

ISSUES RELATING TO THE CENTRAL BANK'S
AUTONOMY IN JAMAICA

by

NOVELETTE DAVIS
BANK OF JAMAICA

Presented at the
24th Annual Conference of the Regional Programme
of Monetary Studies

October 26 - 29, 1992
NASSAU, BAHAMAS

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

TABLE OF CONTENTS

	<u>Page Number</u>
Introduction	1
SECTION I: Role and Function of Central Banks and the Concept of Autonomy	3
SECTION II: Comparative Performance of Four "Autonomous" Central Banks	11
SECTION III: Bank of Jamaica's Performance in the Economy	35
SECTION IV: Conclusion: Pertinent Issues	46
SECTION V: Policy Recommendations	53
Appendix	
Bibliography	

1

ISSUES RELATING TO THE CENTRAL BANK'S AUTONOMY
IN JAMAICA

INTRODUCTION

The establishment of Central Banks within the Caribbean is a relatively recent phenomenon. Policy makers, after 30 years of existence of the Bank of Jamaica are still balancing the pros and cons of greater autonomy for the Bank. The appropriateness of the move towards a more autonomous Central Bank for Jamaica has to be examined in the context of the desired role and functions of Central Banks. In this regard, the experiences of other Central Banks such as the Bundesbank, the Federal Reserve, the Eastern Caribbean Central Bank (ECCB) and the Central Bank of Barbados are briefly appraised in order to evaluate the view that an independent Central Bank ensures a more efficient management of an economy.

The paper seeks to arrive at certain conclusions as to whether the ~~lack of independence~~ of the Bank of Jamaica is a primary cause of a record of less than appropriate monetary and fiscal management; or are these monetary and fiscal problems a result of other causes such as limited managerial/technical expertise of Bank and Ministry professionals. It is hoped that conclusions obtained will act as an indicator to policy makers as to preferred directions in terms of autonomy of the Bank of Jamaica. The paper is divided into five sections. Section I will look at the general role and function of Central Banks and a discussion of the issue of the appropriate degree of discretion to be exercised by them. Section II investigates the performance of some relatively independent central banks:

2.

Bundesbank, EOCB, Federal Reserve and of the Central Bank of Barbados which has less obvious autonomy than the other three. Section III is an overview of the Bank of Jamaica's performance in terms of what should be its central function as defender of the internal and external value of domestic currency. Section IV, the conclusion, explores the lessons to be learnt from Bank of Jamaica's experiences in the context of those of the other countries surveyed. The final section makes certain specific recommendations with respect to the institutional organisation, role and discretion of the Central Bank in Jamaica.

SECTION I

Role and Function of Central Banks and The Concept of Autonomy

The origin of the expression "Central Bank" was as a result of the institution becoming the "banker of banks". Almost every country with a developed financial system has a central bank of some form or other. Whilst the precise functions of central banks are quite varied, and different functions may alter in importance over time, it is still possible to identify four key areas of operations common to all Central Banks.

- (i) Banking, including the issue of bank notes.
- (ii) Monetary policy and control, including the adjustment of banking sector liquidity and the control of money supply growth and short-term interest rates.
- (iii) Financial regulation, including supervisory functions in respect of the banking sector, financial markets and international financial activities.
- (iv) Exchange rate policy and foreign exchange management.

The central bank (the Bank) has the exclusive responsibility for the issuing and redemption of notes and coins. It also recommends, designs and arranges for the printing of new notes and the minting of coins.

The Bank may act as banker to the government and provides

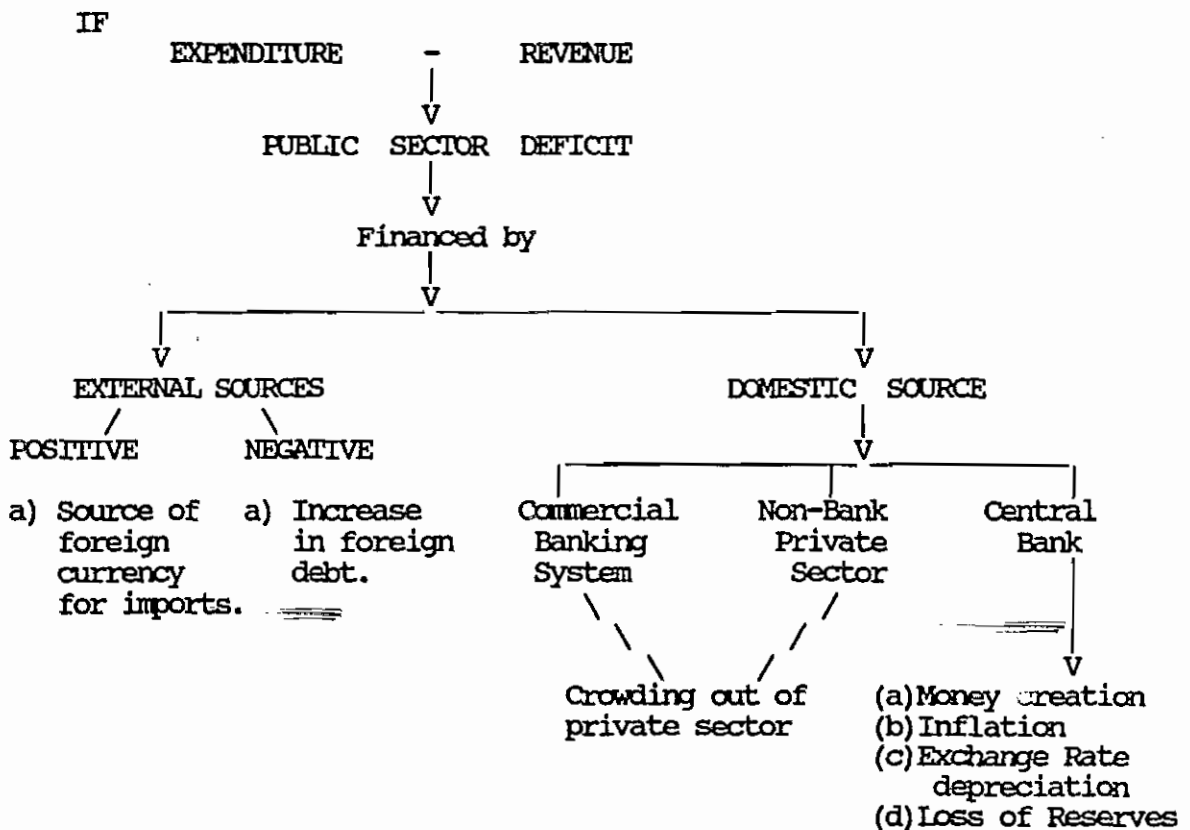
advice to the government on monetary affairs. It may also manage the primary issue of government's securities as an agency function.

In most countries including Jamaica, the law provides limits on the extent to which the Bank can lend to government. The Bank of Jamaica is prohibited from holding government issued or government guaranteed securities with a nominal value in excess of 40.0 percent of the estimated expenditure of the government in the financial year. The Bank may also make temporary advances to government but such advances cannot exceed 30.0 percent of the estimated revenue for the financial year and should be repaid within 3 months of the end of that year.

The Central Bank maintains the accounts and monitors the activities of all the commercial banks operating in the country and also acts as banker to these institutions. The commercial banks hold accounts with the Central Bank (containing operational balances) which provides them with the means of settling transactions with each other. At the end of cheque clearing each day, imbalances are likely to exist between the payments made to and the cheques drawn upon individual banks. Where a bank experiences a deficit at clearing, its operational balances will be drawn upon in order to meet the commitments to other banks, whereas banks experiencing surpluses will have their accounts at the Bank credited. It is by monitoring and managing the excesses or balances in accounts that the Central Bank seeks to influence monetary conditions in the economy as a whole.

The Central Bank is responsible for the execution of monetary policy. Monetary policy is concerned basically with the regulation of money and credit to ensure that they are appropriate to the normative objectives of a country's economic policy. The Bank's role in relation to

the formulation and implementation of monetary policy is very closely related to its role as the government's banker. There are aspects of this function which may directly influence the rate of growth of the money supply and/or level of interest rates. To the extent that government's expenditure minus revenue results in a public sector deficit, financing must be sought. It is the method of this financing that forges the link between the government's fiscal policy and the central bank's monetary policy.



The autonomy of the central bank is affected when the method of financing the deficits comes from that institution. Excessive money creation by the central bank to alleviate a government deficit, serves only

to divert the Bank from pursuing its main function of maintaining the internal and external value of the currency. This is because the increased domestic financing emanating from the central bank affects Net Domestic Asset (NDA) and through the multiplier process a subsequent increase in the money supply is attained.

$$B = C + R = NIR + NDA$$

$$M = mm \times B, \quad mm > 1$$

where:

B = Money Base

C = currency with the non-bank public

R = commercial bank's reserve

NIR = Net International Reserves of Central Bank

NDA = Net Domestic Assets of Central Bank

m = Money supply

mm = Money multiplier

The increase in the money supply will manifest itself in a general increase in domestic prices, exchange rate devaluation and a general loss in foreign currency reserves.

Apart from providing financing for the government other instruments of monetary policy include the manipulation of Cash Reserve and Liquid Assets Reserve Ratios. Basic prudential reserve requirements are designed to protect the holders of bank deposits against unsound credit policies that may make it impossible for the commercial banks to honour their liability obligations. They are also tools of monetary policy since the Central Bank has the authority to vary the minimum percentages.

The monetary policy function of the Central Bank relates to its responsibility for maintaining the value of the currency relative to foreign currencies. This requires management of money growth within limits so as to keep domestic inflation at levels which do not diverge drastically from those of the country's major trading partners. This implies also that credit should not be such as to generate an excess demand for foreign exchange for imports and capital outflows. The role of the central bank in this regard also entails management of a country's official foreign exchange reserves and overseeing the foreign exchange markets to ensure an orderly process of resource allocation.

The Central Bank also performs an important regulatory role within the financial system, with particular emphasis placed upon the supervision of banking activities and non-banking activities. In Jamaica the Bank Inspection Department monitors the commercial banks to ensure that they maintain a sound financial position and other compliance with the provisions of the banking legislation. It may also have the responsibility for supervising non-bank financial institutions.

There are different views as to whether an independent central bank is necessary to carry out the core functions of protecting the value of the currency through its monetary policy. It is argued that monetary conditions pertaining to credit, promotion of price stability and the determination of the exchange rate can be done in concert with other agencies, such as a planning institute or a ministry of finance without prejudicing the efficiency and effectiveness of the policy.

However, there is another school of thought which regards the close association of the central bank with these institutions as being inhibitive to the performance of objective monetary policy. This may create a conflict

of interest arising from a disjuncture between the expenditure needs of the government and its ability to finance it from ordinary revenues. Whenever this occurs the central bank is very often called upon by government to accommodate the fiscal excess. In certain countries, eg. Germany the constitution defines certain limitations on the power of government to demand inflationary financing from the central Bank and it mandates the central bank to defend the value of the currency at all cost. Where the central bank lacks control over government's demand for fiscal accommodation, then if governments do not exercise fiscal discipline an external institution such as the International Monetary Fund (IMF) may provide the institutional context for macro-economic adjustment. The intervention of the IMF usually occurs when the process of fiscal accommodation begins to result in chronic balance of payment deficits. At this stage the IMF steps in and underwrites the preferred role of the central bank in ensuring more effective credit management, discouraging fiscal accommodation thereby supporting the value of the currency.

As a result of the entanglement of fiscal and monetary policy in Jamaica, the Bank of Jamaica has not been able to effectively ensure price stability, control monetary expansion and curtail exchange rate depreciation. The process has resulted in huge cash losses for the Central Bank as there has been a failure to secure reimbursements for the cost of money market intervention. This has led policy makers to start looking towards the potential advantages of a more autonomous central bank.

Central bank autonomy implies not being subjected to operational orders from unipartisan political control or from orders from other government departments, such as a Ministry of Finance. It also entails having financial independence. At the same time the Central Bank needs to

be accountable to the country's tax payers. The Bank must be sensitive to the social, political and economic environment within which monetary policy is set and at all times try to clarify policy to government and the general public.

