphasis on the market and "getting prices right" came to dominate development debates. Within the neoclassical school, a distinct development strategy was that of monetarism¹. Monetarism basically concentrates on increasing the efficiency of market signals as a guide to improving the allocation of resources. In practice, the strategy is often introduced during periods of crisis, when the adjustment of acute imbalances is of high priority. Not surprisingly, the renaissance of neoclassical thought coincided with the debt crisis and promotion by the Multilateral lending agencies of structural adjustment policies in Latin America and Africa.

Measures that are taken to improve relative prices in the economy invariably involve policies to reduce the rate of growth of prices, popularly referred to as "stabilisation". Within this framework, emphasis is usually placed on the execution of monetary and fiscal policies, financial reform, and on improving the institutions and practices of governance. Importantly, stabilisation is generally seen as a short run solution to the problem of economic growth.

The present policy stance in Jamaica is an eclectic combination of an outward looking strategy, and monetarism. The view of the authorities is that "a necessary precondition for the take-off in growth is the establishment of a macroeconomic climate that is stable, predictable and hence

¹ Another strategy is an outward looking orientation that places special emphasis on policies that directly affect the foreign trade sector. These policies include exchange rate policy, tariff regulations and other instruments that affect foreign investments and profit remittances.

favourable to long term investment²". In this regard, particularly since the full liberalization of the foreign exchange regime in 1991, the government pursued tight demand management policies with the aim of attaining internal and external balance. Over the period, GDP growth declined, with growth in the financial sector outpacing growth in the other sectors of the economy. However, the buoyancy in the financial sector came to a halt in 1995 when liquidity and solvency problems emerged in several financial institutions.

There has been an ongoing debate as to whether the problems that emerged in the Jamaican financial sector over the middle part of the 1990's have been the consequence of stabilisation efforts. Conversely, there is the view that these problems have been more related to factors such as poor risk assessment and unsound management techniques on the part of financial institutions. This paper discusses the relative impact of stabilisation policies on the Jamaican commercial banking sector between 1991 and 1997. In what follows, section 1 outlines a brief overview of the expected links between selected variables in the macroeconomy and the performance of the banking sector, while Section 2 traces the evolution of stabilisation policies in Jamaica. Section 3 briefly describes the structure of the financial sector, while section 4 presents an evaluation of the data. The final section summarises the issues discussed.

2.0 Stabilisation and the Financial Sector; A Theoretical Overview

The effects of stabilisation have traditionally been an important area of concern. To the extent that it entails demand management policies, stabilisation has come to be associated with output loss, at least in the short term, as well as fiscal or pseudo fiscal costs. More recently however, empirical work has demonstrated that stabilisation does in some cases have an expansionary effect on total output (Easterly, 1995). This has been shown to occur in instances where the economy rebounds after an initial period of contraction.

2 Governors quarterly statement, April - June 1998, National Sovereignty And Multilateral Financial Institutions p. 11.

While the proponents of stabilisation anticipate that disinflation and restructuring will have explicit fiscal and output costs, little if any attention has been paid to the issue of the direct or induced effect of stabilisation measures on the financial sector. In fact, interest in financial sector issues has become important in a macroeconomic sense only since the beginning of the 1980's with the onset of international debt crisis. More recently, the events which unfolded in Mexico and South East Asia have forced multilateral lending agencies to explicitly recognise banking system issues in their recommendations. As such, there has been a remarkable surge in research aimed at explaining banking crisis, either from an institutional perspective, or from a general macroeconomic framework.

The financial sector can be affected by macroeconomic variables through a variety of mechanisms. Firstly, shocks to confidence in the face of policy instability can lead to funding shocks that undermine a bank's ability to service its obligations. Illiquidity can also arise from the dynamics of adjustment that the financial system must pass through in the course of liberalisation.

Adverse macroeconomic shocks may also affect banks' balance sheets through its induced effects on asset prices. Banks tend to mitigate the effect of high inflation by indexing lending rates and shifting into assets whose prices lead inflation, such as foreign exchange. However, these earnings might be unsustainable, particularly in the period of rapid disinflation that accompanies stabilisation policies. In fact, it has been observed that stabilisation policies have preceded episodes of unsoundness in Chile, Malaysia, and Finland (Garcia, 1995). High inflation also reduces the quality of the information provided by interest rates and goods prices, and therefore exacerbates the moral hazard and adverse selection problems inherent in bank lending. Furthermore, bank portfolio risk is likely to increase as asset concentration increases under high and uncertain inflation.

A special type of asset concentration is loans to related parties. There is usually a strong incentive for these related parties to borrow with the view of undertaking real estate transactions in search of inflationary profits. Usually, these loans are under-collaterised, in addition to being accorded preferential interest rates. In this regard, banks may become

overexposed to real estate assets where, if there is a downturn in the market, they will be adversely affected to the extent of their exposure. Indeed, this factor has been a prevalent feature in most countries that have experienced banking crises.

The exchange rate and exchange rate policy also plays an important role in affecting the soundness of the banking system. Adverse policy shocks to the exchange rate can affect the quality of banks' portfolio through its impact on the borrowers who are directly affected by such changes. Bank earnings can also be adversely affected by an exchange rate shock to the extent that the system derives a relatively large proportion of its income from exchange rate gains. In addition, a policy of maintaining an overvalued exchange rate or an appreciating real exchange rate can seriously undermine the ability of bank debtors in the export sector to service their debt, especially in a context where productivity improvements are not in line with wage inflation.

An exchange rate peg may also have implications for the banking sector in the face of a macroeconomic shock. Consider the case where an adverse shock reduces the ability of domestic borrowers to service their debts to the banking system. If the shock is large and the banking system fragile, banks will not be able to write down the debts to realistic levels without themselves becoming insolvent. At the same time, they would be unable to reduce the real value of their liabilities. In this context, depositors may flee, leading to banking system distress.

It is important to note that shocks not related to policy may also affect the banking system. Shocks to the real sector are perhaps the most important source of financial sector distress [Gavin & Hausman (1995)]. Such shocks can take various forms including a recession, a terms of trade shock or natural disasters such as hurricanes.

The risk of default in the banking system arising from credit booms or from an inappropriate internal structure and inadequate supervisory oversight cannot be ignored. When the banking system as a whole is expanding, probably in response to loose monetary policy or to capital inflows, it is difficult for bankers to obtain information about the credit worthiness of

borrowers. Information problems like these imply that the rapid expansion of bank balance sheets during a lending boom is likely, over time, to generate a deterioration of those balance sheets.

