



# **MONETARY AND FINANCIAL STABILITY: ISSUES FOR CARICOM ECONOMIES IN THE DOMESTIC SECTOR**

by

**Sharon G. Branch<sup>1</sup>**  
**Senior Research Officer**  
**Research Department**

## ***Abstract***

Monetary and financial stability are important contributors to economic growth and development. Instability of any kind has a negative impact on the economy as a whole, since it deters foreign investment and hinders economic growth. Thus, it is necessary for economies to not only focus on achieving economic stability, but to guard the economy against monetary and financial fragility by striving to achieve stability in all spheres of the country.

Realizing the important role that monetary and financial stability plays in promoting economic growth and development, this research seeks to highlight important issues for Caricom countries with respect to achieving such stability. The main focus of this research is to examine indicators used by Caricom countries to measure monetary and financial stability, along with the steps and challenges found in achieving stability.

Monetary stability will be examined in the context of the exchange rate regime embraced by CARICOM countries and the role exchange rates play in the stability process given the Caribbean integration initiative. Financial stability analysis will focus on the new tools for assessing financial system soundness and the challenges that these will pose for financial regulators.

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<sup>1</sup> The views expressed in this paper are those of the author and do not necessarily represent the Central Bank of The Bahamas. The paper should be considered a work in progress and as such the author would welcome any comments on the written text or any of the issues cited. The author would also like to thank all staff of the Research Department, especially Ms. Jamell Bodie for her valuable assistance.

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## **Introduction**

**E**conomic growth and stability are impacted by the behaviour of monetary and financial stability indicators. Monetary and financial stability are important pre conditions for sustainable economic growth. With such stability the result will be stable prices, low inflation and a sound banking system. However, monetary and financial stability are not ends in themselves but means to achieving the ultimate objective of broad based economic prosperity. Thus, the means by which such stability is achieved are important issues that need to be addressed.

Views on the efficiency of monetary policy have changed radically during the twentieth century. In recent years, much more attention has been devoted to devising appropriate monetary policy frameworks essentially to secure price stability in both developed and developing countries. This follows the increasingly widespread acceptance of the view that price stability fosters improved economic performance. Nevertheless, monetary policy frameworks are normally politically determined, and may well depend on the country's financial institutions, and the degree of expertise in monetary policy matters that exists both inside and outside the Central Bank, as well as other economic features.

Moreover, in our quest for monetary and financial stability, the influence of international factors needs to be considered. For small open emerging economies, like Caricom, with the encroachment of international financial forces on their domestic financial systems, policymakers are confronted with various challenges. In economies where there is the rapid flow of speculative capital across borders, national authorities are confronted with exchange rate volatility or volatility being transferred into bank liquidity and domestic interest rates, both of which have implications for financial stability. Countries are thus confronted with the challenge of managing the vulnerability in this financial liberalization era.

**Table 1: Twelve (12) Key Standards For Sound Financial Systems**

<b>Policy Area</b>	<b>Key Standards</b>	<b>Issued by</b>
<b>Macroeconomic Fundamentals</b>		
Monetary and financial policy transparency	Code of Good Practice on Transparency in Monetary and Financial Policies	IMF
Fiscal policy transparency	Code of Good Practices in Fiscal Transparency	IMF
Data dissemination	Special Data Dissemination Standard/General Data Dissemination System	IMF
<b>Institutional and Market Infrastructure</b>		
Insolvency	*	World Bank
Corporate governance	Principles of Corporate Governance	OECD
Accounting	International Accounting Standards (IAS)	IASC
Auditing	International Standards on Auditing (ISA)	IFAC
Payment and settlement	Core Principles for Systemically Important Payment Systems	CPSS
Market integrity	The Forty Recommendations of the Financial Action Task Force	FATF
<b>Financial Regulation and Supervision</b>		
Banking supervision	Core Principles for Effective Banking Supervision	BCBS
Securities regulation	Objectives and Principles of Securities Regulation	IOSCO
Insurance supervision	Insurance Supervisory Principles	IAIS

*Source: Financial Stability Forum*

Hence, this paper seeks to explore monetary and financial stability issues for the Caricom economies in the domestic sector. Thus, this paper is organized as follows; Section one consists of an overview of the Caricom economies. The literature review and an analysis of selected macroeconomic and macro-prudential indicators comprise sections two and three, respectively. Section four addresses monetary stability issues in reference to the fixed and floating exchange rate regimes that exist within the region and financial stability in the framework of effective banking supervision and the new tools for accessing financial system soundness. Section five concludes the paper.

## **Section 1: Overview of The CARICOM Economies**

The countries of CARICOM are most accurately described as small developing island states. These countries have dual exchange rate systems in place. Countries such as The Bahamas, Barbados, Belize and OECS have embraced a fixed exchange rate regime since the 1970s. On the other hand, countries such as Guyana, Jamaica and Trinidad & Tobago have adopted the floating exchange rate regime. Moreover, the CARICOM countries are import driven and highly dependent on foreign direct investment and external borrowing for their supply of foreign reserves. Agriculture, which was the dominant economic sector in colonial days, is still a significant export earner for some countries. Sugar is produced in significant quantities in Barbados, Belize, Guyana, Jamaica, St Kitts and Trinidad and is used for exports, thus being a major foreign exchange earner for most of these countries. Belize, Jamaica, Suriname and the Windward Islands grow bananas for export to the United Kingdom, while Guyana and Suriname are significant rice producers and exporters. Agriculture has been over taken by other economic sectors in some countries and tourism is now the most significant foreign exchange earner for some countries in the region including The Bahamas, Barbados and Jamaica. Among the exceptions is Trinidad and Tobago, where the economy is dominated by oil and natural gas extraction and energy-based industries. Jamaica also has a considerable share in the processing and production of natural resources with its bauxite, despite set backs to the industry due to social and financial problems.

Financial services are growing in a few countries and are the number one foreign exchange earner and contributor to GDP for the Cayman Islands and ranks second for The Bahamas, Bermuda and Barbados. The landscape of the financial systems in most CARICOM countries is dominated by the domestic sector. Commercial banks are pervasive features in the financial sector of CARICOM economies as they are the dominant institutions in these countries. Commercial banks are the main source for funding household expenditure although finance companies, mortgage banks, insurance companies and credit unions have assumed a greater role in the last decade and half. Most countries are dominated by foreign owned banks particularly Canadian banks that entered the Caribbean market in the early 1950s. In almost all Caricom countries,

excluding Barbados where currently there is no indigenous bank, at least one locally owned institution exists, and represents institutions that have been amalgamated or consolidated over the last two decades. Commercial banks are generally characterized by high operating cost, high degree of concentration with a few banks controlling large market shares, and large number of branches that act as deterrent for new market entrants.

<b>COUNTRY</b>	<b>GDP RATE OF GROWTH (%)</b>	<b>TOURISM % OF GDP</b>	<b>FINANCIAL SERVICES % OF GDP</b>	<b>NATURAL RESOURCES % OF GDP</b>	<b>AGRICULTURE % OF GDP</b>
Antigua & Barbuda	2.1	n.a.	10.9	2.0	3.5
Bahamas	4.7	40.0	15.0	n.a.	5.0
Barbados	-0.4	10.3	18.4	0.7	4.0
Belize	4.4	n.a.	7.2	0.5	18.8
Dominica	-4.7	n.a.	13.2	2.1	18.3
Grenada	-1.1	n.a.	11.8	0.6	9.6
Guyana	1.1	n.a.	5.2	10.9	29.3
Haiti	n.a.	n.a.	n.a.	n.a.	n.a.
Jamaica	1.1	n.a.	6.1	5.5	8.2
Montserrat	-2.8	n.a.	2.0	0.1	11.9
St. Kitts & Nevis	0.8	n.a.	5.6	0.3	13.0
Saint Lucia	0.1	n.a.	11.5	0.5	5.7
St Vincent & The Grenadines	-0.1	n.a.	11.8	0.3	9.7
Suriname	1.6	n.a.	n.a	n.a	n.a
Trinidad & Tobago	3.2	n.a.	n.a	n.a	n.a

*Source: Caricom Website and The Various Central Banks Reports*

While almost all countries have some degree of offshore services, in many countries these are insignificant. Only two member countries, namely The Bahamas and Barbados, have a flourishing offshore sector representing in excess of 10% of GDP (*See Table 2*). Several associate member states have significant offshore sectors including the Cayman Islands, Bermuda, and the British Virgin Islands in descending order of magnitude of the sector in those countries. The offshore sector offers various products including international business company registration, banking, management of trusts and mutual funds, and in the case of Barbados, registration of US foreign sales corporations. The Cayman Islands and Bermuda have stock exchanges that are oriented to the offshore

financial sector. However, most CARICOM countries have a stock exchange, which in most instances is dominated by the domestic sector and with few exceptions does not experience significant trade activity, since they are still at the rudimentary stage (*See Table 3*).

