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THE ECCB'S OPERATIONAL FRAMEWORK AND CAPITAL MARKET DEVELOPMENT: CONFLICT OR SYNERGY?

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1.1 INTRODUCTION

If we take a central bank to be the agency which conducts monetary policy, then we can divide such policies into two, distinguishing those concerned with relations with the rest of the world from those aimed principally at internal credit conditions. This distinction is, though, rather artificial since the two are not independent. Indeed, for small economies the relationship is asymmetrical. As is well known from the literature, the choice of exchange regime affects the scope for internal policy. Furthermore, it is evident that certain preconditions must be satisfied for internal policy to be possible. At a minimum there must be a centralized bank reserve held by the monetary authority and clearly, if the central bank seeks to affect the price or availability of credit by trading financial instruments, then there must be markets for those.

The ECCB Agreement commits it firmly to a very particular operational framework, focussing as it does upon the preservation of the external value of the EC dollars supported by fixed minimum proportion of foreign asset backing for the currency. Now the commitment to this framework, the ECCB's external policy, limits quite radically, the scope for internal policy but, equally, renders it unnecessary. It does so by building in a mechanism which tends to automatically stabilize the response of the balance of payments to external shocks. Moreover, given that internal policy is not required for stabilization, it would then seem implicit that its exercise may well be de-stabilizing and might, ultimately, undermine its ability to maintain the external value of the EC dollars.

Indeed, given the fact that financial asset accumulation and private sector expenditure are stable in relation to disposable income, monetary policy has most of its influence on the economic system through the level of foreign assets. It follows, therefore, that an appropriate policy for the monetary authority is to pin the currency issue to the level of foreign assets. Looked at from another angle, given a fixed exchange rate and limited credit creation by the central bank, the money supply is determined to a large extent by the external environment. As noted by Milton Friedman

> A small country on a commodity standard that is common to much of the rest of the world, or what is economically the same thing, that seeks to maintain fixed rates of exchange between its own currency and the currencies of most other countries without using foreign exchange controls or their equivalent- has little leeway with respect to internal monetary policy. Its stock of money must be whatever is required to maintain external equilibrium. Internal policies and events affect internal monetary conditions primarily through their effect on the demand for and supply of foreign exchange and hence on the behaviour of the stock of money that is required to maintain external equilibrium.[1]

Indeed, the ECCB is constrained as to the amount of liquidity it can create and still maintain a fixed exchange rate. We consider the two rules constituting ECCB external policy in turn, starting with the exchange rate.

The Fixed Exchange Rate

The ECCB's policy objective is to maintain the credibility of the EC dollar; this being measured by the ability of the ECCB to sustain the currency's external value. At present the

[1] *Milton Friedman, (1960, p. 76).*

ECCB's exchange rate policy involves a commitment to maintaining a fixed exchange rate of the EC dollar against the US dollar; the currency of the area's major trading partner. An exchange rate which has remained fixed at EC$ 2.70 to a US$ since 1976[2]. The ECCB has sole responsibility for changing the parity of the currency. So, the credibility of the exchange rate for EC dollar is gained and maintained largely through the member governments having surrendered to the ECCB the power to alter exchange rate (the exchange rates can only be changed through unanimous agreement of the Governments). Is this exchange rate policy appropriate for the region?

It is generally argued that the choice of exchange rate regime should be made by reference to the type of shocks which affect the economy. For instance, it has been suggested that a flexible exchange rate regime is more suited to an economy which faces mainly nominal external shocks, such as the fluctuating export prices, whilst a fixed rate regime is more appropriate when internal shocks predominate, for instance monetary shocks[3]. However, it is far from obvious that such reasoning is applicable to the ECCB region since it lacks many of the institutional and economic features of most developed economies[4]. Indeed, most of the exchange rate literature was developed mainly for industrial economies undertaking short run stabilization policies. Moreover, the ECCB members preferences in respect of foreign asset cover for the currency are rather diverse (as indicated by the level of utilization of their quota

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[2]*This nominal parity of the EC dollar to the US dollar predates the formation of the ECCB. This exchange rate was determined under the ECCA arrangement, the institution which immediately precedes the ECCB. However, the ECCB has maintained this nominal parity ever since it was established in 1983.*