Shah (1997) indicates that systemic risk to a banking system can also result from “a complex system characterised by interactions that are not always familiar, may be unplanned or unexpected³”. In this context, he identifies the interconnectedness between institutions and markets, and the tendency to build financial links along regulatory fault lines as an important source of system distress. Additionally, the potential for failure exists where institutions engage in large financial transactions spanning a number of different products in a context where its internal control and compliance features are not effective. The turnover of staff also introduces complexity into the system as this makes it difficult to build well-understood and reliable internal control systems. He also cautioned that the trend towards fewer and larger banks operating globally means that the transmission of risks on an international plane is potentially faster and more hazardous.

Monetary and fiscal policy instruments may also affect the liquidity position of commercial banks. Credit or interest rate controls can force banks to hold unremunerated excess reserves, constrain bank liquidity management, and result in disintermediation, reducing banks’ client base and profitability. Required reserves, or at least a part of it, are not remunerated at market rates and therefore constitute a tax on the banking system. A large increase in non-remunerated required reserves may force banks to execute sudden portfolio adjustments that might affect their solvency and their liquidity (Marston, 1996). Similarly, high non-remunerated liquidity ratios can result in a widening of interest rate spreads, increased bank lending rates and disintermediation. Tax systems which do not allow banks to deduct loan loss provisions or which define earnings to include interest accrued on non-performing assets, effectively tax non-existent profits.

³ Shah, A., *Analysing systemic risk in banking and financial markets* in Journal of Financial regulation and compliance, vol. 5, no. 1, 1997, p. 39

3.0 Jamaican Stabilisation Policies in the 1990's

The Jamaican foreign exchange determination mechanism was liberalised in September 1990, followed by the freeing of the capital account in September 1991. The immediate post liberalisation period was characterised by rapid depreciation in the exchange rate, which moved from US\$1.00 = J\$7.90 at the end of September 1990 to US\$1.00=J\$27.38 by end March 1992. This precipitous slide in the currency pushed inflation to in excess of 80 percent for fiscal year 1991/92. It was from this experience that the stance of monetary policy became increasingly focused on the control of inflation as its chief objective.

The monetary policy reaction to the inflationary spiral that ensued in the immediate post-liberalisation period entailed reintroducing the non-cash portion of the liquid asset requirement between January and March 1992. Also, the penal rate imposed on commercial banks in respect of breaches of the cash reserve and the prescribed liquid assets ratio was increased. Concurrently, the Bank of Jamaica, to contain the expansion in money supply, became more aggressive in its open market operations through increased use of certificates of deposit (CD's). To complement the monetary policy initiative, the public sector borrowing requirement was contained at 0.4 percent of GDP for the full fiscal year. Specific measures included the expansion and intensification of the revenue audit programme, the raising of the travel tax rate and the amendment of the income tax regime to include withholding tax on Debentures and Promissory notes.

Notwithstanding the increased use of certificates of deposit in the early part of 1992, there was a commitment on the part of the authorities to reduce the losses of the central bank by the retirement of this mode of monetary control. As such, the Bank of Jamaica's stock of CDs was gradually phased out, beginning in October 1992, and intervention in the money market became increasingly reliant on Government of Jamaica securities.

Following an easing of policy during the first half of 1993, the exchange rate again came under pressure in the latter half of the year. In response, monetary conditions were tightened through a significant increase in interest rates on CD's. Interest rates on these instruments, which had

approximated 25.5 percent in the early part of the year, were increased to 35.7 percent by July, and further to 48.4 percent by December. To limit the level of speculation in the foreign exchange market, a control mechanism was established whereby authorised dealers were required to charge no more than a 1.5 percent spread between the buying and selling prices on all currencies. The Central Bank also curtailed its liquidity support to commercial banks, penal rates on overdrafts were increased to 120.0 percent, and the liquid asset requirement was maintained at 50 percent.

The structure of the foreign exchange market was broadened in 1994 with the establishment of a network of Cambios, as well as an increase in the number of authorised dealers. This assisted in the unification of the formal and the curb market. Concurrent with these developments, the Central Bank introduced a system of money market primary dealers in April of that year, facilitating an increase in trading activities in the secondary market. Consistent with these developments, the Securities Act was promulgated which governed all aspects of the capital and financial markets, including the regulation of institutions.

Between 1993 and 1994, the Jamaican balance of payments was buoyed by capital inflows, no doubt attracted by the attractive interest rates to be earned on domestic assets. As a consequence, the net international reserves of the monetary authorities increased from US\$51.1 million at end December 1993 to US\$398.6 million at end December 1994.

Given the momentum of the growth in the net international reserve and its expansionary effects on money supply, policy focus towards the end of 1994 was shifted towards facilitating a deceleration in its rate of accumulation. Accordingly, the Central Bank's level of purchases from commercial banks was reduced from 25 percent of total flows to the banks, to 10 percent, and then to 5 percent in January 1995. Purchases from Cambios were also gradually adjusted down to a maximum of 30 percent by April 1995. In addition, the BOJ adjusted its pricing arrangements with authorized dealers so that foreign exchange purchases would take place either at the weighted average selling rate, or the average buying rate of the authorized dealers, plus a margin of 1.25 percent, whichever was lower. In early 1995 the margin was adjusted down to 1.0 percent.

Fiscal policy throughout this period continued to support the monetary programme. Debt raising, apart from providing budgetary support, also facilitated the reabsorption of liquidity generated by central bank's sterilization of large capital flows. In this regard, the stock of domestic debt increased from J\$23.6 billion at the beginning of 1994, or approximately 24 percent of GDP, to J\$49.2 billion, or approximately 29 percent of GDP by the end of 1995.

The moderation of inflationary impulses in late 1994 and early 1995 signaled that monetary and fiscal policies adopted since 1993 had influenced monetary conditions and prices with an expected time lag. This was evidenced in the inflation rate of 9.9 percent for the second half of 1994 compared with the 21.9 percent in the corresponding period of the previous year. Accordingly, there was some easing of monetary policy in early 1995, accompanied by a decrease in nominal interest rates. Additionally, a decision was taken by the authorities to extend the maturity profile of the public debt and reduce the floor on securities held by financial institutions. This was effected by reducing the non-cash portion of the liquid assets ratio by three percentage points.

However, by the second half of the year demand pressures, manifested in higher than programmed inflation rates, increased demand for imports and instability of the exchange rate, posed a challenge for policy. In response, the Central Bank instituted a more restrictive policy by introducing selective special deposit requirements for commercial banks in August 1995. This policy approach was complemented by intervention in the foreign exchange market, with sales amounting to US\$90.0 million from August to November 1995. The exchange rate depreciated however from US\$1.00 = J\$33.95 at the end of June, to US\$1.00 = JA\$39.80 by end December.

Activities in open market operations were also consistent with the general tightening of monetary policy in the latter half of 1995. These included more aggressive use of the reverse repurchase agreements to control liquidity. Concurrent with these developments, the prescribed liquid asset ratio of licensed financial institutions was increased from 17 percent to

25 percent. Also, consistent with the Central Bank assuming supervisory oversight of these institutions, a statutory cash reserve ratio was introduced for building societies.