<b>TABLE 3: THE COMPOSITION OF THE FINANCIAL SYSTEM IN CARICOM COUNTRIES</b>				
<b>COUNTRY</b>	<b>COMMERCIAL BANKS</b>	<b>OFFSHORE BANKS</b>	<b>OLFI's</b>	<b>SECURITIES/STOCK EXCHANGE</b>
Antigua & Barbuda	7	15	30	Yes
Bahamas	7	262	15**	Yes
Barbados	6	54	15	Yes
Belize	5	-	1	n.a.
Dominica	4	3	39	Yes
Grenada	3	15	48	Yes
Guyana	6	-	46	Yes
Haiti	n.a.	n.a.	n.a.	n.a.
Jamaica	6	-	9	Yes
Montserrat	2	11	10	Yes
St. Kitts & Nevis	6	1	19	Yes
Saint Lucia	6	1	52	Yes
St Vincent & The Grenadines	4	10	27	Yes
Suriname	8	-	89	n.a.
Trinidad & Tobago	6	-	463	Yes
Cayman*	6	383	29	Yes
*CARICOM Associate Member				
**This number does not include credit unions and insurance companies				
<i>Source: The Various Central Banks Reports</i>				

Over the past five (5) years, the offshore sector has received much attention from international regulatory agencies leading to several countries, including The Bahamas and a few Organization of Eastern Caribbean States (OECS), being blacklisted by The Financial Action Task Force (FATF) and Organization for Economic Co-operation and Development (OECD) in 2000. Most of these countries have improved the regulatory

framework and implemented measures to combat financial instability. In the Bahamas nine (9) new legislations have been enacted, among them is one whereby banks have been mandated to follow the know-your-customer requirement (KYC) and other anti-money laundering measures. The Central Bank has been given more authority to regulate banks. Included are enhanced powers of the Governor of the Central Bank to issue and revoke licenses to carry on banking and/or trust business from within the country. The Bahamas has also established a Financial Intelligence Unit (FIU) for the receipt and analysis of suspicious transactions reports that banks have since been required to make. In the Cayman Islands a whole slew of legislative changes have been made to combat money laundering in those islands and three groups have been set up to deal with various money laundering issues.

## **Section 2: Literature Review Monetary and Financial Stability**

According to Otmar Issing (2003)<sup>2</sup>, monetary stability is a synonym for price stability, where price stability refers to a stable price level or a low level of inflation and not to stable individual prices. Undeniably, changes in relative prices play a crucial and beneficial part in economic adjustment and decision making by individual actors be they companies or households.

Monetary stability generally refers to the stability of the value of money and is a vital ingredient for sustainable real economic growth. It does not require all prices to rise in line, since relative prices of individual goods can and will fluctuate far more than the average, based on swings in demand or supply.

Unlike monetary stability, where there is broad agreement as to its meaning, the degree of clarity cannot be claimed for financial stability. Most authors find it convenient to define financial instability instead of its positive counterpart. However, Issing in his article quotes Mishkin (1991) as saying that, financial stability is the prevalence of a financial system, which is able to ensure in a lasting way, and without major disruptions, an efficient allocation of savings to investment opportunities (*See Table 1*).

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<sup>2</sup> Monetary and Financial Stability: Is There A Trade Off?

Michael Foot (2003) posited that, we have financial stability where there is monetary stability, employment levels are close to the economy's natural rate, confidence in the operation of the generality of key financial institutions and markets in the economy and where there is no relative price movements of either real or financial assets within the economy that will undermine monetary stability or employment. Therefore, financial stability is absent during periods of bank failure and when normal conduits for savings and borrowing in either the personal or corporate sectors are seriously malfunctioning. Such circumstances would mean that participants had lost confidence in financial intermediaries and economic growth was being damaged by the unavailability or relatively high cost of financial intermediation.

Moreover, authors such as Issing, are cynical concerning the existence of a trade-off between monetary and financial stability. Based on the conventional view, inflation is regarded as one of the major factors creating financial instability and therefore, price stability is good for financial stability. It is felt that inflation can worsen the asymmetric information problem between lenders and borrowers. High inflation is related to high inflation volatility, which adds to the problems of predicting real returns. Thus, stable prices and a monetary policy focus on that objective, play an important role for stable financial markets.

Strong protagonists of this theory claim that, price stability is almost a satisfactory condition for financial stability, while the more conservative perspective states that price stability tends to promote financial stability. Nevertheless, price stability and financial stability tend to mutually buttress each other in the long run. The widespread view is supported by empirical evidence that many financial crises were caused by major shifts in the price level<sup>3</sup>. Moreover, most banking crises tend to occur during recessions, which often follow periods of high inflation. Thus, the policy stance by Central Bankers to maintain price stability is said to be appropriate for the state of the financial system. Nevertheless, the conventional perception concludes that there is no general trade-off between monetary and financial stability.

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<sup>3</sup> See Bordo, Dueker and Wheelock, (2000).

Issing however, stated that since the world is not always as straightforward as one would like it to be, price stability is not a sufficient condition for financial stability. Notwithstanding, a concrete definition of financial stability is important in order to establish the precise link between financial stability and monetary policy, since it is the view that the choice of the monetary policy strategy has implications for financial stability. Truly optimal monetary policy cannot avoid that, at times, strains in the financial system might be such that deviations from the desired inflation rate during shorter periods of time have to be accepted, in order to preserve price stability over the medium to long run. Therefore, monetary policy decisions actually bear on the state of the financial system and could at the margin even be decisive to prevent the crisis and allow the system to recover.

The European Central Bank (ECB) is an example of a central bank with a forward looking perspective, whose focus is on monetary and credit developments in order to form a judgment on consumer price inflation in the medium to long run. According to Issing the optimal price stability-oriented policy reaction based on monetary and credit developments is likely to diminish financial imbalances, since there is a positive correlation between credit growth and bubble developments. Policy would be tightened in times of rising financial imbalances and loosened in times of unwinding financial imbalances.

Conversely, authors of the “new environment” hypothesis<sup>4</sup> argued that, low and stable inflation can make the financial system more vulnerable. Some reasons cited for this are that for quite some time inflationary pressure might not show up in inflation itself due to low pricing power of firms, positive supply side developments and well anchored inflation expectations. It has also been argued that central banks’ focus on price stability is insufficient and financial imbalances would have to be addressed directly. The direct response would involve trying to avoid, or at least subdue, the building up process of financial imbalances.

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<sup>4</sup> Monetary and Financial Stability: Is There A Trade Off?

Therefore, the “new environment” short-term conflict is one whereby financial imbalances are considered important enough to possibly constitute a long run threat to price stability. It does not imply however, that the ultimate objective of monetary policy should not be price stability.

Moreover, monetary stability cannot be disassociated from fiscal stability, since the credibility of monetary policy can potentially be frustrated by inappropriate fiscal policy. Therefore, it is essential for both the central bank and the government to pursue prudent monetary and fiscal policies. G. Thiessen (1996) noted that, the more credible monetary and fiscal policies are the more reinforcing or mutually supportive they can be. According to David Dodge (2002), the central bank needs to consider how changes in fiscal policy will affect demand and inflation, and hence the setting of interest rates. Likewise, when the government changes fiscal policy, it needs to think of how these changes will affect inflation and consequently interest rates.

Dodge further stated that, on the fiscal side automatic stabilizers are tax revenues and employment insurance payouts. When the economy weakens, tax revenues tend to fall, and employment insurance payouts tend to increase. This buffers the effect on personal disposable income of the decline in output and hence tends to reduce the amplitude of the output shock. However, many households, particularly those with lower incomes, cannot borrow freely against future income and therefore, are often significantly constrained by their current level of disposal income. Thus, on the fiscal side, automatic stabilizers play a significant role since some automatic fiscal stabilizers work almost immediately. One such example is the automatic deduction of personal income tax by employers. As a result, for some economies in the Caribbean fiscal policy is more potent than monetary policy.

Dodge noted that, economists are becoming more convinced that deficits and debts have significant real effects on the economy. A decline in the debt-to-GDP ratio can have favourable effects on the economy. To the extent that a lower debt-service burden leads to lower taxes, it leads to a reduction in the usual distortionary effects of taxes. Moreover,

to the extent that it reduces the effect of a given change in interest rates on the government's balance, it makes fiscal planning much easier. In a situation of very high and rising debt-to-GDP ratios, markets may build a premium into interest rates to cover the perceived probability that debt will be monetized. Lower debt ratios are likely to reverse this effect.

### **Section 3: Tools For Assessing Stability**

#### ***3.1: Overview of Macroeconomic vs. Macro-prudential Indicators***

Macroeconomic indicators are used to measure the health of the economy, while macro-prudential indicators are used to assess the health and stability of the financial system. Among the relevant macroeconomic indicators are data on aggregate and sectoral growth, trends in the balance of payments, the level and volatility of inflation, interest and exchange rates, the growth of credit and changes in asset prices, especially stock and real estate prices (*See Table 4*). Note that, these macroeconomic indicators need to be benchmark against the Gross Domestic Product (GDP) and the level of reserves in order to achieve a clear assessment of stability within the economy. The selected macroeconomic indicators can be used to test quantitatively the impact of changes in those variables on financial institutions' portfolios and on the aggregate solvency of the financial system.

On the other hand, macro-prudential indicators focus on banking systems' vulnerability. Prudential indicators help countries to assess their banking systems' vulnerability to crisis. Macro-prudential analysis has a different set of data requirements due to its focus on identifying risks emerging in the financial system as a whole. Prudential indicators look mainly at capital adequacy, asset quality, management soundness, earnings and profitability, liquidity ratios, sensitivity to market risk and market-based indicators. The assessment of the financial system soundness also requires an ability to couple the analysis of macro-prudential indicators with informed judgments on the adequacy of the institutional and regulatory frameworks.