[3]*See M Friedman (1976).*

[4]*Of course this is not surprising since the members of the ECCB form part of the periphery of international financial and economic activity. It therefore follows that the exchange rate policy that these countries can successfully pursue is determined entirely by their dependency.*

of ECCB credit) hence making it difficult for the ECCB to pursue any other exchange rate policy than a fixed peg. Different responses and possible divergent economic trends may be expected among the ECCB members in response to any altered or flexible exchange rates. Therefore, the pursuit of a fixed parity avoids policy coordination conflicts among member countries. We say more on this below.

Further, with undeveloped financial markets, the peg to the US dollar has effectively expanded the domain of the EC dollar for market participants can take advantage of the services available to the US dollar. The US dollar is a useful currency for both private and official transactions with the rest of the world since there are economies of scale from using the dollar[5]. It is a major currency for medium of exchange, unit of account, store of value and so on[6]. In addition, given the proximity of the region to the US and the extensive trade and payment relations that already exist between the ECCB area and the US, it may be reasonable to consider the ECCB are as part of the US optimum currency area[7]. From this perspective, a fixed rate to the US dollar may indeed be an appropriate exchange rate strategy for the ECCB region.

Furthermore, the domestic inflationary goals of the policy authorities in the ECCB region are, by implication, generally consistent with those of the USA. So the fixed exchange rate to the US dollar serves as a readily visible commitment of the policy authorities to establish and maintain price stability in the subregion when compared with the inflationary situation existing

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[5]*For instance, most of the trade in national currencies internationally is done against the U.S. dollar as a reference currency. As a consequence this practice reduces the number of foreign exchange markets that exist. Such economies of scale are prevalent in the forward exchange markets. See (R McKinnon, 1993, p.26)*

[6]*See R McKinnon, (1993).*

[7]*See D Worrell, (1992).*

both in Guyana and Jamaica. Beyond this of course the political cost[8] of changing the exchange rate could be considerable.

In addition, the single policy objective of the ECCB to a large extent precludes the coordination problems that might arise if it had other objectives to meet simultaneously. For instance, if the bank's various constituents were allowed to bargain with it for increased credit allocations, then the bank might have found it more difficult to preserve the exchange rate. So, having a single policy objective has served to cement and focus the ECCB arrangement.

If the ECCB wants to maintain the fixed exchange rate its interaction with the other actors in the system, must be geared towards the preservation of external balance. Specifically, it cannot create an excessive amount of domestic liquidity and still expect to maintain the fixed exchange rate[9]. In other words, the monetary policy of the ECCB must be consistent with its external policy objective. This is the aspect of the arrangement to which we now turn.

The Foreign Asset Rule

The policy instrument used to achieve its exchange rate stability objectives is the 'foreign asset rule'. In this respect the bank enjoys monetary policy making and also policy

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[8]*This amounts to a loss of popularity among the electorate. This is a constant concern for the political directorate which has the seat of Government, since their popularity as determined by the benefits they convey to the population will determine if they are returned to govern at the next election.*

[9]*Under the existing monetary constitution, the fiscal discipline impose on the member governments in the region, stems largely from the automaticity of adjustments in the economy in response to external sector developments as financial equilibrium is restored. If this automaticity is frustrated, it would result only in severe foreign reserve losses. Large foreign reserve losses will bring into question, the sustainability of the fixed exchange rate peg. The automaticity of the adjustment process may be frustrated through excessive central bank lending to the member governments.*

implementation autonomy. Now where there is some minimum threshold for the ratio of foreign assets to domestic currency the viability of a fixed exchange rate requires that the rate of growth of domestic credit not exceed a specified upper bound. The upper bound in question is determined by the rate of growth of private sector assets relative to private sector income, which in turn depends on trade performance. In order words, if more debt is issued than the private sector wishes to hold as financial assets, these debt instruments are rapidly returned to the monetary authority in exchange for foreign assets, resulting in a rapid loss of foreign assets from the monetary authority. At the end of the adjustments the monetary authority would have a higher level of domestic credit, but a lower level of foreign assets on its balance sheet. Of course, if this process continues it would ultimately bring into question the sustainability of the fixed exchange rate peg of the domestic currency as foreign reserves run out.