In 1995 there was an observable shift of the Central Bank's mode of operation from indicative management of the money supply, to daily management of its high powered money. In this regard, the central bank paid increasing focus on the evolution of its balance sheet, and daily specifications of the quantum of open market operations necessary for the day became a permanent feature of the administration of its financial programme.

Over the early part of 1996, there was a moderation of inflationary expectations and the return of relative stability to the foreign exchange market. Foreign exchange flows to the market continued to exceed expectations, resulting in the net international reserve increasing by US\$181.6 million to US\$600.2 million by end June 1996. The exchange rate remained relatively stable, fluctuating between US\$1.00 = J\$39.85 - J\$40.00 during the period, buoyed by increased capital inflows of US\$172.1 million, relative to US\$31.9 for the corresponding period of 1995. The Government also successfully went to the Eurobond market in July with a US\$100.00 million bond.

Consequent on these signs of improvement, there was a gradual relaxation of policy in the middle of 1996. During the year the Bank's signal rate on 30 days reverse repurchase agreements was gradually lowered from 43.0 percent in January to 27.0 percent by end December. In addition to the lowering of interest rates, the special deposit scheme was lifted in December 1996. The Bank in June of that year also reduced the maximum purchase of foreign exchange from Cambios to 10.0 percent from the previous 30.0 percent.

By year-end, there was an appreciation in the exchange rate to US\$1.00 = J\$35.03 from US\$1.00 = J\$38.30 at the beginning of June 1996. Importantly also, the inflation rate for 1996 was 15.8 percent, the lowest it had been since the onset of the 1990s.

The authorities were again challenged in 1997 to maintain stability in the foreign exchange market and attain the objective of single digit inflation. This time, the challenge emerged from

instability in the financial sector which necessitated the Central Bank as lender of last resort to provide liquidity support to weakening institutions. In spite of the need for increased open market operations, this was undertaken without a reversal in the interest rate path, given the significant level of intervention sales to the foreign exchange market. Notwithstanding, the stock of reverse repurchase agreements grew to approximately \$25.0 billion by end June from the \$16.7 billion that obtained at the end of December 1996.

The expectations of a pending general election later in 1997 further exacerbated the pressures in the foreign exchange market. Gross foreign exchange sales to the market between January and June 1997 amounted to US\$256.8 million, and contributed to a reduction in the NIR of US\$128.7 during the period. Interest rates were also increased, with the Bank's signal rate on 30 days reverse repurchases moving from 18.0 percent at end July to 29.0 percent by December. As a consequence, the 12-month inflation rate at December 1997 was 9.2 percent. The depreciation in the exchange rate of approximately 4.0 percent had not derailed the objective of single digit inflation.

4.0 The Jamaican Financial Sector

In the context of the stabilisation efforts of the early 1990's, buoyant growth was recorded in the financial sector, with value added growing by an average annual rate of 17.2 percent. More narrowly, the asset portfolio of commercial banks, the predominant institutions in the sector⁴, grew by an average of 48.5 per cent. By mid the 1990's however, the fortune of the sector was reversed. Between 1995 – 1997, the value added of the financial sector declined by an average of 9.2 percent while commercial banks assets growth showed a marked deceleration to an average of 9.2 percent.

⁴ At the end of 1997, the assets of the commercial banks totaled J\$142.4 billion, representing 50.0 percent of the total assets of the financial sector. Of the J\$142.4 billion in total assets, three large banks accounted for \$106.8 billion or 75 percent.

Table 1
Commercial Bank Assets
(1990 – 1997; End of Period)

	(J\$MN)			Average Growth (%)	
	1990	1995	1997	1990 -1995	1996 - 1997
All Banks	17,088.7	119,476.9	142,433.1	48.51	9.20
3 Large Banks	11,969.3	86,434.3	106,824.8	48.93	11.17
Other Banks	5,119.4	33,042.6	35,608.3	48.41	4.06
Large Banks % of all Banks	70.0	72.3	75.0	N/A	N/A

Source: Bank of Jamaica

Against the backdrop of an inadequate regulatory framework, increased competition encouraged regulatory arbitrage that led to substantial growth in the number of deposit taking institutions, particularly during the period 1990 – 1995 (Appendix 1). Many of these institutions were either subsidiaries of holding companies, or of larger conglomerates comprised of a merchant bank, a commercial bank, a building society, an insurance company and other business firms⁵. These conglomerates had complex structures of inter-company share holdings, interlocking boards of directors, common management and extensive inter-group transactions.

Given the incestuous relationship within the financial groups, problems that initially surfaced in institutions within these groups quickly spread to commercial banks, merchant banks and building societies. In order to maintain stability in the financial sector, weak institutions were either placed under temporary management, as in the case of the Blaise Group, or provided with liquidity support by the Central Bank, as was the initial case for the Century Group. The government subsequently embarked on a programme of restructuring and rationalisation of the financial sector. Initial restructuring efforts were directed through Financial Institutions

⁵ Appendix 2 contains a stylized representation of a typical conglomerate in Jamaica.

Services (FIS) and later formalised in the establishment of the Financial Sector Adjustment Company (FINSAC). Further, the legislations governing financial institutions were revised in 1997 with the aim of strengthening the regulatory powers of the central bank.

5.0 Commercial Bank Operations: The Impact of Stabilisation

5.1 Inflation

Perhaps the most significant macroeconomic factor affecting commercial banks in Jamaica was high inflation and the subsequent attempts at stabilisation. The information in table 2 would suggest that there was no significant expansion of bank assets in real estate related activities following the high inflation episode in early 1990's. As a proportion of total loans, credit for construction and land development declined from an average high of 23.2 percent over the period March 1990 to June 1991, to an average of 7.9 percent over the course of the low inflation period from September 1996 to December 1997. However, increased asset concentration occurred in loans to the tourism sector, professional and other services and loans for personal activities. In particular, between December 1992 and June 1996, loans to the tourism sector increased to 8.1 percent of total loans, from 6.3 percent over the course of the high inflation episode. Simultaneously, loans classified under the categories of Professional & Other Services and Personal loans increased from 11.8 and 11.5 percent of total loans, to 12.6 and 17.3 percent respectively. Increases in these categories continued into the period of low inflation.

Despite the classification nomenclatures, the professional and other services, and personal categories of commercial banks' loan portfolio include loans for real estate acquisition, real estate services, and home improvement⁶. Data availability precludes the possibility of more detailed analyses, but the classification of real estate related loan types under these categories

⁶ The huge increase in the relative size of loans for personal consumption in the immediate post high inflation period also reflected increased demand for private motor cars consequent on the lowering of duty regimes on car imports.

would validate the notion that Jamaican banks were indeed increasing their exposure to relatively more risky assets under the cover of high inflation. The increased asset concentration demonstrated in tourism related loans reflected real estate acquisition by related parties.