Macro-prudential analysis generally uses a variety of stress-testing techniques to gauge financial systems' resilience to shocks. Stress testing helps analysts project likely future developments in macro-prudential indicators using macroeconomic forecasts and observations on past relationships between macroeconomic and prudential indicators.

Nevertheless, the relevance of individual indicators may differ from country to country. Assessments need to be based on a comprehensive set of indicators, taking into consideration the overall structure and economic situation of a country and its financial system. Macroeconomic indicators are used to assess the overall health of the economy while, macro-prudential indicators are utilized to assess the soundness of the banking system and also that of the non-bank financial institutions and securities markets.

**Table 4: Macroeconomic & Macro-Prudential Indicators**

<b>Table 4: Macroeconomic &amp; Macro-Prudential Indicators</b>			
<b>Aggregated Micro-prudential Indicators</b>			<b>Macroeconomic Indicators</b>
<b>Capital Adequacy</b>		<b>Liquidity</b>	<b>Economic Growth</b>
Aggregate Capital Ratios		Central Bank credit to financial institutions	Aggregate growth rates
Frequency distribution of capital ratios		Deposits in relation to monetary aggregates	Sectoral slumps
		Segmentation of interbank rates	
		Loan-to-deposit ratios	
		Maturity structure of assets and liabilities	
		Measures of secondary market liquidity	
<b>Asset Quality</b>		<b>Sensitivity To Market Risk</b>	<b>Balance of Payments and Debt</b>
<b>Lending Institution</b>		Foreign exchange risk	Current account deficit
Sectoral credit concentration		Interest rate risk	Current account deficit/GDP
Foreign-currency-denominated lending		Equity price risk	Import cover ratio
Nonperforming loans and provisions		Commodity price risk	External Debt/GDP
Loans to public sector entities			Terms of trade
Risk profile of assets			Composition and maturity of capital flows
Connected lending			Debt Service/GDP
Leverage ratios			External Debt Service/Reserves
<b>Borrowing Entity</b>			
Debt-equity ratios			
Corporate profitability			
Other indicators of corporate conditions			
Household indebtedness			

**Table 4 Cont'd: Macroeconomic & Macro-Prudential Indicators**

<b>Table 4 Cont'd: Macroeconomic &amp; Macro-Prudential Indicators</b>		
<b>Management Soundness</b>	<b>Market-based Indicators</b>	<b>Inflation</b>
Expense ratios Earnings per employee Growth in number of financial institutions	Market prices of financial instruments Indicators of excess yields Credit ratings Sovereign yield spreads	Volatility in inflation
<b>Earnings and Profitability</b>		<b>Interest and Exchange Rates</b>
Return on assets Return on equity Income and expense ratios Structural profitability indicators		Volatility in interest and exchange rates Level of domestic real interest rates Spread between lending and deposit rates
		<b>Lending and Asset Price Booms</b>
		Loan/Deposit ratio Excess Liquidity ratio
		<b>Contagion Effects</b>
		Financial market correlation Trade spillovers. e.g. proportion of trade done with major trading partners
		<b>Fiscal</b>
		Fiscal Deficit/GDP Recurrent Revenue/GDP Recurrent Expenditure/GDP Public Debt/GDP

<b>Table 4 Cont'd: Macroeconomic &amp; Macro-Prudential Indicators</b>			
			<b>Other Factors</b>
			Directed lending and investment
			Government recourse to banking system
			Arrears in the economy
<i>Source: Evans, Leon, Gill and Hilbers, 2000</i>			

## **Section 4: Monetary and Financial Stability: Issues For Caricom Countries**

### **4.1 Monetary Stability Issues**

#### ***4.1.1. Monetary Stability Under Differing Exchange Rate Systems***

Efforts by central banks in the Caribbean to achieve stabilization are ceteris paribus directed at managing liquidity in the banking system, since it is believed that persistently high and excessive levels of liquidity could have adverse macroeconomic and balance of payments consequences, especially if used to purchase goods for consumption purposes. Therefore, one of the challenges to policy makers is to find instruments capable of mopping up excess liquidity while maintaining financial stability. To undertake this task, central banks in the region have utilized direct and indirect monetary policy instruments for a number of years.

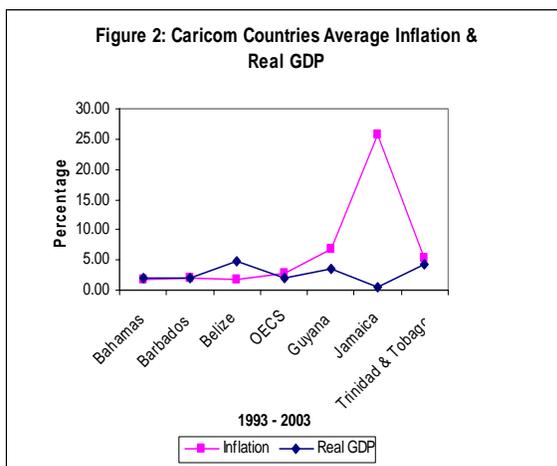
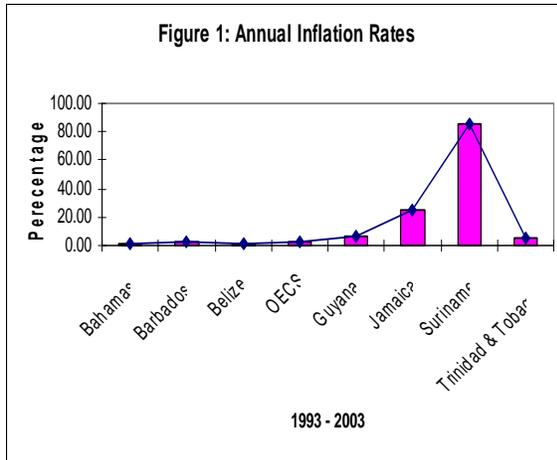
Direct instruments refers to those measures used by the central bank to attain the objective of monetary policy by means of certain rules prescribing the behaviour pattern of banks and possibly other financial institutions. Widely used direct policy instruments are administratively set interest rate ceilings, individual bank credit ceilings, changes in reserve requirements and directed lending (lending at the request of the authorities, rather than for commercial reasons).

Conversely, indirect instruments refer to the use of money market conditions as the issuer of reserve money. These instruments are used to affect the market-determined price of bank reserves as the central bank engages in transactions with both financial and non-financial institutions. The main types of indirect instruments are open market operations that are used to inject and absorb liquidity and the central bank lending facility.

The choice of instruments, whether direct or indirect, and their effectiveness in aiding monetary stability is linked to the exchange rate regime. What exchange rate and monetary regime a country should choose is a perennial question for many governments, especially in the Caribbean given the need for harmonization and integration. It is

especially relevant for Caricom economies, where many of the previously tried regimes are falling out of favour.

Fixed exchange rate regimes appear to be more effective in promoting monetary stability, in contrast to floating regimes. For the Caricom economies, such as The Bahamas, Barbados, Belize and OECS that still have fixed pegs, it was observed that they enjoyed long term monetary stability unlike their counterparts, Guyana, Trinidad & Tobago and Jamaica, which abandoned their pegs at different periods and adopted flexible exchange rate regimes. For the fixed regime economies inflation was relatively low, compared to those with floating rates, who experienced double digit inflation rates. Over the past decade, The Bahamas, Belize, Barbados and OECS had inflation rates averaging 1.8%, 1.7%, 2.0% and 2.7%, respectively.



Inflation rates for the same period for Trinidad & Tobago, Guyana and Jamaica and Suriname, respectively averaged 5.3%, 6.9%, 25.6% and 85.8% (See Figure 1). However, for Trinidad & Tobago even though officially listed as having a floating regime, this country's exchange rate system operates similar to that of a fixed regime, that is, a managed float. As a result, monetary developments in this country mirror that of the fixed exchange rate countries.

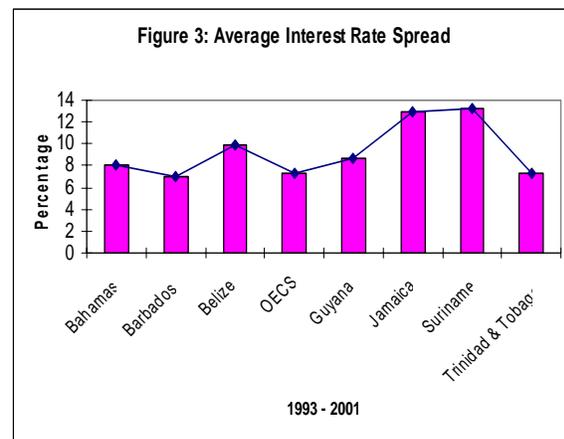
With regards to the inflation and the growth rate it was observed that in the case of floating exchange rate countries the inflation rate was higher than the growth rate. This occurrence signals that expansion in the money supply exceeded that of GDP growth (See

Figure 2). Countries with pegged exchange rates have lower rates of growth in the money supply presumably because there is a higher desire to hold money rather than to spend it. Pegged exchange rates by enhancing confidence can engender a greater demand for the domestic currency. Inflation outpacing real growth is also an indication of the depreciation in the exchange rates for floating regime countries over the past decade. For Jamaica, Guyana and Trinidad & Tobago, the exchange rate depreciated by 82.1%, 41.4% and 5.9% respectively over the past ten years (See Table 5).