It is a fact that governments are faced with multiple objectives, such as growth, development, full employment, external equilibrium, price stability and equitable income distribution. The central bank being the number one financial institution in a country, needs to contribute to the achievement of these objectives. Nonetheless the central bank should not allow itself to be pulled in all directions. Relative domestic price and related exchange rate stability should be the central bank's main concerns. The primary responsibility of the central bank is maintaining the value and purchasing power of the currency. Evidence has shown that countries (with a few exceptions) that have been successful in maintaining a relatively stable currency are those in which the central bank have some independence from government's influence.

The consideration of central banks' autonomy relates to issues of institutional and functional independence. In carrying out its day to day functions the central bank as an institution needs to be independent of instructions from the government, or any other government institution. The execution of monetary policy should be vested in the central bank.

Institutional independence by itself is not sufficient. Full control of monetary policy also requires that the central bank be functionally independent. The central bank must have the sole and unrestricted authority to use the traditional instruments of monetary policy, such as reserve ratio manipulation and open market operations in pursuit of its objectives.

The Deutsche Bundesbank is the only Bank from the five central banks (Bundesbank, Eastern Caribbean Central Bank (ECCB), the Federal Reserve (Fed), the Barbados Central Bank and the Bank of Jamaica) surveyed in this paper that seems to portray most if not all of the attributes of an autonomous central bank. This is closely followed by the ECCB, These two banks have been able to maintain low inflation and overall currency stability. The Federal Reserve over the years has endeavored to maintain monetary policy autonomy but is still required to report to the government. Its monetary policy over the years has been relatively successful. On the other hand the Central Bank of Barbados and the Central Bank of Jamaica are similar in that both are institutionally dependent on the government's direction and control. Nevertheless, the outcome of their economic management is significantly different. Barbados has, for the most part, been able to maintain the external and internal value of its currency in a climate of low inflation, while the value of Jamaica's currency has eroded over the years, with very high rates of inflation being recorded. These contrasting results point to "other" factors apart from "autonomy" that may impact upon economic management by a central bank.

SECTION II

Comparative Performance of Four "Autonomous" Central Banks

It has been established that the main aim of a central bank should be the stabilization in the value of the currency. The issue arises as to whether the attainment of this objective requires an independent central bank. Different countries at varying stages in their development have entrusted the monetary management of their economies to central banks which have exercised contrasting degree of independence. Evidence has shown that some countries have been more successful than others in achieving goals, such as price stability and exchange rate stability. Naturally some of this success can be traced to the degree of autonomy of the central banks, but of equal importance is the quality of the fiscal and monetary management of the authorities.

The experience of four central banks, having different degree of ~~autonomy~~ autonomy is discussed below. The Bundesbank, an independent Central Bank at one end of the spectrum, has both institutional (i.e., its independence from government) and functional independence. It has succeeded in maintaining both the internal and external value of the Deutsche Mark. The Federal Reserve System of the United States (the Fed), has monetary policy (functional) independence but is still accountable to the government. Nevertheless, faced with an expansive government sector, the Fed still manages to curtail money supply expansion. The monetary policy of the countries of the Organization of Eastern Caribbean States (OECS) is managed by the Eastern Caribbean Central Bank (ECCB). The preservation of relative

exchange stability for these countries is mainly as a result of the monetary integration which demands fiscal discipline from member countries. The Central Bank of Barbados has managed to maintain a relatively stable and consistent monetary policy. The final Central Bank, the Bank of Jamaica cannot be described by any standard as being independent. The Bank of Jamaica's record of monetary management has not met with the degree of success, such as the Bundesbank, the Federal Reserve Bank or the EOCB. This has not been merely as a result of it not being independent but more because the Bank of Jamaica over the years has used its monetary policy to support the government in its fiscal operations. This has created the entanglement of fiscal and monetary policy which has had negative effects on the maintenance of the external and internal value of the currency.

DEUTSCHE BUNDESBANK

The ~~Deutsche~~ Bundesbank, the Central Bank of Germany was formed in 1957. The Bundesbank was born out of a need for a stable currency and a healthy monetary policy in general. The turbulence of the past which led to a trillion fold increase in prices left the Germans with a deep fear of inflation. The Central Bank is publicly owned and is obliged under German law to support the general economic policy of the government. This, however, is a limited relationship with the government, since the Bundesbank is essentially an autonomous organization and is able to operate free of government direction. According to the Bundesbank Act, Section 12:

"Without prejudice to the performance of its functions, the Deutsche Bundesbank shall be required to support the general economic policy of the Federal Government. In exercising the powers conferred on it by this Act it shall be independent of instructions from the Federal Government."

The governing bodies of the Bundesbank are the Central Bank Council, the Directorate and the Managing Boards of the Land (Province) Central Banks. The Central Bank Council and the Directorate have the status of supreme Federal Authorities, i.e., the same rank as a Federal Minister. The Land Central Banks have the status of Federal Authorities. The Central Bank Council, the supreme policy-making body of the Bundesbank is composed of the President and Vice-President of the Deutsche Bundesbank, the other members of the Directorate and the Presidents of the eleven Land Central Banks.

The Directorate is the central executive organization of the Bank and is responsible for implementing the decisions taken by the Central Bank Council. It directs and administers the Bank. The Directorate carries out the following specific functions

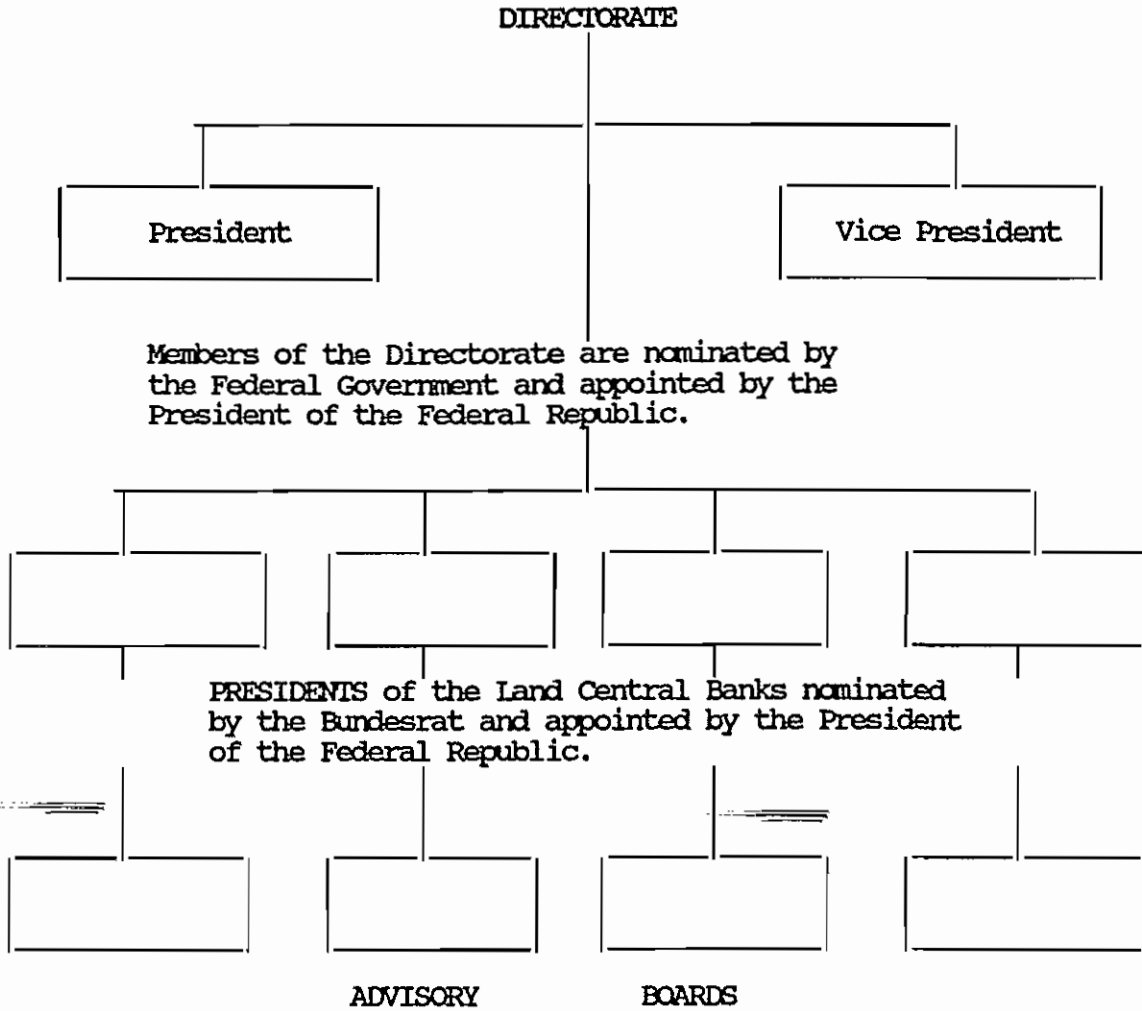
- transactions with the Federal Government
- transactions with banks that have central functions in the whole of the federal area;
- foreign exchange transactions and external transactions, and
- open market operations.

The Directorate consists of the President and Vice President and up to eight other members. The members of the Directorate must have special professional qualifications. They are nominated by the Federal Government after consultation with the Central Bank Council and are appointed by the

President of the Federal Republic for normally eight years. They cannot be removed from office before the end of their term, except for personal reasons or for reasons emanating from the Central Bank Council.

The Bundesbank maintains a Main Office in every Land, including West Berlin. The Main Offices are known as Land Central Banks. They are responsible for carrying out transactions and administrative tasks occurring in their area. The Land Central Banks are headed by a Managing Board, which consists of a President, a Vice-President and one other member in the larger Land Central Banks. They also have Advisory Boards, which consist of representatives of the banking sector, of trade, industry and agriculture and of wage earners. The Boards act as consultative organs, which enable the Bundesbank to maintain contact with the banking sector and its customers in the various Lands.

THE CENTRAL BANK COUNCIL
OF THE DEUTSCHE BUNDESBANK



The Bundesbank has always regarded its function as guardian of the currency, as laid down in the Act, as its primary task. Although the Act provides that the Bundesbank support the general economic policy of the Federal Government as a basic obligation, it also stipulates that this must not create insoluble conflicts with the primary task performed by monetary policy (Bundesbank Act, Section 12). Further, the Bundesbank endeavours to ensure that all its other typical central bank's functions, (such as the issue of "high-powered" money, the banker to banks and of the state and the guardian of the national foreign exchange reserves), must all be serving the main aim while at the same time being subordinate to its primary function.

The Bundesbank has its constitutional independence from government enshrined in its Act. The independence of the Bundesbank, which has allowed it to pursue an effective monetary policy (low inflation), was aided by a commitment to fiscal discipline on the part of the Central Government. Government expenditure (see Appendix 1) as a percentage of GDP averaged 27.0 percent over the 1970s and 31.0 percent over the 1980s. This reflected relatively stable expenditure pattern over the periods. Revenue as a percentage of GDP also grew at a steady pace averaging 26.0 percent over the 1970s and 29.0 percent over the 1980s. The government deficit although increasing was manageable, with the highest being 3.6 percent of GDP in 1975.

The Government supplemented this revenue intake with domestic and foreign borrowing. Foreign financing relative to domestic financing remained low during the period of the 1970s and early 1980s. After this time, there was a marked increase in foreign loan inflows, moving from DM5.47 billion in 1975 to DM107.7 billion in 1985. The increased domestic borrowing was not enough to warrant significant crowding out of the private

sector. Loans to the government from the Central Bank were also minimal over the years. The tight fiscal management, and efficient monetary policy worked together to constrain money supply expansion. The highest annual percentage change in the money supply was in 1990, with a 18.5 percent change over 1989; while the lowest change of 3.7 percent occurred in 1981 over 1980. The stability in the money supply was reflected in the movement of the consumer price index. The inflation rate in Germany is among the lowest in the world. The average annual percentage change in prices over the 1970s was 4.8 percent and 5.7 percent in the 1980's. In fact prices fell in 1986 by 0.1 percent relative to 1985. This naturally accommodated a strong German currency on world markets. The Deutsche Mark per United States dollar started the 1970s at DM3.66 = US\$1.00. During the decade of the 1980s there were sporadic appreciation and depreciation that did not impact significantly on external transaction.