Table 2
Commercial Banks' Loans & Advances:
Sectoral Distribution

	Moderate- Inflation	High-Inflation	Moderate- Inflation	Low-Inflation
SECTOR	Mar-90 to Jun-91	Sep-91 to Sep-92	Dec-92 to Jun-96	Sep-96 to Dec-97
PRIVATE SECTOR	91.8	93.6	92.4	89.5
Agriculture	9.4	8.5	5.6	4.3
Mining	0.4	0.5	0.6	0.5
Manufacturing	17.3	16.5	12.6	11.3
Construction & Land Development	23.2	19.1	14.6	7.9
Financial Institutions	2.7	3.0	3.7	10.9
Transport, Storage & Comm.	12.5	9.5	9.2	6.8
Electricity, Gas & Water	0.7	0.2	0.6	0.2
Distribution	4.3	5.8	6.8	6.8
Tourism	7.8	6.3	8.1	7.4
Entertainment	0.8	0.8	0.7	0.4
Professional & Other Services	6.4	11.8	12.6	13.2
Personal	6.2	11.5	17.3	19.8
GOVERNMENT	8.2	6.4	7.6	10.5
TOTAL	100	100	100	100

Source: BOJ's Statistical Digest, and author's computation.

The shock to real interest rates that occasioned the tightening of monetary policy shifted the incentive structure away from speculation in real estate towards more paper-based transactions. As a result, borrowers who depended on trading in real estate to service bank loans experienced a contraction in demand for these assets. This led to a significant fall off in debt servicing of these sector-related loans.

An assessment of the past due loans attributable to the various loan categories at March 1996 bears out this assessment. The four most significant categories of non-performing loans were construction & land development, tourism, personal, professional & other services (table 3). The tourism category is surprising given the relatively strong performance of this sector over the decade. Data limitations however preclude in-depth analysis of the distribution of loans within this category to ascertain specific areas of non-performance.

Table 3.
Sectoral distribution of Past Due Loans
(6 months & Over at March 1996)

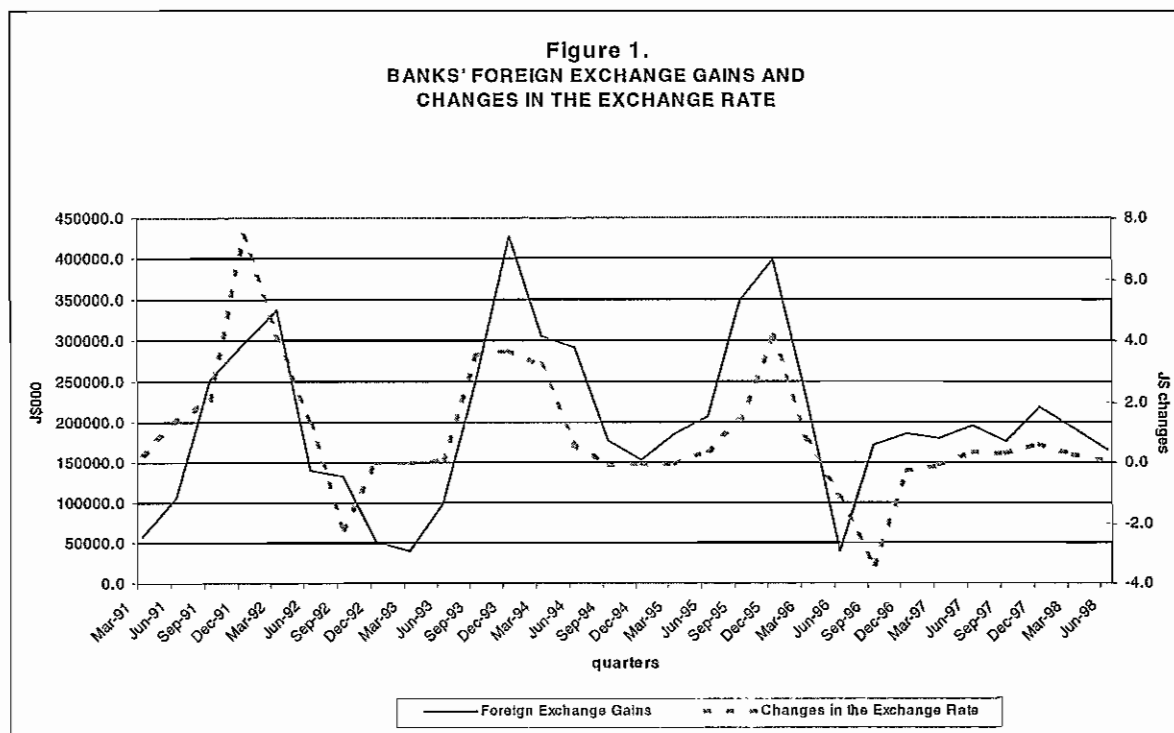
Sector	% of Total
Construction & Land Development	18.5
Tourism	16.4
Personal	15.8
Professional & Other Services	14.0
Manufacturing	11.7
Distribution	7.5
Transport, Storage & Comm.	6.7
Agriculture	5.8
Entertainment	2.1
Mining	1.4
Electricity, Gas & Water	0.3

Source: Department of Supervision of Banks, BOJ

5.2 Exchange Rate

The link between exchange rate volatility and commercial banks' foreign exchange gains is unambiguously clear. Between the first quarter of 1991 and the second quarter of 1992, banks earned J\$226.1 million from foreign exchange gains, stimulated by a 66 percent depreciation of

the exchange rate (J\$1.00=US\$). In contrast, foreign exchange gains fell to an average of J\$80.6 million against the backdrop of a 9.4 percent appreciation of the exchange rate over the four subsequent quarters. The same correspondence between the rate of change in the exchange rate and the level of foreign exchange gains was demonstrated in latter years (figure 1). In



particular, the 14.1 percent appreciation in the exchange rate between the first quarter of 1996 and the first quarter of 1997 stymied foreign exchange gains over the period. For example, gains over the second quarter of 1996 fell to an all time low of J\$39.3 million.

Despite the relatively low importance of foreign exchange gains to commercial banks, shocks to the exchange rate has adversely affected the industry. On average, foreign exchange gains accounted for only 6.1 percent of total income over the seven-year period from 1991, with the largest contributions occurring in the immediate post liberalisation period. In this regard, the contribution of exchange gains to each additional dollar earned as operating income was a mere J\$0.06 over the period March 1991 to March 1996. However, the appreciation of the exchange rate after March 1996 resulted in a negative contribution to operating income of J\$0.25 placing a tremendous strain on the commercial banks.

