

**The Experience  
of Central Banking  
With Special Reference  
to the Caribbean**

**edited by Ramesh Ramsaran**

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Regional Programme of Monetary Studies

**The Experience of Central Banking**  
**With Special Reference to the Caribbean**

Edited by

**Ramesh F. Ramsaran**

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# Contents

	<b>Page</b>
• Changing Perspectives on Central Banking . . . . .	1
<i>Ramesh Ramsaran</i>	
• Issues in Caribbean Central Banking . . . . .	8
<i>Terrence W. Farrell</i>	
• Enhancing the Independence of the Central Banks in the Caribbean Region . . . . .	25
<i>Frank Rampersad</i>	
• Aspects of Multinational Central Banking in the OECS . . . . .	47
<i>E. Eustace Liburd</i>	
• Issues Relating to the Central Bank's Autonomy in Jamaica . . . . .	58
<i>Novelette Davis-Panton</i>	
• Performance Evaluation and Accountability of Central Banks . . . . .	87
<i>Compton Bourne</i>	
• Financial Accounting for Central Banks — with Special Reference to CARICOM . . . . .	101
<i>Courtney N. Blackman</i>	
• Financial System Reforms and Regulations . . . . .	115
<i>Sergio Ghigliazza and Flavia Rodriguez</i>	
• Central Bank Independence and Economic Performance . . . . .	138
<i>Patricia S. Pollard</i>	
• Notes on Contributors . . . . .	166

# Introduction

This volume brings together a collection of papers on central banking presented at different fora over the last few years. A number of them are revised versions of presentations made at the 25th Annual Conference of the Regional Programme of Monetary Studies held in Port of Spain in 1993. Two of the papers do not bear directly on the central banking experience in the Caribbean, but are included to put the Caribbean papers in a broader setting. The contribution by Patricia S. Pollard was first published in the Federal Reserve Bank of St. Louis *Review* and discusses the question of central bank independence in the developed countries. The paper by Sergio Ghigliazza and Flavia Rodriguez provides useful insights into the direction of financial reforms in Latin America and the problems being faced by central banks in the context of stabilisation programmes.

The other papers in the volume focus on various aspects of central banking experience in the Caribbean. The first paper, by Ramesh Ramsaran, surveys some of the perceptions underlying the role of central banks as observers and reflects on the performance of these institutions in good and bad times. Dr Terrence Farrell provides an overview of the kind of issues now facing central banks in a rapidly changing financial environment and points to the role they must increasingly seek to play as we move from direct controls to market-based instruments. Mr Frank Rampersad concentrates his discussion on the political, economic and international constraints in which central banks must now operate. Special attention is given to the implications stemming from the increasingly active role of the international financial agencies in domestic policy formulation. Eustace Liburd's piece is a brief description of the arrangements surrounding the operations of the Eastern Caribbean Central Bank, which is seen as a useful model for countries reviewing their institutional structure. Novelette Davis-Panton discusses the range of developments which have led to the questions now surrounding the role and functions of the Bank of Jamaica. Compton Bourne's paper focusses on caveats and principles which should be taken into account in evaluating the performance of central banks. Not all the variables, he argues, which we often assume are under the control of the central bank are in fact so. Courtney Blackman in his own inimitable way exposes some of the

**myths and fallacies in central banks' accounting practices in small dependent economies and advances some proposals for new accounting rules.**

**Ramesh Ramsaran  
Coordinator, RPMS**

# Changing Perspectives on Central Banking

**Ramesh Ramsaran**

Both in developed and developing countries, the role, functions and performance of central banks have come under increasing scrutiny in recent years. As a management or development instrument great faith was placed in this institution as a key government agency in the state's desire to influence economic activity. Since central bank models, however, differ widely from one country to another, the concerns raised are, not surprisingly, not all of the same genre.

Central banks are not private institutions, even though they may have inherited functions once carried out by entities not owned by the government. While today they render a range of services on behalf of the government, the fact that they are generally the sole issuer of currency (fiat money) puts them in a unique position in the financial system. This power can be used to finance government expenditure, and since public spending affects not only the level of economic activity, but other critical variables, the relationship between central banks and their owners (governments) has become a very sensitive question. Possessing the trappings of political independence does not insulate countries from the pressure of irresponsible or incompetent decisions.

The degree of independence varies from one central bank to another, but 'independence' need not be synonymous with effectiveness. There has been considerable confusion in evaluating central banks, and part of this stems from the ambiguity inherent in the concept of 'independence'. Very often this is seen purely in legislative terms. The view is not infrequently put forward that if the Governor and/or the Directors of the bank, for example, were to be appointed through Parliament rather than by the Prime Minister or Minister of Finance, this in itself would insulate these officials from political pressure, and the bank would then be able to render more objective decisions. But is the question as simple as this? Is the security of the Governor and/or the Board sufficient ground to expect independent and professional judgements related to the issues of the day? There are

a variety of ways through which pressure can be exerted, and it is difficult to separate this possibility from issues stemming from institutional culture, the political and social context, personalities, etc. It is possible to have legislative independence and at the same time have central bank officials who would have little difficulty accommodating the credit demands of the government. It is also possible to have a situation where officials are appointed by the government, but because of their competence, their stature and their professionalism are able to take independent positions on many matters when the occasion demands, or to influence decisions in sensible directions.

A related question, which has not received a great deal of attention in the discussion, is the relationship of the central bank to the government. Much of the focus has been on the financing of the government deficits. But the central bank is a government agency, and, as such, can it consistently distance itself from government policies? What kind of signal would it send by open dissent? When should it speak openly, and when should it stay silent? Whatever the legislative reality, the central bank is a key institution in the government arsenal of instruments directed towards management and development. Can the central bank be allowed to pursue policies, or adopt positions, inconsistent with the objectives of the government of the day?

There is a widely held view that governments could be helped greatly in the task of economic management if the central bank were allowed to render independent advice without fear of victimisation of senior officials. This assumes, of course, that the central bank has the capacity and credibility to make such judgements. It assumes also that the organisation is not used for patronage, and it has the skill, the technology, the information base and the internal strength to produce well founded advice, even if it goes against the grain of current economic and political thinking. Ideally, what is desired is a framework for the central bank to support government objective goals without compromising its integrity, but this has to be the result of a deliberate policy, patiently and consciously developed over time, as part of the institutional development process.

Strangely, the evaluation of many central banks has taken place within an assumption that the central bank has a lever that can be used to manipulate all areas of the economy in the desired direction. In this setting it is easy to blame a central bank for almost anything. While

clearly this should not be the case, at the same time there are certain legitimate expectations one would wish to associate with the role of a central bank. It should be able to appreciate the nature of the economic circumstances in which the financial system is operating and be able to devise safeguards to help in the growth and development of that system. It must have a vision of what it wants of the system and where it wants it to go. It must be able to anticipate problems and take action to deal with them. Its intelligence-gathering must be of the highest calibre. It must be able to inspire confidence by dealing fairly with all financial institutions and by operating with updated regulations. It must be at the forefront of efforts to develop local money and capital markets. It must help government in developing and formulating economic policies and in providing guidance through rough times. There are areas where it must lead. That many central banks have not performed in this way is testimony to the way central banks view themselves and the re-active role developed over time. It is because of a policy vacuum in many cases that the international financial institutions have been able to move so easily into the policy arena of a large number of countries which now make little pretence that they are doing any thinking of their own.

Some of the difficulties have arisen, not because of the pressure put on central banks to print money to finance government expenditures, but because of central banks' apparent lack of effectiveness in the context of changing money markets, e.g., the growth in the range of financial institutions, the decline of commercial banks *vis-à-vis* other financial institutions, development of new types of securities, liberalisation of financial markets, international capital mobility, etc. While monetary policy can still influence the economy, financial market changes may call for new approaches and even new instruments. But one gets the feeling that the issues that have arisen not only concern the effectiveness of monetary policy, but the orientation, functions and even the need for central banks in the context of the global promulgation of the policies adopted by the international aid agencies.

The functions given to central banks in the Caribbean differ very little in the respective legislations:

1. For the Bank of Jamaica its main functions were:
  - a) to issue and redeem notes and coins;

- b) to keep and administer the external reserves of Jamaica;
  - c) to influence the volume and conditions of supply of credit so as to promote the fullest expansion in production, trade and employment consistent with the maintenance of monetary stability in Jamaica and the external value of the currency;
  - d) to foster the development of money and capital markets in Jamaica; and
  - e) to act as banker to the Government.
2. For the Central Bank of Trinidad and Tobago the functions included:
- a) exclusive right to issue and redeem currency notes and coins in Trinidad and Tobago;
  - b) acting as banker for, and rendering economic, financial and monetary advice to the Government;
  - c) maintaining, influencing and regulating the volume and conditions of supply of credit and currency in the best interest of the economic life of Trinidad and Tobago;
  - d) maintaining monetary stability, controlling and protecting the external value of the monetary unit, administering external monetary reserves, and encouraging expansion in the general level of production, trade and employment; and
  - e) continuously undertaking economic, financial and monetary research.
3. For the Central Bank of Barbados its functions were:
- a) to regulate the issue, supply, availability and international exchange of money;
  - b) to promote monetary stability;
  - c) to promote a sound financial structure;
  - d) to foster the development of money and capital markets in Barbados; and

- e) to foster credit and exchange conditions conducive to the orderly and sustained economic development of Barbados.

In the case of the Bank of Guyana, the Bank is required, within the context of the economic policy of the Government, to be “guided in all its actions by the objectives of fostering monetary stability and promoting credit and exchange conditions conducive to the growth of the economy of Guyana.”

The Central Bank of The Bahamas is required:

- a) to promote and maintain monetary stability and credit and balance of payments conditions conducive to the orderly development of the economy;
- b) in collaboration with the financial institutions, to promote and maintain adequate banking services and high standards of conduct and management therein; and
- c) to advise the Minister on any matter of a financial or monetary nature referred by him to the Bank for its advice.

In all cases maintaining monetary stability was seen as a major function of central banks. At the same time, it was widely accepted that these institutions, as the pinnacle of the financial system, had to play a developmental role while safeguarding the value of the currency of which they were the sole issuer. There was also a question of the extent to which a central bank could maintain ‘monetary stability’ given the openness of Caribbean economies and the heavy influence of external factors. There was also a question of whether they could do so in the absence of fiscal discipline.

The abuse of the printing press by some governments, indifference to central bank advice, significant devaluations of certain currencies, exceptional rates of inflation, the dissipation of foreign reserves, the collapse of private financial institutions and ambiguous interest rate policies have raised anew a whole host of questions about the role and functions of central banks in the region. A major question is whether some of the traditional functions cannot be performed in a less costly way or by private institutions. There have been suggestions in certain countries of a return to some form of a currency board system which would remove the discretion over the money supply. The link to a foreign currency would be akin to link to a commodity (e.g., gold).

The local currency supply would move with changes in the level of foreign exchange. In the past it was argued that this lack of flexibility militated against development. It is now being argued that far from helping development, in some cases it has wrecked the external and internal value of the currency, created domestic instability and induced an environment inimical to savings and investment.

Questions about the effectiveness of central banks are not confined to developing countries. At any one time these institutions have to address a variety of objectives — growth, employment, stable exchange rates, price stability, etc. Not all use the same channels in implementing monetary policy, and given the variations in outcomes there is no consensus on the most appropriate approach or procedures. Some banks target interest rates while others operate through monetary aggregates. Given the perception of central banks as the ‘chief’ financial institution it is difficult for such institutions not to lead, or at least provide signals that they understand the difficulty and they know what they are doing. There are several questions here. One is, are they always in a position to provide this leadership, even when their constitutions allow them to do so? Even when the information is available for decision-making, is the competence always there? A second issue relates to the incompatibility between objectives. For example, pursuit of higher levels of employment or growth may not be always consistent with price stability. What helps complicate the situation is that none of these objectives are associated with simple functions. For example, inflation rates do not rely solely on the growth of the money supply. Foreign prices and exchange rates can have a significant impact on domestic prices. The disenchantment surrounding a large number of central banks stems from the fact that often all the major macro-economic variables can be moving in the wrong direction at the same time, notwithstanding anything that the central bank may be doing. Fortunately, or unfortunately, the central bank often has to take the blows for the failure of general economic policies or the impact of external developments on the domestic economy for which mere changes in the money supply may be an inadequate response.

Many of today’s central banks were conceived in an atmosphere where controls were widely accepted, even though it was recognised that most of the instruments enshrined in their constitutions were

unusable. History has not yet ended. Market-based instruments are fast replacing the old arsenal in cases where markets barely exist. The situation is complicated by the adoption of policies based on theories with dubious assumptions meeting little challenge from officials placing high priority on loans to survive perennial crises. The exercise facing many governments revolves not simply around a rethinking of the central bank, but the whole philosophy of development, an appropriate strategy and the role of governance in the development process. Laws cannot serve as a basis for development when governments themselves have no respect for them and subvert them without scruple. Even when institutions have good legal structures, poor appointments in critical positions do not help in the creation of practices which could define the profile and stature of the organisation.

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# Issues in Caribbean Central Banking

Terrence W. Farrell

## INTRODUCTION

Central banks in the English-speaking Caribbean region are relatively recent, ranging in age from 10 to about 30 years.<sup>1</sup> Nevertheless, the regional central banks have had a variety of relevant experiences which can contribute to the global corpus of knowledge and experience in central banking. The economies of the English-speaking Caribbean range in living standards from the middle-income countries of The Bahamas, Barbados and Trinidad and Tobago, to IDA-level countries in Guyana and the eastern Caribbean states. In all of these countries however, the question of the pace of growth and development remains pointed, in the face of persistent high levels of unemployment and underemployment and unequal distributions of income.

All the economies are highly open, but with a variety of staple sectors — petroleum, bauxite, sugar, bananas, tourism. The dependence of these economies on these agricultural or mineral staples, and tourism, and their inability to exercise any market power, makes them highly vulnerable to the vicissitudes of the international markets for these products and services. As such the Caribbean economies have experienced both boom and recessionary conditions which their central banks have had to assist in managing. The governments of the English-speaking Caribbean have also historically been heavily involved in their economies. Degrees of intervention have varied from state dominance in Guyana, to significant roles in Jamaica and Trinidad and Tobago, to somewhat less intrusion in Barbados and the OECS. As an agency of state, central banks in the Caribbean have often been in the vanguard of state intervention in the financial sectors of their economies. However, state intervention in these economies has declined over the last several years.

The central banks of the English-speaking Caribbean were all established by statute. Their functions include (i) acting as banker to

the government and to the commercial banks and non-bank financial institutions, (ii) managing the internal debt, (iii) advising governments on monetary, financial and economic matters, (iv) administering exchange controls on behalf of the governments, and (v) conducting bank supervision on behalf of the government. Generally, the institutional model for the central banks was the Bank of England, although important institutional differences were initiated and some of the characteristics of the currency boards, which were the forerunners of the central banks, were retained. For example, except for the Bank of Jamaica in the early years, the distinction between an issue department and a banking department was not instituted in Caribbean central banks and indeed the Bank of Jamaica abolished this distinction in 1973. However, unlike the Bank of England, the Caribbean central banks were given the power to conduct monetary policy and to implement that policy without obligatory reference to or the permission of the Ministry of Finance. Like the currency boards however, the newly-formed central banks all had a (partial) foreign exchange cover backing for the currency issue.

There is now a fairly sizeable literature on central banking in the English-speaking Caribbean. There was an early survey by Thomas (1972), which had been preceded by analyses of the early experiences of the Bank of Jamaica by Best and McIntyre (1961) and Blackman (1969). William Demas (1974) addressed the first decade of central banking in Trinidad and Tobago, while G. Arthur Brown (1983) did the same for Barbados. Much of Wendell Maclean's monograph (1975) deals with the East Caribbean Currency Authority. More recently, there have been studies by Farrell (1990) on Trinidad and Tobago, Bank of Jamaica (1985) on Jamaica, and Danns (1990) on Guyana, while contributions by Blackman (1989), Rampersad (1988), Bobb (1986) and Farrell (1991) have sought to address one or other aspect of the operations of the region's central banks.

It is not possible in a paper such as this to treat all the various aspects of Caribbean central banking, nor to attempt even a comparative analysis of the operations of the central banks of the area. Instead we will limit ourselves to addressing four key issues, viz. (1) growth and development versus stability; (2) instruments of monetary control; (3) relationships with governments, and (4) the role as lender of last resort. In addition, two broad historical periods may be identified — a foundation period from 1960 to about 1975 and the period of

stabilisation and adjustment from 1976 to the present.<sup>2</sup> A third period is now emerging based on the liberalisation of trade and finance, closer regional economic cooperation, a progressive diminution in the role of the state, and new theories of management. The paper concentrates on the experiences of the central banks of Trinidad and Tobago, Jamaica and Barbados, which have been richer in relation to the issues identified above, but making, where appropriate and relevant, reference to the experiences of the other area central banks. The paper concludes with some speculations on the future of central banking in the Caribbean.

### **GROWTH AND DEVELOPMENT VERSUS STABILITY**

When Caribbean central banks were being formed in the 1960s and 1970s, the dominant paradigm in mainstream economics was the neo-Keynesian model, extended in the area of development economics by the Harrod-Domar growth model.<sup>3</sup> This corpus of views prescribed an active role for the monetary authorities in macro-economic management, and, in the monetary sphere, emphasised low interest rates to stimulate investment and economic growth. A concomitant of the need to stimulate investment was the perceived need to curb consumption, and this was to be accomplished by credit ceilings or selective credit controls directed at consumption spending.

The young central banks of the Caribbean were therefore little concerned with the issue of price stability, or, more broadly, monetary stability. The actual experience of inflation in the English-speaking Caribbean in the 1950s and 1960s was quite favourable. In Trinidad and Tobago for example, inflation averaged 2.7 per cent per annum between 1955 and 1963, and 3.9 per cent per annum between 1964 and 1972. The higher average rate of inflation in the latter period was attributable almost entirely to the price level effects of the 1967 sterling devaluation. This inflation performance, which was in stark contrast to the Latin American experience even at that time, was due to the low rates of inflation prevailing in the industrial countries which were the major source of Caribbean imports, and to the fixed peg to sterling, and free and full convertibility of the local currencies into sterling. These conditions made the money supply dependent on the balance of payments, in that excess domestic money creation would result in an outflow of foreign exchange and a subsequent correction of the money supply along the lines of the Classical price-specie-flow mechanism.<sup>4</sup>

The shift to the monetarist paradigm in the industrial countries in the 1970s, and the consequential focus of their central banks on monetary targets and indicators, did not significantly impact on the thinking of central bankers in the English-speaking Caribbean. It is true that inflation accelerated somewhat in the post-1973 period, but this was attributable to supply-side shocks (higher oil prices, fiscal actions, mainly increases in indirect taxation), rather than to excessive growth of the money supply. In any event, inflation was by any standards moderate. For example, in the period 1973-1982, inflation in Trinidad and Tobago averaged 14.4 per cent per annum.

Monetary stability did become a matter of some concern to the monetary authorities in the mid-1970s, but this was due to the breakdown of the Bretton Woods system and the dismantling of the Sterling Area, which initiated the period of flexible and highly volatile exchange rates. Between 1972 and 1976, all the Caribbean central banks shifted from a sterling peg to a US dollar peg. However, for countries dependent on non-dollar markets for their exports of sugar, bananas and other agricultural products, the volatility of exchange rates increased their vulnerability to fluctuations in export prices.

Another important factor shaping monetary policy in this period was the recessionary conditions in the world economy. Still dominated by neo-Keynesian thinking, the monetary authorities moved, at first slowly, to attempt fiscal stimulation of their flagging economies, perhaps failing to recognise that structural shifts were in train in the world economy, and in the markets for their major exports. The institution of exchange controls meant that the adjustment process did not work quite as smoothly and automatically to engender monetary correction in the face of developments in the balance of payments. There was also increased resort to external financing in order to maintain consumption and growth, which led to the accumulation of external debt and the current debt crisis.

If, therefore, monetary stability was not a primary objective of policy for Caribbean central banks in the 1960s and the 1970s for the reasons outlined above, what then was their primary concern? The statutes of all these central banks stated as one of their functions the pursuit of some objective relating to economic growth and development, and in fact the central banks focussed much of their attention on growth and development. This attention took two forms. First,

monetary policy was conducted so as to try to keep interest rates low and to direct credit more toward production than consumption. Whether these were valid objectives and the instruments chosen were appropriate is discussed in the next section. Second, several of the central banks in the English-speaking Caribbean played a leading role in the creation of institutions to foster economic development. As such, central banks fostered stock exchanges, unit trusts, export credit insurance, and secondary markets for mortgages and government securities, in some instances either directly subsidising these activities or operating them as subsidiaries of the central bank.

### INSTRUMENTS OF MONETARY CONTROL

Caribbean central banks were invested by their enabling legislation with the tools or instruments of monetary management as practised in the United Kingdom, viz., open market operations, reserve requirement or liquid asset ratio variations, rediscount rate, and selective credit controls. They were also supposed to be able to exercise "moral suasion", a peculiarly British technique whereby the quiet, discreet insistence of the central banks that the commercial banks follow or desist from a particular course of action would produce the desired results without employing the sanction of other statutory instruments of control.

The framers of the enabling statutes of Caribbean central banks were, however, conscious of the practical limitations that these institutions were likely to face given the structures of the economies and the financial systems. It was clear for example, that open market operations could not be conducted in circumstances where financial markets were rudimentary. Indeed these central banks took as part of their primary initial responsibilities the creation of markets for government short- and long-term securities. Selective credit controls were not in great favour with institutions like the International Monetary Fund, but found a place in the various pieces of legislation nonetheless. Caribbean central banks also found it expedient to acquire other direct instruments of control, including the power to fix interest rates and, of course, there were exchange controls.

In the early years, Caribbean central banks used rediscount rate changes as the main instrument of policy. At that time the countries were part of the Sterling Area and, as such, exchange controls were

ineffective and exchange rate changes were beyond the pale of appropriate policy. Yet the new central banks felt that there was a need to try to insulate developments in their economies as far as possible from external monetary influences. High interest rates in Britain should not necessarily cause high interest rates in the Caribbean countries, which wanted to keep interest rates low as a spur to growth and development. In the absence of effective exchange controls however, variations in the rediscount rate could not have the desired insulating effect.<sup>5</sup>

The circumstances of the post-1973 world of higher oil prices and floating exchange rates forced Caribbean central banks to deploy other instruments of policy. Increasingly active use began to be made of variations in reserve requirements or liquid assets ratios in an attempt to influence credit conditions. With their withdrawal from the Sterling Area and the imposition of exchange controls against sterling, exchange control became a more potent aid to effective monetary management. Direct credit and interest rate controls were more frequently used. Restrictions on borrowing from the domestic banking system by foreign corporations were imposed, consumer instalment credit was regulated. Interest rates on mortgage lending were fixed in Barbados. In Trinidad and Tobago in 1978, the Central Bank was given the power through the Government to fix deposit and lending interest rates, but this power has never been exercised.

In the event, the combination of monetary measures and exchange controls as applied proved insufficient to protect the balance of payments of the Caribbean countries from burgeoning fiscal deficits, financed ultimately by money creation. As a result, the exchange rate, which had been held almost sacred and as untouchable in the pantheon of instruments, began to be used in those countries with the most serious imbalances.

In addition to several formal devaluations beginning in 1978, Jamaica has experimented with a range of exchange rate regimes — dual exchange rates, mini-devaluations, a formal parallel market, an auction system, and the current flexible exchange rate. Similarly, the Guyana monetary authorities were unable to maintain a fixed rate regime and have also moved to a flexible exchange rate regime. In both Jamaica and Guyana, there has been substantial depreciation of the currencies over the last few years. Trinidad and Tobago devalued

twice, in 1985 and 1988, and experimented briefly with a dual exchange rate regime between December 1985 and January 1987. In April 1993, Trinidad and Tobago adopted a floating exchange rate regime, but the rate has been quite stable since the initial depreciation.

The shifts which have occurred in the use of various instruments of policy over the last 15 years have been due in part to changed internal and external environments, but also to the growing influence over macro-economic policy in the Caribbean by the IMF, the World Bank and the Inter-American Development Bank. Generally, these institutions have discouraged the use of direct control measures such as selective credit controls and, particularly, exchange controls, and have encouraged the use of the exchange rate and, curiously, open market operations, in circumstances which still do not permit the effective use of this technique. As financial markets mature and deepen however, the scope and effectiveness of open market operations will certainly increase. Variation in reserve requirements or liquid assets ratios still remains the most effective instrument of monetary control in these economies, although this instrument has important limitations.

A second point is that over the last 15 years, in the face of a difficult external environment and, consequently, difficult internal economic circumstances, the concern of the monetary authorities has shifted progressively from growth and development to stabilisation and adjustment. Central banks, therefore, abandoned their concern with low interest rates and placed a great deal less emphasis on selective credit controls, and have focussed their energies on leaning against the hurricane of poorly controlled fiscal deficits, and managing the external debt and the foreign exchange reserves on a day-to-day basis.

### **RELATIONSHIPS WITH GOVERNMENTS**

Most central bankers would readily acknowledge the primacy of the government and its economic policies over the policies of the central bank, since at the end of the day the government is accountable to the electorate for the conduct and the effect of all economic policy. As Fazio has said succinctly, the "central bank must coordinate its action and its economic policy interventions in the general context of the state's economic policy".<sup>6</sup> G. Arthur Brown, twice governor of the

Bank of Jamaica, has pointed out of a central bank governor that:

By his training, knowledge and experience, he must show the consequences of various courses of action. He must be free to propose alternatives and spell out the consequences. In operating in this area, the highest standards of discretion and secrecy must obviously be observed. The Governor cannot resort to writing letters to the press or making speeches against government policies. His obligation is to tender advice forcefully but objectively. Like the auctioneer, he will advise once, twice, thrice. But if having done this, the Prime Minister says, 'I have heard you and understand you, but the Government does not agree', he must then see how best the government's decision can be carried out.<sup>7</sup>

Though this basic principle would find ready acceptance, the dynamics of the relationship between central banks and governments have to be understood in the context of the nature of the state, and in the personalities and powers of persuasion of the governors or presidents of the central bank. For example, the extraordinary power of the Bundesbank can only be appreciated in the light of German constitutional history after the experiences of the First and Second World Wars. Recent assaults on the independence of the Bundesbank also have to be understood in the context of the goals of the German state on the question of unification and Germany's role in a European economy.

In order to appreciate the relationship between Caribbean central banks and their governments, it is necessary therefore to have some kind of perspective on the functioning of the Caribbean state. First, because the societies and polities are small, the acknowledgement and overt exercise of power is paramount. It is difficult to diffuse, decentralise or share power since this will reduce the status and authority of those exercising power. Second, patronage is perceived to be important to the retention of power. It is important, therefore, for politicians to retain as much scope for patronage as possible. This involves the ability to secure short-term employment, approvals of one kind or another, appointments to public office, or awards or honours. In a word, the Caribbean state may be described as "proprietary".

Central banks are not usually instruments of patronage, even though they may be seen as powerful in their own right. However, with the exchange control and bank regulation functions vested in them, the scope for patronage becomes larger and especially important to the propertied or business classes in the society who are more directly affected by such regulations. Exchange control did not become a major issue until the mid-1970s. The function was delegated to the central banks and could not be retroceded easily. The central banks of the region therefore occasionally came under severe political pressure in respect of their exercise of their delegated exchange control authorities. Political pressure was also often brought to bear in the exercise of the bank supervision function, particularly as regards the issue of licences for the establishment of new financial institutions, or, later on, actions to intervene and close down particular institutions.

The period up to the mid-1970s presented few opportunities for conflict between the central banks and their governments. Central bank governors acquired considerable stature within their local communities and regionally, and by and large served for long periods. In Trinidad and Tobago, Victor Bruce served as Deputy Governor for 3 years and then assumed the governorship and served for some 15 years. In Barbados, Courtney Blackman was the first Governor of the central bank and also served for 15 years. Patrick Matthews in Guyana served for 16 years. Governors maintained good contacts with their central bank colleagues in Latin America and North America through CEMLA, and with those in Europe through the Bank of England and the BIS. Central banking values, norms and attitudes were assimilated and helped to create some distance between the central banks and the mainstream civil service in terms of attitudes and standards of efficiency.

The opportunities for conflict between the central banks and governments arose during the post-1975 period, which was characterised by a focus on stabilisation and adjustment arising from external shocks as well as internal imbalances caused by weak fiscal policy and the inappropriate financing of the consequent deficits. It is this issue more than any other which tests the independence of the central bank and the mettle of its leadership. In the event, all the central banks which were so tested were found wanting. In Jamaica, the statutory limit on central bank financing of government operations was varied upward and put

wholly at the discretion of the Government in order to accommodate and validate excessive central bank financing. The same occurred in Guyana. In Trinidad and Tobago, the statutory limit on short-term advances has been exceeded, as well as the statutory limit on the holding of government securities and the statutory floor on the foreign exchange cover for the currency issue. In Barbados, the Central Bank also financed the Government excessively in 1981 and again more recently.