The stability in the exchange system over the years engendered relative equilibrium in the balance of payments. The visible and invisible trade categories of the balance of payments contributed to a positive current account, for most years. The highest current account deficit of DM14.1 billion was recorded in 1980 and the highest surplus of DM55.44 billion occurred in 1989. The overall performance of the balance of payments allowed for the accumulation of foreign currency reserves.

A relatively efficient German economy (in terms of its macro-policy) has emerged over the years. The government has not been required to spend excessively, neither is the central bank expected or bound legally to support government's activities. The Bundesbank following the tenets of the constitution has followed the general guidelines of conservative monetary

policy, which sets the foundation for positive economic growth with low inflation.

The Bundesbank has taken its responsibility for monetary stability as its central focus. The Deutsche Bundesbank's anti-inflationary success is not only as a result of the Bank's autonomy, but also relate to other even more fundamental factors. The experience of hyper-inflation during the war years (1919 - 1923) has created a social commitment to a stable currency, by the populace, the government and the central monetary authority. The legal/constitutional autonomy, tight monetary management, fiscal discipline, commitment and "cultural peculiarities" inherited from the past all served to promote the efficient management of the Federal Republic of Germany's economy.

FEDERAL RESERVE SYSTEM

The Federal Reserve System, which functions as the Central Bank of ~~the~~ United States, was created by the Federal Reserve Act in 1913. The implementation of the Federal Reserve System came out of a need to preserve the economy from periodic financial panics that had led to the failures of a large number of banks.

The Federal Reserve is one of those central banks, which is in the so called "grey zone," in terms of independence. It is not an independent central bank according to text book definitions, since it is still accountable to the Federal Government. It is therefore not comparable in terms of the degree of autonomy to the German Bundesbank, the most cited example of an independent central bank. At the other end of the scale the

Federal Reserve does not fall within the category of a Bank of Jamaica, for example, because it is not institutionally subordinate to any arm of government.

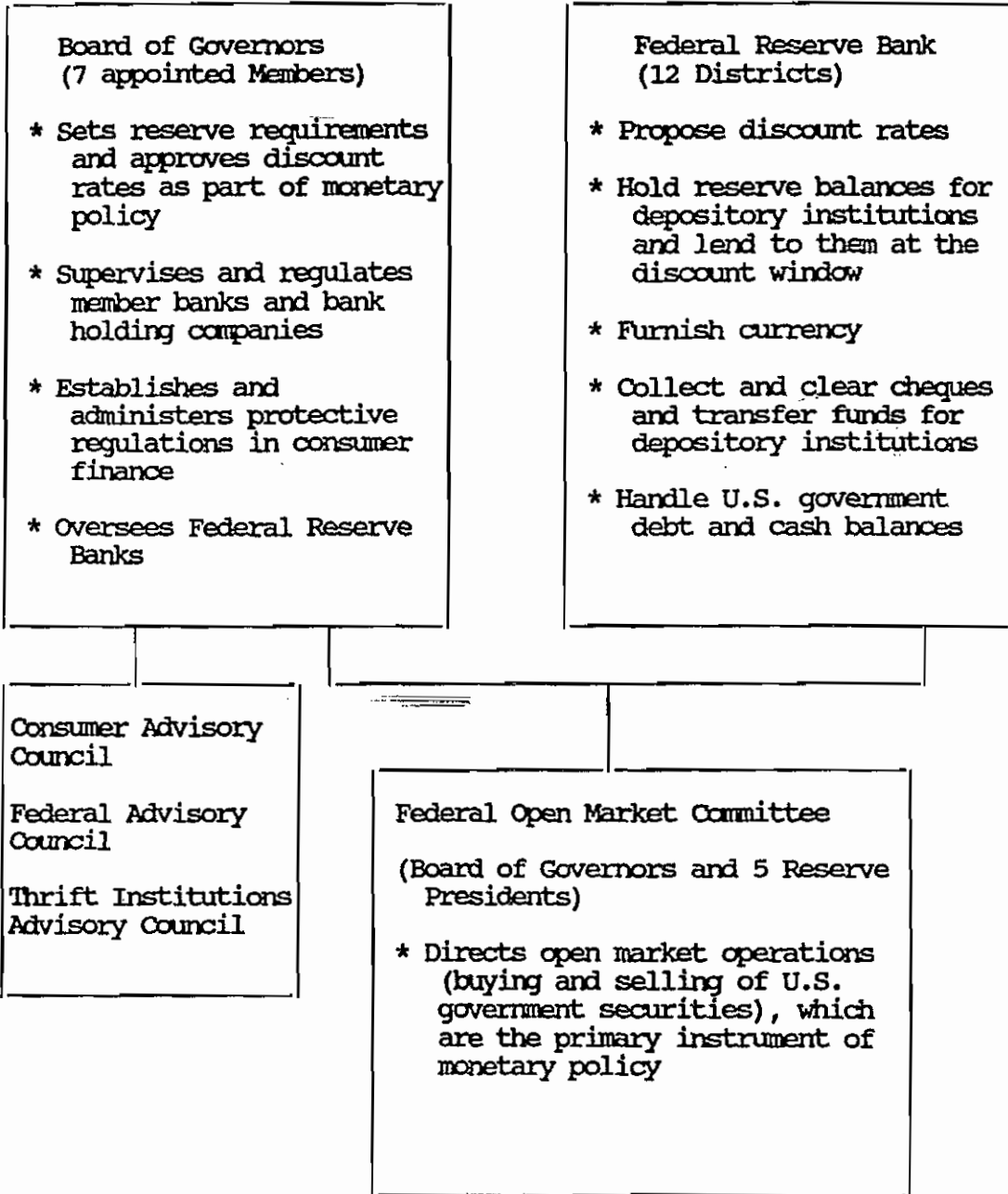
In its role as the Central Bank of the nation, the Federal Reserve contributes to the attainment of the nations economic and financial goals through its ability to influence money and credit in the economy. It does this by ensuring that growth in money and credit over the long run is sufficient to encourage growth in the economy in line with its potential and with reasonable price stability. In its role of lender of last resort to the banking system, it utilizes certain policy instruments in order to forestall national liquidity crises and financial panic. The Federal Reserve's supervisory function is all encompassing. It is responsible for the amount of credit that may be obtained for purchasing equity securities, it regulates the foreign activities of all United States banks and the United States activities of foreign banks; it administers the laws that regulate bank holding companies; it supervises state-chartered member banks; and it establishes rules to ensure that consumers are adequately informed and treated fairly in credit transactions.

The Federal Reserve is often regarded as being an independent Central Bank. This is true only to the extent that decisions of the Federal Reserve do not have to be ratified by the President or by one of his appointees in the executive branch of the government. On the other hand the Federal Reserve Bank must report to the Congress, and thereby to the people as a whole, on its policies. Major appointments to the Federal Reserve Board including the designation of the Chairman and Vice-Chairman from among the members, are made by the President and with the consent of the Senate. As a result of this the Federal Reserve generally works within the framework of

the overall objectives of economic and financial policy established by the government. It is therefore more accurate to say that the Federal Reserve is "independent within government".

The structure of the Federal Reserve system is a complex one. Generally, the principal components are the Board of Governors of the Federal Reserve System, the Federal Open Market Committee and the Federal Reserve Banks (see chart below).

ORGANIZATION OF THE FEDERAL RESERVE SYSTEM



It is therefore important to observe how far the Federal Reserve although not an "independent" central bank has been successful in terms of its economic management of the United States economy. Specifically it is important to ascertain whether the association of the Federal Government and the Federal Reserve Bank has compromised the role of the latter institution.

The Federal Government's expenditure (see Appendix 2), although increasing significantly over the years (1970 - 1991) remained a consistent percentage of GDP. The expenditure/GDP ratio averaged 20.6 percent for the ten years of the 1970s. The average increased by 4.0 percentage points to 24.1 percent for the decade of the 1980s. Revenue although falling short of expenditure also remained at a relatively constant proportion of GDP. Revenue as a percentage of GDP averaged approximately 20.0 percent over the period 1970 - 1990. The Central Government has had a persistent deficit over the twenty years span. Financing was obtained mainly from the domestic market. The Federal Reserve System's claim on government increased steadily, moving from US\$132.4 billion in 1980 to some US\$256.4 billion by 1990. This did not warrant a significant increase in the money supply, as ~~other~~ policies were used to offset this. The percentage change in the money supply, remained relatively stable over the years, with the most significant percentage change of 16.0 percent occurring in 1983. The lowest growth in the money supply (M2) of 3.9 percent was achieved in 1989. The annual average growth was 8.0 percent for the 1980s. Thus the Central Bank was able to maintain relative price stability in the 1980s. There was some amount of depreciation of the United States dollar vis-a-vis the Special Drawing Rights (SDR). The value of the United States dollar fell from US\$1.00 = 0.79SDR in 1980 to US\$1.00 = 0.75SDR in 1989. Despite the marginal depreciation in the value of the United States dollar, the weak

performance of exports, led to the deterioration of the current account. From a surplus US\$1.20 billion in 1980, the current account by 1989 had reached a deficit of US\$106.4 billion. The overall impact of this was a negative overall balance for most years.

The general picture of the United States economy over the twenty years is one in which fiscal policy resulted in huge government deficits. From all indications the monetary policy of the Central Bank was independent from government's fiscal policy. The money supply was not allowed to grow excessively. Thus while the government pursued expansive fiscal policy, the Federal Reserve Bank made an effort to counterbalance this with tight monetary policy impact.

EASTERN CARIBBEAN CENTRAL BANK (ECCB)

In the Caribbean region the Central Bank that Comes closest to being described as independent, is the Eastern Caribbean Central Bank (ECCB). The ECCB has statutory responsibility to regulate the availability of money and credit; to promote orderly credit and exchange conditions and to provide a sound financial structure that promotes growth and development.

The ECCB is the Central Bank of eight OECS member countries (Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines). It was established in October 1983 and succeeded the East Caribbean Currency Authority. Being a "community" Central Bank, the ECCB:

- (i) issues a single common currency, with unrestricted flow among its members;
- (ii) maintains a common pool of foreign exchange reserves, and
- (iii) is that common central monetary authority which decides on the union's monetary policy.

The ECCB is governed by the Monetary Council and the Board of Directors. The Monetary Council is the highest decision making authority in the ECCB. Each government of the participating territories appoints one minister to sit on this Council. The Council provides directives and guidelines concerning monetary and credit policies to the Bank. The Board is comprised of ten directors, the governor and deputy governor and one

director appointed by each government of the eight participating countries. The Board of Directors assumes the responsibility for policy and general administration of the Bank, while the Governor is responsible for day-to-day management and operations.

In terms of monetary management the EOCB has been relatively successful, especially when compared to other central banks in the region. The EOCB is constrained in its power to grant credit to its member governments. Temporary advances and holdings of treasury bills issued by member governments are limited to 5.0 percent and 10.0 percent of each government's recurrent revenue. The holdings of securities other than treasury bills in respect of all governments, may not exceed 15.0 percent of currency in circulation and other demand liabilities. The statutory credit limits imposed by the EOCB Agreement provides the monetary authorities with control over the extent to which budget deficits are accommodated by "printing money". Although the EOCB has the power to conduct open market operations in order to influence the money supply, the potential of this instrument is constrained by a relatively unsophisticated financial system.

The EOCB arrangements have served to force fiscal discipline on the part of member countries governments. The EOCB claims on central governments (see Appendix 3) have not grown significantly throughout the period of the 1980s. In 1984 the first full year of the EOCB existence claims on the Central Government of Antigua and Barbuda were some EC\$34.0 million and by 1990 it had grown to EC\$45.0 million representing only a 24.0 percent increase. On the other hand, claims on the government of Dominica and Grenada fell during the period. In 1984, the EOCB had an exposure of EC\$46.0 million in Dominica but by 1990 this had fallen to EC\$38.0 million, representing a 17.0 percent decline. The same pattern

was evidenced in Grenada, where claims of government declined from EC\$43.0 million in 1984 to EC\$36.0 million in 1990.

Money supply changes remained relatively stable over the period in the three aforementioned countries. In Grenada, for example, the highest annual percentage change of the money supply at 28.0 percent occurred in 1986 but by 1990 the annual change was down to 9.0 percent. Prices have also remained relatively stable in these countries when compared to other Caribbean countries, like Jamaica and Trinidad. In the OECS countries inflation rates during the 1980s were generally low and similar across countries (at between 2.0 percent and 6.0 percent per annum). This is linked to the fiscal discipline arising from the sharing of a common currency. Barbados and Belize recorded low inflation rates which came about as a result of a generally balanced management of macro-economic policy. Trinidad and Tobago, Jamaica and Guyana had higher inflation rates (between 9.0 and 30.0 percent). This was mainly as a result of increased inflationary financing of the government budget deficits through central bank accommodation leading to devaluations.