Table 4.
Commercial Bank Operating Income:
(1991 – 1997)

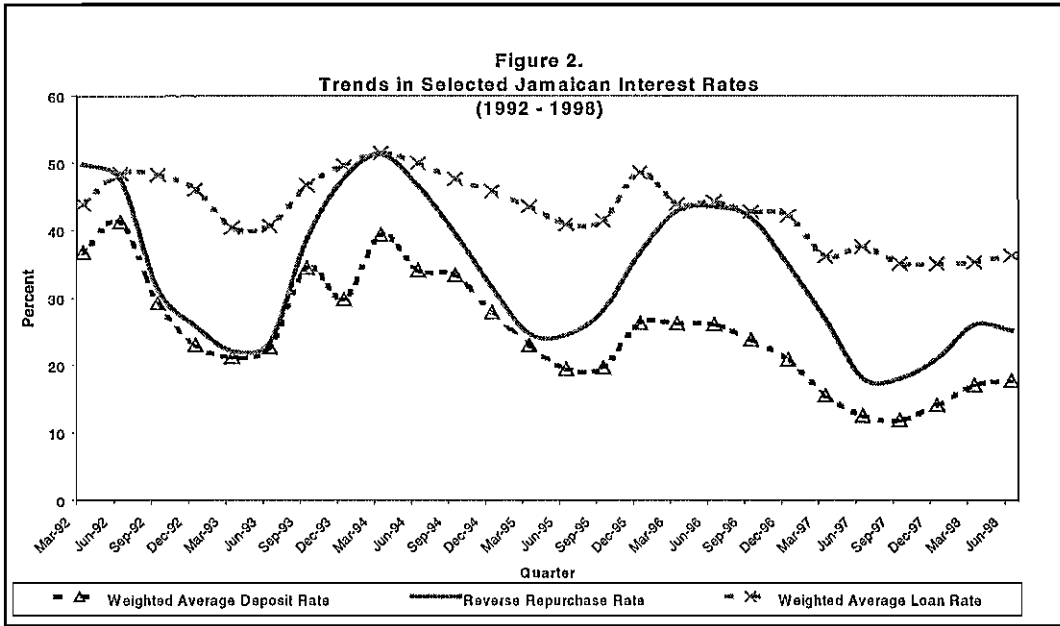
Item of Operating Income	Average Contribution (%)	
	1991:1 - 1995:4	1996:1 - 1998:2
Loans, Advances & Discounts	57.2	55.3
Investments	22.6	28.2
Foreign exchange gains	6.1	2.8
Fee Income	5.4	6.7
Bank of Jamaica Interest Income	2.5	1.3
Other Income	3.2	2.3
Due from Banks & Other Fin. Inst.	3.2	2.5
Dividend Income	0.4	0.8

Source: Department of Supervision of Banks, BOJ

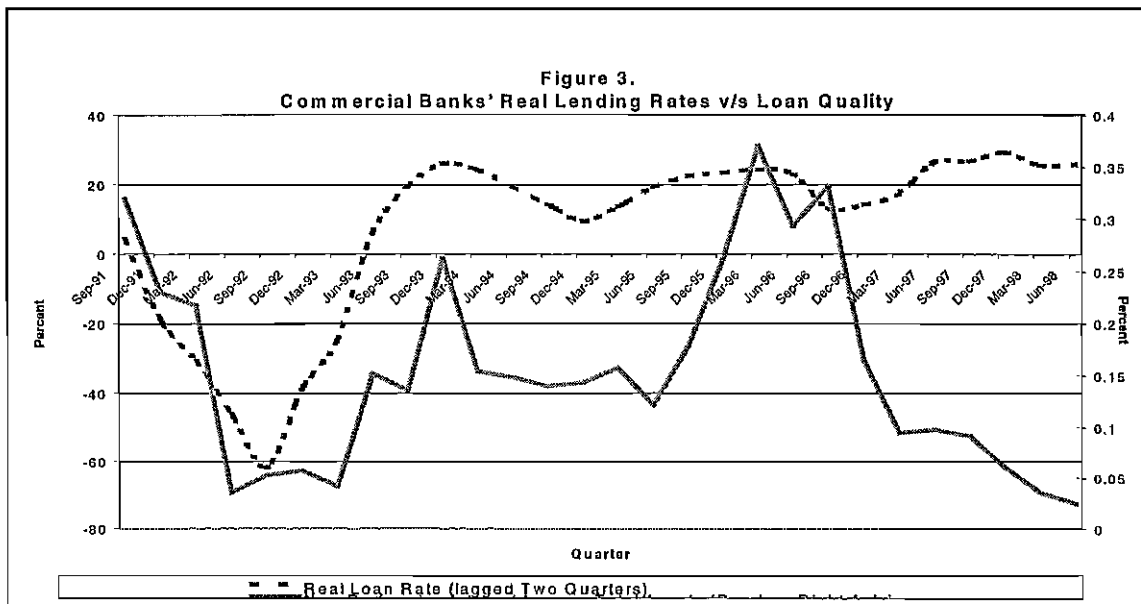
5.3 Interest Rates

How did interest rates affect the commercial banking industry? The much-debated issue is that high real interest rates had a deleterious impact on borrowers ability to service loans, thereby contributing to the erosion in bank liquidity and solvency. This is partly true.

The path of banks' loan and deposit rates has been closely linked to developments in the money market and to the central bank's policy. Whereas deposit rates move in line with the weighted average treasury bill yield, adjustment in loan rates are generally more sluggish. Importantly also, loan rates have generally enveloped the rates prevailing in the money market, indicating that monetary policy had been an important determinant of the price of credit.



The result of the trend in nominal interest rates and inflation over the period is that real loan rates have been exceedingly high. After recovering from the negative shocks of the early 1990's, real loan rates averaged 21.3 percent over the period from March 1993 to June 1998. The general tendency has been for these rates to increase, with the highest real lending rates being realised over the second quarter of 1997.



The impact of these high rates on the quality of banks' loan portfolio is evident. As a proportion of total assets, non-performing interest accrued on loans increased from a low of 0.04 percent in the March quarter of 1993, to an average of 0.21 percent over the period from December 1993 to September 1996. Since the last quarter of 1996, this ratio has trended down.

As noted before, to the extent that the majority of non-performing loans on the banks' book has been related to real estate related activities, shocks to real interest rates shifted the incentive structure away from speculation in land, towards more paper based transactions. The resultant shock to income flows of borrowers involved in real estate activities, resulted in difficulties in meeting contractual obligations to the banks.

Two observations about these facts are noteworthy. One is that changes in the quality of banks' loan portfolio postdate movements in real interest rates by two quarters. The second is that the improvements in the quality of banks' loan portfolio after 1996 was due to the intervention by the authorities in a large commercial bank and the subsequent formation of the Financial Sector Adjustment Company (FINSAC) by the government. At the end of 1997, FINSAC had bought a significant amount of bad debts from particular banks, in addition to the infusion of capital through the purchase of equity.