Why were the leaderships of the region's central banks unable to resist the pressures for excessive government financing? It can be argued that the "proprietary" Caribbean states would have brooked no resistance from the central banks, and the leaders of the central banks, being aware of this and given the limited opportunities for their employment otherwise, might have thought it prudent to concede, whatever their misgivings. The fact is that the legislation governing the central banks of the Caribbean, like those of most other countries, gives the government the power to issue directives to the central bank to give effect to its wishes. It is also true that most central bank governors would wish to spare their governments the embarrassment of dishonouring cheques drawn on their central bank accounts.

There are however, other, perhaps more mundane, but not necessarily mutually exclusive explanations for the observed behaviour. The circumstances of the late 1970s and 1980s were complex and unprecedented in the history of the Caribbean. In the face of the severe external shocks, summed up in sharply declining terms of trade, central banks would have had great sympathy for some attempt to mitigate the worst effects of those shocks by the stimulation of domestic demand, while attempting to protect the balance of payments by tighter exchange controls and/or changes in the exchange rate. They may also have believed that governments would have repaid short-term advances as required by the statute, or stopped issuing securities once these actions were shown to be unsustainable. Having stepped on the slippery slope of money creation, neither the central banks nor the governments found it easy to recover without the assistance of the international financial institutions.

It would be true to say that, over the last decade, Caribbean central banks have lost some of their mystique and much of their lustre. The suspension of the CARICOM Multilateral Clearing Facility in

1983 opened the central banks to censure from their governments, especially in Barbados, whose central bank ended in the invidious position of being owed the largest amount by the CMCF, and compromising its foreign reserves holdings. The severe economic difficulties faced by the region's governments would also have prompted them to look for someone to blame, or at the very least, to question the competence and the quality of the advice proffered by their central banks.<sup>8</sup>

### LENDER OF LAST RESORT

Courtney Blackman has characterised the essence of a central bank as the "infinite liquidity" of its balance sheet. It is this quality which underpins the role of a central bank as lender of last resort. This function, which is often poorly understood, refers to the ability and willingness of a central bank to lend aggressively to commercial banks, on good security, in the context of a liquidity crisis.<sup>9</sup>

In the English-speaking Caribbean, only the central bank of Trinidad and Tobago has had to confront serious problems in its financial system. The problems initially afflicted certain independent non-bank financial institutions, i.e., those not affiliated to a commercial bank, but eventually spread to affect three commercial banks.

The proximate cause of the crisis was the sharp downturn in the economy consequent on the initial fall and then the collapse of oil prices. The more fundamental cause was inadequate management of the financial institutions and the inability of the central bank through the bank supervision process to address the difficulties of particular institutions by appropriate and timely remedial action.

When the first major crisis involving a financial institution broke in 1983, the Central Bank of Trinidad and Tobago was unprepared. It had no previous experience of a run on an institution, there were no Caribbean precedents, and there was no deposit insurance scheme in place. The Central Bank did well to slow the run, but the confidence of the public in the independent non-bank financial institutions had been thoroughly shaken.<sup>10</sup>

The Central Bank had to move on several fronts. First, it had to encourage the Government to amend the legislation to give the Central Bank greater powers to act to protect depositors and to introduce deposit insurance. Second, the Bank had to find a way of providing

liquidity support to the ailing institutions until the legislation was put in place. In the event it took over two years to secure the relevant amendments to the legislation, during which time the ailing institutions had to be supported. Some support from the commercial banks was arranged initially, but this was soon exhausted and the Central Bank was then directly exposed. The ailing institutions had little by way of acceptable security, and the Trinidad and Tobago Central Bank was constrained to discount loans of dubious value.

In 1989 when the Central Bank of Trinidad and Tobago, now with enhanced powers from the 1986 amendments, intervened in a large commercial bank and its subsidiary trust company, it had to undertake a similar bailout. More recently, it assumed control of the largest indigenous bank and effected a merger of the three banks under its control.

In Trinidad and Tobago, deposit insurance is activated only in a liquidation, and therefore once it has been decided, for systemic or other reasons, that an institution will not be liquidated, and there are no other willing buyers of the assets and undertakings, there is really no option but for the Central Bank to fund the rescue.

This role should not be confused with the classic “lender of last resort” role in the context of a liquidity crisis, since, when the central bank has to act to fund a rescue of an insolvent institution, the situation has gone well beyond a liquidity crisis to a solvency crisis threatening the well-being of the entire financial system and with important implications for the fiscal situation.<sup>11</sup> This experience suggests that it may be important to find a way of separating the two roles, perhaps by allowing the Deposit Insurance Fund to be activated in a rescue/recapitalisation and not only in a liquidation.

### **THE FUTURE OF CARIBBEAN CENTRAL BANKING**

There are several factors influencing and shaping the direction and the content of central banking in the English-speaking Caribbean. These are (i) ongoing processes of stabilisation and adjustment under the auspices of the international financial institutions; (ii) the liberalisation of trade and financial services; (iii) the widening and deepening of financial markets in the region; and (iv) impetuses toward greater economic cooperation and integration.

Only with the fullness of time will it become clear the extent to which the Washington-based international financial agencies have

influenced policy formation, and in particular the conduct of central banking in the region. In Jamaica, which has had the longest sustained experience of Fund- and Bank-supported adjustment programmes, there is anecdotal evidence to suggest that the mind-set of the policy makers, including those at the central bank, has conformed to that of the multilateral agencies in major respects. In effect policy makers in the Caribbean have been losing the capacity for independent thought and action. There has been an almost total pre-occupation with stabilisation and adjustment, reflected in the day-to-day management of scarce foreign exchange reserves, and flying visits to Washington to secure or preserve external financing flows, to the virtual exclusion of attention to longer-term development goals and to the quality of economic growth.

The practical effect of the intervention of these agencies has been a demonstrable shift toward the use of market instruments of control and away from direct controls. For example, the use of selective credit controls and credit ceilings has diminished, while greater use is being made of interest rate policy either through so-called 'open market operations' or through active use of the bank or discount rate. The use of exchange controls in support of monetary policy has also declined. Indeed Jamaica has recently repealed its exchange control statute, while Trinidad and Tobago in 1991 removed exchange controls over visible imports which had been in place since 1983, and finally, in April 1993, eliminated all exchange controls in respect of both current and capital transactions. The Central Bank however, remains in control of the operation of the foreign exchange market through its licensing of authorised dealers.

The pace of financial development over the last 20 years has been relatively quick, in that banks have expanded the range of their products and services, including the expansion of merchant banking and off-balance sheet transactions, and, with tax incentives or subsidies from the central banks, new institutions, such as the stock exchanges, secondary mortgage market institutions and unit trusts, have grown up. While the region's financial systems are no longer rudimentary, they are certainly not yet very sophisticated. The developments which have occurred have, however, added to the complexity of monetary policy formation, if only because of the greater variety of interests and players in the financial markets. Central banks have to respond to these

developments by further enhancing their intelligence capabilities, including the speed with which information is captured and analysed to inform policy. This means, in effect, that central banks have to make full use of information technology in support of monetary policy formulation.

Over the last two years, central banks of the region have been examining the issue of Caribbean monetary union. The impetus for this came from the Heads of Government Conference of CARICOM, which was concerned about the move toward a single European market and the impending formation of the North American Free Trade Area, and determined that the CARICOM countries were likely to be better placed to deal with the threats and opportunities presented by these developments if CARICOM moved toward a single market and if a monetary union were formed. The report presented to the Heads of Government conference in Port of Spain in June envisages the formation of a Caribbean Monetary Authority before the end of the decade. Such an institution would seek to remedy many of the deficiencies of the existing national central banks in their relations with governments and the financing of fiscal deficits. It remains to be seen whether this initiative will bear fruit.

The environment within which central banks will have to operate is therefore undergoing substantial change. This means that central banks themselves have to undergo significant change and adjustment both in terms of their internal organisation and operations and how they project their influence in the market place. The weaknesses displayed by central banks when put to the test during the period of stabilisation and adjustment will impact on their ability to respond to the emerging environment. Governments have reacted to these weaknesses by finding ways of reining in the central banks, though there is no immediate danger of re-absorption. Paradoxically, an appropriate response requires that central banks be given more latitude, not less, more independence, not less.

### **CONCLUDING REMARKS**

Like so many other institutions of Caribbean society, the region's central banks are undergoing a period of crisis. The recent scandal in Jamaica in respect of the foreign exchange market, as revealed in the Report of the Barber Commission, bears witness although much of the

crisis is quiet. Changes to either their banking legislation or the central bank statutes or both have been made or are pending in Jamaica, Barbados and Trinidad and Tobago. The East Caribbean Central Bank is also pushing through uniform banking legislation for the territories for which it has responsibility. These legislative changes are absolutely necessary in light of developments in the region and world-wide in respect of prudential regulation and supervision.

However, legislative changes are not likely to provide all of the answers to the problems affecting the region's central banks. While it may clarify the role of lender of last resort, and sharpen instruments of control and supervision, no statute can fully address the capacity to manage a rapidly changing financial and economic system or the complex relationship between the leadership of the central banks and the political directorate. It is this relationship, perhaps more than the provisions of legislation, which determines the effectiveness of a central bank at the end of the day. The political directorate must be self-confident enough and sufficiently seized of the importance of the functions of the central bank to appoint leaders to the central banks who are of a sufficiently independent cast of mind.

It is also the case that much of the progress made in the development of a research and economic intelligence capability and in the knowledge of the conduct of monetary and fiscal policy under conditions of stabilisation and adjustment might well be lost if the central banks of the region are no longer able to attract and retain the better minds with the relevant skills.

Caribbean societies have few institutions which are capable of taking a long view and which have the resources to make a difference to how these societies function. The central banks have to be counted among these, and it is therefore imperative that they be preserved and enhanced.

## NOTES

1. The first central bank to be established was the Bank of Jamaica in 1960, followed by the Central Bank of Trinidad and Tobago (1964), Bank of Guyana (1966), Central Bank of Barbados (1972), The Central Bank of The Bahamas (1974), the Central Bank of Belize (1982), and finally the East Caribbean Central Bank (1983).
2. Clearly some area central banks - East Caribbean, Belize, Bahamas — are still in their foundation phase, though they have had to grapple rather early with problems of stabilisation and adjustment.
3. Another set of influences on Caribbean economic thought came from Lewis' model of unlimited supplies of labour which, although classical in inspiration, suggested an active role for the state in industrialisation through export promotion.
4. See Thomas (1963).
5. See Best and McIntyre (1961) and Farrell (1990).
6. Fazio, A., Role and Independence of Central Banks, in Downes and Vaez-Zadeh (1991).
7. Quoted in Blackman (1989), p. 233.
8. See Rampersad (1990). In Jamaica, there have been several changes of the governorship in recent years, coinciding with changes of government. In Trinidad and Tobago, when a new administration took office in December 1986, the incumbent governor's advice was not actively sought and apparently not trusted when preferred, and he resigned 14 months later.
9. The classic formulation of this principle was by Bagehot in his *Lombard Street*.
10. See Bobb (1986), Farrell (1988) and Farrell (1991) for accounts of these developments.
11. See Sheng (1991).

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# **Enhancing the Independence of the Central Banks in the Caribbean Region**

**Frank Rampersad**

## **INTRODUCTION**

The central bank is seen as one of the principal economic managers in a country. It is charged with playing a vital role to assist the nation state to reach the economic goals which it sets for itself. It functions in a highly sensitive and volatile environment and there is almost universal agreement that central banks should be assured of a substantial measure of independence of thought and action in their field of activity. In this region, in accordance with the prevailing development paradigm at the time of their establishment, the laws setting up central banks give them a number of specific powers, which include control over deficit financing by the government, the management of the financial sector and the requirement to express an independent view on the external economic relations which the government pursues from time to time. These powers are separate and apart from those which the banks exercise in the superintending role which they play in the banker-client relationship between the banks and the governments.

Over the last decade, however, the tenure of governors of central banks in certain countries has appeared to be tenuous, almost 'nasty, brutish and short'. Besides, the objective facts indicate that some of the banks have not exercised adequately the independent powers of restraint on government financing, and this deficiency has been a material factor contributing to the economic malaise which afflicts some of the countries (the OECS excepted). Further, developments in the international financial arena have undergone change and these appear to weaken some of the assumptions which led to the determination of the scope and functions of the banks. The consequences of these new international developments are being enforced upon the governments of the region by the conditionalities which the interna-

tional financial institutions impose on them. Both internally and externally, therefore, the circumstances which attend central banks are in a state of flux.

These changing circumstances require countries in the Caribbean to revisit the concept of the scope of independence of action allowed to these central banks and come to terms with the emerging realities and the changed development paradigm. This paper seeks to initiate some discussion on this contentious issue.

Much of the paper addresses the international financial system and the derived new economic policy which governments in the region have been persuaded to adopt. But certain peripheral comments are also included in order to disclose fully any biases which inform the approach. The perceptions which are projected are, in the main, informed by the circumstances in Trinidad and Tobago, but they should have some applicability in other countries.

The underlying thesis which is being projected is that the contextual situation in which the functions of central banks in the region were defined has undergone significant change. These changes have originated at the international level but the impact of the changes on the policies and practices of both the governments and the central banks has been magnified by the increasingly pervasive effect which the international financial institutions have imposed on their borrowing members. In these circumstances, it is necessary to review the institutional arrangements which were set in place in an era gone by.

### DIVISION OF FUNCTIONS

I start from the perspective that, at the level of the nation state, the underlying objective of development policy in its many facets — fiscal, monetary, human development, environmental improvement and the others — is to establish and entrench a basis which would support a sustainable improvement in the quality of life of the citizens and a distribution of the benefits of development among the economic agents in a manner which satisfies the canons of social justice in the society. In this kind of construct, the important variables by which development should be measured and, *a fortiori*, to which development policy should be directed are — production and productivity, the levels of real consumption, real income distribution, employment rates, the proportion of the population subsisting below the poverty

line, the state of food security, housing and health conditions, the adaptability of the population to meet the changing economic environment in which it will be expected to operate and the general quality of life. Variables such as the exchange rate, interest rates, the integrity of the thrift institutions and the size and structure of the external debt are, however, critically important as indispensable mechanisms to support efforts to reach the targets for the real variables which the nation prescribes for itself. We are in danger of forgetting these imperatives and we need to get back to basics. The central banks have a role to play in this regard.

The textbooks tell us that policies affecting the real and money variables are two blades of the same pair of scissors, so that we do not know, and should care less, which blade cuts the cloth. In practice the conventional view has been that the real economy, i.e., the producing and consuming entities in the society, is the primary economic motor with the financial sector playing the supportive role; that the exchange rate is determined by the relative level of productivity in tradeable goods in the domestic economy *vis-à-vis* the rest of the world and that, under freely competitive conditions, the rate of interest would be a product of international levels of interest adjusted by a factor which reflects the durability of the exchange rate as perceived by the players in the financial market, the rate of inflation being one of the important factors.

This kind of thinking provided a rationale for effecting the division of responsibility in areas of economic management between the central government and the central bank, the latter being the primary agent in the area of monetary policy, although it performs certain other functions tangentially related to monetary policy as well. Indeed, in the case of the Central Bank of Trinidad and Tobago, Terrence Farrell has reminded us that "its functions include bank supervision, or more accurately supervision of financial institutions, foreign exchange budgeting, advice on external financing and debt operations and exchange control, which latter involves vetting of technology contracts, analysis of investment projects and the regulation of all outflows and inflows of foreign exchange." (T.W. Farrell (1990) *Central Banking in a Developing Economy — A Study of Trinidad and Tobago, 1964-1989*, p.1).

At the international level, the thinking also provided a part of the theoretical justification for the decision which the international com-

munity took in the 1970s to remove controls on the movement of capital internationally and to introduce a system of floating exchange rates, the assumption being that the parity of currencies would be determined by the demand for and supply of currency, both being trade related.

However, the action of freeing up capital movements and currency level parity determination has created a dynamic of its own and this has impaired the validity of the underlying assumption. In consequence, the areas over which individual central banks can now act, and the kind of flexibility which they have for action, appear to be undergoing qualitative change. In the light of this, there is already emerging, even among the Group of Seven, a view that either the international system should be brought under greater surveillance or that the functions which the central banks perform should be reexamined. Such a need must be even more acutely felt, and acted upon, in countries on the periphery.

The definition of the role which central banks should be structured to play must be undertaken in the context of the environment in which national decision-making is carried out. It is the reality that the international context is now qualitatively different from that which prevailed when the legislative powers were accorded to the central banks. But perhaps of equal importance is that a major change has occurred in the kind of economic strategies and policies which governments of the region are now being persuaded that it is in their interest to pursue. It is therefore necessary, in any reexamination of the functions which a central bank in a small developing country should be structured to deliver, to start from an understanding of this new environment.

For these reasons most of this paper addresses the developments in the international financial markets and the derived consequences for the shape and form of the economic policies to which the governments of the region are committing themselves. Against that background, we suggest some conclusions which may be drawn and which have implications for the role which central banks should be structured to play. We deal first with the international scene, after which the derived consequences for national economic policies are examined. In the light of the sea-change created in these two areas, a position for the central banks will be briefly examined.

## INTERNATIONAL DEVELOPMENTS

Among the factors adduced at the international level in favour of financial liberalisation was that unrestricted market forces would operate and that, as a consequence, capital flows would move to countries in response to opportunities for investment, thereby achieving a broad equalisation of rates of return on assets; that interest rates would be determined by real market conditions and that, in consequence, countries which had good opportunities for investment would be able to access savings in excess of their own while countries with excess savings would have an opportunity for investment greater than that available to them otherwise; and finally, as a result of all these and other factors, current and overall balances would move towards an equilibrium situation. National central banks would therefore operate within predictable guidelines in taking domestic action on their financial variables in order to ensure that the country would derive benefit, in the form of either income or capital inflows, from the interplay of real and financial forces operating across national boundaries.

The developments in the financial sector (see in particular UNCTAD's Trade and Development Reports 1987-1990) however suggest that, since the original decision was taken, a number of unforeseen and unplanned developments have taken place and these have given rise to certain consequences which appear to vitiate the underlying assumptions. Among those which appear to be significant are the following:-

- (i) currency has substantially detached itself from real flows and has become another traded commodity. Since the removal of restrictions on capital movement and the introduction of floating exchange rates, international banking has grown by about 20% per year, almost twice the rate of growth of world trade (12%) and of world output in current prices (10%). Between 1972 and 1987, world trade increased by about US\$2,500 billion whereas international banking expanded by US\$4,000 billion. Money is now a commodity and threatens to go the way of all commodities since the 1970s, and, in that area, the poorest countries and the poorest people have been the main losers. They are likely to be the main losers in the currency area as well;

- (ii) according to UNCTAD, "the main activity of financial markets has become not so much to intermediate between ultimate savers and investors, allocate resources on the basis of asset valuation reflecting long-term risks and profits . . . but rather to create short-term opportunities for speculation in misaligned asset valuations. The new regime has created greater scope to generate and/or propagate speculative disturbance" (Trade and Development Report, 1990, p. 106. See also Financial Liberalization: The Key Issues, Yilmaz Akyuz, Discussion Paper No. 56, p. 29, UNCTAD, 1993);
- (iii) capital flows across national boundaries now have relatively little to do with investment, and in fact there is a predominance of speculation over enterprise in the movement of capital (*ibid.* p. 116). This appears to apply equally as between new private capital inflow as well as the return of flight capital.

In consequence, UNCTAD's analysis led it to conclude that the behaviour of exchange rates in the 1980s cannot be systematically explained by variables generally cited as their determinants, i.e., interest rates, relative price levels and trade, and current account balances. Interest rates have, on the whole, and especially in developing countries, also remained relatively high and this has impacted adversely on investment, primary commodity prices and employment levels.

These developments, which do not equate with the initial underlying assumptions, have not been wholly beneficial to the world community at large, although certain sections of it have become very rich as a result. They have also enforced a deflection of attention from the real variables in the economy to short-term financial swings, and this deflection is shaping the attitude of the international financial institutions in their approach to the development process. This is abundantly clear from the policy framework which the international institutions prescribe; it is illustrated in their prescriptions for interest rates, a policy which can be predicated only on an assumption of galloping inflation and the consequent currency depreciation, the drying up of investment and the further pauperisation of the poor.

International observers have drawn attention to some of the negative outfalls of these developments, among which are the following:

- (i) in the industrialised countries, aggregate incomes have grown enormously during the period of financial liberalisation and floating exchange rates; and financial institutions, through growth, acquisitions and mergers, have become very large indeed, wielding enormous political and economic power. But income inequality in these countries has worsened and chronic high rates of unemployment have become an accepted (although unacceptable) feature of their landscape, with the consequent growth in crime normally associated with the ghettos when young people cannot find productive things to do;
- (ii) the disparity in the distribution of world income between the industrialised and the developing countries has become even larger in relative terms than it was before. Thus, for example, whereas in 1970 the per capita incomes of the upper 20% of the world population who live in the industrialised countries, were about thirty times the per capita incomes of the poorest 20% of the world population who live in the developing countries, in 1992, the ratio had grown to almost sixty times as high. The new world development paradigm, which is being piloted by the new financial system, is serving to increase world inequalities both within and between nations;
- (iii) the mechanism of exchange rate determination which the new order has installed has also served to entrench capital flight from the developing to the developed countries as a regular feature of the experience of the former. It was the postulate in the literature that capital flight from the developing countries was associated with the untenable efforts of the authorities to maintain fixed exchange rates in the face of their inability to control internal inflation. We are now, however, confronted with a situation where, notwithstanding what the authorities do with regard to inflation control, the speculative currency market will determine what the exchange rate should be, regardless of what the

authorities do in the short-term. In effect, therefore, the exchange rate could assume an existence independent of the internal action which the authorities take, a point which assumes greater significance in view of the long lead time involved in informing and persuading the operatives on the financial markets of the activity being undertaken in the real economy, especially in countries which are on the periphery of financial action.

It cannot go unnoticed in this region that even in Trinidad and Tobago capital flight over the period 1986-1991 (for which the errors and omissions component in the balance of payments is used as proxy) enlarged the current account deficit of the balance of payments by 48%.

Indeed, it is not unlikely that much of the reported private capital inflow into certain developing countries, notably Mexico and Chile, represents a partial return of flight capital, a process which assures speculators of a double gain; for such flight capital, if reintroduced as loans, is entitled to be expensed; and the returning capital, coming after a significant depreciation of the currency, can acquire a larger amount of fixed assets than it could before the flight, because domestic asset values tend to lag behind the rate of currency depreciation. The return of flight capital does not therefore necessarily reflect a growth in investor confidence — as is often projected — but rather an intensification of the process of speculation against the currency;

- (iv) in the new development paradigm which the international financial institutions are enforcing on developing countries, and in the context where these institutions, through purpose and default, are requiring deficit countries to bear the full burden of adjustment, the deficit countries are thrown back on monetary, and indeed interest rate policy, to correct imbalances while seeking in vain to maintain a stable rate of exchange. But the exercise of interest rate policy in these countries carries, as one of its costs, the reduction of investment and an increase in unemployment, since interest rates have to be raised to levels which cannot

be absorbed in the market place. This has been the experience in many Latin American and Caribbean countries, and is already emerging in Jamaica and Trinidad and Tobago.

There may be many reasons for this unsatisfactory state of affairs. At least a partial explanation may very well lie in the conclusion which Dharam Ghai drew that — “the concentration of economic power (in the hands of the transnational enterprises, financial agencies and a handful of industrialised countries) has not been accompanied by a corresponding shift in their political and social responsibilities for global welfare or in their accountability to the peoples of the world. This imbalance is one of the greatest challenges facing the world community in the 1990s and into the next century” (Dharam Ghai, *Structural Adjustment, Global Integration and Social Democracy* UNRISD, 1992, p. 7). The reality which has to be addressed is that, partly because of the poor sequencing of economic actions and partly as a result of the application of the *ceteris paribus* rule where the players, both within and between nations are not equal, the domination of the financial market by a group of oligopolists exposes nation states, and the people in these states, to the full adverse effects of oligopoly in its pristine sense and must inexorably lead to social disintegration at the global and the national level. The political consequences of such disintegration are too horrendous to contemplate.

### SOLUTIONS PROPOSED

These problems of global social disintegration can only get worse as the Group of Seven, and the international financial institutions which they control, yield increasingly to the pressures generated by the financial speculators and the transnational enterprises. But when they do, it is difficult to see what room is left for the exercise of monetary policy in any country, let alone a small developing country.

It is this perception which has led many to propose a refurbishing of the global machinery for managing the closed shop into which world financial system is now coalescing. Such refurbishing should, it is argued, include —

- (i) the establishment and effective operation of a system of multilateral surveillance over both creditor and debtor countries;

- (ii) a return to stable exchange rates. UNCTAD has stated categorically that “there is now widespread recognition that the floating exchange rate system *has failed* to promote sustainable current account balances and that there is a need to move to a more stable system of exchange rates (ibid. p. 133); and, more fundamentally,
- (iii) establishment of institutions which have a global reach.

In short, the liberalisation of capital movements, and the associated pressures to remove barriers to trade and to integrate the global economy, must be supported by a mechanism to cope with imperfections in the market. There is now no such mechanism in place; but unless it is installed, the world economy will increasingly operate in the arena of speculation and the real economy will wither on the vine. Diaz Alejandro was particularly sensitive to this need when he adverted to the negative consequences of a policy of the early liberalisation of capital, “with the highly mobile factor, capital, causing extreme oscillations, privatised banking systems failing, and Governments being forced by foreign pressure to guarantee loans” (Gustav Rainis ‘Carlos Diaz-Alejandro, economist and prophet’, IDB July 1993, p. 7). But the world has taken the step of freeing the capital account. In order to be consistent, it should move to the Keynesian solution of a World Central Bank if the benefits of globalisation are to be shared globally. This is the prescription of the internationalists.

However, in the context of the existing world power structure in which there is a single political superpower and three economic superpowers, there is little likelihood of an early international agreement leading to the establishment of a world central bank. Even a return to stable exchange rates within somewhat wider bands than existed before is problematic; and effective multilateral surveillance of the performance of large national economies has been discussed and accepted as a principle by the Group of Seven, but with no intention of implementation. In short, the world financial system is on autopilot at low altitude in turbulent weather. Good fortune is necessary to avoid a crash.

The principal international financial institutions are not agreed on any need for even reexamining the relevance of the existing international financial system. But it follows equally that governments

and the central banks at the periphery, and in this region in particular, must be guided by political realities and shape their actions in a manner which would provide the minimal safeguard to the welfare of the citizens whose interests they were established to subserve. This emphasises the need to be particularly cautious in accepting the dictates of these institutions as they set out to prescribe the limits of governmental and central bank action in the determination of national economic policy. We turn to this subject briefly, using the Caribbean economies as our basing point.

### THE NEW ECONOMIC POLICY

Under the dictates of the international financial system, some of the countries of the Caribbean, notably Jamaica and Trinidad and Tobago, have espoused a new development paradigm which has, as its stated purpose, the "release" of the economic agents from the controls which the bureaucracy imposes and the exposure of the economy to the full blast of economic and political forces operating at the international level. The paradigm now in vogue contains a number of special features, among which are the following:-

- (i) a rapid elimination of the insulation available to domestic producers in manufactured goods, services and agriculture, this being achieved by an accelerated dismantling of quantitative restrictions and a rapid reduction in import charges to reach 20% or less by 1997. This projected rate of removal of the insulation stands in sharp contrast to the arrangements which the industrialised countries have concluded among themselves and with other countries whose interests they wish to uphold;
- (ii) a telescoping of a package of reform involving simultaneous action on the fiscal balance, the balance of payments, the debt structure and the external trade regime, a combination which can only result in increased unemployment and a thinning of the real economy. The imperative of proper sequencing over a period of time, and with adequate guideposts, forms no part of the regime, notwithstanding the clear need for such an approach as is evidenced by the experience of the Southern Cone countries in the 1970s;

- (iii) the removal of restrictions on capital movements. Current payments have long been free in the region;
- (iv) an exchange rate which will be determined by international market forces in which speculators lead the way;
- (v) an interest rate regime determined by “market forces”, which in effect means a combination of fluctuating international levels of interest rates, plus a speculative market assessment of the exchange risk factor in which developing countries will be put in the high risk category, plus a domestic profit margin for the financial houses which, even under the most favourable conditions, will pass on to their borrowers the diseconomies of small scale production. The resulting impact on the investment and production regime in a country is not accorded any weight in the equation. It should be noted in this regard, that some observers are of the view that “despite widespread claims for efficiency of financial markets, financial liberalisation in many countries in recent years has generated more costs than benefits” (Yilmaz Akyuz, *op. cit.*, p. 37). But Akyuz went on to argue, on the basis of empirical evidence drawn from Latin America and Middle East countries, that “there is often a need for deposit ceilings and intervention in the money market in order to stabilise interest rates and asset prices and prevent excessive risk-taking in the financial sector” (*op. cit.* p. 37). It is well known also that the relative stability with growth which both Japan and Germany have been able to achieve derived support from the authorities’ keeping some control over financial variables and thus deflecting attention from short-term gyrations to the requirements of long-term growth. This stands in sharp contrast to the hands-off attitude which the monetary authorities of the region are being required to adopt as part of the conditionalities;
- (vi) a rapid retreat by the government from an active participation in industrial and commercial enterprises, leaving the way clear for the modernising influence of more efficient private capital, especially private foreign capital which, it is advised, can be relied upon to establish the underpin-

nings of sustainable economic development, the evidence of which may very well emerge, but only some time in the future in countries with small domestic markets and wage levels significantly above the subsistence margin;

- (vii) the sharing with all the citizens the cost of providing certain basic services including health, education and water; and
- (viii) a structural change in the taxation system under which direct taxes would be reduced in the expectation that savings and investment would increase, the public revenue gap being filled by regressive indirect taxation. Only a small proportion of the population benefits from the former; the lower income groups bear the brunt of the latter.