AVERAGE ANNUAL INFLATION RATES — 1978 - 1988

	1978-1980	1980-1985	1985 - 1988
Barbados	14.8%	6.3%	3.4%
Guyana	13.9%	18.7%	29.5%
Jamaica	24.1%	16.1%	9.2%
Trinidad	18.0%	11.3%	10.0%
Belize	n.a	4.6%	1.8%
Antigua	18.7%	2.8%	5.9% /1
Dominica	27.6%	4.1%	3.3%
Grenada	23.3%	5.6%	2.0%
St. Kitts	13.6%	3.8%	-0.3%
St. Lucia	18.1%	2.7%	3.4%
St. Vincent	n.a.	3.3% /2	2.0%

Source: Caribbean Region - Current Economic situation, Regional Issues, and Capital Flows; February 1990

Notes: /1 1985 - 1987

/2 1981 - 1985

n.a. not available

A common trend throughout the Caribbean region is the running of current account deficits. The fluctuations are partially explained by external factors, such as the world recession during the early 1980s, the oil price declines in 1982 and 1985, the aluminum price declines of the

early 1980s and the increase in international interest rates. However, the substantial differences experienced among countries are largely due to differing domestic policies, such as fiscal balance, exchange rate management, willingness and ability to borrow abroad among others. Barbados was able to maintain overall macro-economic stability and succeeded in keeping a largely balanced current account. On the other hand, Guyana experienced severe macro-economic imbalances with current account deficits of around 30.0 percent of GDP throughout most of the 1980s. The OECS countries (except for Antigua and Barbuda, and Grenada) were able to contain their current account deficits during the late 1980s.

BALANCE OF PAYMENTS CURRENT ACCOUNT DEFICIT (-) OR SURPLUS, 1977 - 1987
(As percent of GDP)

YEAR	ANTIGUA	BARBADOS	BELIZE	DOMINICA	GRENADE	GYANA	JAMAICA	SAINT KITTS	SAINT LUCIA	SAINT VINCENT	TRINIDAD TOBAGO
1978	-5.2	-3.8	-10.4	-14.5	-1.1	-6.4	-4.7	3.6	-30.7	0.0	1.0
1979	-24.8	-5.7	-6.6	-31.6	-9.0	-15.2	-7.5	-11.8	-30.5	-12.2	-1.0
1980	-26.3	-2.5	-5.1	-56.2	-21.2	-18.5	-7.8	-5.0	-32.4	-23.2	5.3
1981	-36.2	-11.7	-5.8	-35.4	-33.9	-33.3	-12.6	-11.1	-35.4	-11.2	6.0
1982	-34.1	-4.2	-8.2	-20.3	-38.0	-31.6	-13.8	-15.1	-27.8	-18.4	-8.1
1983	-11.5	-4.8	-8.1	-13.2	-27.5	-33.4	-14.0	-30.7	-10.2	-7.2	-12.6
1984	-1.2	2.4	-6.4	-20.5	-26.5	-23.0	-15.7	-5.3	-13.4	-4.4	-6.4
1985	-12.3	4.7	-3.4	-20.8	-22.1	-28.0	-18.4	-5.5	-9.6	2.9	-1.1
1986	-54.6	0.3	1.8	-4.0	-27.6	-27.1	-9.7	-2.9	-1.9	-2.8	-8.4
1987	-30.6	-3.0	0.3	-6.2	-21.5	-31.5	-10.9	-9.8	-9.5	-17.2	-6.3
1988	-19.6	-1.8	-2.1	-13.0	-15.3	-21.9	-12.0	-14.8	-5.3	-8.5	-4.3

Source: Caribbean Region: Current Economic Situation, Regional Issues, and Capital Flows; World Bank; February 1990.

The OECS countries' GNP growth rate also performed at creditable levels compared to other countries of CARICOM. During the 1970s most CARICOM economies experienced positive growth rates although there was substantial variation across countries (e.g. 7.0 percent per annum in Trinidad and Tobago and -0.4 percent per annum in Jamaica). Substantial capital inflows and transfers during this period were able to offset the impact of external shocks. This allowed CARICOM member countries to maintain stable growth. Nevertheless, after 1980, different growth pattern emerged. The larger countries contracted sharply during the first half of the 1980s (1.0 percent to 7.0 percent per annum in real terms). This came about largely as a result of adverse commodity price movements (petroleum, bauxite and sugar), reduced external capital flows following the debt crisis and inappropriate domestic policy adjustment. Notwithstanding this, most of the OECS countries were able to sustain and in several cases accelerate GNP growth rates at between 3.0 percent and 6.0 percent per annum. Generally, ~~the~~ the fiscal and monetary discipline arising from the common currency agreements are important factors in the relative stability and macro-economic growth enjoyed by the OECS members since the late 1970s.

TABLE: GNP AND GNP PER CAPITA GROWTH, 1973 - 1988
(Constant Prices)

	GNP Growth %			GNP Per Capita Growth %		
	1973-80	1980-85	1985-88	1973-80	1980-85	1985-88
CARICOM	2.9	-2.7	-1.6	2.6	-1.4	1.6
Barbados	3.6	-1.0	5.1	3.3	-1.3	5.0
Guyana	1.2	-6.9	-1.4	-0.9	-7.6	-1.8
Jamaica	-3.8	-1.0	2.3	-5.0	-2.5	0.9
Trinidad	7.3	-4.0	-6.1	5.6	-5.5	-7.5
Antigua	2.4	5.8	6.8	1.1	4.4	5.2
Dominica	-0.4	4.6	7.3	-1.0	3.2	5.9
Grenada	4.3	4.9	6.2	n.a.	2.9	4.2
St. Kitts	3.2	2.5	5.7	3.2	2.3	6.2
St. Lucia	7.0	4.0	3.8	4.9	1.9	1.9
St. Vincent	2.4	6.2	5.4	0.3	4.7	3.9
Belize	6.9	0.4	10.8	4.8	-2.3	7.5

Source: Computed from World Bank Atlas data base (ANDREX).

Note: Growth rates computed using least squares method.
Aggregate (CARICOM) weighted by population.

THE CENTRAL BANK OF BARBADOS

The Central Bank was established on May 2, 1972 after Barbados formally withdrew from the East Caribbean Currency Authority (ECCA). Thus the Government of Barbados was able to assume direct control over the country's monetary policy.

The Central Bank Act points to a fair amount of control over monetary policy by the Government. The objectives of the Central Bank include the following:

1. To regulate the issue, supply, availability and international exchange of money;
2. To promote monetary stability;
3. To foster the development of money and capital markets in Barbados;
4. ~~To foster~~ credit and exchange conditions conducive to the orderly and sustained economic development of Barbados;
5. Acting as fiscal agent, advisor and banker to Government; and
6. Formulating an effective monetary and credit policy within the overall framework of government's economic policy.

The Governor and the Board of Directors, like Jamaica are appointed by the Minister of Finance for a limited number of years. The quality of the economic management of the economy has been given priority attention both by government and the Central Bank alike. Monetary policy has been

regarded as an addition to the "armoury of economic management." Thus monetary policy was used not only in the interest of financial stability, but also in the promotion of economic development. The Government on the other hand has shown a great deal of respect for the quality advice emanating from the Central Bank. The performance of the fiscal policy management compared to Jamaica for example has for the most part, been exemplary, in that tight budgetary management was pursued (at least up to 1987 - see Appendix 4). The Government deficit as a percentage of Gross Domestic Product has remained relatively low over the decade of the 1970s and 1980s. Government deficit as a percentage of GDP was a mere 0.1 percent in 1970, peaked at 7.3 percent in 1987 but was back to 2.8 percent in 1988. Thus the government over the years (1970 - 1988) has tried to maintain disciplined fiscal management. This is further evidenced by the relatively low degree of domestic financing over the years, for example, for 1988 domestic financing was approximately 16.0 percent of foreign financing. Although the Central Bank's exposure to the Government increased over the years, it was in keeping to some extent with the increase in Government's revenue intake. Additionally, the Government's activities in the economy have not had a substantial impact on the growth of the money supply. The annual percentage change in the money supply averaged 19.0 percent of the 1970s and 7.0 percent for the 1980s. This aided in the creation of price stability, since the inflation rate of Barbados remained relatively low averaging 6.3 percent in 1980 - 1985 and 3.4 percent for 1978 - 1988. Barbados maintained a fixed average exchange rate of B2.01 = US\$1.00 for most of the period. Nonetheless, the Barbadian dollar managed to remain stable as there is a relatively manageable current account deficit. There were a few years in which there was a surplus on the current account. The

of the Balance of Payments has been positive in that for most years there has been a Net International Reserve accumulation.

Generally, despite the close association of the Central Bank with the Government, there has not been an entanglement of fiscal and monetary policy. Both policies have worked in tandem, with the Central Bank being allowed to undertake policies in line with a stable currency. The Government has also recognized the importance of fiscal discipline for effective macro-economic management.

Thus the Barbadian Central Bank without significant monetary policy autonomy and closely associated with the Government has managed to keep its monetary policy separate from government's fiscal policy. This comes from a commitment from Government to the ensuring of an appropriate fiscal profile conducive to economic growth and development. The Central Bank has displayed also a commitment to currency stability and continuity in its monetary policy.

The performance of Jamaica's economy has not been as stable as that of Barbados despite having a similarly structured central bank. Therefore, the evidence from the four central banks surveyed is at best instructive but not convincing enough to point to "autonomy" as the ideal situation for Jamaica. It is important that one looks at the structure, operations and performance of the Bank of Jamaica and the government in their national economy.

SECTION III

Bank of Jamaica's Performance in the Economy

The Bank of Jamaica was established in 1961 out of a need for an institution to take over the monetary and financial arrangements of an economy moving towards independence. In 1957 a committee (the Inter-Departmental Committee) had been set up to investigate the feasibility of the establishment of a central controlling financial institution. This resulted in the enactment of the Bank of Jamaica Law by 1960. The result was the establishment of the Bank of Jamaica as the country's Central Bank. The banking law sets out, among other things conditions for the operation of banking business in Jamaica.

The Bank of Jamaica is responsible for the execution of monetary policy to influence the level of aggregate demand in the economy. Secondly, the Bank is responsible for the physical operation of the currency issue.

The Bank is legally constituted to make advances to government, according to Section 36 of the Bank of Jamaica's Act"

"The Bank may in any financial year make temporary advances to the Government which shall:

1. (a) not exceed in the aggregate thirty per centum of the estimated revenue of Jamaica for the financial year; and
(b) be repaid not later than three months after the end of the financial year.

2. where such advances are not duly repaid the power of the Bank to grant further advances in any subsequent financial year shall not be exercisable unless and until the outstanding advances have been repaid."

The Bank of Jamaica over the years has taken on certain quasi-fiscal functions (e.g., listing of government's foreign borrowings under the liabilities of the Central Bank, (loans from the International Monetary Fund - IMF, and not being reimbursed for interest paid on its Certificates of Deposit (CDs) and other cash losses), which have curtailed the Bank's ability to pursue objective and effective monetary policy. The success of monetary policy in achieving price stability and the external value of the currency depends upon the structure of the economy and other economic policies, especially fiscal policy. The latter if not prudently managed can have a most debilitating impact on monetary policy.

This has been Jamaica's experience, which from all indications is as a result of an over zealous government sector trying to fulfil the public welfare role. The Bank of Jamaica being owned by the Government and its senior management being appointed by the Government finds itself in a compromising position in that the Bank has frequently accommodated the Government's fiscal policy. This accommodation comes at the expense of the integrity of monetary policy. This points to the role of an independent central bank, but it must be emphasized that an autonomous central bank is disfunctional without a strong commitment (on both sides) to the avoidance of policies which create inflationary pressures.

The critical issue is that the quasi-fiscal role of the Bank of Jamaica has created an entanglement of fiscal and monetary policy. This has compromised the Bank's ability to defend the currency. It is now pertinent to trace some of the internal dynamics Jamaica's economy, which have effected the entanglement of policies.