Despite the effect that high real interest rate has on the quality of bank portfolio, this information in itself is insufficient to determine how bank liquidity and hence profitability was affected by interest rates. To evaluate the net impact of interest rates on commercial banks' core earnings, it is necessary to consider its impact on interest income from loans and advances (LNINTINC) as well as interest expenses on deposits (DEPINTEXP). To the extent that commercial bank loans are interest sensitive, an increase in loan rates (LNRATE) will generate an increase in interest income. Similarly an increase in deposit rates (DEPRATE) will serve to increase interest expenses on deposit liabilities⁷. We therefore expect that changes in the spread which are attributable to market volatility will affect the banking systems' profitability, or net interest earnings (NETINC) on core business.

⁷ It is important to note that interest income and expenses on the two classes of assets and liabilities can also increase if there are increases in the stock of loans outstanding and the stock of deposits.

$$NETINC = LNINTINC - DEPINTEXP$$

This analytical structure departs from traditional accounting models such as the gap model Rose (1989) which postulates that net interest income depends on the nominal difference between interest sensitive assets and liabilities. Two problems present themselves however. One is that the reported interest income in commercial banks' profit and loss statement is not entirely collectible. This income includes income accrued on non-performing loans for which provision has not yet been made. A more accurate approximation of banks true income flows must necessarily involve the abstraction of the non-performing portion from the stated interest income flow. The best way of solving this problem is to use actual cash flow information. In the absence of cash flows however, we adjust income accrued on loans and advances by the proportion of total interest income (TOTINC) that performing interest (PERFINT) represent in the consolidated balance sheet.

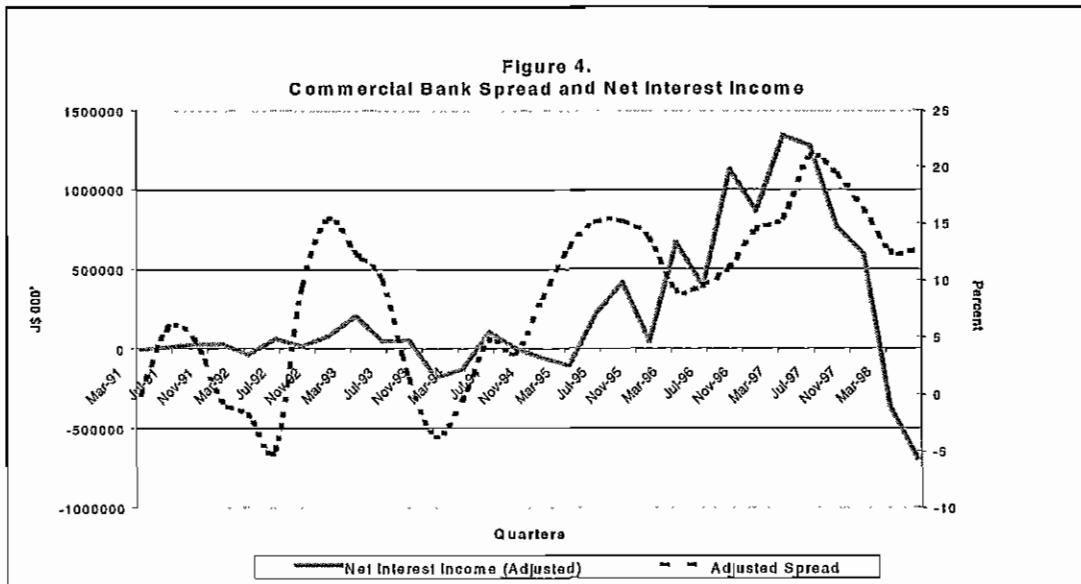
$$LNINTINC(adj) = LNINTINC \times \frac{PERFINT}{TOTINC}$$

The second problem is that we are interested in movements in the spread due solely to the credit risks inherent in the interest rate volatility over the 1990's. Spreads carry a wide range of information, inclusive of the level of bank inefficiency, the cost of bank specific taxation such as non-remunerated reserve requirements, as well as information about the level of risk involved in core business. It is not possible to eliminate changes in spread due to all other factors save risk. However, following Shaw (1992), the spread is adjusted for changes in the cash reserve requirement (CRR) as follows:

$$SPREADadj = LNRATE - \frac{DEPRATE}{1 - CRR}$$

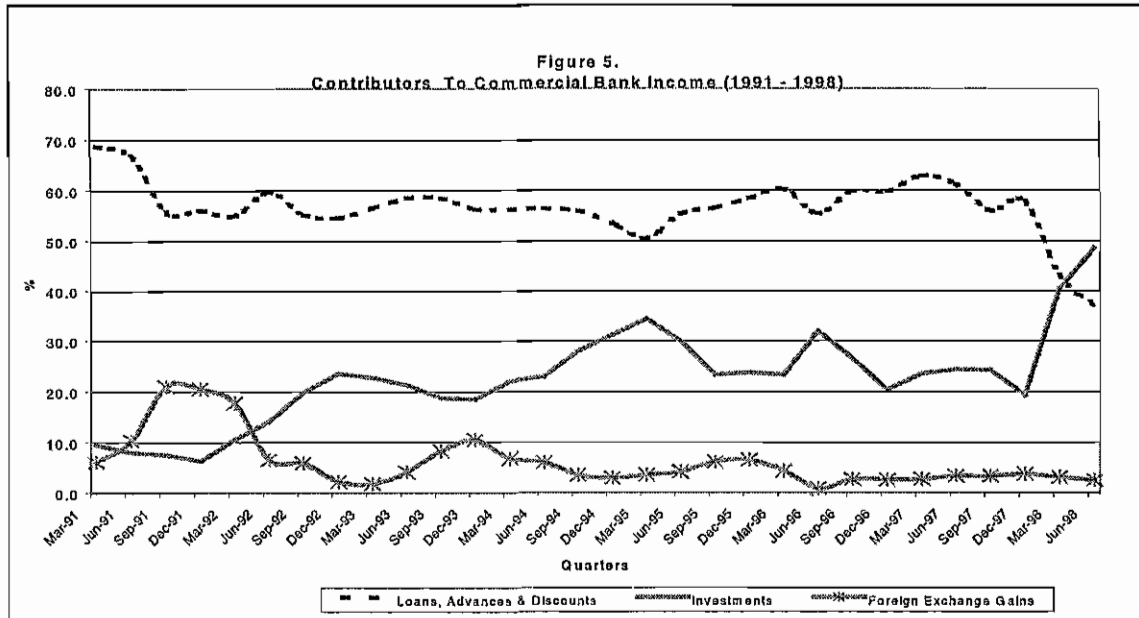
The adjustment of interest income on loans for its non-performing component results in this variable falling by an average J\$343.1 million over the period. The largest adjustment occurred in the last quarter of 1995. Eliminating the effects of the cash reserve requirement on the spread resulted in a lower spread by an average of approximately 7.5 percentage points. The

largest adjustment occurred between 1991 and 1992 when the cash reserve requirement was increased from 19 to 25 percent.