There has been inadequate analysis in the region of the social consequences of the new development paradigm, particularly in the context where implementation is exogenously determined. Dennis Pantin's analysis done for the manufacturing sector was particularly revealing and John Spence and others have attempted an overview for the agricultural sector. The central banks have been coy in making comments and it has fallen on the Caribbean Development Bank to raise some of the concerns. The most cursory examination of the new policy will reveal that its inherent regressivity is likely to be destabilising. But an overall assessment is necessary, one which would attach weights to the economic variables and arrive at an assessment of the applicability of the World Bank maxim of "the maximum pain in the shortest period", answering at the same time the question, 'pain for what purpose?', a question which has been raised in the burgeoning literature on the subject emanating from UNCTAD and UNRISD.

The experience of countries which have shaped their economic policy according to the dictates of the model has been mixed. The consensus of opinion emanating from the international financial community is that countries such as Mexico, Colombia and Chile have made impressive strides and now appear to be firmly set on the road to growth with equity. Their industries, buttressed by a substantial infusion of private foreign capital, are deemed to be well able to cope with international competition, with the consequence that employment levels can be expected to rise rapidly some time in the future.

However, the experience in other countries, notably Jamaica, Venezuela and Trinidad and Tobago, is not as reassuring. In these and perhaps other countries —

- (i) the social fabric is being torn apart as the population reacts adversely to the increasing youth unemployment, the price increases associated with the devaluation of the currency, the rise in interest rates, the increased burden of the cost of social services and the consequent burgeoning proportion of the population living below an ascetically drawn poverty line;
- (ii) there is no conclusive evidence as yet that the policy of reducing direct taxes and allowing interest rates to rise has stimulated savings for fixed investment of the income-generating employment-creating type. Indeed, notwithstanding McKinnon and others, the hypothesis that, in today's world, positive real interest rates are a stimulus to savings and investment seems to be on the verge of disproving itself internationally (See Akyuz, *op. cit.* for references). Conversely, high and variable interest rates, especially where these are combined with uncertain exchange rates, have kept real investment at very depressed levels in developed and developing countries alike and prove the point that stability of interest rates and asset prices are essential for long term investment. In Trinidad and Tobago the net savings ratio over the period 1986-1991, when interest rates have been high by historical standards, has been a derisory 4.1% of net national disposable income.
- (iii) in at least one developing country, Trinidad and Tobago, there appears to be some disenchantment in official circles over the response which the local private sector is showing to the economic environment being created through the application of the new economic policy;
- (iv) the behaviour of the exchange rate in this part of the world shows that the trade-off between the rate of interest and the level of the exchange rate is at best tenuous and perhaps non-existent because we have not been able, and are unlikely, to attract portfolio capital. For example, interest

rates in Jamaica and Venezuela have been raised to exceedingly high levels, with attendant adverse effects on agriculture and manufacturing, but this has not stopped the decline in the exchange rate;

- (v) the so-called globalisation of world markets is yet to be manifested on a global scale. There is as yet no concrete evidence that agricultural subsidies in the industrialised countries are being reduced or that the non-tariff barriers on the manufactured goods which the industrialised countries impose on their imports from developing countries are being reduced. In 1990, 28% of these imports were subject to barriers, an increase from the 26.5% which prevailed in 1980. It has been estimated (by UNCTAD) that the export earnings which the developing countries could not realise because of these restrictions were larger than the gross flows of funds from the developed to the developing countries. The conclusion of the Uruguay Round may change this situation, but the historical experience following the Kennedy and Tokyo Rounds suggests the advisability of withholding a judgement.

None of this emerges with clarity in the official literature in the region or in the statements emanating from government circles from time to time. Indeed the population is fed the outpourings from those whose interests lie in perpetuating the system for their own benefit. The "most unkindest cut of all" is that when the international financial institutions dictate their prescriptions, the governments are expected to announce that the prescriptions are their own policies. This is a most unhealthy arrangement for social stability, as the experience in Asia, Africa and Latin America so liberally warns. But social stability is the prerequisite for economic planning.

All of this suggests a need for an independent on-going assessment of economic policy which will place the national issues in their national and international context. It is against this background that we must define a role for the central banks in peripheral countries.

We believe that the central banks have a critical role to play because, although they are part of the establishment which guides and shapes economic activity in a country, they are not part of the executive. Indeed, the underlying assumption guiding their establish-

ment in countries which adopt the Westminster system of government is that the central bank is independent of the executive, is the ears of the decision-making apparatus, and keeps a close relationship with the real economy as manifested in the experiences of the financial sector, but maintains an adequate distance from it in order to be able to exercise a countervailing power in economic regulation. Such a function is of critical importance in small countries which do not have the benefit of an informed financial press and in which the other economic sectors are poorly served in terms of objective analysis. Besides, by their very nature, the central banks must be major repositories of national and international information on which sound national economic policy can be developed after an active debate.

### **DEFINING A ROLE FOR CENTRAL BANKS**

Bringing together the main points mentioned earlier, we need to take due note of the fact that —

- (i) in the area of monetary policy, a large part of the decision-making authority, especially interest rates, exchange rates and the transborder movement of savings, has been preempted by the private international banking system. Small developing countries are particularly vulnerable to this evolving trend. Policies in these countries cannot be predicated on the assumption that “what is good for General Motors is good enough for us”; and
- (ii) the international financial institutions have preempted the role of being the principal agents determining the kind of economic policy which borrowing countries can espouse and implement, and it is not clear that these institutions attach equal importance to the requirements of the people of the region as they do to genuflecting to the dictates of the increasingly oligopolistic forces which have assumed substantive control of the world economy.

The consequence of these is that it is no longer clear that, under the paradigm, the welfare of the population of any developing country, or indeed any country for that matter, is the principal preoccupation of national policy makers. This is an untenable situation and sets the context in which one has to define a role for the central bank.

On one view, given the decision by the governments to remove controls on capital movements, and taking into account the policies being espoused in the region on interest rates and international trade, and the response so far of the central banks to this turn of events, the kind of independent role envisaged when the central bank was established as an agent of economic change does not appear to have objective justification any longer. The international financial institutions are in the driver's seat in most fiscal and monetary matters. Under the present scenario, the regulation of the thrift institutions, which central banks now undertake, can be quite readily taken over by a division of a ministry of finance; the issue and redemption of currency can be assumed by a currency board which can also be structured to undertake those limited money market operations of the government which the government cannot handle through the bureaucracy; and the government banking business can be handled by the commercial banking system in a manner fully consistent with the private sector ethos which is now in vogue with governments and international financial institutions alike. In short, within the framework of the new development paradigm which the international financial institutions have established for countries in the region, notwithstanding claims to the contrary which governments make, the central banks in the region at least can be seen as no longer necessary in the system which they have created.

This view would probably be anathema to an audience of central banking personnel. But it is necessary to contemplate it nevertheless because it enforces an examination in the countries of the region of the systems which are necessary to optimise the contribution which a central bank can make to enhancing the welfare of the people of the country in the narrowing field in which it, and indeed the governments, are now allowed to act.

In looking at the matter from this standpoint, it will be salutary, first, to alert central bankers to the disquiet which many of the social partners feel over the perceived excessive domination which the international financial institutions exercise over policy formulation and execution in this part of the world, over the double standards which these institutions apply in their dealings with big and small countries, and the apparent willingness of governments to acquiesce in their dictation. This is not, *ex ante*, a myopic view; it derives from an

appraisal, albeit inadequate, that other people are not always the best judges of what is good for us. In monetary matters, there will be greater confidence if the regional financial institutions gave us their considered view.

Second, even under a system in which a country could exercise some control over its external payments system, it was always recognised that excessive money creation would be damaging to the exchange rate. The risk is even greater where all controls are lifted; the real economy feels the full backlash. It is necessary therefore to ensure that the money creation propensities of the governments are held firmly in check within the limits which prudent economic management will dictate. But prudent management must also be guided by the fact that an economy, a government or business enterprise can absorb small, even cumulative small, changes in their behaviour patterns without traumatic effects; large random shocks are, however, very difficult to cope with and tend to be self-perpetuating.

Third, while it has to be accepted as a datum that the international banking system, (until effective multilateral surveillance machinery is established to monitor its activities) will continue to introduce speculative gyrations in the exchange rates, especially in small developing countries which cannot effectively protect their exchange rates through market operations, (and even some of the very large countries have recently found such protection to be extremely costly), there is a need to establish machinery which would at least temper internal speculation against the exchange rate and modulate the effect on the domestic economy of the changes in this rate which are generated through speculative activity abroad.

Fourth, it is worrying that the empirical evidence of the experiences and practices in other countries, whose financial, economic and human infrastructures are similar to those in the region, is not brought to bear on policy determination in the region. This is particularly relevant in the case of the financial variables. Indeed, a detailed analysis of the correlation between the financial variables and the real economy in the Caribbean region has not yet gone past the work of Farrell and Worrell.

Finally, in the formulation and execution of policy, due account must be taken of the fact that if the import regime, the interest rate system, the exchange rate system, the external payments systems on

current and capital accounts, and the food security system are subject to determination by external bodies, then economic development policy in the country will in fact be put in the hands of foreign agents and the level of employment will have to absorb the full backlash. Some of the governments of the region have persuaded themselves that this is the route to go; they may very well be correct although they do not appear ready to persuade the population to accept the political consequences of it. The population is likely to feel reassured, one way or the other, by another view. This view could come from the central banks, but their mandate needs to be enlarged.

In this kind of situation, the appropriate course of action would appear to be *not only not to abolish* the central bank and redistribute its functions, but rather to *enlarge* the area over which the bank, as a major economic agent, would be enabled to play an independent role and be relied upon to project an independent view. However, in order that this should be possible, the existing institutional arrangements, which in effect assume an adversarial system among several partners in the economic arena, need to be changed as they are unequal to the task. I believe that the central banks of the region need to address the question and express a view on the development model which the countries of the region are being driven to adopt and the consequences which, in their view, the model holds for the social stability of the countries of the region.

We therefore put forward for consideration a package of measures set out hereunder which may approximate what the evolving situation requires:-

- (i) The central banks should reexamine the limits of money creation which are now enshrined in their enabling Acts and determine a level which, in their judgment, would be minimally inflationary. This new limit should be prescribed in law and the central banks should comply, and require compliance, with the law. In saying this, it is recognised that the Central Bank Acts of the region now prescribe such limits, most of which are now honoured in the breach. The point being advanced is that the limits should be reexamined in the light of the new situation prevailing and the new ratios which now guide decision-

making and that the central banks should be buttressed in their efforts to make these ratios stick.

- (ii) In the context where the import regime is exogenously determined, the central banks should propose that they be given independent monetary power to regulate import payments in relation to the requirements of supporting a desired level of the exchange rate and without having to vainly raise interest rates to levels which will destroy the propensity to invest in tradeable goods production. Import deposit schemes and monetary devices, other than reserve requirements which increase interest rates, to regulate the volume of import payments should be added to the reserve requirements powers which the central banks exercise over the banking system. The reality is that if the governments are made to surrender all controls over imports and at the same time are unwilling to face the consequences on the real economy of the depreciation in the exchange rate, then some delaying mechanism needs to be available to cushion the impact.
- (iii) The central banks should decide, and have the power to regulate, the level of interest rates in the country. The policies which the Inter American Development Bank, the International Monetary Fund, and the World Bank are seeking to impose in the region are unacceptable and indefensible as they will stultify the development process and destroy agriculture. It remains my view, on the other hand, that the margins which the commercial banks are now demanding on their loans are a mechanism for transferring their own inefficiencies into the bankruptcies of their borrowers, the losses from which they will seek to recoup later through increasing the spreads between interest paid and interest demanded. The central banks must be prepared to use some of their several powers to effect a regulation of such margins because I hold that it is inequitable that the cost of bankruptcies should not be shared between the financiers and the equity holders. More generally, the central banks should take on board the emerging position that stability of interest rates and asset prices is

essential for an efficient financial system and that this “constitutes a strong case in favour of controlling interest rates as well as bank lending” (Akyuz, op. cit. p. 18).

- (iv) The central banks should establish new machinery to manage, or modulate, the effect of changes in the exchange rate on the real economy and such machinery should incorporate the commercial banks. To this end a committee of bank presidents, meeting *in camera* under the leadership of the central bank, is one of the new institutions which the present situation requires and this should be formally instituted.
- (v) Perhaps the most important change required is that the central bank should be better equipped institutionally and legally to play an independent role in the economic management of the country. This calls for at least two structural changes:-
  - (a) the governor of the central bank should be appointed after consultation undertaken through the parliamentary system. Such a change is necessary to give the bank the kind of clout which it requires if it is to be able to express a view which may not fully accord with that of the government of the day. The present arrangement does not convey to the man in the street that the bank is truly independent of the government. (Nothing in this should be interpreted as expressing any concern whatsoever over the technical quality of the governors of the central banks in the region; all of them have been and are excellent people. It is the system which is being addressed);
  - (b) the central bank should by law be required to make a report on a six monthly basis to, and appear before, a committee of parliament constituted to deal with the economic situation and the economic management of the economy.

It will be facile to assume that even the minimal institutional changes which are proposed above will be easy to achieve in the absence of a concerted demand from analysts, professionals and the media for the availability of another view. However, the reality is that

the institutional arrangements which delimit the activities of central banks, certainly in countries of this region, respond to an era now long past. Things have changed significantly since that time and the developing countries need to reexamine the institutional arrangements which were put in place in the previous era. There is now a need for another view, rooted in hard professionalism, to enable countries such as those in the region to have even a minimum chance of evading the steamrollers from the north. The central banks are the logical candidates to play this role because they have accumulated the intelligence base and the national respect to do it. The institutional machinery framing their activities should therefore be modernised, or the banks will be anachronisms and should therefore be eliminated.

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# **Aspects of Multinational Central Banking in the OECS**

**E. Eustace Liburd**

The issues of common currency and monetary unions are very topical subjects today and are likely to remain so throughout the 1990s. We are at present witnessing wide-ranging discussions in Europe and in the Caribbean Community on the extension and deepening of monetary integration.

In the Caribbean Community the call for a new monetary order centres around the issue of the independence of national central banks. The establishment of a regional monetary system, with a common currency and single regional monetary authority, is seen to offer the best prospect for achieving monetary stability. Such a system, it is argued, would permit the regional monetary authority to exercise greater if not complete control over the instruments that affect the money supply process and, through its statute, would be protected against pressures to finance excessive government spending.

Within the OECS sub-region there is the Eastern Caribbean Central Bank (ECCB), whose charter embodies some such provisions. Its multinational character has served to shelter its member countries from the difficulties faced by some of their partners in CARICOM. The countries as a result have been able to achieve relative price and balance of payments stability and good rates of economic growth. This paper focuses on the institutional and technical aspects of central banking in this multinational context.

## **Institutional Features of the ECCB**

The ECCB, established October 1983 as successor to the East Caribbean Currency Authority, is a monetary union of a group of eight island micro-economies, characterised by (i) the issuance of a single common currency, the flow of which is unrestricted among its members; (ii) a common pool of foreign exchange reserves, and (iii) the existence of a central monetary authority which decides on the union's monetary policy.<sup>1</sup>

The governing bodies of the ECCB are the Monetary Council and the Board of Directors. The Monetary Council is the highest decision-making authority in the ECCB. It is comprised of one minister appointed by each government of the participating countries. The function of the Council is to provide directives and guidelines on matters of monetary and credit policy 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 is responsible for policy and general administration of the Bank, while the Governor, the chief executive, is responsible for the day-to-day management and operations.

Although a monetary union, the responsibilities and powers of the ECCB are similar to those of any other central bank. The ECCB has statutory responsibility to regulate the availability of money and credit; to promote and maintain monetary stability; to promote credit and exchange conditions and a sound financial structure conducive to balanced growth and development.

The main central banking provisions, which are summarised below, relate to the foreign exchange cover, limits to the amount of credit the Bank can extend to governments, and the regulation of banking business.

The ECCB is required to maintain a minimum foreign exchange cover equivalent to 60 per cent of currency in circulation and its other demand liabilities. In addition to the foreign exchange cover requirement, the ECCB is constrained in its power to grant credit to its member governments. Temporary advances to meet seasonal needs, and holdings of treasury bills issued by member governments are limited to 5 per cent and 10 per cent of each government's recurrent revenue, while the holdings of securities other than treasury bills, in respect of all governments, may not exceed 15 per cent of currency in circulation and other demand liabilities.

The ECCB is empowered to regulate banking business on behalf of and in collaboration with member governments. In particular the Bank has the power to:

- (i) Impose reserve requirements against deposits and similar liabilities specified for this purpose. Such reserves to be held either in cash or as non-interest-bearing deposits.

- (ii) Require financial institutions to hold securities issued by the member governments, up to 10 per cent of such institutions' deposits and similar liabilities.
- (iii) Prescribe minimum and maximum interest rates payable by financial institutions on deposits and similar liabilities, the maximum interest rates chargeable on loans, and to prescribe the method of computation and the manner of disclosure to the public of interest rates on deposits and loans.
- (iv) Prescribe permissible purposes, aggregate ceiling, maximum maturities, and minimum cash or security required, in respect of loans and other credits.

For the purpose of the conduct of monetary policy, the ECCB, in addition to its power to impose reserve requirements already mentioned, possesses two other instruments. Firstly, the ECCB has the power to discount and rediscount bills of exchange and promissory notes for up to 91 days at rates fixed at its own discretion from time to time, and it may differentiate between classes of transactions or maturities. Secondly, it has power to conduct open market operations in order to influence the money supply. However, given the relatively unsophisticated nature of the financial system, the effectiveness of this instrument of monetary control is severely limited in the present situation.

### **Benefits from Monetary Union**

The participation in a monetary union puts constraints on the flexibility and independence of fiscal and monetary policies. The ability of individual governments to monetise budgetary deficits is constrained by the charter establishing the Central Bank and the collective decision-making requirements. Flexibility in the use of monetary instruments is constrained in the context of differences in the adjustment requirement of the different countries. It is possible that policies which would bring about adjustment at the group level may not produce equally favourable results in each member country. Exchange rate adjustments for instance, may have differential country impacts, resulting primarily from differences in export products and market penetration.

While the above factors may imply some costs to membership in the ECCB, there are undoubtedly benefits, not all of which have been fully realised. Compared with a single-country currency, a common one, in which no single country could take unilateral steps to affect its value, could enjoy greater stability and confidence, and thus provide a more favourable climate for greater domestic savings and investments. Such a common currency would be an added incentive for holding savings in a financial form, thus contributing to the funds available for capital formation.

The existence of the ECCB monetary union provides the basis for the development of regional money and capital markets. Commercial banks have more opportunities for financial intermediation between countries, and those with excess funds could seek to channel these funds to other banks in the region with excess demand. Thus, elements of an inter-bank regional market have developed. Similarly, investors with excess capital in one country could transfer this capital to other countries in the region where there are opportunities for investment and a shortage of capital. Before substantial money and capital markets can develop, however, all remaining barriers to the free flow of financial resources among members of the union would have to be eliminated, and financial institutions and instruments developed, which have as their area of operations and existence the entire market of the area instead of separate individual countries.

The sharing of a common currency has resulted in a more stable exchange rate for the group than would be the case if each country managed its own currency, since external and internal shocks would tend to be spread across countries. The region is susceptible to natural disasters. When these occur in any one country, the immediate effects of the shocks are cushioned by the reserves and the larger productive and export base of the region. Similarly, since the member countries engage in different export activities (some are largely agricultural commodity exporters, while others depend extensively on tourism), the impact of fluctuations in the price of any single export on the exchange rate tends to be mitigated by offsetting fluctuations of other activities.

A further benefit of the sharing of a common currency is the possible savings on external reserves. Given the high premium placed on foreign exchange in the region, such savings are of particular

importance. These savings could derive, first, from the elimination of the need to hold reserves for intra-regional transactions. Second, the sum of the collective foreign reserve holdings that would be required of the group would be smaller than what would be required if held individually by countries. Third, the existence of a common currency serves also to promote intra-regional trade, through the elimination of risks of exchange rate variations among member countries. The volume of intra-OECS trade is still relatively small. The existence of a common currency has however played an important role in the development of manufacturing in the sub-region. Trade in manufacturing has not encountered the difficulties caused by the shortage of foreign exchange experienced in the wider CARICOM community during most of the 1980s.

### **Monetary Policy Formulation**

In countries like those of the OECS, the principal objective of monetary policy is generally accepted to be price and balance of payments stability. However, while appropriate monetary policy is necessary for the achievement of these goals, it is not sufficient. It cannot for example fully compensate for inappropriate fiscal policy, but through appropriate credit policies must seek to underpin the stability of the value of money.

In the framework of the money multiplier theory, the supply of money represents the product of the money multiplier  $m$  and the monetary base or high-powered money  $B$ , i.e.,  $M = mB$ . The money multiplier represents the extent of cumulative credit creation by the banking system, and highlights the role of the central bank by linking money supply to the monetary base. The monetary base has a foreign and a domestic component. The foreign component, net foreign assets, changes as a result of the central bank's foreign exchange trading, and in a situation of a fixed exchange rate regime, reflects changing conditions in export and imports markets and international capital flows, i.e., the balance of payments out-turn. The domestic component of the monetary base reflects the central bank credit to government and to the commercial banks.

To the extent that the components of the monetary base and money multiplier are controllable and predictable, the monetary authorities could employ monetary instruments (reserve require-

ments, the bank rate, open market operations, ceilings on bank credit, etc.) to manipulate the money supply to achieve desirable policy objectives. This however presumes that these monetary instruments are available to the authorities, and that it is practicable to use them at any given time. In practice, in small developing countries like those of the ECCB area, there are technical limitations imposed on the effectiveness of traditional monetary instruments.

The instrument most susceptible to central bank control is its domestic credit, and this has been the instrument of focus for monetary management in the ECCB. In essence, domestic credit expansion is the increase in the money supply less the increase in the net foreign assets of the banking system, while domestic credit expansion by the central bank is simply the increase in the monetary base less the increase in the net foreign assets of the central bank. While, in many less developed countries, central bank credit is often treated passively to accommodate the deficit financing requirement of governments (Sharpley, 1984), the statutory credit limits imposed by the ECCB Agreement provide the monetary authorities with some control over the extent to which budgetary deficits are monetised.

In determining the annual limits for credit expansion, the Central Bank takes into account the existing level of net foreign assets and demand liabilities and, bearing in mind its obligations to maintain a reserve of net external assets of not less than 60 per cent of demand liabilities, establishes global credit limits for the ensuing twelve months. Credit allocations to each government are determined by the ratio of that government's recurrent revenues to the total revenue for all members. Governments are free to draw on their allocations at any time to finance budget deficits, and the Central Bank advises them on the appropriate mix of treasury bills and long-term securities (debentures). In practice, the global amount allocated in any one year has never been taken up in full, though on occasions individual governments utilised the full amount of their respective limits.

As an alternative to money creation by the central bank, governments may borrow from the commercial banks. The different monetary impact of financing the governments' deficits by borrowing from the central bank and by borrowing from commercial banks is well documented in the literature; see Coats and Khatkhate (1980) for instance. Government borrowing from the central bank directly expands the monetary base, with a potential multiplier effect on the

growth of the money supply. The effect on the money supply of government borrowing from the commercial banks will depend on whether the banks are holding excess reserves and the behaviour of the money multiplier. If the banks lend to governments by drawing down excess reserves, the value of the money multiplier will increase and the money supply will rise. If there are no excess reserves, there will be no increase in the money supply, as commercial banks can only lend to governments at the expense of their lending to the private sector.

In the context of the very open economies of the ECCB area, these alternative methods of financing governments' budgetary deficits have direct implications for the balance of payments. Increases in the money supply occasioned by the expansion in Central Bank credit, in a situation of fixed exchange rate and in the absence of rigid and effective exchange controls, are apt to lead, at least in the first instance, to reductions in external reserves rather than price inflation.

The judicious use of Central Bank credit, as the main instrument of monetary policy in the ECCB area, has permitted the region to withstand a series of external and internal shocks during the 1980s. The fiscal discipline this imposes, coupled with favourable developments in the balance of payments, has permitted the exchange rate to remain stable in relation to the United States dollar since its peg in 1976.

### **Interest Rate Policy**

It is desirable in a monetary union that interest rates policy be harmonised to avoid distortions in capital flows within the union. However, such a policy could encounter the difficulty of country variations in the rates of return on investments. In that case, the interest rate level appropriate in one country may be inappropriate for another. Indeed, in the environment of an unregulated market for funds, the levels of interest rates in the different ECCB member countries have on occasions shown some variation, reflecting differences in liquidity within different countries. Such variations are however likely to diminish as the money and capital market expand and develop.

The Central Bank's ability to use market instruments to regulate interest rates is limited, not only by the underdeveloped nature of the money market, but also by the dominance in the banking system of international branch banks, whose reliance on the Central Bank for

liquidity is minimal. Consequently, the bank rate has had virtually no influence on the structure of interest rates in the area. The bank rate has for the most part functioned as a penalty rate, to encourage banks to bring in funds from abroad rather than borrow from the Central Bank.

The Central Bank has introduced regulation prescribing a minimum rate of interest of 4 per cent to be paid on savings deposits by commercial banks. The intent was to promote financial intermediation and encourage savings by small depositors. This aside, the banks have been largely free to establish their own interest rates. On occasions when the growth in bank resources fell below requirements, leading to pressures on liquidity, it was usually the interest rate on time deposits that was raised. On the lending side, the banks tend to adjust rates taking into account the competition for funds, and the target rate of return required on their operations.

### **The Common Reserve Pool**

Fluctuations in net foreign assets are reflections of the overall balance of payments. A payments surplus increases net foreign assets in the banking system and expands the money supply, while a deficit will have the opposite effect. Under the exchange control laws, the commercial banks share the role of foreign exchange depository with the Central Bank. They are therefore not obliged to surrender foreign exchange earnings to the Central Bank. They do so out of the need to acquire domestic currency and to make settlements. To encourage the banks to surrender foreign currency earnings, the Central Bank offers certificates of deposit in which local currency proceeds of the sale of foreign currency may be held.

The foreign exchange reserves of the Central Bank are a common pool from which each member country may draw. No individual country reserves are kept. To be able to draw on the reserve pool, a country, or more particularly the commercial banks in the country, must hold claims against the Central Bank.

For the individual country's compilation of balance of payments, an imputed reserve figure is determined on the basis of the balance sheet accounting identity which holds that:

$$\text{Net foreign assets} = \text{Reserve money} - \text{Domestic credit}$$

In determining the imputed reserves of a country, all liabilities of the country to the Central Bank (Domestic credit) are deducted from

the assets of the country in the Bank (Reserve money). The result is considered to be the share of the common reserve pool attributable to the country.

### **Financial Market Development**

The underdeveloped nature of the money and capital markets has limited the Central Bank's scope for implementing monetary policy. The development of money markets has taken the form of the inter-bank money market, the treasury bills market, commercial bank borrowing from ECCB, and negotiable certificates of deposit. The treasury bills market, which is based on sales from the Central Bank's own portfolio, has been the most active, but this facility has been limited to the commercial banks. The plans for further development of this market would involve the Central Bank acting as agent for managing the treasury bill issues of participating governments to facilitate a region-wide treasury bill market extended to institutional and other holders, and not only commercial banks. The other money markets are not as developed and are limited to bilateral arrangements among commercial banks, such as the informal inter-bank market which exists among commercial banks.