<b>Table 5: Caricom Countries Exchange Rates</b>		
<b>National Currency Per US\$</b>		
<b>Country</b>	<b>1993</b>	<b>2003</b>
Bahamas	1.00	1.00
Barbados	2.00	2.00
Belize	2.00	2.00
OECS	2.70	2.70
Guyana	138.23	195.50
Jamaica	33.20	60.47
Trinidad & Tobago	5.89	6.24

*Source: Bank of Guyana Statistical Bulletin, Dec. 2003*

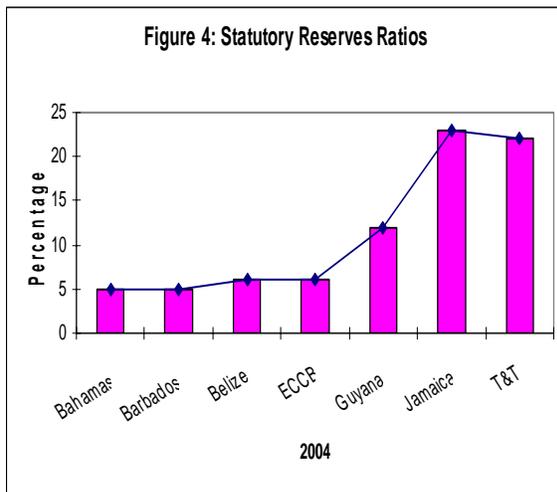
Movements in the interest rate also reflected the difference in the monetary regime. Rates were in some cases lower and experienced less volatility in the fixed exchange rate regime countries than the floating regimes (See Tables 6, 7 & 8). Also contributing to this volatility can be the exchange rate risk that is associated with the floating regimes. With the fixed regime the exchange rate risk is generally absorbed by the government which utilizes direct monetary policy instruments to ensure the stability of the currency. Not forgetting, there is the country risk that is associated with political and economic instability that CARICOM countries with floating regimes are known to experience.



For the period 1993-2001, the average spreads between the weighted average loan rates and the deposit rates, with the exception of Trinidad & Tobago (7.6%), were higher for Suriname (14.3%), Jamaica (13.6%) and Guyana (8.8%), when compared with spreads for The Bahamas (7.9%), OECS (7.2%) and Barbados (6.9%). The only fixed exchange rate country with an exceptionally high spread was Belize with 10.1% (See Figure 3).

In examining the statutory reserves it was deduced that the regional economies with fixed regimes held their statutory reserves at low and stable ratios, while those with floating regimes tried to manipulate liquidity by increasing their statutory reserves and liquidity requirements.

For instance, The Bahamas statutory reserves against Bahamian dollar deposit liabilities was maintained at a ratio of 5.0% since coming into effect in June, 1974. Similarly, for Belize and the OECS the statutory reserves were fixed at 6.0% respectively, while for Barbados the rate fluctuated between 5.0% and 6.0% during the past ten (10) years, with it currently down to 5.0%. However, for Guyana the



statutory reserve is down to 12.0% from a high of 25.0% of demand liabilities in 1996. For Jamaica there was also a decline in statutory reserves over the past decade, with the reserves down from 50.0% in 1994 to a current 23.0%. On the other hand Trinidad & Tobago witnessed an increase in statutory reserves up from 20.0% in 1994 to 22.0% as at end 2004. Thus, it is evident that for the regional economies with a fixed exchange rate regime the statutory reserves is significantly lower and have held fixed ratios over the past decade (See Figure 4).

All CARICOM countries with a fixed regime, target the exchange rate so as to maintain the stability of their currencies against the United States dollar. The build up in

international reserves is also a reflection of the governments' ability to attract inflows of capital as a result of overall macroeconomic stability. Thus, external reserves for The Bahamas, Barbados, Belize and OECS stood at US\$484.3 million, US\$751.7 million, US\$81.7 million and US\$536.7 million, respectively at the end of 2003. While for Guyana, Jamaica, and Trinidad & Tobago their respective external reserves position totaled US\$176.2 million, US\$1,162.9 million and US\$2,241.8 million. The significant amount of external reserves that Trinidad & Tobago recorded can be attributed to fact that this country is an exporter of oil and as such has a large inflow of foreign currency from oil proceeds. Whereas for Jamaica, the large build in external reserves was due to foreign currency borrowings, thus resulting in an increase in their foreign currency debt.

Further, external reserves relative to the money supply (M3) for Trinidad & Tobago and Jamaica, the countries with the highest level of external reserves, were 52.9% and 35.3% respectively, while Barbados was 32.5%; Guyana was 31.5%; OECS was 19.6%; Belize was 15.7%; and The Bahamas was 12.1%. Therefore, the build up in external reserves lead to an expansion in the money supply.

**Table 6: Commercial Bank Weighted Average Loan Rates (%)**

<b>Countries</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Bahamas	14.9	14.2	13.3	12.6	12.8	12.3	11.8	11.7	11.5	11.3	12.0
Barbados	11.3	11.9	11.8	11.9	11.1	11.1	11.7	11.9	11.1	n.a	n.a
Belize	14.6	15.0	16.3	16.2	16.6	16.3	16.2	15.8	15.4	14.5	14.2
EC Currency Union	10.9	11.5	11.8	11.8	11.9	11.6	12.0	11.9	11.5	n.a	n.a
Guyana	18.7	19.6	20.7	18.5	18.3	18.3	17.9	17.7	17.6	16.8	15.6
Jamaica	49.6	45.8	48.6	37.8	31.9	30.1	24.6	22.1	19.5	n.a	n.a
Suriname	11.1	32.3	39.6	34.9	32.0	25.7	27.3	29.0	24.0	n.a	n.a
Trinidad & Tobago	13.1	13.9	13.4	14.2	11.9	15.2	15.9	15.3	14.1	n.a	n.a

*Source: The Various Central Banks Reports*

**Table 7: Commercial Bank Average 3-Month Deposit Rate (%)**

<b>Countries</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Bahamas	5.2	4.5	4.8	5.2	5.0	5.0	4.3	3.8	4.2	4.1	3.9
Barbados	2.9	5.0	5.0	5.0	4.3	4.8	5.1	4.8	3.5	n.a	n.a
Belize	6.0	6.1	7.2	6.2	6.7	6.0	5.7	5.0	4.3	n.a	n.a
EC Currency Union	3.3	4.0	4.3	4.3	3.8	5.4	5.4	5.4	3.8	n.a	n.a
Guyana	10.9	12.8	12.9	10.4	8.4	8.0	9.3	8.7	7.6	n.a	n.a
Jamaica	42.6	31.2	26.0	21.9	15.2	15.5	15.0	14.3	12.2	n.a	n.a
Suriname	6.1	14.7	24.6	17.0	17.0	15.7	15.8	15.0	11.0	n.a	n.a
Trinidad & Tobago	7.8	7.2	6.3	6.5	6.5	6.8	6.4	6.6	6.6	n.a	n.a

*Source: The Various Central Banks Reports*

**Table 8: Treasury Bill Discount Rates (%) - 3 Months**

<b>Countries</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Bahamas	2.91	2.0	4.6	4.6	4.5	3.5	1.5	0.9	3.0	2.3	1.6
Barbados	7.23	7.8	8.3	5.6	4.9	5.7	6.1	3.9	2.0	1.5	0.6
Belize	n.a	4.2	4.0	3.7	3.4	5.9	5.9	5.9	4.3	3.2	3.2
EC Currency Union	n.a										
Guyana	15.44	18.6	15.5	9.9	8.2	8.8	11.1	9.2	6.4	3.9	3.4
Jamaica	41.47	43.0	27.7	38.0	21.1	23.5	22.0	20.2	17.0	17.0	19.9
Trinidad & Tobago	9.98	10.0	8.4	10.4	9.8	11.9	10.1	10.8	6.5	4.5	4.8

*Source: The Various Central Banks Reports*

#### ***4.1.2. Monetary Stability - Exchange Rate Issue***

From the indicators examined it was evident that exchange rate developments are critical for monetary stability in the domestic sector. The dichotomy of the exchange rate systems in the Caribbean has always been associated with their macroeconomic performance. Thus, having differing exchange rate regimes does not guarantee monetary credibility. As in the case of CARICOM, those countries with fixed regimes and relative monetary stability have reservations about the creation of a monetary union with fellow Caricom countries. High volatility, episodes of high inflation and large fiscal deficits resulted in a lack of monetary credibility for the floating regime countries. However, adoption of a common exchange rate regime, be it fixed, dollarization, floating or a monetary union in the region needs careful and urgent consideration, given the Caricom integration drive, which includes the establishment of the Caricom Single Market and Economy. More studies should be conducted on the benefits of having a common currency and the exchange rate system that would best serve the region's need.