The results of comparing the trend in the spread with the trend in net interest income are surprising. In response to an almost secular increase in the spread from 4.7 percentage points in the second quarter of 1994, to an all time high of 20.9 percentage points in the second quarter of 1997, the adjusted net income on core business rose from J\$100.6 million to J\$1.3 billion over the same period. This suggests that despite the high nominal interest rates, Jamaican commercial banks, for the most part, were able to maintain positive margins on their core business.

In another context, high interest rate had a positive impact on banks' earning through its impact on their investment income. Over time, there has been a discernible increase in commercial banks' investment portfolio (figure 5). The most significant components of the investment portfolio are government of Jamaica treasury bills, local registered stocks (LRS), and other



government securities. Between 1991 and 1995, these instruments, as a result of both statutory requirements and discretionary investment decisions on the part of banks, accounted for approximately 79.0 percent of total investments. While this proportion remained fairly constant between 1996 and 1998, both LRS and other securities inclusive of FINSAC bonds became increasingly important. Given these developments, and against the backdrop of high interest rates, investment income increased, compared with other items of income.

Table 5.
Components of Commercial Banks' Investment Portfolio

Item of Investment	Average Share (%)	
	1991 - 1995	1996 - 1998
Jamaica Govt. Treasury Bills	33.9	12.5
Jamaica Govt. Local Registered Stock	36.4	48.6
Other Jamaican Govt. Securities	8.4	18.1
Other Local Securities	9.5	6.2
Foreign Securities	11.9	14.6

Source: Department of Supervision of Banks, BOJ

5.4 Managerial & Legislative Inadequacies

Against the background of strong growth in the sector, pressure was placed on the management of financial institutions and the supervisory capacity of the central bank. Further, growth in the sector outpaced the legislation governing banking activities. These developments exposed managerial and legislative inadequacies, which in turn contributed to the liquidity and solvency problems that emerged in the financial sector.

According to Panton (1998) poor loan administration, which include emphasis on collateral instead of potential income flows, and lending to related parties, were among the major factors which led to the growth in the banks' bad debt portfolio. In the case of collaterals, many real estate based collaterals were overvalued, signaling that loans could not be liquidated in the event that they went bad. This was compounded by the dilution of skills which accompanied a too-rapid expansion of the industry, and which saw inexperienced loan officers failing to, and in certain circumstances not possessing the requisite skills needed to conduct appropriate risk assessments. Occasionally larger clients were not pressured to service loan obligations on a regular basis, pointing to inherent deficiencies in the appraisal systems of the commercial banks.

The problems of poor loan administration and the securing of assets with inadequate collateral were overlooked in many institutions. In several instances, these problems arose from the complex corporate relationships that were pervasive in the financial system. It was widespread practice to have loans from banks to related financial entities and deposits of affiliated companies in their associated banks.

In particular, insurance companies were a main part of the interlocking group of companies that characterised financial conglomerates in Jamaica. These companies over the high and moderate inflation periods, funded their relatively long term, real estate activities through short-term deposit-like instruments. Given realignments in relative yields consequent on the disinflation policies pursued by the authorities, these companies found themselves with a mismatch between assets and liabilities, forcing them to resort to bank financing from affiliates to meet interest payments. Increasing perception of default risk on the part of investors fueled the resulting run on the companies and placed pressure on the banking institutions.

Although the Banking Act (1992) sought to contain the banks' exposure to connected parties, this type of loan grew unabatedly. Between 1990 and 1991, connected party lending as a proportion of total assets fell by an average of 1.6 percent. In contrast, this ratio ballooned at an average quarterly growth rate of 18.8 percent between 1992 and 1995. The data indicated that there was an acceleration⁸ in connected party lending after 1995⁹.

Another factor that contributed to the difficulties in the sector was managerial inadequacies which were manifested in their inability to control expenses in the sector. Over the period 1991 – 1994, the ratio of overhead expenses to banks' core net revenue declined from 102.5 percent to 69.2 per cent. This ratio subsequently increased to 143.9 per cent by the end of 1997 however, reflecting increases in the remuneration to employees and expenditure for rent and

⁸ Between 1995 and 1997, connected party exposure as a proportion of total assets grew by 67.7 percent. This average masks the fact that a major increase of 578.3 percent was recorded in the first quarter of 1996.

⁹ This was partly due to changes in reporting requirements as well as structural changes that occurred in one major bank

fixed assets which were higher than the average quarterly growth rate of net interest income¹⁰. Another ratio that assesses management's ability to control expenses, and is also indicative of scale efficiencies, is the ratio of overhead expenses to total assets. This ratio increased from 1.5 per cent in 1991 to 2.0 percent at the end of 1997, indicating that the rapid expansion of assets in the banking system was occasioned by rising diseconomies of scale.

Panton (1998) corroborates this view that managers in the financial sector failed to contain expenses: "...the ratio of employee remuneration to average assets averaged 3.3 percent over the period 1991 -1995. A comparison of this with the United States benchmark of 1.6 percent suggested that employees in Jamaica's commercial banking sector enjoyed a relatively higher share of operating costs than counter parties in the United States"¹¹.

Another area of concern was the inadequate provision for loan losses made by banks despite a burgeoning non-performing loan portfolio. Over the period March 1993 to December 1997, although the banks' portfolio of doubtful debt grew by a quarterly average rate of 18.5 per cent, there was no commensurate increase in provisioning. In fact, during that period, provisions for loan losses grew by a mere 9.8 percent. As a consequence, the ratio of Loan Loss Provisions to Non- Performing Loans declined precipitously from 63.0 per cent in March 1993 to 38.3 per cent in 1998.

The low level of provisions reflected the inadequacy of the legislation governing commercial banks as well as errors on the part of the banks' management. An amendment to the Banking Act in 1992 made it mandatory for commercial banks to make provisions for non performing loans six months and over, and also stipulated an increase in the capital base of banks. However no reference was made to loans past due for three months. These were subsequently reclassified by the Central Bank as non-performing in 1996. In this context, while banks were

¹⁰ The expansion of commercial banks and the related expense ratios was not confined to increases in the number of branches, but also to increasing and improving computer equipment, the introduction of ATM machines, introducing credit card facility, the provision of television and video presentations for the entertainment of customers, and security facilities.