The development of capital markets such as an OECS stock exchange, a venture capital market and a secondary mortgage market has been restricted by the absence of a suitable environment in the ECCB area. The elimination of restrictions on the intra-regional flow of investment funds, the establishment of a suitable legal and regulatory framework to protect investors and prevent fraud, and of information systems, accounting services and standards, as well as the skills necessary for capital market activity, are all prerequisites for the further development of capital markets.

In its role as the monetary authority for the participating territories, the ECCB has been and continues to act as the catalyst for the further development of money and capital markets. Work towards the establishment of a bond market with the Central Bank managing the issues of participating governments and statutory corporations, as well as their sinking funds, is currently underway. The ECCB is also involved in activities to expand the range of financial institutions and assets.

# **Issues Relating to the Central Bank's Autonomy in Jamaica**

**Novelette Davis-Panton**

## **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 Bank, 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 the 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 discuss the issue of the appropriate degree of discretion to be exercised by them. Section II investigates the performance of some relatively independent central banks: the Bundesbank, EECB and Federal Reserve Banks and 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 the Bank of Jamaica's experiences in the context of those of the other countries

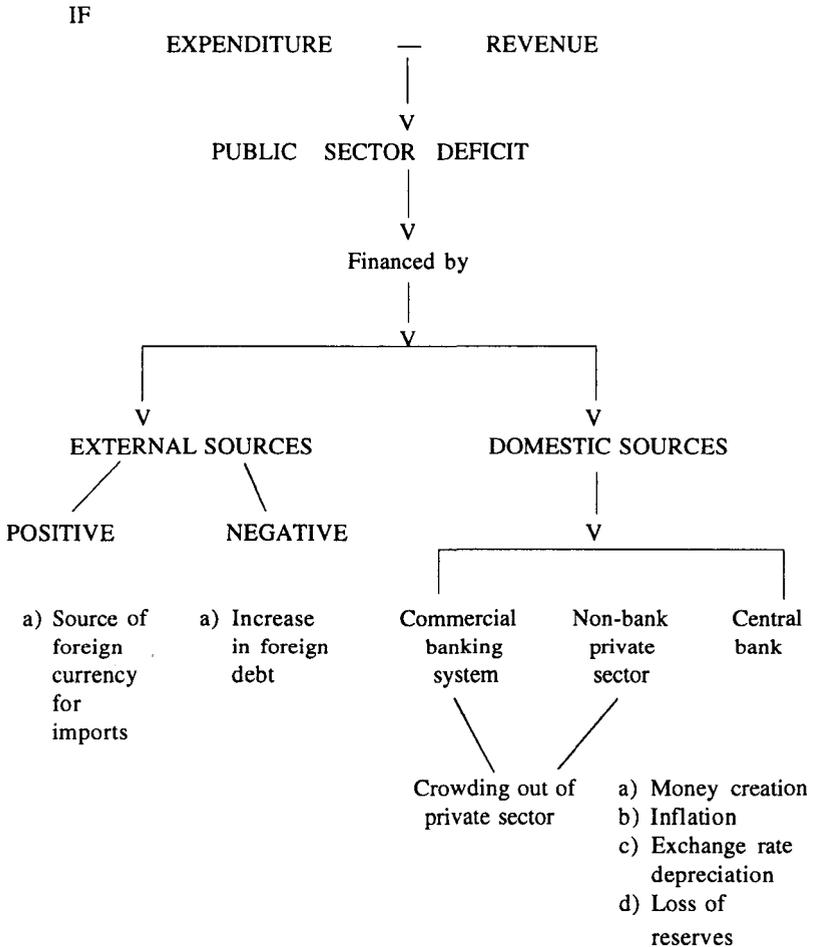
surveyed. The final section makes certain specific recommendations with respect to the institutional organisation, role and discretion of the central bank in Jamaica.

## **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 major function of a central bank is the responsibility 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 deficit 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 assets (*NDA*), and through the multiplier process a subsequent increase in the money supply is attained.

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

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

where:

$B$  = money base

$C$  = currency with the non-bank public

$R$  = commercial banks' reserves

$NIR$  = 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.

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.

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 such

needs through ordinary revenues. When this occurs, the central bank is very often called upon by the government to accommodate the fiscal excess. In certain countries, e.g., Germany, the constitution defines certain limitations on the power of the government to demand inflationary financing from the central bank, and it mandates the central bank to defend the value of the currency at all costs. Where the central bank lacks control over the government's demand for fiscal accommodation, and if the government does 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 payments deficits. At this stage, the IMF steps in and underwrites the preferred role of the central bank in ensuring more effective credit management and 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 the 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 has some independence from the 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 Bank over the years has endeavoured 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 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 been 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.

## II. COMPARATIVE PERFORMANCE OF FOUR “AUTONOMOUS” CENTRAL BANKS

It has been established that the main aim of a central bank should be the stabilisation 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 degrees 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 degrees of 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 Deutschmark. 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 Organisation of Eastern Caribbean States (OECS) is managed by the Eastern Caribbean Central Bank (ECCB). The preservation of relative exchange rate stability for these countries is mainly 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 monetary management has not met with the same degree of success as that of the Bundesbank, the Federal Reserve Bank or the ECCB. This has not been merely as a result of its 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 organisation and is able to operate free of government direction.

The Bundesbank has always regarded its function as guardian of the currency, as laid down in the Banking 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 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 as a percentage of GDP averaged 27.0 per cent over the 1970s and 31.0 per cent over the 1980s. This reflected relatively stable expenditure patterns over the periods. Revenue as a percentage of GDP also grew at a steady pace averaging 26.0 per cent over the 1970s and 29.0 per cent over the 1980s. The government deficit, although increasing, was manageable, with the highest being 3.6 per cent of GDP in 1975.

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 an 18.5 per cent change over 1989, while the lowest change, 3.7 per cent, 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 per cent and 5.7 per cent in the 1980s. In fact, prices fell in 1986 by 0.1 per cent relative to 1985. This naturally accommodated a strong German currency on world markets.

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 the 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 a result of the Bank's autonomy, but also relates to other even more fundamental factors. The experience of hyperinflation 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 Bank 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 textbook 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 Bank does not fall within the category of a Bank of Jamaica, for example, because it is not institutionally subordinate to any arm of government.

Nevertheless, it is often regarded as being an independent central bank. This is true only to the extent that decisions of the Federal Reserve Bank 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 Bank 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 Bank is "independent within government".

It is important to observe how far the Federal Reserve Bank 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, although increasing significantly over the years (1970-1991), remained a consistent percentage of GDP. The expenditure/GDP ratio averaged 20.6 per cent for the ten years of the 1970s. The average increased by 3.5 percentage points to 24.1 per cent for the decade of the 1980s. Revenue, although falling short of expenditure, also remained at a relatively consistent proportion of GDP. Revenue as a percentage of GDP averaged approximately 20 per cent over the period 1970-1990. The central government has had a persistent deficit over the twenty year span. Financing was obtained mainly from the domestic market. The Federal Reserve System's claim on the 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 (16.0 per cent) occurring in 1983. The lowest growth in the money supply (M2), 3.9 per cent, was achieved in 1989. The annual average growth was 8.0 per cent for the 1980s. Thus, the central bank was able to maintain relative price stability in the 1980s.

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 of the government's fiscal policy. The money supply was not allowed to grow excessively. Thus, while the government pursued an expansive fiscal policy, the Federal Reserve Bank made an effort to counterbalance this with tight monetary policy.

### **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.

In terms of monetary management the ECCB has been relatively successful, especially, when compared with other central banks in the region. The ECCB 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 per cent and 10.0 per cent of each government's recurrent revenue. The holdings of securities other than treasury bills in respect of all governments may not exceed 15.0 per cent of currency in circulation and other demand liabilities. The statutory credit limits imposed by the ECCB Agreement provide the monetary authorities with control over the extent to which budget deficits are accommodated by "printing money". Although the ECCB 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 ECCB arrangements have served to force fiscal discipline on the part of member countries' governments. The ECCB claims on central governments have not grown significantly throughout the period of the 1980s. In 1984, the first full year of the ECCB existence, claims on the Government of Antigua and Barbuda were some EC\$34.0 million and by 1990 totaled EC\$45.0 million, a 32.3 per cent increase. On the other hand, claims on the governments of Dominica

and Grenada fell during the period. In 1984, the ECCB had an exposure of EC\$46.0 million in Dominica but by 1990 this had fallen to EC\$38.0 million, representing a 17.4 per cent decline. The same pattern was evidenced in Grenada, where claims on the 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 in the money supply, at 28.0 per cent, occurred in 1986 but by 1990 the annual change was down to 9.0 per cent. Prices have also remained relatively stable in these countries when compared with 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 per cent and 6.0 per cent 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 per cent). 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

Country	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

### **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 Governor and the Board of Directors, as in 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 the government and the central bank. 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 of 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). The government deficit as a percentage of gross domestic product remained relatively low over the decades of the 1970s and 1980s. Government deficit as a percentage of GDP was a mere 0.1 per cent in 1970, peaked at 7.3 per cent in 1987 but was back to 2.8 per cent 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 per cent 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 money supply. The annual percentage change in the money supply averaged 19.0 per cent for the 1970s and 7.0 per cent for the 1980s. This decline aided in the creation of price stability, since the inflation rate of Barbados remained relatively low, averaging 6.3 per cent in 1980-1985 and 3.4 per cent for 1978-1988. Barbados maintained a fixed average exchange rate of B\$2.01 = US\$1.00 for most of the period.

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 recognised the importance of fiscal discipline for effective macro-economic management.

The performance of Jamaica's economy has not been as stable as that of Barbados despite having a similarly structured central bank. The evidence from the four central banks surveyed is at best indicative but not sufficient to establish "autonomy" as the ideal situation for Jamaica. The specifics of the Bank of Jamaica need to be evaluated in this regard.

### **III. THE 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. 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 operation of the currency issue.

The Bank is legally constituted to make advances to the 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 the government's foreign borrowings under the liabilities of the central bank, including loans from the International Monetary Fund (IMF)), while not being reimbursed for interest paid on its certificates of deposit (CDs) and other cash "losses". These factors have curtailed the Bank's ability to pursue independent and effective monetary policy. The success of monetary policy in supporting price stability and the external value of the currency depends upon the structure of the economy and other elements of economic policy, especially fiscal. Public finances, if not prudently managed, can undermine the effectiveness of monetary policy.

In Jamaica's experience, governments have sought to support public welfare objectives. The Bank of Jamaica is owned by the Government and its senior management is appointed by the Ministry of Finance. In that context, the Bank has, on occasion, accommodated expansionary fiscal policy. This accommodation comes at the expense of the integrity of monetary policy. While this points to the issue of an independent central bank, it must be emphasised that even an autonomous central bank may be dysfunctional relative to its monetary policy objectives 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 of Jamaica's economy which have effected the enmeshment of policies.

The exploration considers some relevant economic indicators from 1970-1991 which are used to illustrate the scenario of a central bank being constrained in carrying out its main function of stabilising the currency. The time period spans two distinct episodes of policy experimentation. The decade of the 1970s was one in which nationalistic tendencies led the Government to intensify policies of protectionist import-substitution and self-reliance. Government expenditure embraced programmes that provided social welfare amelioration but did not create the basis for sustained economic growth. The period of the 1980s through to early 1992 is to some extent the 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 was one of structural adjustment, which involved the liberalisation 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 expenditure of 20.0 per cent of GDP. By 1976 (an election year) this had increased to 37.0 per cent of GDP and then to 40.0 per cent of GDP by 1979. Over the ten year span of 1970-1979, expenditure had increased by some 86.0 per cent. While the Government was expanding spending over the period, its revenue was inadequate to cover its expenses. Revenue moved from J\$204.6 million (17.5 per cent of GDP) in 1970 to J\$1.1 billion (26.3 per cent of GDP) in 1979. This created a widened government deficit and increased pressure for deficit financing on the Bank of Jamaica.

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

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 privatisation of certain public entities, such as the Jamaica Telephone Company (JTC) assisted in increasing government's capital revenue. From September 1990, a further boost was given to broaden the public sector revenue collection effort, with the implementation of price system adjustments in some public enterprises. Additionally, there have been efforts to re-organise the central government's expenditure, embracing lay-offs of employees and the elimination of generalised subsidies.

These policies, among others, resulted in the government collecting revenue averaging 30.0 per cent of GDP over the ten year period 1980-1989 compared to an average of 21.0 per cent of GDP for 1970-1979. The increased revenue over the latter period still fell short

of expenditure, which averaged 31.0 per cent of GDP for 1970-1979. Annually, the fiscal deficit fluctuated, reaching J\$2,019.1 million in 1985 (18.0 per cent of GDP), but started to decline thereafter. Fiscal surpluses were recorded from 1987 onward with the sole exception of 1988 when there was a deficit of J\$1,179.8 million (6.0 per cent of GDP). This 1988 performance can be attributed to heavy government spending following the passage of hurricane Gilbert.

The expansive nature of government activities was further reflected in its growing local and foreign borrowing. Domestic borrowing averaged J\$735.5 million over 1970-1979 and J\$6,301.34 million over 1980-1989. This is an increase of approximately 850.0 per cent in the latter over the former period. Foreign loans increased by approximately 473.0 per cent for 1980-1989 relative to 1970-1979. The extent of 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. Money supply growth originated mainly from an increase in the net domestic assets (*NDA*) of the central bank, representing largely, in this case, an increase in the central bank's net lending to the public sector. This had the effect of expanding the monetary base (*B*) through the increase in the excess reserves (*R*) of the banking system and then the money supply through the credit-driven money multiplier. Relatively weak balance of payments performance limited the expansion of the money base through an increase in the net international reserves of the central bank.

The listing of government's foreign borrowings under the liabilities of the central bank placed further pressure on the central bank to make payments on behalf of the government. The high external debt service ratio (over 50.0 per cent of export revenue) also led the government to borrow more in the domestic market. This accounted to some extent for the relatively rapid growth in domestic financing of the government towards the end of the 1980s.

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 moved to J\$1.3 billion. By the end of the decade of the 1980s claims on the government by the Bank of Jamaica had reached J\$3.3 billion (excluding accumulated losses not settled by the government). The flow of new advances from the Bank of Jamaica remained within

the stipulated 30.0 per cent of revenue for most years (with the exception of 1976, 1979 and 1983), but, according to the Bank of Jamaica financial statements, advances made prior to the beginning of the new financial year on April 1 were not recovered by June 30 of the same year as required by law.

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. During the 1970s, there was a 16.0 per cent average annual increase in the money supply (*M2*) and a 23.0 per cent average annual increase during the 1980s. It is important to mention that the 32.0 per cent increase in 1988 had a direct relationship with the increase in government expenditure for post-hurricane reconstruction. The highest average annual increase in the money supply occurred in 1991, at a rate of 51.0 per cent.

Strong money supply increase was manifested in inflation, exchange rate depreciation and a loss in official foreign exchange reserves. In the 1970s, consumer prices increased at an annual average of approximately 17.5 per cent and by 14.3 per cent through the 1980s. The high average increase in prices in the 1970s could be attributed in part to an annual average increase in nominal wages, approximating 15.3 per cent over 1973-1978. The growth in money supply would also have been an important factor.

Although prices increased at a slower pace in the 1980s relative to the 1970s, there were more volatile movements of money supply, the exchange rate and wages. There were rapid increases in the money supply for the first four years of the 1980s. The money supply increased by 28.0 per cent in 1981, 26.0 per cent in 1982 and 27.0 per cent 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 the government. With a relatively stable exchange rate of J\$1.78 = US\$1.00 from 1980 to 1983, strong money growth led to a loss in official foreign exchange reserves. The stock of reserves moved from -US\$86.5 million in 1980 to -US\$288.5 million in 1981. There was some improvement 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 system was introduced, wage guidelines were followed, but most importantly emphasis was placed on decreasing the fiscal deficit and on more efficient management of public sector entities. The restraint of fiscal expenditure helped to curtail money supply expansion. Fiscal management also entailed an improved revenue collection effort. Fiscal year revenue as a percentage of GDP averaged over 30.0 per cent for the second half of the 1980s compared to an average of 25.0 per cent for the 1980-1984 period. The budget deficit as a percentage of GDP declined from 18.0 per cent in 1985 to 9.0 per cent in 1986, and by 1987 the Government was able to run a surplus of 2.3 per cent of GDP. The passage of hurricane Gilbert disrupted the improved performance, with the budget returning to a deficit of 6.0 per cent. Thereafter, a surplus was maintained and by 1991 there was a surplus of 3.4 per cent of GDP.

In 1986, the money supply increased by 27.0 per cent and by 12.0 per cent in 1987. Extra government spending in 1988, occasioned by the hurricane, resulted in the 32.0 per cent growth in the money supply recorded in 1988, but by 1989 its growth was a mere 6.0 per cent. In 1990, the money supply had begun to increase once more and in fact by 1991 the percentage change in the money supply was some 51.0 per cent.

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 an average of 15.0 per cent in 1986 and by 6.0 per cent in 1987. With the massive average 51.0 per cent increase in the money supply in 1991 there was also a 51.0 per cent increase in prices.

In keeping with the reduction in the rate of growth 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 held

twice weekly. Subsequently, 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. 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 by US\$74.2 million in 1988.

The general picture emerging from 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 empirical evidence suggests that the root of the inflation-devaluation spiral was fiscal imbalance undermining the integrity of monetary policy. Although the central bank acts as advisor to government, fiscal policy is not within the domain of the central bank.

The nature of the central bank's essential operations, which involve the issue and redemption of notes and coins, usually precludes it from having an operating loss. Nonetheless, available data indicate that the Bank of Jamaica has been making a cash loss growing from J\$63.5 million in 1978 to J\$2.7 billion in 1990. These losses came about as a result of what have been referred to as the Bank's quasi-fiscal operations. The improvement noted in the overall public sector deficit from the late 1980s (16 per cent of GDP in 1981/82 and approximately 3 per cent in 1990/91) and into the 1990s, had a counter-offsetting element in the Bank of Jamaica's accounts in the form of losses. The Bank of Jamaica on behalf of the government of Jamaica borrowed abroad, operated exchange rate guarantee schemes in addition to certain other quasi-fiscal operations, e.g., the issuing of certificates of deposit to mop up the excess liquidity of the central government's operations. These activities resulted in exchange losses and cash outlays for interest paid on the government's foreign liabilities and on certificates of deposit. The Bank of Jamaica's interest expenditure came to substantially exceed its interest income, contributing to an expanding net loss.

The evidence is that the government's expenditure created excess liquidity in the market. The Bank of Jamaica in its effort to

sterilise this effect issued certificates of deposit (CDs) 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 cash losses in the Bank of Jamaica accounts. These losses were not paid for by the government, therefore allowing it a higher level of expenditure than would 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 substantial evidence that the entanglement of fiscal and monetary policy has reduced the central bank to being an accommodator of the 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 textbook 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. Liquid asset cash reserve requirements have served as a force for financing 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, there were usually no payments of cash from the consolidated fund to the Bank as required by law. Instead, amounts due from government were settled by the issuing of long term local registered stocks bearing very low or zero rates of interest. While making cash outlays on behalf of the public sector, the Bank's assets have become increasingly non-interest bearing.

There is now the need for an assessment as to whether an independent central bank would have acted in a less accommodating manner towards the 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.

#### IV. CONCLUSION: PERTINENT ISSUES

Economic policy in Jamaica over the years has not been able to consistently defend the value of the currency. This appears to be due in part to the relationship between the Bank of Jamaica and the government. This has been reflected in 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 the Bank of Jamaica", to examine the role and function of the Bank in a liberalised economy, its appointment processes and institutional independence, among other things. If autonomy of the central bank precludes the government from having access to readily available financing, then this should encourage a degree of fiscal discipline. Governments would be forced to finance deficits by borrowing from the private sector or from overseas. The respective consequences of these two methods are the crowding out of private sector expenditure (including investment) and growing external debt.

It would be advisable that any transition to greater autonomy be approached with caution, allowing for assimilation of the lessons from other countries. The evidence that the autonomy of a central bank by itself ensures exemplary economic management of an economy is inconclusive. The case of the United States is instructive in this regard. A fundamental 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 supported by effective macro-economic policy coordination between the government and the central bank. Therefore, autonomy may not be 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 legislation governing the operations of the central bank should contain clear statutory objectives that are narrowly defined in order to avoid ambiguity;
- Specific historical, cultural and structural factors peculiar to a particular economy should be considered;

- The nature of the relationship between the government and the central bank should be clearly defined;
- A commitment from the political directorate to effective fiscal management and low inflation is essential;
- The commitment and determination of the central bank to pursue currency stability as its major priority needs to be established;
- The technical and professional capability of the central bank's senior staff, both absolutely and relative to the private sector, should be assured.

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 problems. 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? The effect of destabilising speculation during 1919-1923 and immediately following World War II and the currency crisis in the depths of the Great Depression (1931-1934) are occurrences that post-war officials have been determined to avoid repeating. That Germany has been successful in maintaining monetary stability with low inflation rates has to be understood against the background of its money supply, prices and cost of foreign exchange all rising by more than trillion times 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. The inflationary impact was less dramatic in the years after World War II. In the early fifties the experience of excessive money creation by public deficit spending during and after the war was one source of inflation. Inflation remained below 3 per cent up to the 1960s and accelerated to 7 per cent in 1973. Informed by these experiences, the Federal Republic of Germany's constitution clearly delineates a separation between the administration of government and that of the central bank. Both institutions have endeavoured to carry out their functions in a spirit of cooperation towards the agreed main aim of economic stability.

Nevertheless, it is to be emphasised that the formal legislative arrangements associated with autonomy are important and critical to

the maintenance of integrated 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, where there may be differences in short-term objectives relative to the political leadership.

An appropriate relationship between central banks and governments still needs to be defined. The Bundesbank is not accountable to the government for its monetary policy. The ECCB, in its exceptional role of being the central bank of a number of different countries, is not accountable to any one government. Both central banks are endowed with monetary policy independence in the sense that they are both insulated from political pressure in the determination and operation of monetary policy. The Federal Reserve Bank, the Central Bank of Barbados and the Bank of Jamaica are accountable to their respective governments. The main differences among these banks is that the Federal Reserve Bank is not obligated to monetise 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 the government's fiscal policy, due in part to low fiscal deficits. Thus accountability to government does not in itself imply the entanglement of fiscal and monetary policy. Additionally, the Federal Reserve Bank over the years appears to have insulated itself from day-to-day political pressures by utilising some form of monetary policy "rule". 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 its own policy rules. Effective monetary policy therefore 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 times 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 pressure may be placed on the central bank to finance the deficit directly or indirectly. Another result might be excessive foreign borrowing. As long as the central bank is not called on to use monetary policy as a cushion for the government's fiscal deficits, 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. 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.

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 per cent of estimated revenue for the financial year and also allows lending to the government by the purchase of newly issued Government of Jamaica (GOJ) or GOJ-guaranteed securities up to a total of 40 per cent of GOJ's estimated expenditure in that financial year. In Germany, the legislation sets strict limits on direct central bank credit to the government but it may acquire government paper in the course of open market operations 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 overexposure 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,<sup>1</sup> 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 the 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 the government's liabilities as part of the Bank of Jamaica's liabilities. If these liabilities are removed to the books of government, this could restore the solvency and profitability of the Bank of Jamaica. The Bank of Jamaica had foreign 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 financial independence. These recommendations would 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 competent, they will quickly gain the respect and cooperation 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 us 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 organisation respected for its professionalism, technical expertise, integrity, non-partisanship and a high degree of continuity, then this would pave the way for an easier transition.

## 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 recognised 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. The Governor and senior deputy governors have a maximum tenure of five years and are eligible for reappointment, while other directors obtain a maximum tenure of three years. 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 five years to a minimum 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 are, 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 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. 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 should be financed by the Bank of Jamaica, directly or indirectly.
5. The Jamaican psyche will not willingly accept an institution's 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 the 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.

## NOTE

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

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# **Performance Evaluation and Accountability of Central Banks**

**Compton Bourne**

## **INTRODUCTION**

Central banks are agents of the state. In their capacity as agents of the state, central banks are potentially one of the more powerful and influential economic institutions in Caribbean countries. In legislative and regulatory terms, they are the overlords of the formal financial system. Where this legislative or statutory power is transformed into real power, i.e., the ability to make other financial institutions and transactors behave as the central bank intends, then central banks become the dominant institutions imbued with the capacity to shape, guide and determine the structure of the financial system and the course of general economic activity. The potential influence of central banks also derives from their status within the hierarchy of public sector economic agencies. They are regarded as the centre of expertise in finance and macroeconomics if not in the entire field of economic development. Their close working relationships with international financial institutions, particularly their policy intermediation role between those institutions and the political directorate, add weight to their advice.

These potential sources of power and prestige are not always manifest and are not always permitted expression. In Guyana, the central bank has since 1970 been marginalised by the political directorate which has established more powerful and influential economic agencies elsewhere in the state system. Furthermore, although there is room for debate about the exact degree of the diminution in the status and influence of the Bank of Jamaica since 1977, it is evident to informed observers that this central bank no longer enjoys the status and wields the power characteristic of its first 15 years of existence. On the whole, Caribbean central banks do exercise power and do have enormous prestige. They are subject only to the authority of the political directorate to whom they are legally answerable and from whom they may receive directives.

The reality, as distinct from the constitutional formality, of political control and accountability is the subject matter of this paper. It proceeds on the premise that performance accountability is desirable and enquires into the problem of making accountability meaningful. The implicit viewpoint that central banks are not error-free and should be held accountable for their performance may seem somewhat heretical. The motivation for the enquiry is the plain fact that recent events in segments of the financial system controlled by central banks have been very unsettling. The failure of financial institutions in Barbados, Jamaica and Trinidad and Tobago, the collapse of foreign exchange rate systems in Guyana and Jamaica, and uncontrolled central bank finance of fiscal deficits in many countries invite questions about performance accountability of central banks.

### **THE CONCEPT OF PERFORMANCE ACCOUNTABILITY**

The concept of performance accountability pertains to achievement or non-achievement of economic goals assigned to central banks. It is to be sharply distinguished from financial accountability, which deals with rectitude and efficiency in the use of funds. A central bank is accountable for its performance if through a set of systems and rules it can be made to answer — be rewarded, praised, penalized, or censured — for achievement or non-achievement of goals.

There are several elements in this definition of performance accountability. These include (i) the identification of central banking goals or objectives; (ii) the identification of performance indicators; (iii) attribution; and (iv) the system or rules for answerability. Each is analysed in turn.

### **GOALS, OBJECTIVES AND THE CENTRAL BANK'S PREFERENCE FUNCTION**

The first major difficulty in performance accountability is encountered with the evaluation of central banking performance. To evaluate performance, one must first identify the goals or objectives pursued. Several broad objectives can in fact be easily established from the enabling legislation of the central banks. Blackman (3) lists these as:

1. The preservation of the internal value of the currency.
2. The preservation of the external value of the currency.

3. The promotion of economic development.
4. The promotion of a healthy financial system.
5. The development of capital markets.

The difficulty arises primarily because not all statutory objectives have the same importance or weight in the central bank's scheme of things at any point in time or over any defined interval of time. For instance, it cannot be concluded that capital market development featured importantly among central banking objectives in Barbados during the 1970s or among the members of Organisation of Eastern Caribbean States during the early part of the 1980s. Similarly, one would be hard pressed to sustain the argument that the Bank of Guyana or the Bank of Jamaica sought actively to preserve the internal and external value of their national currencies during the 1980s. Generally speaking, the social preference function of central banks as a formal representation of their goals and objectives is not time invariant or uni-valued.

The central bank's social preference function may not correspond with that of the political directorate, statutorily defined objectives, or with the community's social preference function. One issue, which then arises, is which set of weighted objectives is the appropriate set for performance evaluation of the central bank, that is, the objectives they are required to pursue or the ones they actually pursue? The notion that central banks may have quite separate and distinct preference functions from those of their political masters and the general public is readily understood from the perspective of bureaucratic theory. Within this paradigm, central banks are viewed as bureaux which are concerned with prestige and self-preservation and this may lead to a distinctive ordering of objectives (Acheson and Chant, 1). If there are indeed differences between the preference functions of the state as principal and the preference functions of the central bank as agent, then one cannot conclusively infer policy failures from divergences between exogenously, i.e., politically determined, objectives and actual outcomes. What may appear to be policy failure may merely reflect the central bank's pursuit of an internally determined different set of objectives.