Exchange rate stability could neutralize the domestic monetary institutions' poor credibility, which has been caused by past violations of exchange rate pegs, a history of monetary financing of the fiscal deficit and high inflation. A common currency regime could enhance monetary credibility, financial stability and economic integration. For countries to share similar economic conditions they require similar monetary policies, which is possible with a common currency. A common currency is a precondition to monetary integration in the Caribbean and can make the region a stronger economic force in its dealings with the rest of the world.

Note that, in the region a fixed exchange rate regime has often been cited as an alternative option for all regional economies because it has proven to work well for some Caricom countries and the arrangement could remove the instability associated with frequent changes in regional cross-rates. However, in this globalization era fixed exchange rates are no longer looked upon as the most favourable regimes to adopt. With the liberalization of the capital and financial accounts, which requires the removal of all restrictions to capital inflows and outflows, the fixed parity might be difficult to maintain.

The difficulty in maintaining the fixed parity relates to the abolishing of certain policies consistent with pursuing a fixed exchange rate system. For instance, in pursuing a fixed exchange rate regime, exchange control and other direct measures to prevent the depletion of external reserves are generally implemented. A constant buildup in international reserves is necessary for maintaining exchange rate stability under a fixed system. In order for this to occur there is need for exchange control measures, which are viewed as barriers to the entry and exit of capital. With liberalization, all barriers have to be abolished, thus creating the difficulty of maintaining the amount of external reserves that are needed to support the fixed exchange rate system. Such difficulty can lead to a shortage of foreign currency which could then lead to the creation of a parallel market for foreign currency. Thus, in this liberalization environment, governments of fixed regimes are likely to encounter difficulties in their absorption of the exchange rate risk involved in the maintenance of a fixed regime.

Basically, a fixed exchange rate regime can only be maintained if it is supported by continuous sound macroeconomic policies and provided that Caricom economies can build the foreign exchange capacity to effectively absorb external shocks. However, with the potential for declining reserves and burgeoning fiscal deficits, a fixed exchange rate regime could become unsustainable. Therefore, for Caricom economies the real cost of the fixed exchange rate is the risk of an exchange rate crisis, resulting in harmful devaluations.

Over the past two decades some developing countries have shifted away from fixed exchange rates and have moved towards more flexible exchange rates. Note that, a shortage of foreign exchange was cited as one of the contributing factors to the 1997-98 Asian financial crisis. According to Dick Nanto (1998), the structural factor that initially enabled the crisis related to the fact that most of these countries had been aligned with the dollar or basket of currencies dominated by the dollar. These pegged exchange values were not allowed to adjust sufficiently in response to changing economic conditions.

Therefore, given the twin forces of globalization and liberalization of markets and trade, consideration could be given to the adoption of a floating exchange rate system. Under such a regime, Caricom countries can have what Bennette (1990) and Worrell (1992) proposed, that of a single regional currency which is allowed to float against other international currencies. With a floating exchange rate regime it is supposed that Caricom economies would be better able to respond to external shocks from the global economy. The floating regime should be able to introduce an expenditure switch automatically without a time consuming decision process having to be undertaken. According to theory, such a system would lead to an instantaneous adjustment and hence the balance of payment would not be a constraint on government's economic policy. In a floating regime, the exchange rate would be free to move up and down in respect to shifts in demand and supply arising from international trade since market demand and supply would determine the value of the currency.

The increasing success of floating regimes is also supported by more systematic evidence. Econometric estimates of monetary policy reaction functions, that is how central banks adjust interest rates in response to changes in economic conditions, have been used to determine whether countries with floating exchange rates were able to raise and lower interest rates in response to changing domestic circumstances. Evidence from the countries with a sufficiently long history of floating exchange rates suggested that they were able to move interest rates in useful ways to counteract changes in domestic economic conditions.

Experience in Latin America and elsewhere suggested that floating regimes do allow exchange rates to move appropriately in response to shocks, although sometimes interest rate responses are also sharp. Exchange rate flexibility seems to have been helpful in cushioning output changes in the face of adverse shocks, and pass-through inflation has been fairly low. It appears also that floating regimes are gradually becoming more effective. An examination of the recent history of floating exchange rate regimes, such as those in Chile, Mexico and Peru, suggest that they may become more effective with time as credibility increases and systems become more firmly established.

Notwithstanding, experiences in the region have shown that for countries which have adopted the floating exchange rate regime they have been plagued with monetary instability. However, it is not prudent to think that the floating exchange rate regime led to macroeconomic instability in these economies. Political instability and debt management problems were contributing factors to their macroeconomic instability. The problems that CARICOM countries with floating exchange rates experienced were as a result of the economic climate that pre-existed the adoption of the float. These countries espoused the floating exchange rates as a remedial measure to their macroeconomic instability; stability was not the prelude to adopting a flexible exchange rate. Countries embraced the float with the hope of correcting their economic imbalances.

Cardinally, a well-functioning floating exchange rate responds appropriately to external shocks. When downward pressures on a currency occur in the foreign exchange markets, if the exchange rate is allowed to adjust freely, an initial depreciation tends to lessen pressure for more depreciation and the rewards for speculating in the market diminish. With an exchange rate pegged to the dollar however, government attempts to maintain the rate often raise the expectations of traders that the currency is heading for a fall. This places even more downward pressure on the currency as traders rush to sell the currency in anticipation that they will be able to buy it later at a lower price. If the governments involved do not have sufficient foreign exchange reserves to stave off the speculators and others in the market, they eventually have to concede failure and allow the currency to depreciate. When this process begins, the fall in the currency may be quite significant and may overshoot the equilibrium rate.

According to Berg, Borensztein and Mauro (IMF 2003), from a large sample of developing countries that have fixed exchange rates and that face negative terms of trade shocks, they achieve real exchange rate depreciations with a lag of two years while suffering large real GDP declines. By contrast, countries with floating rates display large nominal and real depreciations on impact and later suffer some inflation but much smaller output losses. Nevertheless, currency depreciations place additional burden on

local borrowers whose debt are denominated in dollars. Debt service cost is likely to rise in proportion to the currency depreciation.

Dollarization which is the most extreme form of a fixed exchange rate is another option for consideration. Dollarization has the potential to enhance credibility, remove the need for holding international reserves and reduce interest rate levels and exchange rate volatility. By minimizing exchange rate risks, dollarization would introduce price stability within the region which would then work to the benefit of CSME. According to Anthony and Hughes Harllett (2000), there is a strong economic and political case for adopting the United States dollar as the common currency in the region. These authors asserted that dollarization is the most credible way for the Caribbean economies to be tied to the United States dollar.

However, the drawback from dollarization is that it will completely eliminate seigniorage revenues and impede Central Banks in the region from acting as lenders of last resort. With regards to the latter, no government would be able to monetize its budget deficit and this could severely constrain the public sector in times of crisis. Central Banks will be challenged to secure sufficient reserves to finance the US dollars needed to implement and operate a fully dollarized system. Moreover, an important adjustment tool will be lost in that there will be no room for maneuver through the use of exchange rate policy. There is also the increased risk of financial and foreign exchange market crises being transmitted to the region. Capital inflows intermediated by the banking system may expand gross official international reserves, with a parallel increase in domestic short-run liabilities in the form of increased banks required reserves with the monetary authorities. Unless the monetary authorities hold all the resultant increases in required reserves in foreign exchange reserves, there will be deterioration in their net foreign currency denominated position.

Furthermore, for the Caribbean region the best option might be for the establishment of a monetary union, so as to accelerate regional integration. Originally, the idea of a monetary union initiative commenced in 1990, following the Conference of Heads of

Government of the Caribbean Community. However, following a study on the transformation into a Monetary Union it was concluded that the time was not appropriate for the establishment of a union. It was recommended that the union be viewed as one element of the wider programme of regional integration.

Nevertheless, the creation of a monetary union is very important to the future development of the Caribbean economy along a path of stability and sustained outward-oriented growth. Having a single currency in the region is crucial to furthering the integration process (Bennett 1994). A monetary union in the Caribbean can help to promote stable money, monetary and fiscal discipline and aid in the success of the Caricom Single Market and Economy. A monetary union can reduce the transaction costs of doing business among participating countries by eliminating foreign exchange dealings and facilitating transactions in capital market instruments.

According to a report presented by the technical team on monetary union at the Caricom Central Bank Governors meeting (May 2003), monetary integration would remove the risk of exchange rate revisions thereby reducing transactions costs in the cross-border trade in goods and services. Further, it was stated that it has the potential for balance of payments stability due to the constraint on government financing. The limits of the Monetary Authorities' ability to finance individual governments imply that deficits must be constrained or financed at higher market rates of interest. Such limits on government spending would act to protect the balance of payments by assisting in keeping national expenditure in line with national income. Improvement in the efficiency in resource allocation is an added benefit. The increased intra-union trade in securities would tend to equalize the rates of return on different types of capital in the member countries.

Moreover, foreign exchange would no longer be needed for intra-regional transactions. Since all the economies of member countries are unlikely to perform poorly at the same time, the creation of foreign reserves would reduce the quantity of required foreign reserves for the region. There is also the possibility of reduced cost of financial

management. Overhead costs of financial transactions would be spread more widely and some foreign exchange dealings would be eliminated, yielding resource savings.