The exploration considers some relevant economic indicators from 1970 - 1991 (see Appendix 5). This will be used to illustrate a the

scenario of a Central Bank being constrained in carrying out its main function of stabilizing the currency. The time period spans two distinct episodes of experimentation of policy. The decade of the 1970s was one in which nationalistic tendencies led the Government to pursue policies of import-substitution and self-reliance. Government expenditure embraced programmes that provided social welfare amelioration but did not create the necessary impetus for economic growth. The second era of the 1980s through to early 1992 to some extent an antithesis of the 1970s. The focus shifted towards private sector led economic growth which "opens" the economy and looks to exports as the engine of growth. This latter period is one of structural adjustment which involves the liberalization of the economy and the divestiture of government holdings of businesses and entities to the private sector.

The Government started the decade of the 1970s with an expenditure of 20.0 percent of GDP and by 1976 (an election year) this was increased to 37.0 percent of GDP and 40.0 percent of GDP by 1979. Over the ten year span of 1970 - 1979, expenditure had increased some 86.0 percent. While Government was expanding spending over the period, its revenue was inadequate to cover its expenses. Revenue moved from J\$204.6 million (17.5 percent of GDP) in 1970 to J\$1.1 billion (26.3 percent of GDP) in 1979. This created a widened government deficit that has created the conflict of interest for the Bank of Jamaica. This will be discussed below.

The expansionary nature of the government sector continued into the 1980s. During 1980 (another election year) government expenditure was some 45.0 percent of GDP, while revenue was only 26.0 percent of GDP. The natural result of this was a widened government deficit of J\$943.1 million (20.0 percent of GDP), approximately 36.0 percent above the 1979

deficit. Over the ensuing years effort was made to reduce the size of the deficit by accelerating revenue collection. This took many forms, among them a fundamental reform in personal income tax (1986) whereby a single rate, broader based structure replaced the then existing complex rate structure.

The privatization of certain public entities, such as the Jamaica Telephone Company (JTC) assisted in increasing government's capital revenue. A further boost was given to the revenue collection effort with the implementation, since September 1990, of price system adjustments in some public enterprises. The Jamaica Public Service (JPS) and the Jamaica Commodity Trading Company (JCTC) are two such entities for which there is now a complete pass-through of costs to the consumer. Additionally, there have been policies to re-organize Central Government's expenditure, such as lay offs and the elimination of general subsidies creating increased government's savings.

These policies among others resulted in the Government collecting revenue averaging 30.0 percent of GDP over the ten year period 1980 - 1989 compared to an average of 21.0 percent of GDP over 1970 - 1979. Nonetheless the increased revenue over the latter period still fell short of expenditure which averaged 31.0 percent of GDP over 1970-1979. The natural consequence was an unstable deficit which reached J\$2,019.1 million in 1985 (18.0 percent of GDP), but started to decline thereafter, and in fact recorded surpluses from 1987 onward with the exception of 1988 with a deficit of J\$1,179.8 million (6.0 percent of GDP). This 1988 performance can be attributed to heavy government spending following the passage of hurricane Gilbert.

The expansive nature of government's activities was further evidenced in the growing local and foreign borrowing by this sector. Domestic borrowing averaged \$735.5 million over 1970 - 1979 and J\$6,301.34 million over 1980 - 1989 an increase of approximately 850.0 percent over the former period. A similar trend was evidenced in the growth of foreign loans, which increased by approximately 473.0 percent during 1980 - 1989 over 1970 - 1979. This points to two major considerations, firstly, the extent of the domestic borrowing aided in the crowding out of private sector productive activity as well as the injection of a substantial amount of liquidity in the economy. This came mainly from an increase in Net Domestic Asset (NDA) of the Central Bank which represents in this case an increase in net lending to the public sector, which expands the monetary base (B) through the increase in the excess reserves (R) of the banking system. Relatively weak balance of payments performance limited the tendency for an expansion in the money base due to an increase in the NIR.

Secondly, the listing of government's foreign borrowings under the liabilities of the Central Bank places further pressure on the Central Bank's autonomy. The high debt service ratio (over 50.0 percent of export revenue) on foreign debt also served to force the Government to borrow more in the domestic market. This accounted some what for the rapid growth in domestic as opposed to foreign loans.

There was a meteoric increase in lending to the Government by the Bank of Jamaica over the period being considered. The Bank's claims on Government amounted to a mere J\$7.0 million in 1970 and by 1979 it moved to J\$1.3 billion. By the end of the decade of the 1980s loan to the Government from the Bank of Jamaica reached J\$3.3 billion (excluding accumulated losses). The flow of new loans from the Bank of Jamaica remained within the

stipulated 30.0 percent of revenue for most years, but according to the Bank of Jamaica financial statements advances, made prior to the beginning of the financial year April 1, were not recovered by June 30 of the same year.

The significant contribution of the Bank to the domestic borrowing requirement of the Government had repercussions on the rate of growth of the money supply. Lending to the Government by the Bank of Jamaica only served to accelerate the process of money creation which was de facto the printing of money. During the 1970s there was a 16.0 percent average annual increase in the money supply (M2) and a 23.0 percent increase during the 1980s. It is important to mention that the 32.0 percent increase in 1988 had a direct relationship with the increase in government expenditure for hurricane reconstruction. The highest average annual increase in the money supply occurred in 1991 with a 51.0 percent annual average increase.

The unwieldy nature of the money supply increase was manifested in high domestic prices, fluctuations in the exchange rate and a loss in reserves. In the 1970s price increased by approximately 17.5 percent annually and 14.3 percent over the 1980s. The high average increase in prices in the ~~1970s~~ could be attributed to a marked annual average increase in nominal wages, which approximated 15.3 percent over 1973 - 1978.

Although price increased at a slower pace in the 1980s relative to the 1970s, more volatile movements were detected in the rate of growth of the money supply, exchange rate and wages over the latter period. There were rapid increases in the money supply for the first four years of the 1980s. The money supply increased by 28.0 percent in 1981, 26.0 percent in 1982 and 27.0 percent in 1983. This was facilitated by an increase in capital inflows and increased domestic credit from the commercial banks to the private sector and to Government. As was alluded to above, the money

multiplier working through credit resulted in an increase in the money supply. This coupled with a relatively stable exchange rate of J\$1.78 = US\$1.00 from 1980 to 1983 led to a loss in reserves. The stock of reserves moved from -US\$86.5 million in 1980 to -US\$288.5 million in 1981. There was some improvements in 1982 with the stock moving to -US\$123.5 million, but by 1983 it had deteriorated to -US\$361.9 million.

Thereafter, the economy was forced into a period of sharp adjustment. During this time more effort was placed on controlling the growth of the money supply, a more flexible exchange rate determination system was introduced which served to protect reserves, wage guidelines were followed, but most importantly emphasis was placed on decreasing the fiscal deficit and on more efficient management of public sector entities. Conscious effort to reduce government expenditure succeeded in as far as expenditure as a percentage of GDP decreased by 6.0 percentage points between 1985 and 1986, the largest reduction of both the 1970s and 1980s. There was a continuous decline in the expenditure/GDP ratio except in 1988 (due to hurricane relief spending) when the expenditure/GDP ratio increased from 31.0 percent in 1987 to ~~38.0~~ 38.0 percent in 1988. The decline subsequently resumed and by 1991 the ratio had reached 30.0 percent. Beginning in the latter part of the 1980s as a part of the government's policy to control expenditure, wage constraints in the public sector were enforced. During these years average wages increased annually by approximately 18.0 percent. The constraint placed on expenditure helped to curtail money supply expansion. Fiscal management was also manifested in an improved revenue collection effort. Fiscal year revenue as a percentage of GDP averaged over 30.0 percent for the second half of the 1980s compared to an average of 25.0 percent for the 1980 - 1984 period. The performance of the government

sector over the latter period of the 1980s naturally had an impact on the rate of growth of the deficit. The budget deficit as a percentage of GDP declined from 18.0 percent in 1985 to 9.0 percent in 1986 and by 1987 the Government was able to run a surplus of 2.3 percent of GDP. The passage of hurricane Gilbert disrupted the improved performance, with the budget returning to a deficit of 6.0 percent. Thereafter, a surplus was maintained and by 1991 there was a surplus of 3.4 percent of GDP.

Growth of the money supply declined by 15.0 percent between 1986 and 1987. In 1986 money supply increased by 27.0 percent over 1985 and by 12.0 percent in 1987 over 1986. The extra government spending in 1988, resulted in the 32.0 percent growth in the money supply recorded in 1988, but by 1989, the percentage growth was a mere 6.0 percent. In 1990, the money supply had began to increase once more and in fact by 1991 the percentage change on the money supply was some 51.0 percent over that of 1990.

According to the Quantity Theory of Money, changes in the general price level will vary directly with changes in the money supply. This was indeed borne out in the latter part of the 1980s and at least up to 1991. The period for which there was a decline in the rate of growth of the money supply, 1985 - 1987, also witnessed a decline in the rate of increase in prices. Prices increased by 15.0 percent in 1986 over 1985 and by 6.0 percent in 1987. Following the massive average increase of 51.0 percent increase the money supply in 1991 over 1990, there was also a 51.0 percent increase in prices.

In keeping with the reduction in the expansion of the money supply and relatively stable prices in the 1985 - 1989 period, there was also relative stability in the rate of exchange. During this period the average

exchange rate fluctuated between J\$5.56 = US\$1.00 and J\$5.74 = US\$1.00, with the rate being determined by an auction system held twice weekly. Additionally, with the introduction of a new inter-bank foreign exchange system on September 17, 1990, each commercial bank was able to set its own rate. Thus by 1991 the exchange rate had depreciated to an average of J\$12.12. = US\$1.00.

The relative stability of the exchange rate during 1985 - 1989 also had a positive impact on the country's foreign exchange reserves. Net foreign reserve accumulation was reported for those years. In 1987, Jamaica's Net International Reserves improved by US\$299.0 million and although falling, remained positive at US\$74.2 million in 1988.

The general picture emerging for the 1970 - 1991 period is that of an economy in which the macro-policies used have served to fuel inflationary pressures in the market. This was so at least up to 1985 when the economy started the process of structural adjustment. The question of whether or not an independent central bank could have controlled the process is redundant, since the empirical evidence has shown that the root of the inflation-devaluation spiral was the fiscal indiscipline undermining the integrity of monetary policy. Although the Central Bank acts as advisor to Government, fiscal policy is not the domain of the Central Bank. The nature of the Central Bank's operation which involves the issue or redemption of notes and coins precludes it from having an operating loss. Nonetheless available data indicates that the Bank of Jamaica has been making a cash loss since 1978. This has grown from J\$63.5 million to J\$2.7 billion in 1990. This loss came about as a result of the Bank's quasi-fiscal operations. The improvement noted in the government's budget deficit over the latter part of the 1980s towards the 1990s, had its counterpart in the

Bank of Jamaica's accounts in the form of losses. The Bank of Jamaica on the behalf of the Government of Jamaica borrowed abroad, operated exchange rate guarantee schemes in addition to certain other quasi-fiscal operations; such as the issuing of Certificates of Deposit to mop up the excess liquidity of Central Government's operations. These activities resulted in exchange losses and interest paid on government's foreign liabilities and on Certificates of Deposit. Thus over the ensuing years Bank of Jamaica's interest expenditure substantially exceeded its interest income, resulting in an expanding net loss. The Bank of Jamaica Act requires that the Government pay to the Bank out of the consolidated fund the losses incurred by the Bank. This was not done and there is no binding constraint in the Act that ensures that the Government of Jamaica complies.

The overwhelming evidence is that the Government's expenditure created excess liquidity in the market. The Bank of Jamaica in its effort to sterilize this effect issued Certificates of Deposit (CDs) (see Appendix 6) at market rates. The precipitous growth in the stock of CDs and the interest expenditure on the CDs added further to the quasi-fiscal deficit in the form of losses in the Bank of Jamaica accounts. These losses were not absorbed by Government on a timely or annual basis and therefore allowed the Central Government a higher level of expenditure that would not have been possible had Central Bank losses been paid for in cash out of the Consolidated Fund. This acted as further injection of liquidity (currency or bank reserves) into the banking system and accelerated the increase in the money supply.