Matters may be further complicated by informational asymmetries between the central bank and its principal. In an agency relationship, the principal has less information about the agent's preferences

and actions than the agent does. The less explicit or identifiable are central banking goals and objectives, the weaker is the empirical basis for criticism and the smaller is the scope for political efforts at ensuring convergence between the central bank's preferences and the society's preferences. As a bureau, it is in the central bank's interest to provide as little information as possible and to be as vague as possible about policy objectives and their relative ranks or ordering. Obfuscation may be an effective strategy for institutional protection and interest promotion (Acheson and Chant, 2; Chant and Acheson, 9).

Given the possibility of divergent objectives and of obfuscation, it is essential that society and the political directorate develop the capability of discerning the "true" as distinct from "stated" objectives or goals of central banking policy. However, identification of the "revealed preferences" of central banks is not an easy task.

### REVEALED PREFERENCES OF CENTRAL BANKS

A strand of the economics literature offers a solution to the problems which might be posed by the failure of central banks to state their true intentions. The 'revealed preference' approach pioneered by Reuber (19) and Wood (27) has its roots in the theory of optimal economic policy developed by Theil (23). The approach infers the policy intent by working backwards from knowledge of the policy actions, given a known structure of the links between policy actions and policy outcomes. Motive is deduced from action. A formal variant of this approach may be usefully sketched as follows.

Let the central bank's preference function be the quadratic:

$$(1) \quad U = (Y - Y^*)' W(Y - Y^*) + (X - X^*)' Z(X - X^*)$$

Where  $Y^*$  and  $X^*$  are vectors of desired values of the objective variables  $Y$  and the central bank's instrument variables  $X$ , and where  $W$  and  $Z$  are relevant matrices of weights representing the unknown preferences of the central bank.

Assume that the central bank operates with a truncated policy model of the economy linear in the policy instruments:

$$(2) \quad Y = AX$$

where  $A$  is a matrix of reduced form coefficients.

Then assuming that the central bank optimally chooses the values of the instrument variables, we get (by solving the first order

conditions for maximum  $U$ ) the optimal reaction function of the central bank

$$(3) \quad X = X^* + Z^{-1} A^{-1} WY^* - Z^{-1} A^{-1} WY$$

The optimal reaction function provides quantitative evidence on the contribution of changes in the objective variables to changes in the policy instruments by the central bank. In this sense, the policy preferences of the central bank are revealed by its policy actions. For example, suppose that a 10 per cent monetary expansion is known *a priori* to cause a 3 per cent growth in employment, a 10 per cent price level increase, and an 8 per cent deterioration in the foreign reserves. Furthermore, suppose that starting from a situation of zero per cent changes for all three objective variables, i.e., employment, price level, and foreign reserves, employment drops by 3 per cent. If the central bank then expands the money stock by 10 per cent, one would infer from the monetary expansion that the central bank attached greater social value to the employment objective than to the stability of the internal value of the currency and the balance of payments.

However, there still remain pitfalls in the revealed preference approach. Cognisance has to be taken of the possibility of covert policy action. In addition, the value of the approach is contingent upon knowledge of the economic structure or policy transmission mechanism.

### POLICY EXTERNALITIES

Kane (13) pointed to the possibility of unintended consequences of policy actions. When the variables affected are within the central bank's preference function, these effects are likely to be incorporated in subsequent policy reformulation. When they fall outside the preference function, they are an externality. Analogous to the incorporation of externalities in social cost-benefit analysis of investment projects, it seems advisable to incorporate the unintended effects of policy actions in the performance appraisal of central banks. This means that the review of goals and achievements must go beyond the statutory or declared objectives of the central bank and should encompass consideration of spill-over effects on variables not within the set of statutory or declared objectives.

### PERFORMANCE INDICATORS

Public economic objectives are often stated in terms that lead to imprecision and lack of clarity with respect to measures of achievement. In other words, it is not often clear what the appropriate performance indicators are. Consider, for instance, objectives such as “economic development”, “capital market development”, and “promotion of a healthy financial sector”. Economic development admits numerous performance indicators: growth of national income on an aggregate or per capita basis over some specific period, stability of incomes, the degree of employment, self-sufficiency (variously measured), etc. The problems of indicators with respect to capital market development can be exemplified by the following set of questions: Is capital market development measured by the number of institutions? The volume of instruments traded? The pattern of investment financing?

Similar definitional issues arise with respect to the policy objective of a ‘healthy financial system’. How many institutional failures does it take to make a financial system unhealthy? Does it depend upon how much wealth is lost or how pervasive the damage is? Even apparently simple cases like preservation of the internal and external value of the currency turn out to be tricky because of choices with respect to relevant reference periods and the acceptable degree of change and deviance.

If there are no clear-cut performance indicators or there is scope for reasonable differences in the choice of performance indicators, then one can be fairly sure that there will be major difficulty in reaching agreement on the quality or effectiveness of central bank performance even if there were an agreed identification of the set of policy objectives.

### ATTRIBUTION

Attribution or assignment of responsibility for performance outcomes presents perhaps the most difficulty in making central banks accountable. One reason is the less than full information available on central bank actions. Chant and Acheson (9) argue that bureaux will prefer covert to overt methods. “By use of covert methods, combined with a skilfully created mythology, the management of any bureau can

increase its immunity to critical investigation” (p. 109). Covert actions will also appeal to central banks because of “the broad range of initiatives implicit in their use”. Chant and Acheson indicate that, depending upon the instrument chosen, a central bank may obfuscate its powers or crucially delay knowledge of its powers. They go on to argue that a central bank can influence the overall covertness of its monetary policy by a judicious combination of instruments. “Sole reliance on any given instrument leaves a central bank vulnerable because only one signal is provided of the Bank’s actions. On the other hand, combination of several instruments used in different degrees and even in different directions at the same time makes interpretation of the central bank’s actions much more difficult and provides a degree of covertness unobtainable by exclusive reliance on any instrument” (Chant and Acheson, 9, p. 110).

A second reason is that the central bank is often not the only agent with official responsibility for policy goals. For instance, the goals of economic development and capital market development in the Caribbean are also the responsibility of other economic agents of the state such as the ministry of finance and the ministry of planning and of some legislative bureaux. Responsibility is diffused in most cases. Diffusion of responsibility provides opportunities for blame shifting among the several agents and may thereby reduce their separate accountability.

Thirdly, each of the statutory objectives of central banking policy is a complex function of variables, all of which are not endogenous to the central bank. In such circumstances, it can be argued that goals were not achieved despite the best efforts of the central bank. An interesting example is the case of general price level stability. Only monetary reductionist models of the open macroeconomy would insist that the rate of inflation is a single-valued function of the domestic money stock. More complete causal models would allow for the influence of foreign prices and money wage rates. The latter two variables are exogenous to the central bank. If increases in either variable exert upward pressure on aggregate prices independently of any change in the nominal money stock, it would be difficult to sustain the argument that monetary policy *caused* inflation, although it is readily understood that subsequent increases in the money stock would *validate* the inflation induced by foreign prices or by nominal

wage rates. This example shows the potential for ambiguity in interpretation of cause and effect and the difficulty it creates for attribution. There are many cases, of course, where no such ambiguity exists and where it is clear that the central bank does not have full control. For example, the failure of financial institutions may be due to the absence of adequate regulatory power or to a generalised recession in the economy or in a particular sector. Friedman and Schwartz (12) and Bourne and Graham (6) demonstrate that *ex ante* sound loans can become unsafe *ex post* because of deep economic recession.

There is a fourth reason, which is closely related to the third one, namely that there is not always much technical consensus on the mechanisms of the economy. Differences in technical judgements lead to different appraisals of central bank performance and to varied perspectives on the issue of attribution. Many examples may be adduced but it is perhaps sufficient to refer to the cases of the demand for money, the aggregate savings function and the aggregate investment function. The demand for money function is a key relationship in macroeconomic models. Monetarists believe that there exists a stable relationship between the demand for real money balances and real income so that changes in nominal money balances generate changes in aggregate expenditures, aggregate prices and the balance of payments. A recent Caribbean example of such a monetarist model is contained in St. Cyr (22). In the monetarist schema, interest rates have at best a weak and distant effect on the demand for real money balances so that the effects of money stock changes are not transmitted through financial markets. Keynesians in contrast believe that interest rates are a major influence on the demand for real money balances and that monetary effects on aggregate expenditures, aggregate prices and the balance of payments are transmitted via financial markets. The Caribbean empirical studies on real money demand functions reported in Bourne (5) provide a menu of estimates of the income and interest rate parameters, giving rise to a lack of consensus on the empirical magnitude of the relationships.

The savings function is another major macroeconomic relationship. It plays a central role in short-run stabilisation analysis and policy as well as in long-run economic growth and development. It is common practice to specify the savings function with some income variable and interest rate as its arguments. The development econom-

ics literature often adds other variables such as the dependency ratio and foreign savings. A variety of empirical specifications are reported in Bourne (4), Ekanayake and St. Cyr (10), Ramsaran (17), Watson (24) and Watson and Ramlogan (25). Here, too, the empirical evidence is conflicting. With respect to the influence of interest rates on domestic savings in Trinidad and Tobago, Watson (24) reports a coefficient of 2261.9 for one specification and 2459.9 for another specification. Watson and Ramlogan (25) report interest rate coefficients of 0.641, 0.653, 1.27 and 1.22 for varying specifications of a Trinidad and Tobago savings function in which the savings ratio is the dependent variable, and estimated coefficients of 2143.8, 2276.1 and 2865.6 when the net national savings is the dependent variable. On the basis of these two studies alone, the policymaker and the policy analyst have considerable latitude with respect to the savings model they may choose.

The empirical evidence on the aggregate investment function is also inconclusive. Studies by Worrell (29), Bourne (5), and Ramlogan and St. Cyr (16) present a variety of results. Thus Ramlogan and St. Cyr (16) present five different statistically significant (but perversely signed) coefficient estimates for their credit variable, and similarly for their output variable. Coefficient estimates are not identical across model specifications.

The main conclusion of this section, therefore, is that it is extremely difficult to attribute credit or blame to central banks even within their statutory realms of responsibility because their actions may be covert, other public sector agencies share responsibility with them in vaguely defined terms, important causal variables might be exogenous to the central bank's set of policy instruments, and the underlying model of the pertinent economic process may be unclear and debatable.

### **PROVISIONS FOR PERFORMANCE ACCOUNTABILITY**

There is hardly any constitutional or other formal provision for performance accountability in Caribbean central banking. The Trinidad and Tobago Central Bank Act is characteristic of the status quo. It stipulates that the central bank shall keep the Minister of Finance informed of monetary and banking policies pursued or intended. It permits the Minister to issue general directives to give effect to the

monetary and fiscal policies of the government. It also requires a copy of the Central Bank's Annual Report to be laid before Parliament. Although the laying of the Annual Report in Parliament provides an opportunity for parliamentary review and debate on central bank performance, this rarely happens. Furthermore, when questions are raised they tend to be focussed on alleged breaches of statutory restrictions on central bank credit to the government, rather than on the central bank's macroeconomic and financial sector management performance.

The United States is sometimes cited as an example of how performance accountability might be formally achieved. The Federal Reserve System must report to Congress. Furthermore, the Chairman and the Governors of the Federal Reserve Board are required to appear before the Banking Committee and the Joint Economic Committee. Thus in theory "Congress can provide a highly visible forum for criticism of the System" Woolley (28, p. 133). There is considerable skepticism, however, about the effectiveness of congressional supervision. Reagan (18, p. 298) asserts that the "issue of FRB accountability to Congress is a false one and should be exposed as such". Skaggs and Wasserkrug (21) claim that the information provided to Congress at quarterly oversight hearings is insufficient and inadequate. Woolley (28) points to the inadequate technical background of members, the limited staff resources of the oversight committees, and the lack of sustained interest among congressmen as further constraints to effective congressional oversight.

From a Caribbean perspective of little or no performance accountability of public sector agencies, it would still be useful to adopt the US system of congressional supervision. At the minimum, it would serve to focus parliamentary attention on macroeconomic policy and on the role of the central bank in the conduct of that policy. Routine requirement of parliamentary review would galvanise wider public interest and discussion because issues raised in parliament tend to be widely reported by the national communications media and thereby command public attention.

These formal provisions for performance accountability could be reinforced by the development of a better technically equipped media and local intelligentsia, and by publication of good quality current affairs journals with reasonable coverage and periodicity.

### **A QUESTION IN LIEU OF A CONCLUSION: SHOULD CENTRAL BANKS BE ACCOUNTABLE?**

Performance accountability of central banks is closely related but not identical to the question of central bank independence from the political system. It is therefore perhaps useful to conclude by re-examining the premise on which this paper was constructed. There is a large international body of opinion in favour of independent central banking. Similar views have recently been advocated in the Caribbean by Blackman (3), Worrell (30), and with some qualification by Farrell (11).

Expert opinion has not always supported the desirability or the reality of central bank independence. For instance, R.S. Sayers categorically states: "The authority of the state over the central bank is always necessarily absolute. All that is open to question is the extent to which the sovereign body should detail its commands to the central bank — for the monetary laws are such commands" (20, p. 65). Cairncross concludes at the end of his survey of relations between the Bank of England, the Treasury and Parliament that "The British experience has been that there is no alternative to a close working relationship with each preserving its independence of judgement but with the responsibility for major decisions resting inevitably on the government of the day". (8, pp. 71-72). Edward Kane's summary conclusion on the Federal Reserve System is definitive: "The Fed is approximately as independent as a college student whose room and board is financed by a parentally revocable trust fund. Some conflict will be tolerated, but the limits of the benefactor's patience must always be kept in mind" (Kane, 14, p. 329). Furthermore, the abrupt departure of Mr. Pohl from the Presidency of the Deutsche Bundesbank in Germany after his loss on a major policy issue with Chancellor Kohl at the very least raises a question about the reality of the much proclaimed independence of the Deutsche Bundesbank.

It has been observed that "virtually all those who advocate independence, do so because they want the central bank to pursue, or at least to be able to pursue, fundamentally different objectives from those pursued by the rest of the government" (Bryant, 7, p. 320). Were this to happen, the preferences of the agent would necessarily prevail over those of the principal. The central bank, not the government, would be the source of monetary and financial policy, shaping the

entire framework of national economic policy. It would be difficult to reconcile such an eventuality with the principles of modern democracy.

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# **Financial Accounting for Central Banks — with Special Reference to CARICOM**

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## **I. INTRODUCTION**

In an earlier paper, “Towards a Theory of Central Bank Management — With Special Reference to the Caribbean”,<sup>1</sup> I grappled with the problem faced by central bank management in measuring the performance of the institution. I attributed this to the basic fact that, whereas the inputs into the central bank’s operations (i.e., wages, supplies, services, etc.) were costed by the market, its outputs of advice to the government and information and other services to the public, for which it received no fees, were for the most part not costed by the market. This situation derives from the unique function of a central bank in the economy.

The managerial approach which I suggested was to disaggregate the activities of the central bank according to classes of clientele, e.g., government and commercial banks, etc., and according to functions, e.g., exchange control, bank supervision, etc., and then develop appropriate measures of performance for each activity. I acknowledged the difficulty of designing any measure of central bank performance, but I insisted that management would have to do its best to obtain some indication of how well or badly it was doing.

I observed along the way that “profits” represented a most unsatisfactory overall measure of performance for central banks. For example, there is no reason to believe that the \$30 million profit of the Central Bank of Barbados in 1992 represented a more superior performance than the \$4 million loss in 1989.

Profit is not only a misleading measure of performance in the case of central banks, but frequently a perverse one as well. A central bank might very well record splendid profits during a period when its operations actually contributed to dysfunction in the economy, but

report a loss when it contributed to superior economic results. For example, by financing two thirds of the record government deficit in 1990, the Central Bank of Barbados contributed much more to the malfunctioning of the national economy than it did in the year before; yet it earned \$4 million in profit in 1990, \$8 million more than in 1989. By the same token, the J\$3.7 billion of Bank of Jamaica "losses" accumulated up to year end 1992 reflect not so much the performance of its management as its forced financing of government and public sector operations.<sup>2</sup>

The difficulty of measuring the performance of central banks is twin-rooted. First, their function of monetary management is, by its very nature, shared with ministers of finance, and usually in a manner which makes it difficult to allocate the responsibility for various monetary outcomes. Secondly, there is the unsatisfactory state of financial accounting for central bank operations. This reflects both the uniqueness of the central bank in any economy (making comparison with other financial institutions difficult), as well as professional accountants' imperfect understanding of the nature of central banking. The latter is hardly the fault of accountants, since in the entire economic literature there exists not even one authoritative exposition on the theory of central banking.

Even if, for various reasons, the central bank's financial reports provide an imperfect measure of managerial performance, they should certainly provide the public with some meaningful index of the central bank's relative contribution to real economic progress, whether positive or negative. At least, the more egregious distortions produced by current accounting conventions might be mitigated, even if not eliminated. This paper represents a first attempt to do so.

Section II clears away the confusion surrounding the issues of the measurement of central bank performance. Section III explores the phenomenon of seignorage, a concept which lies at the heart of central bank financial operations. Section IV develops the case for distinguishing between "real" and "nominal" values in financial accounting for central banks. Section V offers a critique of the monetary arrangements of central banks within CARICOM, especially in regard to their financial operations. We conclude with suggested changes in financial reporting so as to provide a more accurate picture of the central bank's contribution to the real economy.

## II. ISSUES OF THE MEASUREMENT OF CENTRAL BANK PERFORMANCE

This paper makes the point that the financial reports of central banks should provide a more realistic idea of their contribution to real economic output/decline. Such an index might or might not measure the performance of management, depending on the degree of independence from government which the central bank enjoys. This is an issue which Professor Compton Bourne thoroughly obfuscates in his paper, "Performance Evaluation and Accountability of Central Banks".<sup>3</sup> He writes, "Performance accountability of central banks is closely related to but not identical to the question of central bank independence from the political system".

In fact, an individual or institution can only be held accountable for its performance if it has the legal authority and the means to carry out the functions assigned to it. In the case of the Federal Republic of Germany, we may conclude with considerable justification that the low level of inflation prevailing in that country since World War II is a positive index of the Bundesbank's performance. The Act establishing the Bundesbank unequivocally charges it with the responsibility of price stability and empowers it to implement monetary policies independently of the administration and, on occasion, policies opposed to those of the administration, if that is necessary to fulfill its statutory mandate.<sup>4</sup> New Zealand's Minister of Finance recently settled the issue of the central bank's accountability by specifying monetary stability as its sole performance criterion. Maximum inflation targets are agreed on between the governor of the central bank and the minister of finance, who has surrendered his authority to give directions to the central bank except under specified circumstances.<sup>5</sup>

After his introductory remark that CARICOM central banks "are subject only to the authority of the political directorate to whom they are legally answerable and from whom they may receive directives", Professor Bourne continues: "The reality, as distinct from the constitutional formality, of political control and accountability is the subject of this paper". But operatives are, by definition, accountable to those who have the power to appoint and remove them. If CARICOM central banks do not behave as if they are accountable, this reflects poorly on the political directorate. In fact, the frequency with which CARICOM central bank governors and directors are removed or hounded from

office when administrations change does not suggest the absence of political control. It does suggest, alas, that CARICOM central banks are held accountable for political rather than technical ends.

In opposing central bank "independence" Professor Bourne shows how captive he is to the British concept of parliamentary democracy which fosters the tyranny of the executive. In the absence of a written constitution, the British Parliament is sovereign, so that an administration enjoying even a simple majority in Parliament is also sovereign. Not surprisingly then a British Cabinet finds it difficult to entertain the concept of central bank independence. However, in republican and especially federal regimes, such as exist in Germany and the U.S.A., it is the constitution which is sovereign, and checks and balances among the executive, legislative and judicial branches are deliberately built into the political system. "Government" and the executive are not synonymous, and it is not unusual for different elements of "government" to pursue fundamentally different objectives. In spite of their written constitutions, CARICOM administrations behave very much as if they were sovereign, and continue to observe British parliamentary precedents.

That the Bundesbank has sometimes found itself in conflict with the Chancellor, and the Chairman of the Federal Reserve with the President, does not make Germany and the USA any less democratic than Guyana or Jamaica, where the central bank has operated primarily as a money printing machine for the minister of finance. My own preference is for central bank independence within a democratically determined political system that limits the power of the administration to destroy the economy through central bank financed fiscal deficits.<sup>6</sup>

Increasingly, enlightened administrations in countries as varied as Chile, South Africa, New Zealand and France have taken steps to free their central banks from the political direction of the ministry of finance, and to make price stability the unequivocal criterion of their performance. In the absence of similar developments within CARICOM, we must at least develop financial reporting conventions which indicate whether central banks are contributing positively or negatively to real economic output.

### III. THE PHENOMENON OF SEIGNORAGE

The distinguishing feature of a central bank is its monopoly on money creation, and hence its unlimited access to seignorage. Seignorage may be defined as the rent earned from the right to issue currency. The means of realisation of such rent depend on the monetary regime in operation. There are two basic types of monetary regimes, (1) commodity money, and (2) symbolic money. In the first case, the intrinsic value of the circulated currency is equal to its face value; in the second instance the intrinsic value of the circulated currency bears no relation to its exchange value.<sup>7</sup>

It was notorious in the era of gold and silver coinage that the king would clip the coinage and reissue the clipped coins at their original face value. The proceeds from clippage would be melted down to mint new coins. (It was only after 1660 that the edges of English coins were embossed so that any filing down was plainly visible). Seignorage was reflected in the profits from such clippage, along with the service charge to those who brought new silver and gold for minting.

The move to symbolic money began when it was realized that the public was quite indifferent to the state of coinage as long as there was price stability. However, if the king overdid the clippage, growth of the money supply would exceed the increase in national output, thus leading to inflation. This would cause the public to lose confidence in the domestic currency.

Excessive clippage would also lead to currency devaluation. Whereas the locals might be tolerant of the circulation of clipped coinage, foreign merchants always insisted on "true" coinage. With moderate clippage, the local merchants could always hoard enough "true" coinage to meet their external liabilities. When they were forced to pay with clipped coins, the sophisticated foreigners would demand coinage of an increased face value to compensate for the reduced intrinsic value of the clipped coins.

A currency board's issue is analogous to commodity money in that it is convertible for hard currency on demand. The currency board obtains its seignorage from the interest earned on the foreign securities which "back" the issue — after operational expenses are covered. The currency board usually maintains foreign investments in excess of its domestic liabilities to serve as a cushion against the vagaries of the international capital market.

With the currency board system the money supply is a direct function of the trade balance and foreign capital flows, and the foreign payments problem is eliminated. There is still limited scope for domestic inflation via the increase of money velocity, or through the credit creation process of the commercial banking system. However, the balance of payments effects are self-limiting, as the draw-down of foreign exchange reserves to purchase imports leads automatically to a contraction of the money supply and a consequent reduction in the demand for imports.

Most modern economies use symbolic money. One advantage of symbolic money is that it does not involve the sacrifice of real commodities or foreign assets for its “backing”. Another advantage is its flexibility: its supply can easily be expanded or contracted to the desired level through the operations of the central bank. The inflexibility of commodity money was a serious drawback, so that the expansion of the money supply, and hence the growth of the economy, depended heavily on imports of bullion and ultimately on the discovery of new lodes of gold and silver. The integrity of symbolic money depends on the appropriate balancing of its supply and demand. Its over-supply leads to inflation, with its consequent economic pathologies. (Its under-supply could lead to falling prices, recession and even depression, as happened in the depression of the 1930s).

Countries with hard currency settle their foreign deficits through the purchase of other foreign currencies on the international foreign exchange markets. Equilibrium in the collective foreign exchange markets is brought about by changes in the relative external values of various traded currencies. Countries with “soft” currencies, like those in CARICOM, have no choice but to adopt a mixture of symbolic and commodity currency, and maintain stocks of commodity money (gold or foreign exchange assets) to settle their external debt. This is because their own foreign exchange markets are too thin and shallow to “play” in the international “big league”. It is not surprising then that attempts to float CARICOM currencies have usually led to rapid and disruptive currency depreciation.

The gold standard and its successor, the gold and dollar standard, were hybrids of the commodity and symbolic monetary systems. Under the pure gold standard, the national currency was theoretically redeemable in gold. However, this did not necessitate a 100 per cent

backing of gold bullion, since all the currency notes and coins in circulation could hardly be tendered simultaneously at the central bank. Indeed, in times of crisis, the commitment to redeem currency for gold might be temporarily suspended. Under the gold and dollar standard (the Bretton Woods Agreement) the national currency became entirely symbolic, in that nationals could not redeem their local currency for gold, while net foreign deficits were settled between central banks in gold or acceptable “hard” currency. The need to settle in gold or hard currency imposed a discipline on monetary authorities and motivated them to keep a tight rein on the growth of their money supply, since the consequence of delinquency was a “shameful” devaluation of the national currency.

In a monetary regime using symbolic currency, seignorage is earned by the central bank when it lends new money to the government or the commercial banking system or, indeed, when it purchases goods and services for its own use. Typically, the operating expenses of a central bank are so small that they constitute a negligible portion of the available seignorage. The same cannot be said for fiscal deficits which, if financed by the central bank, could threaten the integrity of the national currency. There is a point at which seignorage ceases to be a harmless source of income, and becomes an agent of inflation and currency depreciation, setting off a downward spiral of economic decline.

#### **IV. “REAL” AND “NOMINAL” VALUES IN CENTRAL BANK OPERATIONS**

One of Sir Arthur Lewis’ most important insights was the distinction he drew between developed and underdeveloped countries: developed countries possess unlimited supplies of capital; underdeveloped countries have unlimited supplies of labour.<sup>8</sup> In the current intellectual climate where the same free market model fits all countries, this distinction is frequently disregarded by policy makers, with baleful consequences for their clientele. Another egregious error of policy makers in developing countries is the application of the Keynesian closed model to their typically highly open economies. These two distinctions have important implications for policies of money creation in these respective types of economies.

In the Keynesian-type closed economy with unlimited supplies of capital, recessionary conditions reflect the idleness of already installed capital accompanied by high unemployment.<sup>9</sup> This unemployment reflects the deficiency of aggregate demand in the economy, so that the creation of new money to fund government expenditures serves to expand aggregate demand and so bring idle resources of capital and labour back into use. In these circumstances, money creation by the central bank contributes to the expansion of real output. However, since supplies of capital are unlimited, it is the full employment of labour which is first achieved; continued expansion of aggregate demand creates inflationary pressures and, in time, balance of payments disequilibrium, as both consumers and capitalists are forced to import goods and services which the fully employed labour force can no longer produce. This explains the propensity of industrial countries to import labour during the upswing of the business cycle.

In the case of developing countries, the creation of new money by the central bank to fund government expenditures quickly brings all idle capital into use long before a dent is made in the unlimited supplies of labour. This is why Sir Arthur Lewis recommended the importation of foreign capital and technology to exploit idle and underemployed labour in the traditional sector. The alternative model, employed by the Soviets and Japanese during their early development, required the ruthless extraction of savings from the peasant class to finance imports of physical capital and technology.

Real savings is the source of capital, and failure to appreciate the inelasticity of real savings in LDCs has led international financial institutions to impose Professor Ronald McKinnon's high real interest rate policies on some CARICOM states in a futile attempt to bring non-existent real savings into play.<sup>10</sup> Such policies have led to the bankruptcy of several small businesses, but have brought about only negligible increases in real savings. We should note that financial savings are not the same thing as real savings!

Once the limits of production imposed by the sparse supply of capital are reached in developing countries, excess purchasing power generated by money creation can only be satisfied through imports. This process is halted only by the exhaustion of the nation's foreign exchange reserves and the drying up of its credit and foreign aid sources. The chronic shortage of foreign exchange precipitates eco-

conomic collapse, as the cases of Guyana and Jamaica so vividly demonstrate.

If a central bank's operations lead to economic decline and dysfunction, its operations can in no useful sense be termed "profitable". Indeed, except for buildings, equipment and meagre holdings of foreign exchange, the assets currently listed in the balance sheets of the Banks of Guyana and Jamaica are comprised primarily of a vast volume of non-marketable securities and may properly be described as fictitious or, more politely, "nominal". The auditors may confirm the arithmetic of their financial reports as correct; they should not represent their accounts as being a "true and fair" record of their operations.

The balance sheets of the Banks of Jamaica and Guyana are to be contrasted with that of the Eastern Caribbean Central Bank (ECCB), whose assets are primarily comprised of foreign balances and securities, all realisable in the international market place. The Bank's holdings of domestic treasury bills are relatively small and liquid, and its holdings of long-term government securities limited. Seignorage is earned primarily through returns on the foreign assets which "back" the currency and so ensure that the Bank's liabilities are readily exchangeable for foreign exchange.

Utilising the well-founded accounting principle of conservatism, we may distinguish between the "real" and "nominal" transactions of central banks. The criterion is whether or not the financial operations represent values realisable in the capital or money markets. According to this criterion, the accounts of the ECCB would overwhelmingly represent realisable values, while those of the Banks of Jamaica and Guyana would not. In the case of the Central Bank of Barbados the auditors would have to sort the "chaff" from the "wheat".