¹¹ Panton, N., *The Commercial Banking Industry in Jamaica: Some Issues of Efficiency, 1990 –1995*, *Money Affairs* , Vol. XI, No., 1, January – June 1998, p.125

required by the Central Bank to increase their provisioning, it remained inadequate up to 1997. The subsequent sharp rise in the ratio of provisions to non-performing loans reflected the impact of two factors. Firstly there was a contraction in the loan portfolio of many banks consequent on the intervention of FINSAC. Secondly, a change in the statute in 1998 made it mandatory for banks to make provisions against loans three months past due.

6.0 Conclusion

The clear objective of the Jamaican authorities over the course of the 1990's has been the stabilisation of the economy, as indicated by low and stable inflation. In the process towards attaining this objective, real interest rates on loans remained persistently high. Within this environment, a significant challenge has been the preservation of stability in the financial sector. The problems of the sector, though related in part to the stabilisation policies pursued over the 1990's, seem to have been more related to managerial inefficiencies and a weak legislative framework, rather than to developments related to stabilisation.

The disinflation process unmasked the inefficiencies that were earlier concealed by the profits generated by the depreciation / inflation cycle. Within the high inflationary environment banks increased their risk exposure to real estate related transactions, both in the form of loans and collateral. While real estate related loans were seen as a hedge against inflation, these transactions were concluded without adequate risk assessment. Loans were granted based on the market value of the collateral rather than the ability of the client to service the debt or the potential income stream of the project.

There was evidence of the deleterious impact of high real interest rates on banks' asset quality, as evidenced by the rise in non-performing loans. On the other hand there were positive spin-offs from the impact of the tight demand management policies. High nominal interest rates in conjunction with high reserve requirements have facilitated an increase in banks' income from government securities.

The banking system was further compromised by the incestuous relationships that characterized the financial sector. In addition to real estate related transactions, commercial banks channeled resources through affiliates, which were, involved in foreign exchange earnings activities such as tourism. These were expected to yield returns that would outstrip inflation, but subsequently contributed to the problems which unfolded in the mid 1990s.

Two issues arise from this discussion. The first relates to the appropriate sequencing of policies. An accepted view in the literature is that an adequate regulatory framework and a stable macroeconomic environment are important preconditions for liberalisation. The Jamaican experience suggests that, of pre-eminence, is the need to construct an adequate regulatory and supervisory framework even before stabilisation policies are attempted. Over-regulation might be seen to be constricting, but the evidence shows that under-regulation is even more dangerous. The second issue relates to the need to improve understanding of the portfolio behaviour of commercial banks in a liberalised environment. This becomes increasingly important against the background of the globalisation and the high costs associated with bank restructuring.

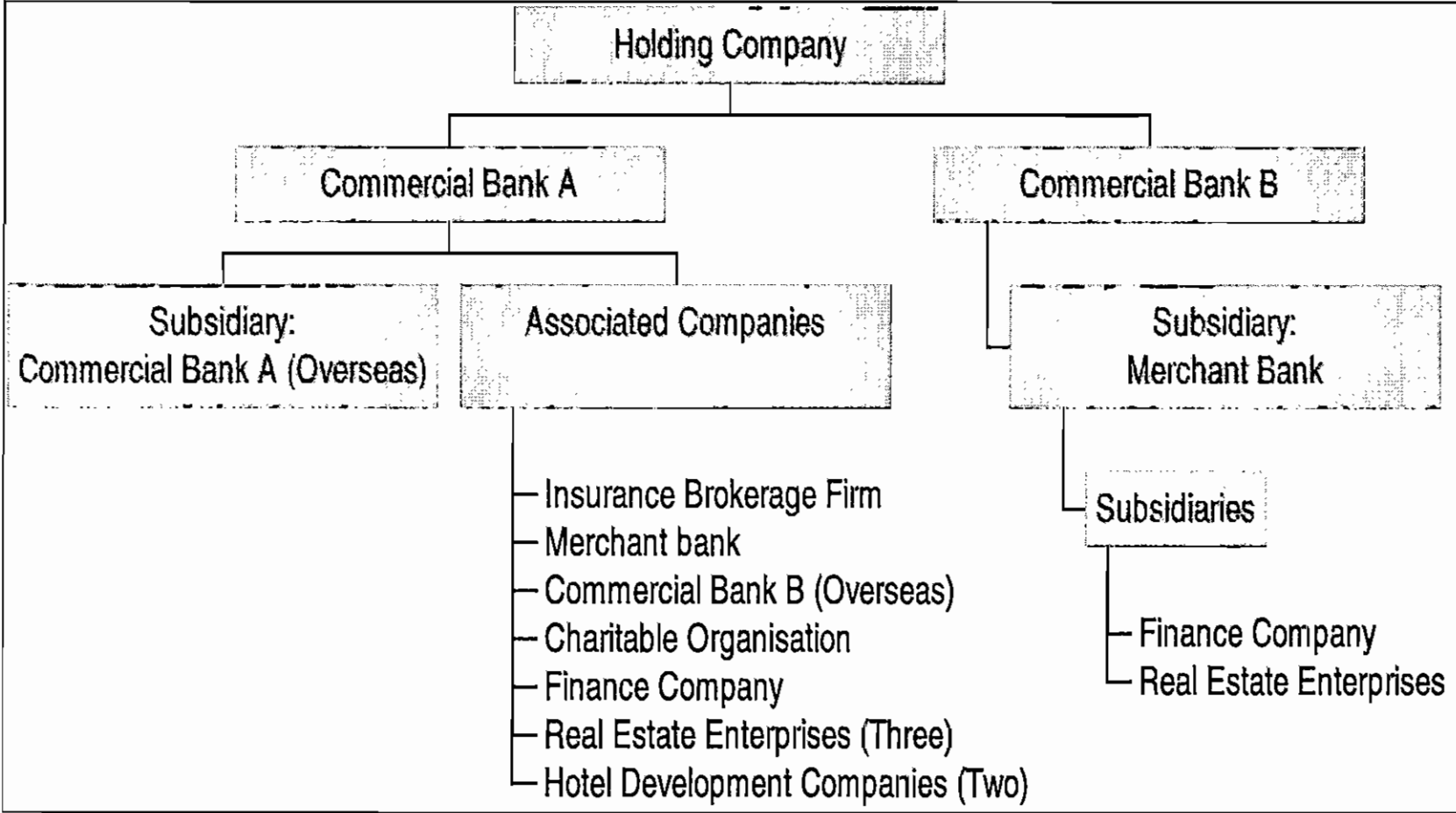
Appendices

Appendix 1: Jamaica Financial Sector Development

	1985	1990	1995	1997
Commercial Banks				
No. of Banks	10	11	9	9
No. of Branches	155	170	188	171
Merchant Banks				
No. of institutions	8	21	25	23
Building Societies				
No. of institutions	6	36	13	13
Life Insurance Companies				
No. of institutions	13	10	12	12

Source: Bank of Jamaica.

Appendix 2: Typical Commercial Bank Group



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