There is overwhelming evidence from countries like Jamaica that the entanglement of fiscal and monetary policy has reduced the Central Bank to being an accommodator of government's fiscal excesses. Domestic credit

expansion by the Central Bank to the Government has, through the multiplier effect on the base, led to money supply expansion. The basic conclusion is that the Bank of Jamaica over the years has functioned as an arm of the Ministry of Finance and not in the manner of the more conventional text book description of an independent central bank. The Bank of Jamaica has accumulated huge liabilities to the private sector through Certificates of Deposit at high rates of interest, while its assets have been largely non-interest earning and cash reserve requirements to finance the Government. It has delved into other quasi-fiscal activities, such as servicing external debt on behalf of the Government and other public sector entities often bearing the exchange loss on these transactions. Although the legal provision of the Bank of Jamaica Act clearly states that the Bank's losses are the full responsibility of the Government of Jamaica, this was never adhered to, since there were no payments of funds from the Consolidated Fund to the Bank. Instead amounts due from government were settled by the issuing of long term Local Registered Stocks bearing low non-market rates of interest.

There is now the ~~need for~~ an assessment as to whether an independent central bank, would have acted in a less accommodating manner towards government's over exposure. If so, would this have forced fiscal discipline on the part of the Government of Jamaica? This raises the question as to whether the solution is simply one of 'creating' an independent central bank or providing a more efficient, effective and consistent economic management on the part of both the Government and the Central Bank.

SECTION: IV

CONCLUSION: PERTINENT ISSUES

The Bank of Jamaica over the years has not been able to provide the type of consistent economic management necessary to defend the value of the currency because of its relationship to the Government. This is now widely recognised and has been part of the findings of a Committee, "the Nettleford Committee" formed to examine the restructuring of the public service. The Government of Jamaica arising from its declared commitment to more efficient public sector management has now set up another committee, "the Coke Committee on Bank of Jamaica", to examine the autonomy of the Bank in a liberalized economy, among other things. If the perception of the Government is that autonomy of the Central Bank will preclude Government ~~from~~ having access to a readily available pool of funds, then this will ensure a certain degree of fiscal discipline. Governments would be forced to finance spending from the private sector or from overseas. The respective long-run consequences of these two methods are the crowding out of other productive investments and growing external debt. It is advisable that the transition be approached with caution, in order that the lessons from other countries are not ignored. Additionally, the evidence has not shown that the autonomy of a central bank by itself ensures exemplary economic management of an economy. The case of the United States gives credence to this. Similarly, a social and governmental commitment to low

inflation and stable exchange conditions may make the issue of autonomy less relevant. The overwhelming evidence is that independence must be tempered with sound economic policy co-operation emanating from both government and the central bank. Therefore, autonomy is a necessary but not a sufficient condition needed for macro-economic stability, a number of other factors must be present to ensure sound macro-policies:

- The formal legislative arrangements of autonomy;
- The Central Bank's Act should contain clear statutory objectives that are narrowly defined in order to avoid ambiguity.
- Certain historical, cultural and structural factors peculiar to a particular economy.
- The degree of the relationship between the government and the central bank.
- A commitment from the political directorate to effective fiscal management and low inflation.
- The commitment and determination of the central bank to pursue currency stability as its major priority.
- The technical and professional capability of the central bank's senior staff.

Germany's experience may indeed be used as a benchmark for the measurement of a central bank's autonomy, but it should not be seen as the solution to Jamaica's problem. The Bundesbank's success must be placed in the proper perspective. Is it so much that the Bundesbank's independence led to lower inflation and better fiscal policy or is it that both came

about because of the deep fear of inflation? Economists will purport that perception and expectation can indeed help or hinder the success of economic policy. The debilitating effect of destabilizing speculation during the inter-war years (1919 - 1923), post World War II years and the currency crisis in the depths of the Great Depression (1931 - 1934) are exigencies that post war officials have been determined to avoid repeating. It comes as no surprise that Germany has been successful in maintaining a stable money supply with low inflation rates, considering that the money supply, prices and cost of foreign exchange all rose more than trillion fold in 1922 - 1923. Money had become totally worthless, and by late 1923, not even a wheelbarrow of paper money could have bought a week's groceries. Thus the German's constitution clearly delineates a line between the government and the central bank. Both institutions have endeavoured to carry out their functions in a spirit of co-operation with the main aim of economic stability. Thus the independence of the Bundesbank and the ultimate success of its monetary policy must be viewed against the historical background of Germany and indeed Europe as a whole.

Nevertheless, one must not lose sight of the fact that the formal legislative arrangements associated with autonomy are important and critical to the maintenance of harmonious and effective monetary and fiscal policy. It might be possible to enhance credibility by ensuring that monetary policy is the domain of an independent central bank that doesn't possess the same in some cases short-term objectives and incentives as the political leadership.

This brings to focus the appropriate relationship between central banks and governments. The Bundesbank is not accountable to the government for its monetary policy. The ECB in its exceptional role of being the central bank of a number of different countries is not accountable to any

one government. Thus both central banks are endowed with monetary policy independence in the sense that they are both insulated from political pressure and have considerable discretion in the determination and operation of monetary policy. The Federal Reserve, the Central Bank of Barbados and the Bank of Jamaica are accountable to their respective government. The main difference among these banks, is that the Federal Reserve Bank is not obligated to monetize the government deficit. The Bank of Jamaica has consistently done so because it operates more as an "arm" of the Ministry of Finance. The Central Bank of Barbados has to some extent kept its monetary policy separate from government's fiscal policy. Thus the accountability to government does not in itself imply the entanglement of fiscal and monetary policy. There must be a strong commitment to sound economic management, which is even more entrenched if it emanates from an experience that behoves policy makers to do so. Additionally the Federal Reserve Bank over the years appears to have insulated itself from day-to-day political pressures by legislating some form of monetary policy "rule." This might have its genesis in the "rules-versus-discretion" debate since the Federal Reserve Bank has limitations placed on its monetary policy independence. The Federal Reserve Bank has the freedom to devise and implement its own view of a desirable monetary policy and although accountable to, is not constrained by the political leadership. Nonetheless, it is heavily constrained by the rule. Thus effective monetary policy can be achieved without institutional independence.

A major criticism of the Bank of Jamaica is that it functions as a part of Central Government. This criticism is often time made in a vacuum without regard to structural factors inherent in the economy. In a country where at times the Prime Minister is also the Minister of Finance and the

Central Bank Governor is also the chief economic advisor to the Prime Minister, it is difficult if not impossible to draw a clear line of demarcation between central bank "functions" and ministry of finance "functions." Nevertheless, it has been proven that excessive fiscal deficits can make the implementation of monetary policy difficult, because it may place pressure on a central bank to finance the deficit directly or indirectly. Another alternative result might be excessive foreign borrowing. As long as the central bank does not use its monetary policy as a cushion for governments fiscal policy, then a close relationship between the two institutions can be maintained. Ideally, these two institutions should work together in dealing with overall economic conditions and present a united front in order to resist expenditure pressures from other government entities.

The crucial conclusion of Jamaica's experience is that the Bank of Jamaica has not always been allowed to pursue monetary stability as its primary objective. The fiscal policies of the government have been effectively merged with the monetary policy of the Bank of Jamaica, causing the latter institution to lose sight of its own objective. This is not to say that the Bank's major objective of monetary stability is inimical to government objectives of growth, development, full employment, external equilibrium, price stability and equitable income distribution. The objectives of all concerned would be better served if the Bank of Jamaica concentrates on the achievement of price stability. The latter has implications for savings, investment and exchange rate stability. These are all vital ingredients needed for investment, economic growth and development. It is indeed true to say that independence of the Bank is neither necessary nor sufficient for the attainment of price stability.

To the extent that it is perceived that monetary policy independence is necessary for price stability then the extent of legal constraint on central bank funding of the government, needs to be considered. The Bank of Jamaica Act accommodates credit to the government of not more than 30.0 percent of estimated revenue for the financial year. In Germany the legislation sets strict limits on direct central bank's credit to government but may acquire government paper in the course of open market operation for monetary control. The Bank is not otherwise able to acquire government paper on its own account. It is the Bank of Jamaica's advances to the Government and its over exposure in the CDs market leading to currency instability that have precipitated the call for an independent central bank from various groups, especially the private sector.

The Government itself has commissioned "the Coke Committee" to look into the issue of independence of the Bank of Jamaica but it must be reiterated that if there is no political commitment to the process, then all efforts will be in vain. According to the recommendations emanating from a report on the Bank of Jamaica's losses by C. J. Lindgren ¹ the ~~Government~~ should as a starting point recognise that the quasi-fiscal deficits or losses of the Bank of Jamaica are in fact part of government's deficit and should be repaid in cash from the consolidated Fund. The present review of the Bank of Jamaica Act needs to contain explicit measures that will encourage Government compliance. A related issue is that of the listing of governments liabilities as part of the Bank of Jamaica's

¹A Strategy for the Elimination of the Quasi-Fiscal Losses of the Bank of Jamaica - Lindgren, Carl-Johan & Hardy, Daniel. IMF: May 14, 1992.

liabilities. If these liabilities are removed to the books of government this could restore the solvency and profitability of the Bank of Jamaica. In foreign currency the Bank of Jamaica had assets of J\$3.5 billion at the end of 1991 as against foreign liabilities of J\$22.6 billion (most of which were really Government liabilities). Other recommendations put forward by the Lindgren report suggest that the Bank of Jamaica should be prohibited from incurring any further external borrowing without acquiring matching foreign assets and from entering into any type of exchange rate guarantees. The Bank of Jamaica's exposure in the servicing of the debt of other public sector entities should also be reduced and the responsibility of such debt restored to the public sector entities. To the extent that these recommendations are carried out, the Bank of Jamaica would have been divested of some of the major impediments to its independence. These recommendations will also help to ensure the functional integrity and credibility of the Bank's monetary policy, since its relationship with the Government would become more transparent. Nevertheless, independence must not be viewed as a panacea.

If central bank ~~governors~~ are perceived as being apolitical and technically consistent, they will quickly gain the respect and co-operation of the financial community and the government. Governors such as Paul Volcker and Alan Greenspan of the Federal Reserve Bank may be regarded as such governors. During their term in office they have repeatedly managed to resist initiatives from the government that would have led to an increase in the money supply.

This leads to focus on the need for highly qualified technical personnel to staff central banks. The evidence from the central banks surveyed indicates that these banks have been able to retain high calibre

staff

members. This will be a positive in favour of the Bank of Jamaica, if it does in fact take on the mantle of an independent central bank. As long as the Bank of Jamaica is an organization respected for its professionalism, technical expertise, integrity, non-partisanship and high degree of continuity, then this would pave the way for an easier transition.

SECTION V

POLICY RECOMMENDATIONS

If the decision is made for the Bank of Jamaica to move towards greater autonomy, then the relationship between the Central Bank and the Government will certainly be of particular importance. In order to enable the capturing of potential benefits of independence, the following policy guidelines are recommended:

1. It is recognisable that the Board may be used as a channel for the Government to exert influence on the Central Bank. The Governor and Board of Directors, therefore, should be impartially appointed. Presently the Governor and Board are appointed by the Minister of Finance on four year contracts. The power of appointment should be widened to include the opposition and the private sector. The Members of the Board of the Bank (excluding the Governor) should be appointed by the Governor General from nominations submitted

from these various interest groups. Members should represent a wide cross section of skills, but with at least three members with expertise in economics, accounting and law. The Central Bank Governor should in turn be appointed by the Board from nominations submitted by the wider interest group (government, opposition and private sector). The security of tenure must also be ensured by increasing the contract period from four years to a maximum of eight years and, where possible, not running concurrently with the life cycle of the political directorate. This will ensure continuity in the Central Bank's management.

2. The Bank of Jamaica Act needs to define its statutory objectives more precisely. The principal objectives of the Bank of Jamaica states among other things "to keep and administer the external reserves of Jamaica, to influence the volume and conditions of supply of credit so as to ~~promote~~ promote the fullest expansion in production, trade and employment, consistent with the maintenance of monetary stability" It is not realistic for monetary policy to be made responsible for so many and at times conflicting objectives. The Bank's monetary policy should be targeted at the stability of the currency only.