The annual limits for credit expansion for the Central Bank is determined as a residual variable. This result obtains precisely because of the statutory requirements imposed upon the Central Bank to maintain a reserve of net external assets of not less than 60 per cent of its demand liabilities. Therefore, once this requirement is satisfied global credit limits for the ensuring twelve months are simultaneously chosen. In the conduct of this policy, the bank is not required to consult the participating governments, it is done autonomously.

The level of foreign reserves the ECCB maintains to support the exchange rate is determined by the 'foreign asset rule'. This is the mirror image of the restraint on liquidity creation and it is imposed on the system by restricting credit expansion to both the governments and financial institutions by the central bank. In fact, the ECCB keeps foreign reserves in excess of the statutorily required limit.

At first glance this could be viewed as a situation where the rules on foreign asset holdings has led to a policy which maintains an inappropriately large proportion of the region's resources as foreign assets at the expense of lower domestic expenditure. Indeed, Mc Clean, (1975. pp. 11 and 34), criticized similarly large holdings of foreign assets under the ECCA arrangement which preceded the ECCB on precisely these grounds. He further suggested that the level of foreign assets holding were not justified by the variability of balance of payments position. This view must, however, be qualified since some additional factors need to be taken into account. An assessment of the size of foreign asset holding requires us to ascertain the influences on the demand for foreign reserve in particular the preferences[10] of the individual member states as regard insurance cover; and the precise combination of public and private benefit each member requires to participate in the arrangement. The variability of payments argument may be misleading in the case of a single country and even more so in a currency union where preferences differ. High levels of foreign assets may simply indicate that members preferences may not be similar. By implication, the correction of such a situation may require those members whose preferences are dissimilar to leave the scheme. The amount of foreign reserves the ECCB holds can be looked at as two tiers. The first is the 60 per cent requirement which acts as a constraint on liquidity expansion in the system and hence keeps demand consistent with the external balance objective of the ECCB, thereby maintaining credibility of the exchange rate

[10] *See J Dodsworth, (1978).*

peg. The second tier represents the governments' unused quota of borrowing.[11] Therefore, to the extent that current holdings of foreign assets are higher than the 60 per cent requirement this is simply an indication that some governments are not fully using their borrowing power at the ECCB. In fact, historically the ratio has always been greater than the statutory requirement (see Table 1).

Table 1
The ECCA/ECCB Foreign Asset to Currency Issue Ratio

YEAR	RATIO	YEAR	RATIO
1968	101.1	1981	86.1
1969	103.4	1982	76.8
1970	97.2	1983	76.6
1971	98.0	1984	79.6
1972	97.4	1985	88.1
1973	103.6	1986	93.5
1974	95.5	1987	103.5
1975	89.9	1988	110.1
1976	83.2	1989	86.0
1977	86.3	1990	122.4
1978	88.7	1991	87.1
1979	86.8	1992	97.5
1980	86.6	1993	98.9

This sharp change in the ratio which occurred in April 1989 was due to a re-classification. Data up to 1973 includes Barbados.

Source: ECCA/ECCB Annual Reports.

Moreover, large holdings of foreign assets can be regarded as a mechanism which creates "generalized" financial claims/assets (as opposed to "localized" financial assets) and thus helps

[11] *In addition a portion of the fiduciary issue is available for use as lender of last resort financing. However, this is more of a residual consideration, given that the governments notionally take the lion's share of the available fiduciary issue.*

to integrate the ECCB economic system into the world economy, or at least that of the United States, in a manner that eliminates such pressures[12]. This is very important given the proximity of the ECCB area to the United States. If economic agents are not sure of the value of the EC dollar or that the official supply of foreign exchange will be adequate, this may lead to a situation of currency substitution, where economic agents switch their wealth from EC to US dollars. Therefore, the external policy objective of the ECCB, and the policies used to support it, have precluded the emergence of parallel foreign exchange market in the ECCB area.