## V. CRITIQUE OF MONETARY ARRANGEMENTS IN CARICOM

At the root of the current monetary disarray within CARICOM is the failure of monetary authorities to recognise the limits of seignorage; or, put another way, to recognise that you can only clip the coinage so many times before public confidence in the currency is lost. Jamaican and Guyanese ministers of finance have regarded the seignorage deriving from the currency issue as infinite. The consequent debasement of the Guyanese and Jamaican dollar has extinguished the

usefulness of those currencies as “units of account” and “stores of value”. They remain “media of transaction” only through the force of law.

Secondly, most CARICOM governments overlook the critical importance of adequate foreign exchange reserves in the context of small and open underdeveloped economies. It is the level of foreign exchange holdings which determines the extent to which seignorage can be “safely” extracted. Once the banking system and, ultimately, the central bank are unable to meet the public demand for foreign exchange, public confidence in the domestic currency is lost, and once lost is very hard to restore. Both the Guyanese and Jamaican currencies have suffered this fate.

Thirdly, misguided by the free market ideologies of the World Bank, IMF and IDB, some CARICOM states have set off in search of the holy grail of the “equilibrium exchange rate”, plunging their currencies into free-fall devaluations. The monetary instability created by exchange rate volatility makes measurement of the financial operations of central banks even more difficult. In fact, no CARICOM country possesses foreign exchange markets with the depth and breadth to sustain a floating exchange rate regime. Furthermore, as I have explained in the First Adlith Brown Memorial Lecture, once foreign exchange markets have collapsed, as they did in Guyana and Jamaica, the equilibrium value of the exchange rate becomes indeterminate.<sup>11</sup> Commenting on the case of the industrialised nations, Professor Peter Kenen has this to say:

Exchange rates should be managed, not left completely to market forces, but informal arrangements such as those exemplified by the Plaza and Louvre agreements may not suffice. To manage exchange rates effectively over the long term, it may be necessary to manage them systematically, not periodically, and thus to devise a pegged rate system resembling the EMS.<sup>12</sup>

What makes the governments of tiny countries like Trinidad and Tobago, Guyana or Jamaica believe that they can go it alone?

Fourth, central banks themselves have failed to distinguish in their financial reporting between “real” and “nominal” transactions, and have thus contributed to further economic dysfunction. Indeed, the

balance sheets of some CARICOM central banks read like a fairy tale. This is especially so in respect of the valuation of assets, the recognition of income and the reporting and pay out of "profits". For example, the assets of the Bank of Guyana are comprised predominantly of government securities which have negligible market value. Again, the "foreign reserves" of the Central Bank of Barbados include a high proportion of balances of the defunct CARICOM Multilateral Clearing Facility (CMCF). Since the debtor, the Government of Guyana, is potentially immortal, these balances need not be written off. However, only the proportion of CMCF assets earning income at the prevailing rate of interest should be treated as "real" assets; the remainder should be considered "nominal" assets and shifted to suspense accounts. At any rate, illiquid foreign assets are, by definition, not foreign exchange reserves!

In some cases, CARICOM central banks purchase vast quantities of government paper to fund runaway fiscal deficits which, far from expanding real output, sets off inflation, currency devaluation and economic decline. Although such loans to governments actually contribute to economic dysfunction, central banks yet treat interest on these loans as income, and take them into the profit and loss account. In contrast to a commercial bank, which treats bad loans as losses, CARICOM central banks report "profits" in spite of the real economic losses resulting from their credit extension.

What is worse, the central bank pays out these "profits" to government and other domestic institutions, thus injecting more high-powered money into the economy and setting off a further round of price increases and currency depreciations. It was the interest income from credit to the government which contributed so substantially in 1992 to the record "profits" of the Central Bank of Barbados. These "profits", in turn, were paid out to the Government, allowing it to further increase its inflationary expenditures. Indeed, some ministers of finance perceive central banks more as convenient sources of credit and income than as regulatory institutions.

The Bank of Jamaica has its own version of this charade. Supposedly for the purpose of mopping up excess liquidity in the banking system, the Bank issues short-term certificates of deposit (CDs) at rates of up to 50 per cent per annum. This means that a purchaser of a J\$8 million CD (worth approximately US\$300,000

today) would receive J\$9 million at the end of three months, leading to an overall net increase of liquidity at 12.5 per cent in three months, a dramatic rise in the money supply in a country experiencing chronic inflation. To prevent such an expansion in liquidity, the Bank would have to issue another CD to the value of J\$9 million, and so on, and so on. In theory, the interest costs of these issues are borne by the Jamaican Government. But what government can afford to pay 50 per cent on its loans? Not surprising then, a government debt to the central bank of over J\$20 billion had built up by the end of 1991, representing a horrendous overhang of liquid assets in the economy. Certainly, it would be better for the Bank of Jamaica to sell long term government paper from its portfolio in the capital markets at an appropriate discount so as to sterilise the funds over the long term. Or why not raise the cash reserve asset, or the proportion of government securities to be held by the banking system? And why such high interest rates? Is it because these perfectly sensible measures are forbidden by the international "gods" of financial liberalisation?

It should by now be clear even to blind men that sustainable economic development is unlikely in the absence of a sound and stable currency. The countries of CARICOM, the OECS, Belize, The Bahamas and Barbados, whose economic policies have maintained monetary stability, have far outperformed those countries whose policies led to currency depreciation — Guyana, Jamaica and Trinidad and Tobago. There have been a number of proposals for restoring public confidence in the CARICOM currencies. In this respect, it is surprising that the strategy of currency reform has not occurred to the monetary authorities in Georgetown and Kingston. It is an historical fact that neither in the 1920s nor the 1940s did economic growth resume in Germany until comprehensive currency reforms had been put in place.

We have discussed above the issue of independence for regional central banks. Professor Stephen Hanke, in a paper, "From Monetary Mischief to Sound Money", has proposed that Jamaica should return to a currency board system.<sup>13</sup> I have frequently put forward the ECCB as a model for a regional CARICOM central bank.<sup>14</sup> In the meantime, we should seek the assistance of the accounting profession in developing financial reporting conventions which provide a fair financial picture of the impact of central bank operations on the real economy.

## V. PROPOSALS FOR NEW ACCOUNTING RULES

In proposing new accounting rules for CARICOM central banks, we invoke the rapidly evolving accounting principle that financial assets should be marked to market and, secondly, the long established principle of conservatism. The first principle implies that central bank assets should be valued at what they would fetch in active foreign and domestic financial markets. The convention of conservatism suggests that proceeds from seignorage, and the income derived therefrom, should not be regarded as “real”. This is because of the uncertainty as to whether the *ex ante* proceeds from seignorage will represent *ex post* market values.

These principles yield the following proposals:

1. All assets should be marked to market.
2. Only assets tradeable on the external or domestic markets should be regarded as “real”. These would include securities traded on the international money and capital markets, and assets readily saleable on domestic goods and financial markets.
3. Advances from the central bank to the government should attract no interest charges. Similarly, securities purchased directly from the government by the central bank should bear no coupon.
4. Only income from “real” assets should be taken into the profit and loss accounts. Income from nominal assets or from seignorage should be segregated in suspense accounts.
5. Profits should not be paid to the government unless the auditors certify that the external assets of the central bank are at a prudent level, given the bank’s external liabilities.
6. The accounts of the central bank should be recorded in terms of an accepted “hard” currency or a basket of such currencies. This would ensure comparability from year to year.
7. Central bank advances to the government should be limited to a fixed proportion of the external assets of the central bank, rather than related to the current expenditure of the government.

The above rules would help to ensure that the profile of the central bank's balance sheet reflects its "true" financial state, and would limit the possibilities for compounding the effects of excessive credit creation.

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# **Financial System Reforms and Regulations**

**Sergio Ghigliazza and Flavia Rodriguez**

The past 15 years have witnessed a broad process of financial reforms undertaken in industrialised countries as well as developing ones. Such reforms have been an integral part of more general efforts oriented to achieve more efficient and less unfair economic structures. In cases with inflationary situations, such efforts have been oriented as the first step to fight them. This leads to greater efficiency in general terms, but with a special significance for the development of the financial market, for which this is a necessary precedent.

In Latin America, the motivations that have led countries to begin important changes in their financial systems have been generally two: as an answer to a deep crisis in their financial system; or to improve competitiveness and efficiency in their financial institutions.

In each of the countries, the reforms have been done paying attention to their particular characteristics, but they have had many common elements. Among them are a greater participation by market mechanisms in the determination of interest rates and in the attraction and allocation of financial resources, introduction of new instruments, big reductions in reserve requirements for bank deposits, higher capital ratios, new approaches to assets supervision and much less regulation of financial intermediaries.

Changes in regulations have influenced the extent and performance of the reforms in each country, as well as the degree of internationalisation of financial markets. The innovations that have been introduced have also affected monetary policy and market supervision and regulation.

This paper intends to make a review and summarise the main elements of a financial reform. A reform that leads to more efficient intermediation, by reducing market distortions and permitting resources to reflect their real opportunity costs, should depend to a greater extent on market forces and much less on discretionary management in determining quantities and prices.

The paper is divided into three parts. The first one shows an assessment of financial market operations in Latin America; the second analyses the principal measures and instruments used in recent reforms in the region, and mentions some of the new problems that have arisen as a result of the new measures, and the third examines the changes that these reforms imply for central banks.

## I. ASSESSMENT

Recent changes in the regulation and operation of financial markets in Latin America can be interpreted as a reaction to the crisis faced by many countries in the region during the eighties. This crisis produced three-digit inflation, acute financial disintermediation, and high public sector deficits. These deficits, in turn, led to increased demand for domestic and foreign financing that resulted in almost complete exclusion of the private sector from bank credits and the capital market, and a huge public and private sector foreign debt.

Financing of government deficits induced high reserve requirements in the banking system, as well as strong bullish pressures on free interest rates, both real and nominal. To these pressures were added the high risk and macroeconomic uncertainty prevailing in these economies.

Although these aspects brought the crisis to a head during the eighties, we must recognise the fact that financial systems in Latin America were seriously distorted long before, and the emergence of highly inflationary situations only helped to make this more obvious.

As is well known, the financial market's interest rate is determined by supply and demand. This variable plays an important role in raising and allocating funds. Wrong signals from an inefficiently functioning market or administrative interventions can lead to improper allocation of productive factors and have a negative impact on productivity.

As in any other market, there are two prices here: the interest rate at which intermediaries receive funds (deposit rate) and the rate used in channeling them (lending rate). The margin between the two is a good indicator of a market's efficiency: the wider the margin, the more inefficient the market, and vice versa.

For example, a narrowing of the differential will mean a reduced lending rate, an increase in the deposit rate, or both. Any increase in

the deposit rate will lead to higher savings; a reduction in the lending rate will encourage investment. Either result contributes positively to growth, when investment and savings respond to interest rates.

The greatest contribution that the financial system can make to economic growth is operating efficiently; any reforms should be aimed at accomplishing this objective.

One way of doing this is to try to pinpoint the main obstacles to efficient market operations. These are as follows.

In first place, inflation. The inflationary process affects the fundamental characteristics of money, which loses its properties as storage of value, currency unit and medium of exchange. The consequence is a profound disintermediation process.

Inflation also leads authorities to adopt unrealistic measures trying to stop the process, such as fixing interest rates, and making huge increases in reserve requirements, leading to distorted market operations and changing relative prices.

Market deficiencies that usually pass without notice in stable times come out in aggravated form and give feedback to the inflationary process.

Inflation, especially the non-anticipated one, not only because of its direct effects but because of the distortions originated by it, is without a doubt the financial market's enemy number one.

Generally, behind uncontrolled inflation there is a large public sector deficit, often caused by a lack of political will to limit or reduce the share of the public sector in the economy.

Other obstacles that should be considered as intrinsic to the market are the following:

- a) Lack of competition in the market. Barriers to entry and departure from the market. Administrative measures restrict the entrance of new domestic and foreign participants. On the other hand, banks are supported explicitly or implicitly to avoid bankruptcies that could affect the system's stability.
- b) Restrictions on capital flows. Sometimes interest paid on foreign debt is taxed, artificially increasing costs of this source of funds. Financial regulations are also applied, such as reserves requirements on foreign debt, or special authorisations or permits are

required to engage in these kinds of operations. Taxes and excessive regulations limit the use of financial instruments, thus biasing portfolio selection.

- c) Interest rates are determined by administrative decisions. Deposit rates, for financial intermediaries or the public sector, are fixed by the authorities and are reviewed at their discretion.

We should point out that errors arising when interest rates differ from those from free market operations impact on factor distribution and macroeconomic equilibrium, especially when monetary policy validates discretionary decisions. When this is not the case, black or parallel markets are encouraged.

Frequently, loans to specific sectors or activities are granted at fixed rates, which in many cases differ from market rates. Under inflationary conditions, this fact represents large subsidies for the beneficiaries of these credits and, in the long run, puts pressure on the fiscal or quasi-fiscal deficit.

- d) Information on participants in the market and the state of their activities is restricted. It is usually concentrated in the central bank, the superintendency of banks, insurance brokers, or other intermediaries.

By limiting information to the public, the superintendency, or the central bank, or the treasury assumes a moral responsibility towards the creditors of intermediaries. These can always claim that the authorities concealed information needed to evaluate the risk of the intermediary's portfolio.

In financial investments it is generally accepted that lower risk corresponds to lower returns. Nonetheless, if the depositor or creditor of a financial intermediary does not have enough information to be able to assess the risk incurred, and thinks the government agency has it, and is not willing to distribute it, it has grounds to make the agency responsible. When investors or depositors feel that the government is responsible for the safety of their assets, they will not care where they invest their money. Their investment decisions will be determined by which bank offers greater returns. For them, risk will be the same no matter where they invest.

The foregoing is a deterrent to market efficiency. If banks are not under market discipline, they have no stimulus to reduce risks and therefore raise cheaper funds.

- e) This situation is reinforced if authorities have found formulae to avoid losses to depositors because of bank failures, or if the government has explicitly guaranteed capital and interest recovery to creditors of financial institutions. This could lead to practices contrary to the solvency of the institutions and their adequate capitalisation. In the end, it could result in a relaxation of prudential rules for credit granting.

As long as the criterion for fund raising is payment of higher interest rates, borrowing funds will be more costly. Thus, banks will incur higher risks. The more explicit and indiscriminating is the government's guarantee, the more is the relaxation of credit discipline. In extreme cases, when one or more banks have had solvency problems, the owners have been motivated to transfer funds to their non-banking businesses through unguaranteed "accommodation" credits, at lower than market interest rates.

- f) Social objectives have often been given to financial intermediation, especially when all or part of it belongs to the state. If the instruments used for these objectives have achieved their purpose, they have meant distortions in the allocation of funds. This has been the case in compulsory channelling at subsidised interest rates. In many cases, these functions have been assigned to development banks. This model, whether applied to commercial or development banks, does not recognise the fact that the purpose of any bank is to make a profit, and virtually isolates it from the discipline imposed by market forces. Nonetheless, financial activities do require discipline, thus it is imposed through regulation which, under the described circumstances, goes against market forces. Therefore, there will be incentives to evade it which, in turn, will lead to more regulations: this is over-regulation.

If the market is highly competitive, banks cannot fix the interest charged to customers; lower returns on legal reserves or compulsory investments will affect balances and could even result in losses. Therefore, to avoid bank losses they are *often granted compensatory privilege in the form of restraints on market competition*. Such situations are reflected in the differential between deposit and lending rates.

Many of the obstacles to efficiency in financial markets that we have mentioned in this assessment have been overcome by some Latin American countries through their recent financial reforms, as we shall see in the following section.

### **FINANCIAL REFORMS**

Financial reforms pursue an efficient organisation of the market as a point of reference. Care has been taken to ensure that money recovers its essential functions. Much progress has been made toward this by reducing inflationary pressures. When the most important obstacles to market efficiency have been identified, i.e., imperfections resulting from insufficient growth, or government intervention, it has been possible to design adequate strategies for each particular case. However, some measures are common to almost all.

Financial markets opening at all levels have been allowed, and this has greatly increased the competitiveness of investment financing. The three fundamental aspects of this are:

a) Barriers to entry have been lowered, although almost all legislations retain the power of the central bank or the superintendency of banks to authorise new companies at their discretion; b) wider opportunities for foreign investment, both through the establishment of foreign companies and through sharing capital of domestic institutions, although percentage limits have been imposed in some cases;<sup>1</sup> c) advances have been made in the development of capital markets, enabling companies to obtain medium and long term investment financing. Facilities for creating investment and retirement funds, and the promotion of insurance companies, have contributed positively to this process.

In addition, to reduce market segmentation and specialisation, commercial banks have been empowered to provide financial services previously restricted to specialised institutions. Thus, through conglomerates or financial groups, or universal banking, a series of services has been integrated that permit them to rationalise customer service and generate economy of scale.

Greater independence and increased activity in areas that before were not open to commercial banks, together with more flexible regulations for them, and also financial innovations, have increased

the market's systemic risk, and this has led to increasingly strict criteria for evaluating the portfolios of financial intermediaries, and voluntary or compulsory creation of precautionary reserves and capital adequacy. On the other hand, sharing of experiences has helped identify other types of risks, such as those arising from foreign exchange or interest rate fluctuations, and the means of covering them properly.

### **1. Desirable Pre-Conditions for Financial Reforms**

Most of the successful financial reform programmes have been preceded by considerable progress toward macroeconomic stability and a balanced public sector budget. However, as shown by the Chilean crisis in the late seventies and early eighties, advances in this sense by themselves cannot prevent severe financial crises from arising, with all the negative effects on economic stability that this implies.

The lesson to be learned from financial crises in many Latin American countries, such as Argentina, Chile, Colombia and Uruguay, is that for deregulation and financial liberalisation to contribute positively to the development of the financial market they must be accompanied by new and very strict regulations. These must be based on "the rules of the game" of a free market, rather than on the discretionary decisions of authorities.

Risk and profitability are opposite forces in financial instruments. Making them transparent is part of refining the market. Therefore, rules on the capital adequacy of intermediaries, supervision of assets, limits on the concentration of credit in a single account, especially for interlocking loans between closely associated financial intermediaries and non-financial corporations,<sup>2</sup> and diversification in fund raising are elements that determine the degree of risk for customers and are valuable indicators in making a fair evaluation. In an advanced system, the market itself can supply the criteria for this; in less advanced systems, the rules of the game must be imposed and supervised by the authorities.

One of the problems facing authorities when they decide to begin a process of financial liberalisation is that the markets are not really competitive; on the contrary, intermediation is highly concentrated, with a few oligopolistic companies controlling almost all activities.

This oligopolistic set-up of the financial system must be taken into consideration very seriously before allowing the market forces to determine interest rates, since it could lead to a widening of the differential between rates and consequently to increased inefficiency. Therefore, as suggested by Pereira and Sundararajan (1990), before freeing interest rates, the authorities must consider these questions: 1) is there enough competition in the financial market? 2) do the monetary authorities have enough instruments and procedures to influence the rate? and 3) are transmission mechanisms efficient enough to allow the interest rate to respond rapidly to changes in monetary policy and the market's key variables?

So, it is advisable to take measures to improve the competitiveness of the financial system when leaving interest rates up to the free market. Among these are: opening the market to new entrants,<sup>3</sup> as well as facilitating exit; eliminating subsidies on interest rates for some loans and eliminating compulsory selective credits; standardising or eliminating reserve requirements for different financial institutions; introducing the necessary changes in regulations to minimise the frequency of bad credits; and allowing monetary policy to depend less on the use of reserves and credit ceilings, and more on open market operations.

High, idle reserves are generally associated with monopolies, for reasons already mentioned. If greater competition is encouraged, banks will not be able to pass on the cost of maintaining these reserves to credit users, and will have to absorb the loss. This will tend to decapitalise them, with foreseeable consequences. Therefore, before encouraging competition, the structure of interest on legal reserves should be taken into account, or banks should be completely or partially freed.

It is obvious that free market operations will be very limited in effectiveness if an organised money market does not exist. Consequently, suitable conditions for it should be established by strengthening an inter-bank market in which the interest rate can fluctuate freely. It is also important to introduce reliable government or central bank securities to be used for monetary regulation, not for financing the government.

One measure that can be adopted in trying to improve competition in the financial market and reduce its fragmentation is to accept

patterns that gradually lead to universal banking. We continue with a section on the model for financial groups that has been adopted in many countries of the region.

## 2. Financial Groups

Latin American countries that have recently introduced financial reforms (Argentina, Chile, Colombia, Mexico, Peru) have adopted the model of financial groups that allows commercial banks to provide a wider range of services. So, a commercial bank can offer any financial service through its affiliates, but these cannot be offered directly by the bank.<sup>4</sup>

In practice, preference for financial groups over universal banking is due to the fact that they can establish a more direct, simpler relationship between the risk involved in certain operations and capital and reserve requirements, as well as more adequate supervision for each type of business within the group. Groups can be an intermediate step towards universal banking while information systems and operating models are perfected to correlate the risks implied in different operations with the reserves or capital necessary to cover them.

A group can offer comprehensive financial services because its components act jointly under the control of the holding company. Usually they can invest in financial leasing, investment firms, factorage and brokerage houses.<sup>5</sup> These financial conglomerates therefore have a greater capacity to introduce innovations and offer better and more complete attention to customers while reducing operational costs, thus favouring economies of scale.

Latin America has shown a preference for the model of financial groups purely for financial intermediation and information services without participation in the risk capital of other sectors, except as short term portfolio investments with no influence on company decisions.

This choice has been an attempt to diminish the risk of company debts being in effect guaranteed by bank funds. In part, this measure avoids the conglomerate's bank credit being used to finance companies in difficulties.

It is also a matter of facilitating risk evaluation for any conglomerate's business, since intra-group transactions, even for companies in the financial area, sometimes present serious problems. The task of supervisors can be made more difficult when the banks

participate significantly in the group's non-financial company capital, since the banks are more able to evade regulations and conceal true net worth.

The benefits derived from adopting the financial group model versus a universal banking system are:

- a) It is easier to control and regulate conflicts of interest than when different financial services are offered under one roof.
- b) The conglomerate can have lower capital costs because it can achieve economies of scale in obtaining financial resources. It also has lower risks because it combines unrelated enterprises, reducing the risk of affiliates' insolvency, since there is the group's financial backing.
- c) "Contagion risk" is less because the banks can be prohibited or regulated from channeling a disproportionate amount of assets towards their affiliates' activities, or from subsidising them. This limits the risk for subsidiaries, permitting them to expand into new areas, increasing the profitability and competitiveness of the group while limiting possible losses. For example, in Mexico the law on the formation of financial groups prohibits commercial banks from having shares in the holding company.

To avoid contagion risk, it should be specified in law that members of the group cannot participate in the capital stock of other members belonging to the same conglomerate.

- d) As mentioned by Martinez Neira (1992), it is possible to regulate the solvency of capital groups when they are consolidated and to penalise capital pyramiding, in order to achieve an effective capital adequacy for the companies that make up the conglomerate.
- e) The specialisation and size of the group enable it to hire, train and develop specialised personnel, which makes it possible to employ more advanced management techniques and reduces the costs that these human resources represent for the conglomerate.
- f) More balanced competition between the banks and non-banking intermediaries is promoted, and over-regulation that might affect the banks' non-banking activities is avoided.

Two points made by O'Brien (1988) with reference to North American financial conglomerates should be included in this section. 1) While a conglomerate can isolate its bank from the risks incurred by non-banking affiliates, it could, on the other hand, manage an entire group with one sole risk and yield objective, which is normal because the group has common ownership and management. Thus, if the conglomerate's bank is limited by regulations to maintain higher capital adequacy and lower risk than desired by the group's administrators, other affiliates will possibly be operated with less capital and greater risk. Although the increased risk might not endanger the bank, it could prove to be an advantage for the conglomerate over its non-banking competitors. 2) The financial conglomerate might not be stable in the event that banking activities are strictly regulated while other activities are not. This could be an incentive to the group's administrators to transfer activities from the most regulated affiliates to those less regulated, in which case the authorities would not be able to justify independent treatment of the affiliates.

### 3. Regulation

The new freedom granted to commercial banks has exposed them to greater risks, forcing a change in regulations, with prudent preventive measures, and stricter standards in certain areas such as supervision and capital adequacy.

When we speak of adequate capital for a financial institution, we refer to the capital needed to ensure that, in case of bankruptcy, losses will be absorbed by the stockholders, not by the public.

Until a few years ago, the rules for capital adequacy followed by Latin America in general referred to a specified deposit/capital ratio. According to this rule, a commercial bank's capital had to be a minimum percentage of its deposits from the public. This rule does not guarantee creditors in the case of failure, since the deposits cannot be paid with its capital, but with liquid assets, which are not taken into account in the ratio.

At present, in almost every Latin American country, it is felt that the most appropriate rule of capital adequacy should be based on asset risk/capital ratio. Under this rule, bank assets are duly balanced by risks, so that the higher the degree of asset exposure, the greater the capital protection offered by the bank must be.

This rule has its origin in the capital adequacy norms agreed on by the Committee on Rules and Practices of Banking Supervision of the Bank for International Settlements, better known as the Basle Committee. These norms consider that the ratio between the assets weighted for risk and capital of commercial banks should be at least 8 per cent. They also consider as assets some items not included in the balance sheet,<sup>6</sup> and the portfolio risk is taken into account by means of different ratios of minimum capital for the different types of assets.

In weighting the asset risk, the credit portfolio as well as the investment portfolio is rated. Portfolio analysis takes into account factors such as customer's fulfilment of debt servicing, as well as solvency, commercial record and collateral provided. With this analysis, asset risk can be evaluated and the level of reserves needed to balance the risk determined.

In addition, a general provision or reserve should be established to protect the unrated part of the portfolio.

As for the investment portfolio, efforts are made to analyse the solvency risk of security issuers due to market variations, such as exposure risk because of changes in interest rates, foreign exchange risk, and country risk, and to determine the minimum capital provisions needed to cover it.

In the case of exchange risk, for example, the Basle Committee proposes an 8 per cent capital requirement for the net open position of the bank,<sup>7</sup> allowing a minimum exemption for banks that have little exchange exposure and do not deal in foreign exchange at their own risk.

The Basle Committee decided not to recommend application of international capital requirements to global interest rate risks assumed by banks, considering present requirements to be sufficient.

To diversify risk in the investment portfolio, countries of the region have placed special emphasis on limiting the concentration of credits. The Basle Committee considers 10 per cent to 40 per cent of the total capital to be an adequate limit for a sole exposure; in Latin America, individual limits tend to be lower; they range between 5 per cent and 30 per cent, and even considering loans with real guarantees, are never above 30 per cent. For individual loan limits, the interrelation of the property of some concerns is also taken into account.

So-called “risk centres” complement these norms. These are credit information centres offering the opportunity to consult the level of exposure of the whole system or one institution in relation to one customer, and the degree of risk that each financial institution ascribes to him. Several Latin American countries have given legal approval to these centres, to which all institutions of the financial system have access.

It should be pointed out that a study by Cantor and Johnson (1992) found that the U.S. market has rapidly compensated those commercial banks that have made great efforts to improve their capital ratios by adjusting them to the new norms and reducing leverage levels. These banks saw the price of their stock grow to above the average during the last three years (1990-1992).

#### 4. Supervision

##### a) *Supervision of Financial Groups*

The appearance of conglomerates has complicated the supervision of financial institutions, especially because of the necessary coordination between different regulators responsible for the supervision of different parts of the group. Moral hazard is also a potential problem, since conglomerates encompass a mixture of regulated and unregulated financial institutions, and quite often the holding company itself is unregulated.

Efforts have been made to isolate banks from contagion risk, although some authors like Cornyn, et al. (1986) consider this to be difficult for three basic reasons: 1) the conglomerate is managed as a unit and errors or bad management affect all affiliates; 2) the market could perceive that a conglomerate does not provide sufficient isolation for the banks, and this could lead to a situation where the affiliate’s losses cause a run on the subsidiary bank; 3) bank regulators have sometimes treated conglomerates as a single entity in consolidated reports or in the handling of some errors. If the authorities consider the group to be a single entity, then its administrators and creditors can also do so.

Measures taken to isolate banks from the other affiliates have so far been unsatisfactory; and the Basle Committee is currently studying ways to focus this problem.<sup>8</sup>

Among the most serious problems of conglomerate supervision are the following: 1) determining what funds the group has and whether they are sufficient for the risks assumed, and the observance of limits and other general regulations; 2) uncovering crossed share holdings that need to be eliminated when determining the real level of group funds; 3) apportioning responsibilities and coordinating with other supervisory authorities when the conglomerate has headquarters or affiliates abroad, or includes firms subject to other supervisory authorities, for example, banks, brokerage houses and insurance companies and 4) determining the legal responsibility of the group regarding its parts.