Notwithstanding, it is agreed that Caricom countries have not met the basic criteria of an optimal currency area. There are obstacles that need to be overcome before the formation of a monetary union. There is the issue of the application of the convergence criteria which is necessary for the development of a monetary union in the region. According to the convergence criteria (3-12-36-15) previously set by Caricom, the call is for members to maintain foreign exchange reserves at 3 months of import cover for 12 months; exchange rate with the US dollar be stable for 36 months and external debt ratio maintained at no more than 15 percent of exports. Implementation of this 3-12-36-15 criteria is viewed as the first step towards a monetary union. The formation of the European Monetary Union began with the introduction of the convergence criteria.

For the successful functioning of an Economic and Monetary Union it will be essential for the participating Member States to achieve a high degree of sustainable convergence in terms of low inflation rates, sound public finances and exchange rate stability. With the convergence criteria all participating countries would be able to show that they are responsible and able to manage their fiscal and monetary policies within certain guidelines, thus resulting in economic and financial stability. With the individual exchange rates eliminated, there would be more restraint in the fiscal policies of the participating countries. Given a common currency, fiscal expansion would not be accommodated by monetary expansion, since any such expansion would have to be agreed by all the other participating countries.

The most significant benefit to the region is that, a monetary union would serve to concretize integration in the wider economic sphere and enhance the region's ability to negotiate as a unit with extra-regional countries and multilateral agencies. By binding policy-making close together, a union would force a deeper analysis of economic situations, prospects and solutions by regional technicians.

On the whole, the initiative to increase trade integration among Caribbean countries would increase the appeal for a common exchange rate regime. However, the challenge is when is this likely to emerge, since the necessary degree of political and economic integration is absent in the region. Thus, embracing the appropriate exchange rate system is an important issue for monetary stability in the Caribbean.

#### ***4.1.3. Monetary Stability - Capital Account Liberalization Issue***

For Caricom countries there is also the capital account liberalization issue is important in this globalization era. With the decision to liberalize, the effects on the economy will be conveyed via its monetary policy. Capital account liberalization, which increases the potential for sudden reversals of capital inflows, can force the national authorities to hike interest rates even more dramatically to defend a currency peg under attack, something they may loath to do when the banking system is already fragile.

As with the Asian financial crisis, the financial services sector was developing rapidly and without sufficient regulation, oversight and government control. As capital markets liberalized, banks in these countries were permitted to borrow abroad at relatively low rates of interest and re-lend the funds domestically. Thus, the financial crisis in Asia began in the currency market but this exchange rate instability originated from problems in the banking sectors of the countries in question.

For any country therefore, opening its capital account must be done in an orderly, gradual and well sequenced manner. The sequencing of capital account liberalization is an important but complicated issue. Countries vary greatly in their levels of economic and financial development, in their institutional structures, in their legal systems and business practices, and in their capacity to manage change in a host of areas relevant for financial liberalization. Accordingly, there is no common recipe for the sequence of steps to follow and no general guideline for how long the process should take.

Presumably, a country with a fully liberalized domestic financial system that had firmly put in place the safeguards necessary to ensure its successful operation could proceed

almost immediately and with confidence to full capital account liberalization. However, it would be a mistake to liberalize the domestic banking system or to open it fully to inflows if important parts of the system are insolvent or likely to be pushed into insolvency by liberalization. As a general rule, nonviable institutions should be weeded out and remaining banks put on a sound footing before liberalizing or opening the domestic banking system.

Liberalizing the capital account before the home-country financial system has been strengthened can contribute to serious economic problems. In particular, domestic and international financial liberalization heightens the risk of crises if not supported by robust prudential supervision and regulation and appropriate macroeconomic policies.

#### ***4.1.4. Monetary Stability - Macroeconomic Policies Issue***

Overall, prudent macroeconomic policies are the key to favourable exchange rate developments and successful capital account liberalization. Prudent fiscal policy that prevents the ballooning of large deficits will avoid the temptation to rely on foreign loans that might create debt-management problems, reduce credit-worthiness or weaken an economy's ability to manage external shocks. Hence, monetary policy can be used to counteract disorderly markets.

## **4.2 Financial Stability Issues For Caricom Countries**

### **4.2.1. Financial Stability In The Region**

Weaknesses in the banking system of a country can threaten financial stability both within that country and internationally. The need to improve the strength of financial systems has attracted growing international concerns. Tools for assessing financial stability garnered significant importance following the financial crises of the eighties and nineties. As a result, numerous international bodies have been examining ways to strengthen financial stability globally and ways to improve the types of surveillance and indicators used to assess financial stability within countries (*See Figure 5*).

Important to note is that, within a financial system the role of deposit-takers (banks) is central. These deposit-takers provide a convenient location for the placement and borrowing of funds and therefore, are an important source of liquid assets and funds to the rest of the economy. Deposit-takers also provide payment services that are relied upon by all other entities for the conduct of their business. Hence, failures of deposit-takers can have a significant impact on the activities of all other financial and non-financial entities and on the confidence in, and the functioning of, the financial system as a whole. Thus, analysis of the health and soundness of deposit-takers are central to any assessment of financial system stability.

Unlike the Mexican, Argentine, Asian, Russian and Brazilian crises, the Caribbean economies financial systems, with the exception of Jamaica, have been remarkably free of contagion. Some of the regional economies experienced periods of instability but they were related to domestic economic instability and the domestic market for foreign exchange, and did not coincide with financial instability in international markets. For Jamaica, the financial crisis was associated with rapid financial liberalization, which made it difficult for financial supervision to keep pace, differentials in the reserve requirements for different types of financial institution with especially high requirements for banks, and tight monetary policies in 1995/96, accompanied by interest rates which persisted at the very high levels of the previous period of high inflation.

Otherwise, the regional economies' financial sectors have enjoyed relative stability and they continue to implement policies to secure that stability. The resilience of the Caribbean financial systems has improved with the upgrade of legislation for domestic financial activities and the use of macro-prudential indicators that aided in the assessment of their banking systems' vulnerability to crisis.

The regulatory framework for financial systems in the Caribbean was documented by the Caricom Regional Supervision Harmonization Project from 1992 to 1994. It recorded legislation and bank supervision practices, and made recommendations for reform. Caricom Central Bank Governors used the recommendations in ongoing upgrades of the

regulatory framework and administration. Further, Caribbean regulators, in close association with the Caribbean Financial Action Task Force (CFATF) have taken a number of measures to counter the use of the region's financial system for money laundering. Countries have enacted anti-money laundering legislation, established financial intelligence agencies and have issued anti-money laundering guidelines to financial institutions. Regulators and law enforcement agencies continue to work closely with the international Financial Action Task Force (FATF) and CFATF in ongoing efforts to upgrade the regulatory framework.

Caribbean regulators have also played an active role in global efforts towards implementing the minimum standards recommended by the Basel Committee and other international agencies for strengthening supervisory systems and promoting soundness in the banking system. Currently, financial stability assessment in the region is guided by the Basel Core Principles for Effective Bank Supervision (Basel I), which provides a comprehensive blueprint for an effective supervision system. The Basel Committee developed a comprehensive set of twenty-five (25) core principles as a reference point for effective banking supervision and these core principles are the assessment tools used by all Central Banks in the Caribbean for assessing the soundness of the financial system.

According to the Basel Core Principles for Effective Bank Supervision (April 1997), the twenty-five (25) basic principles that need to be in place for a supervisory system to be effective relate to preconditions for effective banking supervision (principle 1), licensing and structure (principles 2 to 5), prudential regulations and requirements (principles 6 to 15), methods of ongoing banking supervision (principles 16 to 20), information requirements (principle 21), formal powers of supervision (principle 22) and cross-border banking (principles 23 to 25).

For more than a decade all CARICOM countries have been actively amending and introducing new legislation to ensure adherence to these Principles and other international banking standards and continuous stability in their financial sectors. Onsite examinations have become an integral part of the supervision of banks in the Caribbean.

These safety and soundness examinations cover a wide range of issues, particularly the financial position of banks, the quality of credit being extended and corporate governance arrangements. Also, all Caribbean economies have either implemented or are implementing measures aimed at introducing deposit insurance as a requirement for their domestic banking system.

Further, there was the establishment of the Caribbean Group of Central Bank Supervisors (CGCBS), who are working closely on the development of consolidated banking supervision within the region. Notably, all these measures were taken and are being taken to preserve the current stability of the financial sector. However, with continuous steps being taken to minimize the negative consequences of risk-taking by financial institutions, there have been proposals for the upgrading of the current methods of assessment of financial institutions and the implementation of new methods. The latest developments relate the New Basel II Accord and the Financial Soundness Indicators.

The original Basel I Accord was a landmark event, however, the expressed view is that over time it has become less and less reflective of the risks of the largest organizations and accordingly, has become less and less integral to the ongoing supervision of them. Some of the short comings cited for Basel I relates to its failure to recognize differing credit quality within the same general asset type, its varying of the capital charge with the credit exposure's legal form, such as whether it is on or off balance sheet, and its simplistic approach to risk transference and credit risk mitigation.

Moreover, it has been posited that Basel I was not structured to keep pace with the rapid rate of financial innovation that have been noticed in international active banks. This has created incentives for capital arbitrage, with banks able to structure transactions with the primary goal of minimizing regulatory requirements without a commensurate reduction in risk. Similarly, it is said to have resulted in distortions in bank activity, by creating a tax on certain activities while understating the risk for others.