3. The Bank of Jamaica must assume full responsibility for its monetary policy. It might be difficult to attain the level of independence of the Bundesbank because of the cultural

and structural peculiarities of the Jamaican economy. A more appropriate model might be one based on the Federal Reserve System. In that the Bank of Jamaica, in the determination of its monetary policy, should be independent of the Executive Branch of Government, but have an obligation to report to the Parliament at least once per quarter.

4. There must be tighter legal restrictions placed on the central bank funding of the Government. Legislation should stipulate that no public expenditure whether directly or indirectly should be financed by the Bank of Jamaica.
5. The Jamaican psyche will not willingly accept an institution being vested with the responsibility of currency stability without some accountability from that institution. The Bank of Jamaica therefore needs to make its actions more transparent by explaining not only to Government but the general public the reasons for policy actions and long-run policy targets.
6. The Central Bank needs to have some degree of budgetary independence from the Government. This should include payment to staff and infrastructural improvements.

ECONOMIC INDICATORS GERMANY

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
GROSS DOMESTIC PRODUCT /1	675.30	749.80	823.10	917.30	983.90	1026.60	1120.50	1195.30	1283.60	1388.40	1472.00	1535.00	1588.10	1688.50	1750.90	1823.20	1925.30	1990.50	2094.90	2219.40	2403.40
GOVERNMENT EXPENDITURE /1	159.28	180.42	202.51	229.96	266.91	310.25	333.76	354.94	379.01	405.37	452.74	487.11	510.43	527.24	554.74	569.55	585.26	613.07	640.89	666.79	
% OF GDP	23.59	24.06	24.60	25.07	27.13	30.22	29.79	29.69	29.53	29.20	30.76	31.73	32.14	31.23	31.68	31.24	30.40	30.80	30.59	30.04	0.00
GOVERNMENT REVENUE /1	166.22	186.79	208.34	242.39	260.48	273.09	302.55	329.37	352.52	377.74	425.83	451.70	480.73	493.99	527.22	554.43	575.66	591.54	609.99	659.77	
% OF GDP	24.61	24.91	25.31	26.42	26.47	26.60	27.00	27.56	27.46	27.21	28.93	29.43	30.27	29.26	30.11	30.41	29.90	29.72	29.12	29.73	0.00
GOVERNMENT DEFICIT /1	8.94	6.37	5.83	12.43	-6.43	-37.16	-31.21	-25.57	-26.49	-27.63	-26.91	-35.41	-29.70	-33.25	-27.52	-15.12	-9.60	-21.53	-30.90	-7.02	0.00
% OF GDP	1.03	0.85	0.71	1.36	-0.65	-3.62	-2.79	-2.14	-2.06	-1.99	-1.83	-2.31	-1.87	-1.97	-1.57	-0.83	-0.50	-1.08	-1.48	-0.32	0.00
GOVERNMENT FINANCING /1																					
DOMESTIC						97.85	118.62	142.83	164.85	188.39	197.72	218.77	247.73	267.08	284.25	293.41	285.90	293.77	319.06	313.91	
FOREIGN						5.47	10.26	10.75	15.09	17.21	38.05	59.62	88.71	80.19	89.66	107.74	136.09	152.79	162.25	183.86	
RESERVE BANK CLAIM ON GOV. /1	14.60	14.80	13.60	16.40	15.30	18.40	15.20	16.00	17.80	17.00	20.90	23.50	22.00	24.00	23.00	20.90	25.10	22.90	24.20	24.50	24.70
MONEY SUPPLY /1	332.30	376.90	429.80	467.60	501.40	558.80	601.00	663.20	731.20	768.90	803.90	833.50	890.90	941.70	994.50	1074.40	1144.40	1212.80	1283.00	1348.00	1598.30
% CHANGE	8.88	13.42	14.04	8.79	7.23	11.45	7.55	10.35	10.25	5.16	4.55	3.68	6.89	5.70	5.61	8.03	7.52	5.98	5.79	5.07	18.57
CONSUMER PRICES (INDEX)	50.39	53.03	55.94	59.86	64.02	67.83	70.74	73.35	75.32	78.42	82.87	87.90	92.53	95.56	97.86	100.00	99.87	100.12	101.39	104.21	107.01
% CHANGE	3.43	5.24	5.49	7.01	6.95	5.95	4.29	3.69	2.69	4.12	5.42	6.33	5.27	3.27	2.41	2.19	-0.13	0.25	1.27	2.78	2.69
EXCHANGE RATE (Per. Avg.), Marks per US\$	3.66	3.49	3.18	2.67	2.58	2.46	2.51	2.32	2.00	1.83	1.81	2.26	2.42	2.55	2.84	2.94	2.17	1.79	1.75	1.88	1.61
CURRENT ACCOUNT/2	0.85	0.98	1.18	5.10	10.58	4.39	3.71	3.97	9.12	-5.57	-14.10	-3.43	4.98	5.43	9.59	17.05	40.10	46.07	50.50	55.44	43.22
ROP OVERLAI. BAL./2	6.05	4.81	4.62	9.48	-0.69	-1.09	3.56	2.86	9.69	-3.09	-15.65	1.56	2.92	-1.23	-1.13	0.89	1.54	20.35	-18.43	-10.62	5.08
COM. BK. CLAIMS /1 (PVT. SECT.)	434.30	496.30	576.20	638.60	680.60	712.60	779.80	851.70	940.00	1053.50	1155.20	1238.70	1306.30	1399.40	1489.00	1594.60	1665.50	1726.10	1818.50	1952.60	2310.50

NOTES

1/ IN BILLIONS OF DEUTSCHE MARKS
2/ billions of US\$

APPENDIX # 2

ECONOMIC INDICATORS - UNITED STATES /1

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
GROSS DOMESTIC PRODUCT	1008.30	1093.40	1201.60	1343.10	1453.40	1580.90	1761.70	1965.10	2219.20	2464.40	2684.40	3000.50	3114.90	3355.90	3724.80	3974.20	4205.40	4497.20	4840.20	5163.20	5423.40
GOVERNMENT EXPENDITURE % OF GDP	201.90 20.02	218.80 20.01	232.80 19.37	260.60 19.40	283.40 19.50	346.60 21.92	386.20 21.92	423.80 21.57	475.70 21.44	524.70 21.29	622.30 23.18	718.60 23.95	785.60 25.22	856.00 25.51	896.80 24.08	1003.80 25.26	1035.80 24.63	1057.50 23.51	1118.20 23.10	1190.50 23.06	1313.80 24.22
GOVERNMENT REVENUE % OF GDP	190.50 18.89	194.00 17.74	214.10 17.82	244.40 18.20	279.00 19.20	292.70 18.51	311.30 17.67	371.50 18.90	416.70 18.78	488.80 19.83	546.10 20.34	639.90 21.33	659.90 21.19	653.40 19.47	718.50 19.29	791.70 19.92	823.20 19.57	910.00 20.23	962.70 19.89	1046.70 20.27	1094.40 20.18
GOVERNMENT DEFICIT % OF GDP	-11.40 -1.13	-24.80 -2.27	-18.70 -1.56	-16.20 -1.21	-4.40 -0.30	-53.90 -3.41	-74.90 -4.25	-52.30 -2.66	-59.00 -2.66	-35.90 -1.46	-76.20 -2.84	-78.70 -2.62	-125.70 -4.04	-202.60 -6.04	-178.30 -4.79	-212.10 -5.34	-212.60 -5.06	-147.50 -3.28	-155.50 -3.21	-143.80 -2.79	-219.40 -4.05
GOVERNMENT FINANCING DOMESTIC	-	-	3.10	7.70	5.00	44.60	78.00	34.60	38.60	36.90	76.40	75.00	129.30	200.10	158.50	155.30	191.90	131.70	94.80	90.40	
FOREIGN	-	-	17.50	10.30	-2.90	8.50	4.80	21.20	23.40	2.90	0.20	9.80	9.50	15.50	15.60	45.30	41.20	16.80	66.60	49.10	
PRD. CLAIMS ON GOV. % CHANGR	67.20	77.20 14.88	77.30 0.13	86.10 11.38	88.40 2.67	96.80 9.50	102.70 6.10	106.00 3.21	123.10 16.13	128.60 4.47	132.40 2.95	141.60 6.95	149.30 5.44	160.40 7.43	167.40 4.36	191.10 14.16	222.10 16.22	234.30 5.49	252.40 7.73	247.40 -1.98	256.40 3.64
MONEY SUPPLY (M2) % CHANGR	630.60 6.48	714.20 13.26	806.50 12.92	859.30 6.55	905.50 5.38	1020.40 12.69	1159.90 13.67	1282.50 10.57	1381.30 7.70	1467.00 6.20	1570.50 7.06	1643.70 4.66	1787.10 8.72	2078.30 16.29	2266.60 9.06	2483.40 9.56	2706.80 9.00	2814.40 3.98	2984.60 6.05	3100.90 3.90	
CONSUMER PRICES (INDEX) % CHANGR	36.09 5.90	37.62 4.24	38.87 3.32	41.28 6.20	45.84 11.05	50.03 9.14	52.90 5.74	56.33 6.48	60.63 7.63	67.47 11.28	76.58 13.50	84.48 10.32	89.68 6.16	92.57 3.22	96.56 4.31	100.00 3.56	101.86 1.86	105.67 3.74	109.91 4.01	115.21 4.82	121.43 5.40
EXCHANGE RATE (PRR. AVG) US\$/SDR RATE	1.00	1.08	1.08	1.20	1.22	1.17	1.16	1.21	1.30	1.31	1.27	1.16	1.10	1.10	0.98	1.10	1.22	1.41	1.34	1.31	1.42
CURRENT ACCOUNT	2.33	-1.45	-5.78	7.07	1.94	18.06	4.18	-14.49	-15.40	0.20	1.20	7.26	-5.86	-40.18	-98.99	-122.25	-145.42	-162.22	-128.99	-106.41	-92.16
ROP OVERALL BAL.	-10.69	-30.47	-11.05	-5.23	-8.81	-4.65	-10.50	-35.04	-33.48	9.95	-9.06	-1.24	2.03	-4.05	0.72	5.80	-33.78	-56.86	-36.27	16.93	-24.89
COM. RE. CLAIMS (PVT. SECT.)	310.20	356.30	421.20	503.70	567.60	562.50	600.20	680.80	785.40	898.60	963.90	1058.40	1146.00	1234.10	1396.10	1539.20	1752.70	1930.20	2149.30	2361.00	2484.50

NOTES

/1 IN BILLIONS OF US\$

ECONOMIC INDICATORS ORCS /1

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ANTIGUA & BARBUDA																
RECEIPTS ON GOV.	2.12	5.62	5.77	6.26	6.26	9.40	9.60	11.56	11.56	14.49	33.95	37.10	36.38	40.55	38.46	45.78
MONEY SUPPLY	98.02	106.49	102.53	113.21	130.74	145.37	168.54	191.25	236.80	286.08	319.92	378.13	449.44	503.91	576.54	597.41
% CHANGR	-	8.64	-3.72	10.42	15.48	11.19	15.94	13.47	23.82	20.81	11.83	18.20	18.86	12.12	14.41	3.62
EXCHANGE RATE E. CAR. \$ /US\$	2.17	2.61	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
DOMINICA																
RECEIPTS ON GOV.	3.30	3.70	3.70	11.08	11.49	24.45	33.36	37.68	42.86	46.05	47.29	50.41	39.54	35.68	38.33	
MONEY SUPPLY	36.65	41.25	45.15	53.94	77.60	79.47	81.29	96.26	105.71	122.59	128.20	147.27	190.85	186.35	215.56	262.00
% CHANGR	-	12.55	9.45	19.47	43.86	2.41	2.29	18.42	9.82	16.97	4.58	14.88	29.59	-2.36	15.87	21.54
EXCHANGE RATE E. CAR. \$ /US\$	2.17	2.61	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
GRENADA																
RECEIPTS ON GOV.	5.53	8.36	9.44	12.56	14.89	14.90	31.84	38.85	29.95	42.91	37.62	33.78	32.19	33.28	36.16	36.52
MONEY SUPPLY	66.67	79.28	88.07	104.13	123.40	130.95	141.16	146.61	146.96	148.42	177.21	226.95	253.55	304.00	328.33	359.19
% CHANGR	-	18.91	11.09	18.24	18.51	6.12	7.80	3.86	0.24	0.99	19.40	28.07	11.72	19.90	8.00	9.40
EXCHANGE RATE E. CAR. \$ /US\$	2.17	2.61	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70