In general, among the measures recommended for facilitating the supervision of financial groups is to consolidate the conglomerate's activities in order to obtain an overall picture of the risks assumed and contrast it with the funds at its disposal, scrubbed of double counting. This will provide the information for more exact analysis of the group's stability.<sup>9</sup>

In those cases where the conglomerate includes several activities under separate supervision, the information mentioned above is very important in coordinating the efforts of the different supervisors. This is especially true considering the difficulty in demanding solvency from each independent institution to cope with their particular risks.

To face collective risk when there is no consolidation implies that the regulation of a conglomerate's activities must specify that it have minimum funds on hand equal to those required by each set of rules applying to their respective activities. This will provide solvency for the conglomerate, especially if intra-group balances are monitored and controlled. Note that this would not prevent investments from being channeled into less regulated activities.

#### *b) Supervision of Bank's Foreign Branches*

With the increasing integration of worldwide financial systems, there is an even greater need for comprehensive, standardised, and consolidated supervision methods. The Basle Committee has proposed basic norms for the supervision of international banking groups and their transnational agencies. Because of the increasing interrelationship among markets and the potential for systemic risk due to problems within an individual financial conglomerate that could endanger the

stability of the financial markets of countries in which it operates. These rules are geared towards protecting the depositors and the creditors of financial institutions and protecting the efficiency of payments systems.

The minimum norms of the Basle Committee specify that the home country of a bank or financial group with international affiliates must be responsible for the overall supervision. The home country should receive the following information from the host countries about the branches or affiliates of its banks or banking groups: all prudential and consolidated financial information on their operations, as well as a confirmation of its reliability (in order to check the security and the stability of the bank or conglomerate). It should have the ability to prevent corporate mergers or corporate structures that could undermine efforts to maintain consolidated financial information or that might interfere with effective supervision of the bank or financial group; and it should have the capacity to prevent the bank or conglomerate from establishing branches or affiliates in countries in which minimum norms are not met to its satisfaction.

These minimum rules have been applied in the United States since the end of 1991, and have been included in the general guidelines for the establishment and supervision of bank agencies, branches, affiliates or subsidiaries abroad proposed by members of the Association of Bank Supervisory Agencies of Latin America and the Caribbean.

### **III. THE CENTRAL BANK AND FINANCIAL REFORMS**

#### **1. The Autonomy of the Central Bank and Stabilisation**

Efforts to achieve stabilisation and openness, or deregulation of the financial system, in Latin America can be interpreted as a response to economic stagnation and instability as well as to low productivity and inefficiency of financial intermediation.

When stabilisation programmes have been successful, they have been characterised by firm political support which has made it possible for all, or almost all, of the economic policy instruments to be aimed at this priority. Monopolistic positions have been reduced, tariffs and other distortions to trade have been removed and prices of goods and services have been stabilised by freeing them. Specially, during

transition periods, there has been income policies agreement among sectors to ease this process.

These stabilisation programmes also involved the correction of great imbalances in public sector finances by eliminating subsidies and other government transfers that had proliferated in the past, leading to a more efficient realignment of relative prices.

Supported by a strategy such as this, monetary policy is in the best possible position to achieve price stability, minimising economic and social costs.

To the extent that monetary policy is able to reduce the growth rate of money, it is probable that it can also reduce the pace of inflation. However, the more inefficient and the more inflexible the productive apparatus of the economy is, the greater the social and the economic cost of achieving price stability. This is especially true when an attempt is made to reduce very high levels of inflation, as has been the case in many Latin American countries.

Many stabilisation programmes which at the beginning succeeded have later failed, when economic and social costs have become politically untenable. Opportune action to increase the system's efficiency can lessen these costs and increase the probability of success.

If the political will to fight inflation exists, monetary policy, which is the most efficient instrument to achieve this goal, acquires a superior strategic position. Consequently, the central bank, which is generally in charge of implementing the policy, must be given the necessary authority to achieve this goal.

This implies the need to define or redefine the central bank's objectives, since in many cases the charters or goals of these institutions set forth other additional objectives such as maintaining high employment levels or achieving high growth rates. It has taken a long time to be widely accepted that the main avenue for monetary policy influence on economic growth is to bring about an environment of price stability and confidence in which the markets can develop and where the signals given by the price system can serve as reliable indicators for the efficient allocation of resources.

In many cases, and for long periods of time, it was felt that keeping interest rates artificially low or granting loans, sometimes

with subsidised interest rates, was the way for monetary policy to contribute to economic development. This obviously proved to be wrong.

Today there is a wide consensus about what the objective of monetary policy should be, and it has been included in almost all the new central bank charters. The modified charters of Chile, Argentina, Uruguay, Colombia, Peru, Venezuela, El Salvador and, recently, Mexico, specify as the prime objective of the central bank, to which all others are subordinated, the achievement of price stability.

Recognising that the most frequent cause of monetary expansion has been the inability of central banks to refuse financing to the government, the new charters provide for situations ranging from absolute prohibition of government financing to the imposition of narrow limits on doing so. In some cases, it is stipulated that the central bank may acquire government securities only as a means of monetary regulation (open market operations). This means that the government must satisfy financing requirements through the market, relinquishing cheap financing from the central bank and occasionally assuming the unpopular consequences of increased interest rates.

Though less frequently, credit to the banking system also appears as another reason for monetary expansion. Fear of a systemic crisis has impelled many central banks to support commercial banks as a lender of last resort. This has occurred both with, or without, a formal obligation to do so. In Argentina, practically all bank deposits were guaranteed; this added to a general disruption in the country's financial system and encouraged risky if not fraudulent credit practices that brought about a crisis that caused many bank failures. When obliged to make the guarantee effective, the central bank produced a monetary expansion comparable to the one originated by the public sector deficit.

For this reason, the charters also limit the authority of central banks to act as lenders of last resort. Argentina is an extreme case, where this function disappears. In other countries, the bank is limited to acting in very specific cases. Deposit guarantees are also limited and, in general, reduced to a small amount of minimum deposits. In many cases, the establishment of contingency funds has been anticipated to cover guarantees whenever necessary. These funds are made up of contributions from banks in proportion to their size.

It is clear that monetary policy must not be subject to other economic policy objectives if it is to reach its goal of price stability. It must be independent, and this independence must include its administration and an institutional autonomy that precludes interference arising from the desire to reach objectives in other areas of economic policy. Andres Bianchi (1992) defines central bank autonomy in its simplest and most fundamental form as the fulfilment of a basic premise: “that in the performance of its functions, the bank neither receives or need obey instructions from the Executive Branch or from Congress”.

Certain conditions must be met to guarantee the central bank’s autonomy:

- a) The procedure for the appointment and the removal of members of the board of directors should not depend on the personal will of the country’s president. It should depend at the least on the approval of other institutions such as Congress, as is the case in the United States.
- b) Members of the board of directors should be irremovable during their term, unless they abuse their authority or are unable to fulfil their duties. It is preferable that their terms be longer than that of the public administration. All the appointments should not end at the same time, but one by one, so that the complete board will not be chosen by one single administration.
- c) Members of the board should be subject to strict rules regarding the conflict of interests that could generate any type of dependence on the government or the private sector.<sup>10</sup>
- d) Government authorities should have a seat on the board, limited to the highest executives of the ministry of finance or of any other equivalent office.

### *1.1 Solution of Conflicts between the Government and the Central Bank*

It is possible that the central bank’s autonomy could, at times, produce a lack of coordination with the government’s economic policy. It is therefore advisable that facilities or instruments be legally established to settle differences between the bank and the government.

## **2. Preventive Support Funds and Deposit Guarantee Funds**

For long periods, banks in many countries were forced to maintain very stringent voluntary lending policies, due to credit ceilings or high average and marginal reserve requirements. This had unfavourable effects on efficiency and sometimes on returns, since credit risk was relatively low because the government or the central bank were the main debtors.

When reserve ratios were eliminated or reduced, as in Mexico, the ability to grant voluntary credit increased considerably. This situation was reinforced by lower government financial needs that reduced the attractiveness of public securities, and by stable conditions that favoured “financial reintermediation”. All of this contributed to an unprecedented expansion of consumer and other voluntary credit to the private sector.

Because of this, the individual and systemic risk for investors or depositors, as well as the risk for authorities, has changed. It is now considered to be higher than before. A series of measures have been taken to meet this situation, with emphasis on prevention; advances have been made in the application of more objective and rigorous criteria to evaluate institutional portfolios, adequate reserves have been created for estimated credit risk, capitalisation levels have been established with relation to asset risks (according to recommendations from the Basle Committee), and dissemination of information has been fostered to help depositors in making true evaluations of risks when entrusting their funds to banks. The creation of risk evaluation centres has also been supported for both particular bond and security issues, as well as for the issuing institutions. These are integral aspects of preventive supervision based on uniform, reliable and opportune information that is geared toward limiting the central bank’s function as a lender of last resort to a bare minimum.

Preventive supervision as understood in the financial reforms of Latin America aims at supporting or strengthening mechanisms based on the market operation rules; because of a lack of indispensable conditions or infrastructure for free market operations, the choice has been made, with increased frequency, to apply regulation models that simulate market mechanisms.

The central bank’s intention to limit its role as lender of last resort and the reinforcement of preventive supervision would seem to give

a larger role to market rules in the organisation of the financial markets. However, to achieve effective results, preventive supervision must have financial backing available to help institutions that might get into difficulties.

Such funds have been made up by contributions from authorities and institutions, or only from institutions. Since support for troubled institutions is limited by the amount of their contributions, and given the impossibility of guaranteeing all depositors the reimbursement of their full investments, or even all the depositors of one large bank, there is uncertainty among depositors as to the risk level offered by each institution. This will induce depositors to evaluate possible returns versus the incurred risk, and to choose according to their preferences. Banks will be forced to reduce their risks and to take cheaper deposits. These processes help to form an efficient market. If looked at in this way, preventive funds are not in conflict with market efficiency that occurs when disposable funds for bank support are seen to be limitless, in other words, when the government or the central bank guarantees reimbursement to depositors as the last resort.

Another aspect, not always clearly separated from the foregoing, is the guarantee given to small depositors who are unable to judge the risk of not being able to recover their investments. Support in this case is directed to the depositors, not the institutions; it is a corrective instrument, not a preventive one. Once the disaster occurs, and the bank is not able to return all deposits, the depositor can file a claim to recover his investments and income.

A fund similar to the preventive one can be created to take care of this eventuality. The same considerations apply to these funds as to preventive ones. Since such guarantees are limited to avoid distortions in market organisation, they have only been granted to very small depositors who cannot make an objective judgment of the risks they incur. Furthermore, on some occasions it has been suggested that even these depositors be guaranteed proportionately, not completely.

## NOTES

- 1 This is the case in Mexico, where foreign institutions are only allowed to buy a maximum of 30 per cent of stock in commercial banks, limited to Class C stock. Ecuador only permits investments up to 40 per cent. See Martinez-Neira (1992).

- 2 Diaz-Alejandro (1985) clearly demonstrates this need for regulation in a liberalised financial system: "... even a purely laissez-faire financial system must have some indirect government inputs, such as efficient judicial and police systems to punish fraud, control contract defaults and settle disputes in bankruptcy cases".
- 3 Not without fully investigating the necessary credentials of the new participants.
- 4 In Brazil, the Central Bank's Resolution 1524 of 1988 permits the operation of various types of institutions under one legal persona, with one account and accounting system. For example, the banking system includes commercial banking, development, investment and real estate operations. See Martinez-Neira (1993) for further information.
- 5 For example, the Mexican financial groups can include: multiple service banks (commercial), brokerage houses, insurance companies, bail bond Co., foreign exchange houses, factorage and leasing companies.
- 6 These concepts are part of so-called complementary capital that includes reserves for unidentified losses, hidden reserves that banks in some countries are allowed to maintain, fixed or financial assets that register a market value superior to book value, unguaranteed debt instruments, etc.
- 7 The net open position of the bank is calculated by adding the total net short positions in any currency, including the declared currency, and the total of each net position in any precious metal disengaged from the monetary unit.
- 8 See Corrigan (1992) for example.
- 9 See Rodriguez G., et al. (1992) for example.
- 10 Bianchi (1993) suggests that, besides the foregoing conditions, it would be advisable for board members to fulfil special technical-professional requirements, or have previous experience in financial or economic spheres, to reduce the probability of appointing unqualified people.

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# Central Bank Independence and Economic Performance\*

Patricia S. Pollard

In recent years many countries have adopted or made progress toward adopting legislative proposals removing their central banks from government control, that is, making them independent. Between 1989 and 1991, New Zealand, Chile and Canada enacted legislation that increased the independence of their central banks. The 1992 Treaty on European Union (Maastricht Treaty) requires European Community (EC) members to give their central banks independence as part of establishing the European Monetary Union. As a result, EC countries that do not yet have strongly independent central banks have introduced legislation or announced their commitment to make their central banks more independent.<sup>1</sup> Furthermore, in recent months the governments of Brazil and Mexico have announced their intentions to introduce legislation to create more independent central banks.

In view of these developments, it might seem reasonable to conclude that unambiguous links had been established between economic performance and the degree of central bank independence. Interestingly, however, the two post-World War II star performers among the industrialised economies — Germany and Japan — have different levels of central bank independence. The German Bundesbank is viewed as one of the most independent central banks in the world, whereas the Bank of Japan is seen as more subject to government control. Thus, the contrast between the movement to grant central banks more independence and widely different degrees of independence across the major economies raises several questions. Among these are: Why is the idea of an independent central bank popular? Are there economic benefits of having an independent central bank?

This paper examines empirical and theoretical studies of central bank independence to address these questions. Empirical researchers

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have devised measures of independence to focus on the relationship between central bank independence and a country's economic performance. Theoretical studies have modelled the strategic behaviour of monetary and fiscal policymakers to be able to compare an economy's performance when policymakers cooperate in setting policies with its performance when they do not cooperate.

The next section of this paper presents a survey and evaluation of empirical studies. Next, theoretical studies are presented and evaluated. The final section examines the extent to which these studies either explain the current movement toward greater central bank independence or highlight unresolved questions in this debate.

## **EMPIRICAL STUDIES: CENTRAL BANK INDEPENDENCE AND ECONOMIC PERFORMANCE**

### **Inflation and Central Bank Independence**

As a broad generalisation, interest in central bank independence was motivated by the belief that, if a central bank was free of direct political pressure, it would achieve lower and more stable inflation.<sup>2</sup> Bade and Parkin (1985) conducted one of the first empirical studies of this link. The authors used data for 12 Organisation for Economic Cooperation and Development (OECD) countries in the post-Bretton Woods era and measured the degree of central bank independence according to the extent of government influence over the finances and policies of the central bank.<sup>3</sup> The degree of financial influence on the central bank was determined by the government's ability to set salary levels for members of the governing board of the central bank, to control the central bank's budget and to allocate its profits. The degree of policy influence was determined by the government's ability to appoint the members of the central bank governing board, government representation on this board, and whether the government or the central bank was the final policy authority. Countries were given a rank of one through four in each category, with four being the highest level of central bank independence.

Bade and Parkin concluded that the degree of financial independence of the central bank was not a significant determinant of inflation in the post-Bretton Woods period. Policy independence, however, was seen as an important determinant of inflation because the two countries

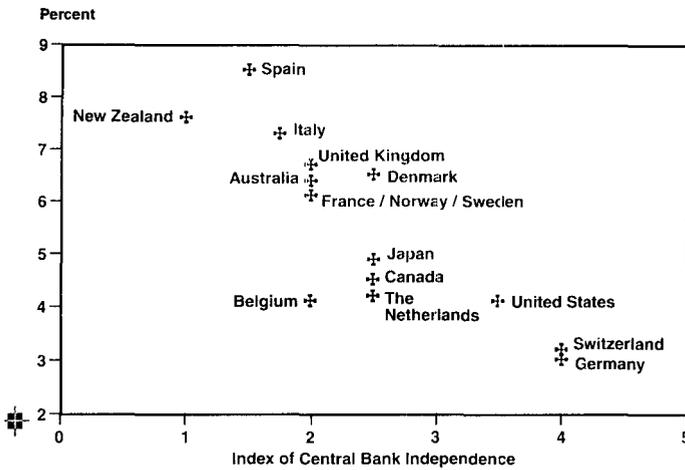
with the highest degree of policy independence (Germany and Switzerland) had inflation rates significantly below those of all other countries in the sample. They found no significant differences in inflation performance among countries with lower rankings of independence in the post-Bretton Woods era.

Alesina (1988) used the Bade and Parkin (1985) index but added the following four countries: Denmark, New Zealand, Norway and Spain. He found, as hypothesised, that there was generally an inverse relationship between average inflation rates and the level of central bank independence.

Grilli, Masciandaro and Tabellini (1991) created two indexes of central bank independence — one based on economic measures of independence (with a scale ranging from zero to eight), and the other based on political measures of independence (but with a scale ranging from zero to seven).<sup>4</sup> The political factors were similar to those identified by Bade and Parkin. The economic factors considered were the ability of the government to determine the conditions under which it can borrow from the central bank and the monetary instruments under the control of the central bank. The data set comprised 18 OECD countries over the period 1950-89.<sup>5</sup> For the period as a whole, Grilli, Masciandaro and Tabellini found that economic independence was negatively related to inflation. Political independence also had a negative correlation with inflation, but the relationship was not statistically significant. Breaking the data into four decade-long sub-periods, they found that neither measure of independence had a significant effect on inflation in the first two decades. In the 1970s, both measures of independence were significant, whereas in the 1980s only the economic independence measure was significant.

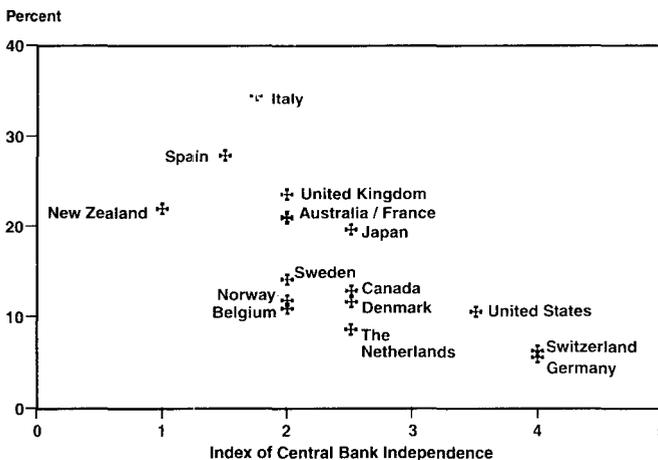
Alesina and Summers (1993) calculated a measure of central bank independence by averaging the indexes created by Bade and Parkin and Grilli, Masciandaro and Tabellini.<sup>6</sup> The countries included were the same as in Bade and Parkin with the addition of Denmark, New Zealand, Norway and Spain. The sample period was 1955-88.<sup>7</sup> As in the previous studies, they found a negative correlation between the level of central bank independence and the rate of inflation (Figure 1). They also found that the more dependent a central bank was, the greater the variability in inflation (Figure 2). This, they argued, was a result of a correlation between the level and variability of inflation.

Figure 1  
Average Inflation: 1955-1988



Source: Alesina and Summers (1993).

Figure 2  
Variance of Inflation: 1955-1988



Source: Alesina and Summers (1993).

Cukierman (1992) provided an extensive analysis of central bank independence and its relationship to inflation performance using data for 1950-89. Unlike previous studies, he used not only legal measures of central bank independence, but also practical measures of the level of independence. One such measure was the frequency of turnover of the central bank governors. Another measure of practical independence was based on answers from a questionnaire completed by qualified

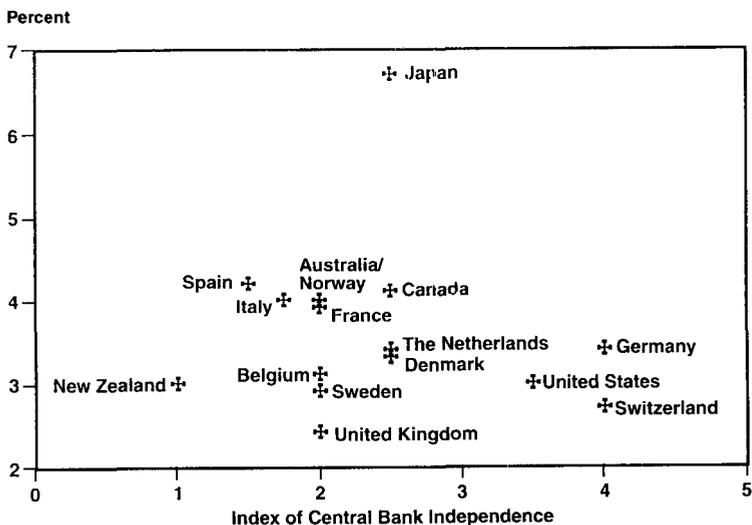
individuals at the central banks.<sup>8</sup> Cukierman's analysis is the most comprehensive to date, not only because it incorporates information about the actual level of independence a central bank enjoys in practice, but also because it includes a sample of 70 countries.<sup>9</sup> Cukierman concluded that "central bank independence affects the rate of inflation in the expected direction".<sup>10</sup> This result was also found by Cukierman, Webb and Neyapti (1992).<sup>11</sup>

### Central Bank Independence and the Real Economy

Although most of the empirical work focused on the relationship between central bank independence and the rate of inflation, some studies examined the link between independence and economic output. If an independent central bank can produce lower inflation than a dependent central bank, does this come at the cost of lower output? Conversely, are dependent central banks attempting to exploit a short-run Phillips Curve relationship, accepting higher inflation in order to achieve higher output?

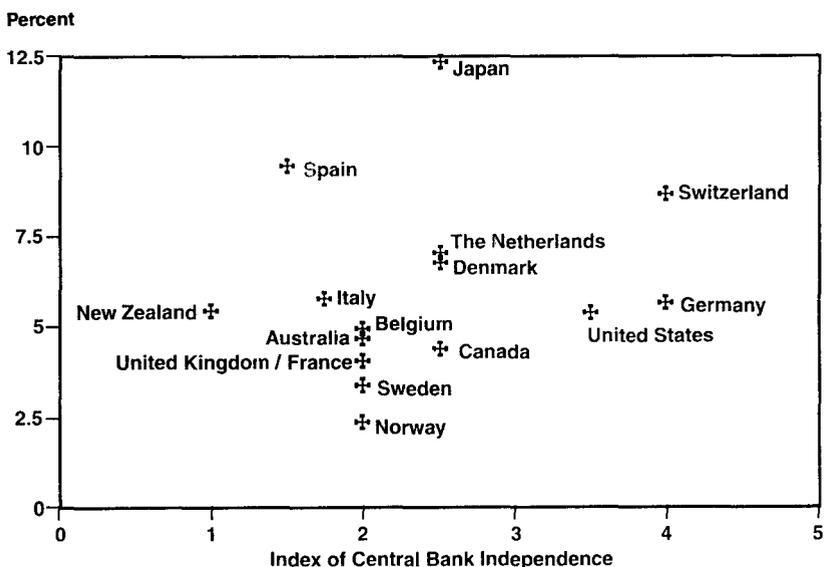
Grilli, Masciandaro and Tabellini (1991) found no systematic effect of central bank independence (using either of their two indicators) on the growth rate of real output. Alesina and Summers (1993) likewise found no correlation between average economic growth or the variability of growth and the level of central bank independence (Figures 3 and 4).<sup>12</sup>

Figure 3  
Average Real GNP Growth: 1955-1987



Source: Alesina and Summers (1993).

Figure 4  
 Variance of Real GNP Growth: 1955-1987



Source: Alesina and Summers (1993).

De Long and Summers (1992) looked at the relationship between central bank independence and output per worker while trying to eliminate differences between countries that were due solely to convergence effects.<sup>13</sup> To do this, they examined the growth rate of real gross domestic product (GDP) per worker during 1955-90, controlling for the level of GDP per worker in 1955.<sup>14</sup> This procedure showed a positive relationship between central bank independence and economic growth.<sup>15</sup> More precisely, they found that holding constant the 1955 level of real output per worker, a unit increase in their index of central bank independence was associated with a 0.4 percentage point increase in growth per year.<sup>16</sup>

In contrast, Cukierman, Kalaitzidakis, Summers and Webb (1993) found that output growth in industrialised countries was unrelated to central bank independence even after controlling for structural factors that might influence growth. The factors they considered were the initial level of a country's GDP, its initial enrolment rates for primary and secondary education, and changes in its terms of trade. The authors did find, however, using the turnover rate of central bank governors as a proxy for independence, that central bank independence did have a positive effect on growth in developing countries.

The difference in the results for industrialised countries versus developing countries, they argue, may imply that "dependence on political authorities is bad for growth only when the level of independence is sufficiently high."<sup>17</sup> Central bank independence is higher in all the industrialised countries than in most of the developing countries.

### **Central Bank Independence and Fiscal Deficits**

Another area of empirical study has been the relationship between central bank independence and fiscal deficits. The motivation for these studies is the belief that independent central banks should be better able to resist government efforts to have them monetise deficits. Thus governments realising that there may be some limit on their ability to issue bonds continuously to finance deficits may decide to limit deficit spending.

Parkin (1987) investigated this question for the same 12 countries as Bade and Parkin for the period 1955-83.<sup>18</sup> He found that there was some evidence of a negative relationship between central bank independence and the long-run behaviour of government deficits as a percent of gross national product (GNP). The deficits of Switzerland and Germany, the countries with the highest levels of central bank independence, had long-run equilibrium values near zero with little variance. However, other countries, notably France, that had low levels of central bank independence also had small long-run deficits as a percent of GNP.

Masciandaro and Tabellini (1988) looked at fiscal deficits as a percent of GDP in Australia, Canada, Japan, New Zealand and the United States during the period 1970-85.<sup>19</sup> They found that New Zealand, which had the lowest level of central bank independence of the five countries during this period, had the highest fiscal deficit as a percent of GDP. The United States, however, with the highest level of central bank independence among this group of countries, had a deficit/GDP ratio similar to those of the other countries.

Grilli, Masciandaro and Tabellini (1991) found that there was generally a negative correlation between the deficit/GNP ratio and the degree of central bank independence. However, when political factors, as well as central bank independence, was included in their regression, the latter variable was insignificant.<sup>20</sup> Thus they conclude that an

independent monetary authority apparently does not discourage the government from running fiscal deficits.

A further examination of the relationship between fiscal deficits and central bank independence, which is consistent with the work done by Alesina and Summers and De Long and Summers, is presented here.<sup>21</sup> Using the same index of central bank independence and the same 16 countries as these previous papers, there is some evidence of a negative correlation between average deficits as a percentage of GDP and central bank independence for the period 1973-89, as shown in Figure 5.<sup>22</sup> The degree of independence, however, is not a statistically significant (at  $\alpha = .05$ ) determinant of the deficit/GDP ratio. The variability of deficits as a percentage of GDP is also negatively correlated with central bank independence (Figure 6) and this relationship is statistically significant.

Figure 5  
Average Deficit as a Percent of GDP: 1973-1989

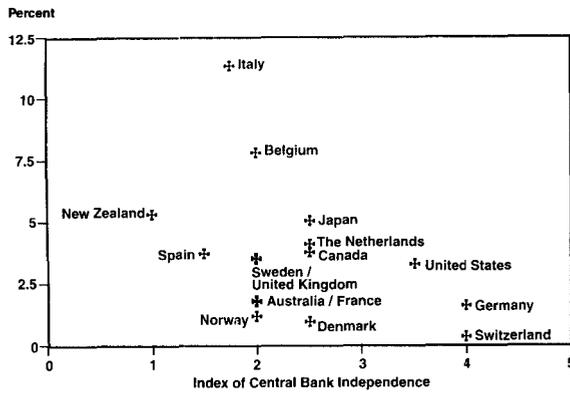
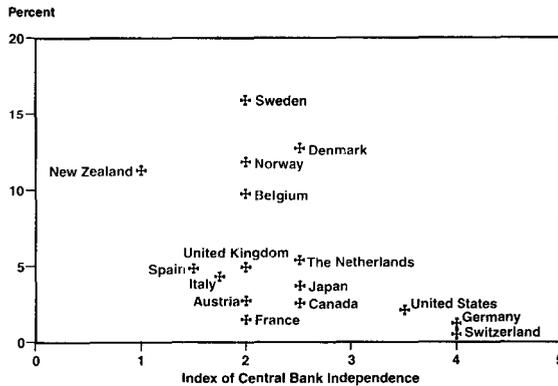


Figure 6  
Variance of Deficit as a Percent of GDP: 1973-1989



## EVALUATION OF THE EMPIRICAL STUDIES

At first glance, these studies seem to indicate that a country that wants to lower its inflation rate and do so without hurting growth should create an independent central bank. Such a central bank apparently could also help reduce fiscal deficits and increase output. These benefits would explain the recent popularity of independent central banks. Thus, Grilli, Masciandaro and Tabellini commented:

Having an independent central bank is almost like having a free lunch; there are benefits but no apparent costs in terms of macroeconomic performance.<sup>23</sup>

Alesina and Summers (1993) went a step further in concluding their findings: "Most obviously they suggest the economic performance merits of central bank independence".<sup>24</sup>

A more careful analysis of these studies, however, indicates weaknesses that highlight the need for further evidence before one should believe that creating an independent central bank will improve a country's economic performance. The following four weaknesses are considered: 1) the difficulty in measuring central bank independence; 2) the possibility of a spurious relationship between independence and economic performance; 3) the possible endogeneity of central bank independence; and 4) the inclusion of the fixed exchange rate period in the sample data of some of the studies.