Consequently, it is the view that these shortcomings combined, have made the regulatory capital metric less informative to investors, supervisors and counterparties. Further, it is the view that these shortcomings have eroded the principle of adequate risk-based capitalization that the Basel I Accord was designed to promote. The lack of sensitivity and incentives for arbitrage have said to have made Basel I less relevant in the supervision of the largest banks, thus resulting in the development of the New Basel II Accord and the proposed IMF's Financial Soundness Indicators, as new tools for assessing the banking system soundness. These new tools however, would present some challenges for Caricom countries as these proposed advance methods of assessment require a lot more data collection and analysis than is currently conducted by developing countries in general.

#### ***4.2.2. Financial Stability - New Basel II Accord Issue***

The implementation of the new internationally agreed bank capital requirement, known as Basel II Accord, deals exclusively with capital adequacy. The main objective of Basel II is the creation of a stronger, more risk sensitive measure of banks. It builds on risk measurement concepts that have emerged in the industry. The New Accord is supposed to link risk taking to capital adequacy in a meaningful and consistent way. Its systemic quantification of risk should give market participants new tools for viewing banks' capital positions. Basel II establishes strong preconditions for firms' adherence to using those methodologies, and places a strong measure of responsibility on the supervisors to ensure that each firm is in fact adhering to those requirements. The New Accord is expected to allow for the evolution of bank practice over time by building on the core elements of a bank's internal methodologies.

Many countries, nevertheless, including those within the CARICOM region feel that the new standard is complex and expensive to implement, unlike the Basel I which was easy to understand and simple to implement and was adopted by all Caribbean countries. With Basel II, the greater use of assessments of risk provided by banks' internal systems as inputs to capital calculation has been included. The 'New Accord' is promoting the adoption of stronger risk management practices by the banking industry, by focusing on

more risk-sensitive capital requirements that are conceptually sound and pay due regard to particular features of the present supervisory and accounting system in individual countries. However, the focus on the calculation of risk sensitive capital requirement is not commonly done in the region and would therefore require supervisors with a higher degree of knowledge, skill and experience.

Implementation of Basel II is through three Pillars. Pillar one relates to *minimum capital adequacy*; Pillar two, *supervision review process*; and Pillar three, *market discipline*. Implementation of these three Pillars will prove challenging for the Caribbean. For Pillar one, a vast amount of empirical work will be required for calculating credit risk, operational risk and market risk, which are all part of calculating the minimum capital requirements. For most, if not all countries in the region, no empirical work is done with regards to credit risk coefficients. An enormous amount of empirical work is normally conducted by the G-10 countries but not by the developing economies. Hence, within the region this would necessitate training and investment in the relevant computer programs.

The New Capital Accord has provided countries with over sixty (60) options for implementation at national discretion. However, for countries in the region that serve as host jurisdiction for the developed countries, they would need to follow closely what positions are being taken by these countries. Reason being, countries might adopt different approaches, thus forcing the Caricom countries, especially those with subsidiary banks, to learn all approaches of the New Accord, as some countries parent offices might adopt the more advanced approaches.

Further, even the outright application of the standardized approach might prove challenging for some Caricom countries. The standardized approach involves the use of ratings agencies to determine the risk weighting for assets. Therefore, this would require the Central Banks in the region reviewing rating agencies for over 40 countries to determine if they meet the Basel criteria, an exercise which can prove costly and time consuming.

With regards to the implementation of Pillar two, Supervisory Review Process, it is not expected to pose much of a challenge since Banking legislation in the region already permits the Inspector to require a licensee to augment its capital. According to Basel II however, supervisors should regularly review the process by which banks self-assess their capital adequacy, in terms of the level and quality of capital held in relation to their risk positions. Therefore, a more in-depth review of capital adequacy will now be required during the examination process. Central Banks will have to assess via on-site examination, the system and records by which licensees routinely monitor their capital adequacy between report dates. Thus, strengthening of this policy and increasing transparency are issues that the region would have to examine.

For Pillar three, market discipline, the emphasis is on the disclosure of both quantitative and qualitative information of banks activities by shareholders, depositors and other market participants. Implementation of this pillar will be an added cost to the banks due to more frequent disclosures. Disclosures will have to be semi-annual for all public licensees and quarterly for large retail banks. Moreover, if the disclosures are to be credible then it will necessitate the checking or auditing by banks external auditors. Along with the extra cost to banks there will also be resource and expertise considerations for local audit firms as certain disclosures are not currently made.

Nevertheless, the implementation of Basel II should help supervisors and market participants to better detect increases in risk in individual institutions and across the financial system through a more risk-sensitive capital measure. It also promises to reinforce and accelerate improvements in bank risk management globally, as well as promote future innovations through its reliance on banks' internal methodologies.

#### ***4.2.3. Financial Stability - Financial Soundness Indicators Issue***

In addition to the New Capital Accord (Basel II), the IMF has recently proposed in its financial sector assessment programme the use of Financial Soundness Indicators (FSIs). FSIs are a new body of economic statistics that reflect an amalgam of influences. These are indicators of the current financial health and soundness of the financial institutions in

a country and of their corporate and household counterparts. They include both aggregated individual institution data and indicators that are representative of the markets in which the financial institutions operate. FSIs are calculated and disseminated for the purpose of supporting macro-prudential analysis which is the assessment and surveillance of the strengths and vulnerabilities of financial systems, with the objective of enhancing financial stability and limiting the likelihood of failure of the financial system.

The FSIs are divided into core and encouraged sets. The core set examines capital adequacy, asset quality, earnings and profitability, liquidity and sensitivity to market risk. On the other hand, the encouraged set deals with deposit-takers, other financial corporations, non-financial corporate sector, households, market liquidity and real estate markets (*See Table 9*).

Compilation of FSIs are a new endeavor for Caricom countries and because of the wide range of data sources that need to be drawn upon, this process can prove to be a complex task. For the Caribbean there are some *strategic issues* that need to be addressed when considering the compilation of such data. Given the range of data sources that potentially need to be drawn upon, it is not likely for all data to be available in one agency, so the job of compiling FSI data will certainly involve more than one agency. However, the FSI Guide recommends that one agency should be given the primary responsibility for calculating and then disseminating FSI. Once the lead agency has been determined, the strategic decision will be whether to establish a unit in the lead agency that focuses specifically on the FSI data-set or whether an existing unit should add this task to its workload.

Furthermore, for most FSI related series, legal backing for data collection is required and this is absent from most CARICOM countries. Adequate legal backing provides the statistical agency with the necessary support to encourage the private sector to report the data required. Moreover, stiff penalties for non-compliance and proper enforcement of the laws are also factors to consider. Penalties for non-compliance should be harsh enough to affect any institutions which do not comply and should be strongly enforced.

In some CARICOM countries it can be argued that even where there is a penalty for non-compliance it is either not enforced or marginally enforced.

<b>Table 9: Financial Soundness Indicators: The Core and Encouraged Sets</b>	
<b>Core Set</b>	
Deposit-takers	
Capital Adequacy	Regulatory capital to risk-weighted assets Regulatory Tier 1 capital to risk-weighted assets
Asset Quality	Nonperforming loans to total gross loans Nonperforming loans net of provisions to capital Sectoral distribution of loans to total loans Large exposures to capital
Earnings and Profitability	Return on assets Return on equity Interest margin to gross income Non-interest expenses to gross income
Liquidity	Liquid assets to total assets (liquid assets ratio) Liquid assets to short-term liabilities
Sensitivity to Market Risk	Duration of assets Duration of liabilities Net open position in foreign exchange to capital
<b>Encouraged Set</b>	
Deposit-takers	Capital to assets Geopolitical distribution of loans to total loans Gross asset position in financial derivatives to capital Gross liability position in financial derivatives to capital Trading income to total income Personnel expenses to non-interest expenses Spread between highest and lowest interbank rate Customer deposits to total (non-interbank) loans Foreign currency-denominated liabilities to total liabilities Net open position in equities to capital
Other Financial Corporations	Assets to total financial system assets Assets to GDP
Non-financial Corporate Sector	Total debt to equity Return on equity Earnings to interest and principal expenses Net foreign exchange exposure to equity Number of applications for protection from creditors
Households	Household debt on GDP Household debt service and principal payments to income
Market Liquidity	Average bid-ask spread in the securities market Average daily turnover ratio in the securities market
Real Estate Markets	Real estate prices Residential real estate loans to total loans Commercial real estate loans to total loans
<i>Source: Compilation Guide on Financial Soundness Indicators, IMF, September 2003</i>	

In addition to strategic issues, there are a number of *managerial issues* pertaining to the implementation of work on FSIs. Most important is the coordination with other agencies, development of work schedules and consultation with both data suppliers and users. As data for compiling FSIs are likely to be supplied by different agencies, a number of management challenges would arise. For instance, procedures are needed to ensure that the concepts used and data compiled by the different agencies are consistent, or at least reconcilable. To this end, the lead agency would need to develop expertise in the international guidance for compilation of FSIs, and also act as their guardian within the economy.

There are also *practical issues* of increased resource cost from collecting new data series. Collecting new data for compilation of FSIs could be an added burden to agencies that have to supply the data. Hence, in determining the need to collect new data, authorities should make a judgment as to the likely impact and importance of the additional data series for compiling and monitoring FSI data.