NOTES

1/ MILLIONS OF EASTERN CARIBBEAN DOLLARS

APPENDIX 4

ECONOMIC INDICATORS - BARRADOS /1

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
GROSS DOMESTIC PRODUCT	1652.00	1678.00	1695.00	1730.00	1962.00	1926.00	2008.00	2082.00	2183.00	2355.00	2459.00	2413.00	2293.00	2303.00	2385.00	2410.00	2523.00	2914.00	3097.00
GOVERNMENT EXPENDITURE % OF GDP	101.23	118.46	127.50	172.40	199.50	234.20	288.80	329.80	334.30	398.40	536.90	641.70	648.60	662.60	757.10	819.90	854.80	1058.20	1125.40
GOVERNMENT REVENUE % OF GDP	6.13	7.06	7.52	9.97	10.17	12.16	14.38	15.84	15.31	16.92	21.83	26.59	28.29	28.77	31.74	34.02	33.88	36.31	36.34
GOVERNMENT DEFICIT % OF GDP	-2.74	-5.45	-8.00	-33.80	-22.00	-20.00	-58.50	-62.80	-4.30	-20.90	-60.90	-128.80	-76.10	-25.70	-91.00	-71.40	-79.70	-213.80	-88.70
GOVERNMENT FINANCING DOMESTIC	4.44	5.61	4.30	13.70	18.40							43.70	30.60	5.70	38.40	-3.60	27.80	75.20	12.00
FOREIGN	-1.70	-1.60	3.70	20.10	3.60							85.10	45.50	20.00	60.60	75.00	51.90	132.60	75.50
CENTRAL BANK'S CLAIM ON GOVT.	3.80	5.80	5.80	5.70	20.50	20.20	30.30	72.30	46.70	83.60	75.90	118.40	126.00	122.80	110.20	134.60	131.70	119.20	110.10
MONEY SUPPLY % CHANGE	176.50	208.90	236.30	245.30	301.10	343.50	389.80	431.30	480.90	614.70	694.50	790.10	840.50	931.20	1002.00	1093.40	1194.90	1366.00	1517.00
CONSUMER PRICES (INDEX) % CHANGE	15.43	18.36	13.12	3.81	22.75	14.08	13.48	10.65	11.50	27.82	12.98	13.77	6.38	10.79	7.60	9.12	9.28	14.32	11.05
EXCHANGE RATE BARRADOS \$ PER US\$	18.25	19.61	21.94	25.64	35.62	42.85	44.99	48.74	53.38	60.39	69.11	79.18	87.37	91.92	96.23	100.00	101.33	104.69	109.77
CURRENT ACCOUNT /2	7.29	7.45	11.88	16.86	38.92	20.30	4.99	8.34	9.48	13.17	14.44	14.57	10.34	5.21	4.69	3.92	1.33	3.32	4.85
ROP OVERALL BAL. /2	2.00	1.96	1.92	1.96	2.05	2.02	2.00	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01
CURRENT ACCOUNT /2	-41.80	-35.10	-43.30	-52.30	-47.80	-41.30	-64.20	-51.40	-31.30	-34.20	-25.70	-118.60	-35.80	-42.00	19.10	40.30	-15.80	-53.40	2.20
ROP OVERALL BAL. /2	-5.90	11.70	3.10	-0.40	-6.70	8.70	-12.00	-8.30	21.10	4.80	17.60	21.20	1.80	-10.70	-13.60	22.30	20.10	6.20	38.00

NOTES

/1 MILLIONS OF BARRADOS \$ UNLESS OTHERWISE SPECIFIED

/2 MILLIONS OF US\$

SOURCE : INTERNATIONAL FINANCIAL STATISTICS YEAR BOOK 1991

APPENDIX 5

ECONOMIC INDICATORS JAMAICA /1

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	
GROSS DOMESTIC PRODUCT	1171.00	1282.00	1439.00	1720.00	2159.00	2601.00	2702.00	2960.00	3749.00	4293.00	4773.00	5307.00	5887.00	6993.00	9558.00	11203.00	13389.00	16002.00	18748.00	22315.00	29822.70	42367.00	
GOVERNMENT EXPENDITURE % OF GDP	236.30 20.18	287.10 22.39	333.50 23.18	416.90 24.24	626.90 29.04	823.20 31.65	1012.60 37.48	1103.50 37.28	1428.40 38.10	1724.10 40.18	2164.90 45.36	2487.70 46.88	2417.50 41.21	2805.80 40.12	3642.70 38.11	4727.40 42.20	4869.30 36.37	5022.10 31.38	7208.00 38.45	7653.90 34.30	9579.20 32.12	13048.20 30.80	
GOVERNMENT REVENUE % OF GDP	204.60 17.47	239.30 18.67	274.10 19.05	326.40 18.98	459.00 21.26	634.10 24.38	616.30 22.81	733.30 24.77	854.10 22.78	1128.60 26.29	1221.80 25.60	1661.70 31.31	1576.40 26.87	1844.40 26.37	2334.10 24.42	2708.30 24.17	3700.50 27.64	5385.70 33.66	6028.20 32.15	8308.80 37.23	9630.40 32.29	14496.20 34.22	
GOVERNMENT DEFICIT % OF GDP	-31.70 -2.71	-47.80 -3.73	-59.40 -4.13	-90.50 -5.26	-167.90 -7.78	-189.10 -7.27	-396.30 -14.67	-370.20 -12.51	-574.30 -15.32	-595.50 -13.87	-943.10 -19.76	-826.00 -15.56	-841.10 -14.34	-961.40 -13.75	-1308.80 -13.69	-2019.10 -18.02	-1168.80 -8.73	363.60 2.27	-1179.80 -6.29	654.90 2.93	51.20 0.17	1448.00 3.42	
GOV. FINANCING																							
DOMESTIC	172.10	210.00	257.40	308.40	388.10	481.00	669.00	1323.20	1642.80	1903.10	3209.60	3651.20	4398.70	6006.10	6795.10	5993.10	6468.40	8047.40	9403.60	9140.20	9317.40	9819.00	
FOREIGN	103.20	110.00	127.60	177.30	272.30	381.70	444.00	484.70	1185.20	1378.70	1594.60	1942.30	2533.90	-	1776.70	1841.30	2224.90	2533.80	2702.90	2711.30	2811.70	2570.90	
ROI CLAIMS ON GOV.	7.00	11.00	33.00	51.00	72.00	204.00	505.00	469.00	616.00	1347.00	1539.00	1989.00	2236.00	3164.00	3919.00	3598.00	4294.00	2829.00	2940.00	3343.00	3316.00		
ROI'S LOSSES	-	-	-	-	-	-	-	-	63.49	426.94	615.08	540.20	821.05	1248.51	1687.18	1470.45	1099.07	1736.98	1301.68	1340.80	2782.50		
MONEY SUPPLY (M2) % CHANGE	379.00 -	471.00 24.27	528.00 12.10	578.00 9.47	687.00 18.86	828.00 20.52	897.00 8.33	1044.00 16.39	1235.00 18.30	1422.00 15.14	1712.00 20.39	2197.00 28.33	2773.00 26.22	3527.00 27.19	4197.00 19.00	5238.00 24.80	6687.00 27.66	7527.00 12.56	9958.00 32.30	10612.00 6.57	12891.00 21.48	19516.00 51.39	
CONSUMER PRICES (INDX) % CHANGE	8.80 5.68	9.30 5.68	9.80 5.38	11.50 17.35	14.60 26.96	17.20 17.81	18.80 9.30	21.00 11.70	28.30 34.76	36.50 28.98	46.40 27.12	52.40 12.93	55.80 6.49	62.30 11.65	79.60 27.77	100.00 25.63	115.10 15.10	122.80 6.69	132.90 8.22	152.00 14.37	185.30 21.91	280.00 51.11	
EXCHANGE RATE (Per. Avg.) J\$ PER US\$	0.83	0.83	0.77	0.91	0.91	0.91	0.91	0.91	1.41	1.76	1.78	1.78	1.78	1.93	3.94	5.56	5.48	5.49	5.49	5.74	7.18	12.12	
CURRENT ACCOUNT /2	-152.90	-172.20	-198.70	-247.60	-91.90	-282.80	-302.60	-42.10	-50.00	-138.90	-168.00	-336.80	-408.50	-358.60	-335.20	-304.40	-40.20	-137.00	30.20	-295.50			
ROP OVERALL BAL. /2	14.80	20.20	-31.10	-30.30	56.00	-99.60	-223.10	-69.90	-156.60	-151.00	-86.50	-288.50	-123.50	-361.90	151.80	-60.00	-65.80	299.00	74.20	-195.00			
COM. BK. CLAIMS (PVT. SECT)	280.00	326.00	416.00	471.00	549.00	641.00	622.00	544.00	654.00	775.00	904.00	1231.00	1683.00	2123.00	2483.00	2602.00	3109.00	4046.00	5549.00	7290.00	8583.00		
COMPENSATION TO EMPL. % CHANGE				931.00 25.59	1169.20 23.95	1449.20 5.64	1530.98 7.98	1653.10 17.54	1942.99 12.18	2179.66 11.42	2428.51 13.19	2748.73 14.67	3151.84 12.79	3554.93 21.21	4308.88 13.51	4891.21 14.12	5581.96 19.29	6658.65 19.30	7943.61				

NOTES

1/ DATA IN MILLIONS OF J\$ UNLESS OTHERWISE SPECIFIED

2/ IN MILLION OF US\$

APPENDIX # 6

CERTIFICATES OF DEPOSITS OPERATIONS

DATE OF AUCTION	AMOUNT OFFERED	J\$000		CLEARING RATE (%)	MATURITY
		APPLICATIONS RECEIVED	AMOUNT ALLOCATED		
16/12/86 /a	OPEN	519815.0	519815.0	27.0	6 MONTHS
18/12/87 /b	OPEN	293113.0	293113.0	20.0	3 "
6/12/88 /c	700000.0	768453.0	700000.0	17.7	3 "
11/12/89 /d	400000.0	269865.0	269865.0	26.0	6 "
8/11/90 /e	400000.0	374600.0	374600.0	32.0	214 DAYS
20/12/91 /f	450000	254787.0	215307.0	48.0	112 DAYS

NOTES

- a\ TOTAL # OF AUCTIONS IN 1987 = 14
- b\ TOTAL # OF AUCTIONS IN 1987 = 11
- c\ TOTAL # OF AUCTIONS IN 1988 = 10
- d\ TOTAL # OF AUCTIONS IN 1989 = 22
- e\ TOTAL # OF AUCTIONS IN 1990 = 16
- f\ TOTAL # OF AUCTIONS IN 1991 = 19

SOURCE: STATISTICAL DIGEST BANK OF JAMAICA

BIBLIOGRAPHY

- Bank of Jamaica: Bank of Jamaica's Annual Report -
Several years
- Bank of Jamaica Statistical Digest
- The Bank of Jamaica Act
- The Central Bank and the Jamaican
Economy 1960 - 1985, Kingston,
Bank of Jamaica's 25 Anniversary, 1985
- Board of Governors of The Federal Reserve System, Purposes
Washington, D.C. 20551 and Functions
- Bullock, Colin Submission to the "Coke Committee" on
the Role of the Bank of Jamaica,
mimeo - unpublished, September 1992.
- Downes, Patrick The Evolving Role of Central
Vaez-Zadeh, Reza Banks
- Farrell, Terrence W. Central Banking in a Developing Economy.
A Study of Trinidad & Tobago
1964-1989.
- International Monetary Fund International Financial Statistics
Year Book 1991
- Liburd, E. Eustace Aspects of Multinational Central Banking
in the OECS
- Lindgren, Carl-Johan. A Strategy for the Elimination
Hardy, Daniel. Quasi-Fiscal Losses of the
Bank of Jamaica
IMF, May 14, 1992
- The Deutsche Bundesbank The Deutsche Bundesbank - Its Monetary
Special Series No. 7 Policy, Instruments
and Functions
- The World Bank The Caribbean Common Market, Policies
March 9, 1990 Policies and Regional Integration in
in the 1990's.

Volcker, Paul A.
Mancera, Miguel
Godeaux, Jean

Perspectives on the Role of a Central
Bank

Worrell, Delisle

Making Caribbean Central Banks more
Independent, Social and Economic Studies
40.4 (1991)