The measures of central bank independence used in empirical studies have been determined by establishing a set of factors thought to be relevant for independence and then analysing central bank charters and laws for compliance with these factors. With the exception of the index created by Cukierman, all of the indexes of independence apply equal weight to each factor. For instance, the Grilli, Masciandaro and Tabellini index based on political measures of independence gives a country one point if no one on the central bank board is appointed by the government and one point if the policy formulated by the central bank does not require approval by the government. Although the latter certainly places a greater constraint on the actions of the central bank than the former, the two are treated the same empirically.

Another concern is that the studies are based on a legal measure of independence that may not reflect a bank's *de facto* level of independence. If there is a difference between legal and practical independence, studies based on the former type of measures may provide misleading results. Cukierman (1992), in an attempt to address this possibility, uses central bankers' responses to a questionnaire to determine the actual degree of independence in the 1980s. He finds that the correlation between the legal index and this practical index of independence is 0.33 for developed countries, 0.06 for developing countries and 0.04 overall.<sup>25</sup> This finding indicates, as Cukierman notes, that a legal index of independence is not useful for studying developing countries. It also indicates that a legal index may be a weak measure of actual independence for the developed countries.

There also may be bias in the factors selected to measure independence. For example, Grilli, Masciandaro and Tabellini include: "statutory requirements that central bank pursues monetary stability amongst its goals" in their index.<sup>26</sup> Likewise, a central bank is more independent under Cukierman's system if price stability is its only objective than if price stability is one of a number of objectives or not an objective at all. Using the goal of price stability as a measure of central bank independence may result in a bias between the measure of independence and the inflation rate.

The problems in developing precise measures of central bank independence are less important, however, if there is a consensus in ranking central banks within broad levels of independence. The Table lists 16 OECD countries along with their relative rankings as given by Alesina, Cukierman and Alesina and Summers.<sup>27</sup> All agree that Switzerland and Germany have the most independent central banks of the countries studied. There are, however, a few countries which are ranked quite differently by the authors. For example, Japan has the second lowest level of independence of all 16 countries, according to Cukierman, whereas Alesina and Alesina and Summers give it a much higher level of independence.

**TABLE: COMPARISON OF RELATIVE RANKINGS OF CENTRAL BANK INDEPENDENCE**

Country	Alesina	Alesina and Summers	Cukierman
Australia	14	8	7
Belgium	5	8	14
Canada	5	4	5
Denmark	5	4	4
France	5	8	9
Germany	1	1	2
Italy	13	14	12
Japan	3	4	15
Netherlands	5	4	6
New Zealand	14	16	10
Norway	5	8	16
Spain	14	15	13
Sweden	5	8	10
Switzerland	1	1	1
United Kingdom	5	8	7
United States	3	3	3

This discrepancy over the degree of independence of the Bank of Japan is not due solely to differences in factors considered in measuring independence. The index used by Alesina is based on the criteria of independence created by Bade and Parkin (1985). The index used by Alesina and Summers is constructed by averaging the indexes created by Alesina and Grilli, Masciandaro and Tabellini. Bade and Parkin claim that the Bank of Japan is independent from the govern-

ment in formulating and implementing monetary policy, and Grilli, Masciandaro and Tabellini claim that there are no provisions for handling policy conflicts between the Bank of Japan and the government. In contrast, Cukierman claims that the Bank of Japan and the government formulate policy jointly and further notes that in the case of a policy conflict, the executive branch of the government has final authority.<sup>28</sup>

Since most of the empirical studies consider only central bank independence as a determinant of economic performance, it is possible that if other factors are accounted for, these results could be spurious. Grilli, Masciandaro and Tabellini attempt to account for other factors that could affect the rate of inflation by including political variables. They find that after accounting for political factors, central bank independence was still negatively related to inflation in the countries studied over the period 1950-89. The incorporation of political variables is a step in the right direction, but other factors also should be considered. As noted by Cukierman, "monetary policy is generally sensitive to shocks to government revenues and expenditures, employment, and the balance of payments".<sup>29</sup> The types of shocks that a country experienced over the sample period and the reaction of the central bank to these shocks can affect its economic performance. A study by Johnson and Siklos (1992) found that the reactions of central banks (as measured by changes in interest rates) to shocks to unemployment, inflation and world interest rates were not closely related to standard measures of central bank independence.

Empirical use of these indexes may be problematic if central bank independence is an endogenous variable in the sense that countries with a commitment to price stability may have a greater propensity for independent central banks. If this is true, the mere establishment of an independent bank without a commitment to price stability will not bring inflation benefits to a country. In fact, a public aversion to inflation predates the establishment of many independent central banks. This was true for the creation of the Bundesbank and more recently with respect to central banks in Chile and New Zealand. New Zealand had one of the highest inflation rates of all industrialised countries in the 1980s. In 1989 legislation was passed to increase the independence of its central bank substantially. This change is often credited with bringing inflation down to near zero. Though the

legislation certainly formalised the country's commitment to price stability, New Zealand had succeeded in reducing its inflation rate from nearly 16 per cent in 1987 to 6 per cent before the creation of an independent central bank.

In theory, the degree of independence of a central bank should not be a determinant of a country's inflation performance under a fixed exchange rate system because monetary policy cannot be set exogenously.<sup>30</sup> During the Bretton Woods era, it is not clear that any central bank (with the possible exception of the U.S. Federal Reserve) could be considered independent in the sense of an ability to pursue an independent monetary policy.<sup>31</sup> Thus the empirical finding of a negative relationship between independence and inflation when the sample period extends over both the Bretton Woods and post-Bretton Woods eras may indicate a flaw in these studies. To assess the effect of central bank independence on inflation, the data used in these studies could be divided into two periods. If no evidence of a relationship between independence and inflation is found in the Bretton Woods period, this would strengthen the underlying argument of these studies that central bank independence is a primary determinant of a country's inflation performance.<sup>32</sup> If, however, evidence is found of a relationship between central bank independence and inflation in the Bretton Woods period, this would conflict with theory and could indicate that the empirical findings are spurious.

### **THEORETICAL MODELS OF FISCAL AND MONETARY POLICY INTERACTIONS**

In contrast to the empirical studies, the theoretical studies of central bank independence and economic performance concentrate on the conflicts that can arise when monetary and fiscal policy are delegated to independent institutions. In this literature an independent central bank is one that does not cooperate with the fiscal authorities in setting economic policy. A dependent central bank is one that cooperates with the fiscal authority in setting policy.

In examining the theoretical implications of central bank independence, this paper focuses on models in which the policymaking process is decentralised.<sup>33</sup> The basic framework of these models is as follows. The government controls fiscal policy, and the central bank controls monetary policy. Both parties set goals for the economy

(generally inflation and output targets) and assign priority to these goals. The goals and priorities may differ across the policymakers. Each institution uses the instruments available to it in an attempt to reach its goals. In most models the central bank controls the growth rate of the monetary base and the government controls fiscal spending. There is an underlying model of the economy that indicates how fiscal and monetary policy will affect the relevant economic variables. All the models assume that there are no stochastic shocks to the economy.

The government and the central bank can either cooperate in implementing their policies or choose not to cooperate. If they do not cooperate, they either can set policies simultaneously, or one party can set its policies first and the other then adopts its policies in reaction to these.

Consider Andersen and Schneider's (1986) simple model in which the government and the central bank establish targets for inflation and output.<sup>34</sup> The further the actual level of output and rate of inflation are from their respective targets, the more disutility each authority receives. Thus, using the following equations, each authority can be modelled as setting policy to minimise its respective loss functions:<sup>35</sup>

$$\begin{aligned}
 (1) \quad L_f &= a_f(y - y_f)^2 + b_f(\pi - \pi_f)^2 & a_f &\geq b_f \\
 (2) \quad L_m &= a_m(y - y_m)^2 + b_m(\pi - \pi_m)^2 & b_m &\geq a_m \\
 (3) \quad \pi_f &\geq \pi_m, y_f \geq y_m
 \end{aligned}$$

where:

- $L_f$  is the fiscal authority's loss function
- $L_m$  is the monetary authority's loss function
- $y$  is output
- $\pi$  is inflation
- $y_f$  is the fiscal authority's output target
- $y_m$  is the monetary authority's output target
- $\pi_f$  is the fiscal authority's inflation target
- $\pi_m$  is the monetary authority's inflation target
- $a$  is the weight placed on the output target
- $b$  is the weight placed on the inflation target

Andersen and Schneider compare the economic outcomes under cooperation vs. noncooperation given three different models of the economy. The first model is Keynesian in nature. This is a short-run model with price sluggishness so that even anticipated changes in policy affect aggregate demand. The level of output and the rate of inflation prevailing in the economy are affected by both fiscal and monetary policies, which can be shown in a simple reduced form model with the following equations:

where  $f$  is the fiscal policy instrument and  $m$  is the monetary policy instrument.<sup>36</sup>

$$(4) \quad y = \gamma_0 f + \gamma_1 m \quad 0 < \gamma_1 < \gamma_0$$

$$(5) \quad \pi = \theta_0 f + \theta_1 m \quad 0 < \theta_0 < \theta_1,$$

In the second model, which Andersen and Schneider refer to as Keynesian-New Classical, anticipated monetary policy is neutral; it can affect only inflation. Thus in a world of certainty, equation (4) becomes the following:

$$(6) \quad y = \gamma_0 f$$

In the third model, the economy is New Classical in nature, characterised by perfect price flexibility and rational expectations. Anticipated policy, both fiscal and monetary, affects only inflation, not output. The economy is modelled by the following equations:

$$(7) \quad \pi = \eta_0 f + \eta_1 m$$

$$(8) \quad y = \pi - \pi^e$$

$$(9) \quad \pi - \pi^e = \eta_0(f - f^e) + \eta_1(m - m^e),$$

where  $y$  now refers to output relative to capacity and the superscript  $e$  refers to the expectation of the variable. Output can be increased above capacity only through unanticipated inflation, and unanticipated inflation can occur only through unanticipated changes in fiscal policy, monetary policy or both.

The relevant issue for policy is the size of the loss to each policymaker under cooperation and noncooperation. Cooperation in the determination of monetary and fiscal policies is modelled by the government and the central bank choosing the policy variables ( $f$  and  $m$ ) to minimise a weighted average of their loss functions:

$$\begin{aligned}
 (10) \min_{f,m} L_c &= \rho L_f + (1 - \rho)L_m && 0 \geq \rho \geq 1 \\
 &= \rho[a_f(y - y_f)^2 + b_f(\pi - \pi_f)^2] \\
 &\quad + (1 - \rho)[a_m(y - y_m)^2 + b_m(\pi - \pi_m)^2],
 \end{aligned}$$

where the weight placed on each loss function is determined by the relative bargaining strength of the two parties. Solving this minimisation problem yields the equilibrium values for output and inflation, which can be substituted into the loss functions for the government, equation (1), and the central bank, equation (2), to determine the loss to each.

As noted above, noncooperation can be modelled in two ways. In the first, fiscal and monetary policies are chosen simultaneously; that is, the government selects a level of spending to minimise its loss function, equation (1), taking as given the actions of the central bank. At the same time, the central bank chooses the growth rate of the monetary base to minimise its loss function, equation (2), taking as given the actions of the government. This structure is referred to as a Nash game and the resulting equilibrium is called a Nash equilibrium. In a Nash equilibrium, neither authority, taking the actions of the other as given, can decrease its loss by unilaterally changing its policy.

In the second model of noncooperation, one policy is set before the other is determined. This process is known as a Stackelberg game, and the policymaker who moves first is known as the Stackelberg leader, whereas the other policymaker is known as the Stackelberg follower. The leader chooses its policy, and the follower sets its policy in reaction. Furthermore, the leader, in choosing its policy, knows how the follower will react.

Although the equilibrium level of output and the rate of inflation vary depending on which model of the economy is used, in all three models the cooperative solution is Pareto superior to the noncooperative solution. This result is invariant to the structure of noncooperation — Nash or Stackelberg. The performance of the economy is better under cooperation in the sense that the losses to the government and the central bank are each lower than they are under noncooperation. This result holds even if the government and the central bank each place the same weight on meeting their inflation targets relative to their output targets ( $a_f = a_m$  and  $b_f = b_m$ ) but maintain different targets.

Andersen and Schneider summarise these results by noting the following:

When we have two independent authorities who act in their own selfish interest, then we quite often observe a conflict over the "right" policy direction. This result should be kept in mind when quite often the argument is put forward that an independent monetary authority should be created. ... Two independent policymakers do not automatically guarantee a policy outcome which is preferred to other outcomes under different institutional solutions.<sup>37</sup>

Alesina and Tabellini (1987) show that adding one more target to the loss functions of the government and the central bank also does not change the nature of the results. Noncooperation is once again suboptimal.

Adding a time dimension to the model also does not change the basic result that cooperation can improve the outcome from the perspective of both policymakers. Pindyck (1976) presents one of the first dynamic models analysing the strategic interaction of monetary and fiscal policy. He argues that the

separation of monetary and fiscal control may considerably limit the ability of *either* authority to stabilise the economy, particularly when the conflict over objectives is at all significant.<sup>38</sup>

Petit (1989) examines the issue of policy coordination in a continuous time model. The government sets targets for output and inflation, giving higher priority to output. The central bank targets inflation and the level of international reserves, giving higher priority to inflation.<sup>39</sup> As is standard, the government sets the level of public expenditures to minimise its loss function, whereas the central bank sets the growth of the monetary base to minimise its loss function.

In this model, policies are set at the beginning and are unchanged over the period considered. Once again, cooperation is Pareto superior to the Nash and Stackelberg equilibriums. Furthermore, cooperation in this dynamic system leads to a decrease in the variability of the targets (particularly prices and international reserves), and raises the speed of adjustment of the system. The latter indicates that, given a shock to the system, the economy will return more quickly to its long-

run values of output and inflation if the government and the central bank are coordinating their policies. Thus, Petit concludes that policymakers should coordinate their policies.<sup>40</sup>

Other studies concentrate on the interaction of the government and the central bank in financing fiscal deficits where the deficit must be financed through bonds, seignorage or both.<sup>41</sup> Under the assumption that there is some limit on the ability of a government to continually issue bonds to finance its deficit, the need for inflation revenues becomes important.<sup>42</sup> Sargent and Wallace (1981) conducted the seminal research on this question and showed that if the government embarks on a path of unsustainable deficits, the central bank might eventually be forced to inflate to fund the deficits. If the public realises that the government debt is on such a path, it will expect inflation to increase, which may cause inflation to increase well before the debt limit has been reached.<sup>43</sup> This outcome is a result of the government being able to set its policies and the central bank having to react to those policies (a Stackelberg game).

In general, a conflict over the public debt can arise at any time when the government and the central bank are allowed to adopt independent policies. Tabellini (1986) develops a dynamic model in which the central bank sets targets for changes in the monetary base and the stock of outstanding public debt while the government sets targets for the fiscal deficit net of interest payments and the stock of outstanding public debt. The target value of public debt is the same for both authorities. In choosing the level of the monetary base and the fiscal deficits, the two authorities are constrained by the government's dynamic budget constraint.<sup>45</sup> The stock of public debt as a proportion of income is considered too high by both the fiscal and monetary authorities. In the noncooperative setting, however, each authority ignores the benefit to the other of its own actions to reduce the level of debt. In the cooperative setting these benefits are internalised, resulting in a lower level of debt.

Tabellini (1987) and Loewy (1988) provide two more examples of models examining the conflict between central banks and governments over fiscal policy. Both show that such a conflict can lead to an increase in government debt. As noted by Blackburn and Christensen (1989), a conflict will always arise between a central bank whose goal is to maintain price stability and a government whose objective is to

increase output and is pursuing this goal by running a stream of large deficits. Such a macroeconomic programme is infeasible; one party will have to revise its strategy (give in). The conflict creates problems for the economy because of the uncertainty over the future course of policy: the public can expect higher inflation or higher taxes, depending on which policymaker gives in.<sup>46</sup>

### EVALUATION OF THE THEORETICAL LITERATURE

The theoretical studies indicate that noncoordination of fiscal and monetary policies will result in a suboptimal economic performance from the perspective of both the government and the central bank. Policy targets are more closely met when coordination occurs. Thus an independent central bank is not conducive to achieving better policy outcomes.

However, the theoretical work, like the empirical studies, has its weaknesses. One criticism is that the models are too simplistic. Neither the preference structures of the two authorities, nor the models of the economy, are completely specified. Furthermore, most of the models operate in a world of certainty. Policy, however, is not made in a world of certainty. Extrinsic uncertainty — shocks to the economy — can drive a wedge between the implementation of policy and its outcome. Intrinsic uncertainty — lack of knowledge of the preferences of a policymaker — is incorporated only in Tabellini and Loewy's models.<sup>47</sup> As these two models illustrate, adding uncertainty can increase the policy conflict between an independent central bank and fiscal authority.

In addition to assuming certainty, the models also omit one important player in these policy games — the public. Public perception of the credibility of a macroeconomic programme is important to its results because the public can limit the ability of policymakers to take advantage of an inflation/output tradeoff. If an independent central bank can increase the public perception of the credibility of policy, this in turn should produce better economic results.<sup>48</sup>

Another deficiency of this literature is its failure to address the feasibility of the policymakers' goals. The output goals set by the government, for example, may not be sustainable without accelerating inflation. Tax and expenditures plans, which lead to a stream of

deficits, may also raise questions about the sustainability of fiscal policy. In this environment, an independent central bank could be useful if its credible commitment to price stability forced the government to evaluate the sustainability of its policy goals. In contrast, centralisation of policies might reduce the long-run economic performance of a country when the government's focus is short-run performance.

### **CENTRAL BANK INDEPENDENCE AND THE ECONOMY — WHAT DO WE KNOW?**

This paper began with two questions: Why is the idea of an independent central bank as popular as it is? Are there economic benefits to be gained from having an independent central bank? Unfortunately, the empirical and theoretical studies surveyed do not provide clear answers. The empirical studies find that there is a negative correlation between central bank independence and long-run average inflation. They also show a negative correlation between independence and long-run average government deficits as a percentage of GDP. In general, they find no evidence of a positive correlation between output growth and central bank independence. These results all point in the same direction yet do not provide unequivocal evidence that an independent central bank will lower inflation and government deficits and raise a country's output.

In sum, these empirical studies provide evidence of a negative correlation between central bank independence and inflation and central bank independence and fiscal deficits, but they do not provide evidence of causality. Countries with an aversion to inflation may formalise this aversion through the creation of an independent central bank. If this is true, it is the inflation aversion, not the independence of the central bank, that is the primary causal factor behind the low inflation result. The empirical measures themselves are biased toward the finding that independence promotes low inflation. This is because the measures place much weight on legal requirements that a central bank pursue price stability and place this goal above all others. Cukierman is explicit in stating that his measure of independence:

is not the independence to do anything that the central bank pleases. It is rather the ability of the bank to stick to the

price stability objective even at the cost of other short-term real objectives.

Given such a definition of independence, it is not surprising that independence is equated with low inflation.

Theoretical studies indicate that an independent central bank can increase policy conflicts with the government whenever the preferences of the two differ and, in so doing, worsen the economic performance of a country. These studies, however, do not provide overwhelming support for the idea that countries should place monetary policy in the hands of the executive or legislative branches of the government. The simple structure of these models ignores some factors that affect the outcome of policy decisions — for example, the role of the public and the overall credibility of policy. Central bank independence may enhance credibility and thus the overall effectiveness of a policy programme.

In sum then, in the empirical studies, emphasis on price stability and freedom to pursue this goal are primary determinants of independence. In the theoretical studies independence is equated with non-cooperation between the fiscal and monetary authorities in policy implementation. These different definitions of independence may partly explain the different results. Furthermore, countries that may be classified as independent using the empirical definition may be classified as dependent using the theoretical definition. New Zealand is one such example. The 1989 Reserve Bank of New Zealand Act made price stability the *only* goal of the central bank, and the central bank is free to adopt policies to achieve that goal. Thus according to the empirical definition of independence, the 1989 Act created an independent central bank in New Zealand. The central bank's inflation target, however, is established by the government for a multi-year period. The governor of the central bank signs an agreement pledging the bank to adopt policies that meet this target. Such cooperation between the monetary and fiscal policymakers is consistent with a dependent central bank in the theoretical models.

Altogether, these studies indicate that we are far from fully understanding the role of central bank independence in producing favourable economic outcomes.

## NOTES

1. To meet the level of independence prescribed by the Maastricht Treaty, a central bank must be prohibited from taking instructions from the government. The term for central bank governors must be set at a minimum of five years, although it can be renewed. In addition, the central bank must be prohibited from purchasing debt instruments directly from the government (that is, in the primary market) and from providing credit facilities to the government. Both Denmark and the United Kingdom have reserved the right to decline membership in the European Monetary Union. Thus neither country has introduced legislation to ensure conformity of their central banks with the Maastricht provisions.

For a detailed analysis of the institutional status of the central banks in the EC countries, see the Committee of Governors of the Central Banks of the Member States of the European Economic Community (1993).

2. Buchanan and Wagner (1977) point out that even an independent central bank may not be immune from political pressures and thus exhibit an inflationary bias.
3. The 12 OECD countries are Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom and United States.
4. In both measures the scale is increasing in the level of independence.
5. Grilli, Masciandaro and Tabellini add Austria, Denmark, Greece, New Zealand and Portugal to Bade and Parkin's group of countries and eliminate Sweden.
6. See Bade and Parkin (1985) and Grilli, Masciandaro and Tabellini (1991).
7. See Alesina (1988): Alesina and Summers report that the results of their study are the same if the data period is restricted to 1973-1988, the post-Bretton Woods era.
8. The sample period for the questionnaire data was 1980-89.
9. The questionnaire data were available for only 24 countries.
10. Cukierman did not actually use the rate of inflation, but the rate of depreciation of the real value of money, defined by the following formula:

$$d_t = \frac{\pi_t}{1 + \pi_t},$$

where  $\pi_t$  is the inflation rate in period  $t$ . The use of  $d_t$ , as noted by Cukierman, moderates the effects of hyperinflation on the results.

11. Capie, Mills and Wood (1992) also studied the link between inflation and central bank independence. Their data set consisted of 12 countries, with the data series beginning between 1871 and 1916 and ending in 1987. Central banks were classified as either dependent or independent according to the

extent of their control over monetary policy. The authors examined the relationship between the status of the central bank and inflation over the entire sample period and four subsample periods — pre-World War I, the Interwar Years, Bretton Woods and post-Bretton Woods. Periods of hyperinflation, however, were excluded from the data. In all sample periods, the countries with independent central banks were in the low inflation group. Nevertheless, some of the dependent central banks were also in this group. The authors concluded that independence may be a sufficient condition for low inflation but not a necessary one.

12. The results are the same if per capita gross national product (GNP) is used rather than GDP.
13. Standard neoclassical growth models suggest that growth rates of economies tend to converge over time. Thus given two countries, the one with the lower per capita output will have a higher growth rate than the other until their levels of real output per capita converge.
14. GDP per worker levels are based on the Summers and Heston (1991) estimates, which use purchasing power parity conversions.
15. This study does not take into account that the degree of independence of the central bank of New Zealand changed dramatically in 1989. Furthermore, all the studies, with the exception of Alesina (1988), do not take into account that there was an institutional change in the structure of the Bank of Italy in 1981 that increased its independence. The latter change, however, was not as substantial as the former.
16. De Long and Summers regress the average growth rate of GDP per worker over the period 1955-90 on GDP per worker in 1955 and the central bank independence index.
17. See Cukierman, Kalaitzidakis, Summers and Webb (1993), p. 42.
18. See Bade and Parkin (1985).
19. The deficits are as a percentage of GNP for Japan.
20. These political factors include the frequency of government changes, significant changes in the government and the percentage of governments in a given period supported by a single majority party.
21. See Alesina and Summers (1993) and De Long and Summers (1992).
22. The 1989 ending date was chosen because of the change in the status of the Bank of New Zealand, which occurred in 1989. All data are from the International Monetary Fund, *International Financial Statistics*.
23. See Grilli, Masciandaro and Tabellini (1991), p. 375.
24. See Alesina and Summers (1993), p. 159. Even the press has picked up the banner of central bank independence. A recent headline in *The Washington Post* proclaimed: "More Independence Means Lower Inflation, Studies Show". See Berry (1993).

25. The correlations are based on the weighted indexes. Giving each factor related to independence an equal weight in the indexes results in a correlation of 0.01 for developed countries and 0.00 for developing countries.
26. See Grilli, Masciandaro and Tabellini (1991), p. 368.
27. The measure of independence developed by Cukierman is based on more factors than the measure used by Alesina, and Alesina and Summers. Thus Cukierman's rankings are more delineated than the other two.
28. AFRICHT (1961) reproduces the Bank of Japan charter and subsequent changes in its governing regulations, which support the conclusion reached by Cukierman.
29. See Cukierman (1992), p. 438.
30. See McCallum (1989), pp. 285-88, for an explanation of the limitations on monetary policy under a fixed exchange rate system.
31. Indeed, the primary argument in favour of a flexible exchange rate system was that such a system would permit individual countries to pursue independent monetary policies. See, for example, Friedman (1953) and Johnson (1969).
32. This is Grilli, Masciandaro and Tabellini's finding (1991).
33. There have been studies concentrating solely on monetary policy that have shown that better economic outcomes result from the policymaker placing a greater weight on inflation than society as a whole. Rogoff (1985) argues that these results indicate the economic benefits of central bank independence. These studies ignore the interaction of fiscal and monetary policy in determining economic outcomes and thus are not discussed here.
34. Generally it is assumed that the government places more weight on meeting its output target than its inflation target, whereas the opposite holds for the central bank. Furthermore, it is generally assumed that the inflation and output targets set by the government are greater than or equal to the targets set by the central bank.
35. The quadratic nature of the loss functions, which is standard in the macroeconomic game theory literature, implies that deviations on either side of the targets produce an equal loss to the policymaker.
36. The restrictions in equations (4) and (5) imply that fiscal policy has a greater (lesser) effect on output (inflation) than does monetary policy.
37. See Andersen and Schneider (1986), p. 188.
38. See Pindyck (1976), p. 289.
39. The target for international reserves reflects a balance of payments objective.
40. Hughes, Hallett, Andrew and Maria Luisa Petit (1990) also model the interaction of fiscal and monetary policy in a dynamic setting, reaching this same conclusion.
41. Seignorage is the revenue received from the creation of money. It occurs because base money costs only a fraction of its face value to produce.

42. As the public debt grows, there may be increasing concern among bondholders that the government will be unable to repay the bonds.
43. As Sargent and Wallace note, if money demand today depends on inflationary expectations, then the price level today is a function of not only the current money supply, but also expectations of the future levels of the money supply.
44. The concern that undisciplined fiscal policies could result in inflation was recognised by the EC in drafting the Treaty on European Monetary Union. In the regulations concerning the proposed European Central Bank, the bank is prohibited from financing fiscal deficits of the member countries.  
As pointed out by Sargent and Wallace, and expounded on by Darby (1984), the need for the central bank to monetise government debt through an inflationary policy is based on the assumption that the rate of growth of the real economy is less than the real rate of interest.
45. Note that monetary base and fiscal deficits in this model are both instruments and targets.
46. A government may adopt a strategy of running deficits, through decreasing taxes, to force future governments to cut expenditures. Under this strategy, the government would prefer an independent central bank, which will refuse to monetise the deficits and thereby increase the likelihood that fiscal spending will be reduced. See Sargent (1985) for a discussion of this type of strategy.
47. See Tabellini (1987) and Loewy (1988). In Tabellini's model, the government is initially unaware of the preferences of the central bank. In Loewy's model, both parties are initially unaware of the preferences of the other.
48. This issue has been studied in the literature that focuses only on monetary policy. See Blackburn and Christensen (1989) for a survey of this literature.

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