#### ***4.2.4. Financial Stability - Stress Testing Issue***

Analytic work is also focusing on how aggregate stress testing can be used in combination with FSIs to enhance their usefulness. Aggregate stress testing involve applying standardized shocks to deposit-takers' balance sheets and then aggregating the results across deposit-takers, to obtain the impact on the sector as a whole. Stress testing also provides a way to access certain types of risks that are hard to measure precisely, using FSIs, including derivatives and off-balance sheet exposures. However, stress testing is not conducted by the Caricom countries. Hence this area would require careful study and analysis by the regional economies.

Stress testing and FSIs are different but complementary approaches to assessing risks to financial stability. FSIs allow more continuous monitoring of specific strengths and vulnerabilities over time, while the stress test gives an estimate of the losses associated with these vulnerabilities from a one-time, plausible shock to the relevant macroeconomic risk factor. However, these are all new methods of accessing financial

stability within the Caribbean and there would be challenges with the initial compilation, as the region would need to see to the development of the necessary expertise and techniques.

#### ***4.2.5. Financial Stability - Independence Of Financial Regulators Issue***

Moreso, financial regulators<sup>5</sup> need independence. Political interference in financial sector regulation and supervision contributed to the depth and magnitude of nearly all of the financial crises of the past decade. Independence for financial regulatory agencies is very important, since an independent regulator can ensure that the rules of the regulatory game are applied consistently and objectively over time. If bankers know in advance that insolvent banks will be closed they will behave more prudently, thereby reducing the likelihood of a full-blown banking crisis. However, when politicians become directly involved in enforcing regulations, they may be influenced by other considerations in making their decisions, which then take on an ad hoc quality.

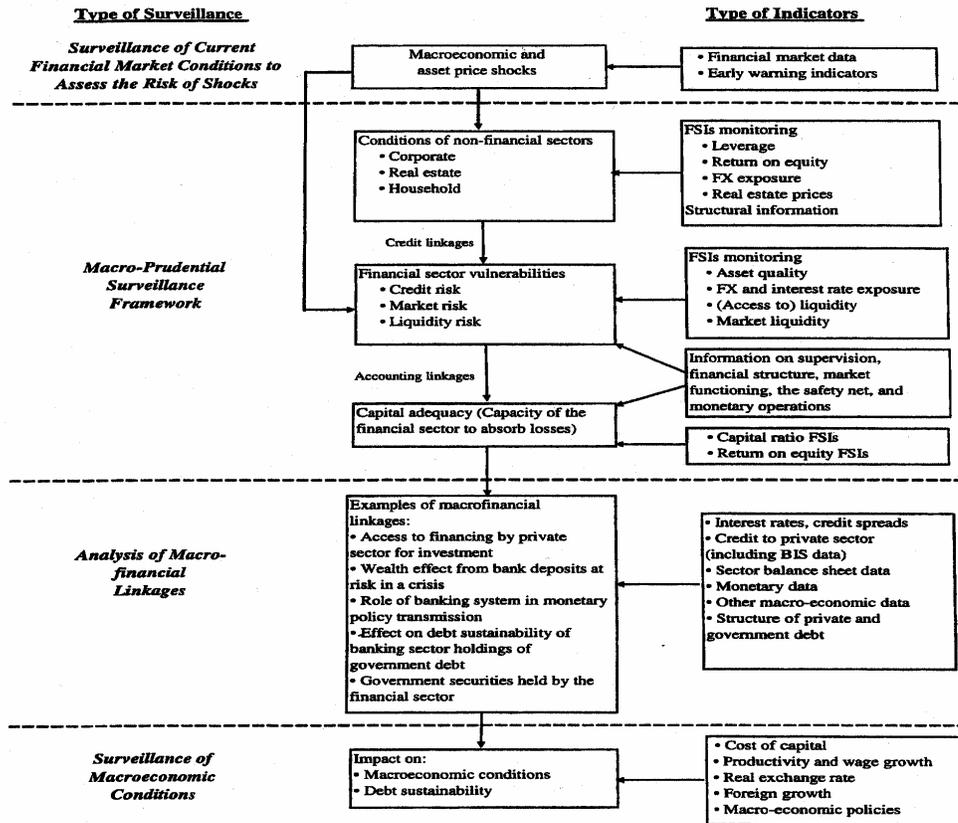
Therefore, regulatory autonomy in the Caribbean is critical for effective rule making. Agencies should have an appropriate degree of autonomy in setting prudential regulations within the broader legal framework. Supervisors who can define regulations are in a better position to respond quickly and flexibly to changing needs and trends in the international markets. Supervisors will also be more motivated to implement and enforce regulations if they have been closely involved in the rule-making process.

Supervisory independence is also critical to enforcing rules, imposing sanctions and managing crises. To protect their integrity, supervisors should enjoy legal protection when carrying out their responsibilities so that they cannot be sued personally for their actions. Appropriate salaries should help agencies attract and retain competent staff and discourage bribe taking. Further, supervisors should be given sole authority to grant and revoke licenses because they have the best view on the composition of supervised sectors.

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<sup>5</sup> For CARICOM countries, the Central Banks are the financial regulators.

**Figure 5: Analytic Framework For Financial Stability**



Source: IMF Compilation Guide on Financial Soundness Indicators, Draft September 2003

Overall, in the interest of financial stability, much attention should be given to ensuring the autonomy of the supervisory agencies. The need to pursue the goal of independent and accountable regulators and supervisors in the interest of long-term financial stability is as great as ever.

## **Section 5: Conclusion**

In the Caribbean quest for monetary and financial stability the influence of international factors cannot be overlooked. With the process of globalization moving apace, and the development of a number of trading blocs setting the stage, CARICOM countries need to be proactive about the way forward. The regional economies are faced with new challenges that deserve careful attention and thought. A framework therefore, which seeks ways of securing both monetary and financial stability, on a sustained basis, through an appropriate distribution of responsibilities and a mutually supportive use of the instruments at their disposal is needed. Further, the pursuit of prudent fiscal policy measures should not be neglected since the achievement of monetary and financial stability is connected to fiscal stability.

For small open economies like CARICOM countries, with the encroachment of international financial forces on their domestic financial systems, it is necessary to keep pace with the latest developments in the financial sector. It is vital to have a strong, stable financial system to support effective monetary policy. Excessive volatility in financial markets can significantly raise the cost of capital for business investment and adversely affect real economic advancement. History has demonstrated that a weak financial sector can significantly impede the monetary transmission mechanism when central banks are trying to stimulate the economy.

Therein, ensuring monetary and financial stability exists in all economies in the region is critical to the regional integration process. Beginning with common monetary tools, such as the exchange rate arrangement, is a step closer to the harmonization process, since the exchange rate is an indicator of the stability of any economy.

With respect to the financial sector, the Basle II will no doubt help improve financial stability. The new framework will enable bank regulatory capital ratios to be more responsive to changes in risk and will foster additional disclosures by banks about their risk-management. Basle II will encourage banks to develop their systems to measure and manage risk as part of the investment needed to support strategic initiatives. The greater

volatility in measured risk, combined with strategic capital planning, should encourage banks to continue to maintain actual capital levels above regulatory minimums. However, the initial challenges, which include the development of qualified and experienced staff to oversee banks' adoption of the new framework, need to be overcome.

Similarly, the compilation and dissemination of FSIs would aid in macro-prudential analysis, that is, the monitoring of risks to the stability of the national financial systems arising from the collective behaviour of individual institutions. The magnitude and mobility of international capital flows has made it increasingly important to monitor the strength of financial systems and their resilience to capital flow volatility. The financial sector is often the conduit between global financial markets and domestic borrowers and, as such, is sensitive to external capital markets conditions, as well as domestic development. Thus, there is a need for the compilation of FSI data, but like Basel II, this would require a relatively high level of technically skilled staff at the compiling agencies. Moreover, the financial system is only as strong as its governing practices, the financial soundness of its institutions, and the efficiency of its market infrastructure. Instilling and applying sound governance practices are a responsibility that should be shared by market participants and supervisors. Market participants must establish good governance practices to gain the confidence of their clients and the markets. Regulatory agencies have a key role to play in instilling and overseeing the implementation of good governance practices. Therefore, in the Caribbean, regulatory agencies need to follow sound governance practices in their own operations or they will lose the credibility and moral authority they need to be effective in their oversight role, hence opening the door to moral hazard, unsound markets and practices and ultimately, financial crises.

Further, political and institutional considerations are necessary for CARICOM. The European experience highlighted the need for political commitment to a common currency and the time it may take to develop common institutions to support adjustment to economic and political pressures. CARICOM countries have not yet made comparable investments in common institutions. Differences in levels of development are significant within the Caribbean, suggesting that the establishment of a common currency regime

would be a complicated and slow process. However, the fact that institutional reform would be necessary is advantageous. It is hard to imagine the complete success of Caribbean integration without common monetary objectives, which will aid in establishing monetary credibility for all countries in the region.

Overall, prudential policies are the first line of defense against the build-up of imbalances. Monetary and financial regulators need independence. Establishing adequate independent arrangements is crucial to reducing the likelihood of political interference in the monetary and financial systems.

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