The level of foreign reserves apart, the conduct of rule-based monetary policy in the ECCB area can be recommended on several grounds. First these economies, as is the case with all small open economies, are subject to external shocks which can cause adverse movements in their terms of trade. These shocks of course affect the level of income. However there is nothing that the monetary policy authorities can do to avoid this. Allowing discretion at a time of external shocks may prove to be detrimental to the foreign reserves of the system. In the face of falling income and rising unemployment, for example, the political authorities may be tempted to increase domestic credit, which would generate a balance of payments deficit. On the other hand, the 'foreign asset rule', in conjunction with the fixed exchange rate in the presence of such a 'shock', promotes an automatic adjustment of the balance of payments and hence the foreign reserves. By implication, therefore, the policy authorities do not have to institute corrective measures, directly aimed at the external sector. This is a direct result of the operational framework the ECCB has adopted. Under this framework, disequilibria in member countries will tend to manifest itself in fiscal disequilibria. Therefore, it is the fiscal policy stance and

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[12] *See Ingram, (1959).*

not monetary policy which the domestic authorities must use to manage such 'shocks'. In this way the national policy authorities have an incentive to pursue sustainable fiscal policies.

The rule has greatly simplified the conduct of monetary policy so that even in the environment where there is little information the conduct of monetary policy has been kept under control. There has been no instance of persistent balance of payment deficits in the region facilitated by the monetary authority, and the reward has been a domestic currency which has maintained its external value in relation to the US dollar. That is, the EC dollar remains a convertible currency. Such a situation ought to be compared with a regime of discretion; where there exists limited technical ability; poor and untimely economic data, extensive data revision and also limited data series. Then lags between the need for change in the monetary policy, the recognition of that need, and the implementation of the changed policy. The advantage of the ECCB operation, is that none of these factors are important, since currency is only issued in exchange for an equivalent amount of foreign assets.

The 'foreign assets rule' has other advantages to recommend it. These include the elimination or at least the reduction of negotiation costs and burden sharing conflicts.

From the policy credibility literature there is added support for the ECCB's 'foreign asset rule', since it relieves a number of sources of credibility problems for the policy maker[13]. These are: time inconsistency; incomplete information and uncertainty regarding the predictability of

[13] *Indeed, the credibility of monetary policy is usually cited in the received literature as one of the benefits of an independent central bank with a specific policy focus. See K Blackburn and M Christensen, (1989), for a useful survey of the pertinent issues.*

policy. It is left to the individual constituent members to ensure that their fiscal policies are consistent with the overall focus of monetary policy.

The fixed rule has pre-committed the economic policy makers in the ECCB to time consistent monetary policies that is its optimal ex-post strategy does not differ from its ex-ante strategy and has made it very difficult for the governments to renege on promises even though the incentive may still exist. The pre-commitment also eliminates uncertainty regarding the predictability of monetary policy with respect to exogenous shocks to the economy. Especially so because of the unanimity rule and the possible differences in performances of the individual countries. To change the rules, for instance, would require either that the country withdraw from the arrangement, or the structure of decision making changes. Both possibilities are of course significant and will become common knowledge to all economic agents. Hence there is no second guessing about the motives or nature of the monetary authority. Further, there can be no credibility problem arising from an inconsistency between fiscal policy and monetary policy. The governments fiscal stance must adjust to suit the 'foreign policy rule' enforced by the autonomous ECCB.

Therefore, from our analysis it may be reasonable to suggest that, given the existing international monetary order on the one hand and the nature of the regional economy on the other, the ECCB has been given an appropriate focus for monetary policy. The focus of the ECCB's monetary policy under a regime of fixed exchange rate is the balance of payments out turn[14]. Further, because of this particular external monetary policy, there exists a certain level

[14] *A policy focus which can in our opinion be further strengthened by the removal of financing to the commercial banks and government.*

of automaticity in the adjustment processes of the ECCB area economies to developments in the external sector as financial equilibrium is restored. The fixed rules with which the bank must comply guards it against discretionary policies which are time-inconsistent. They ensure an ingrained effort towards pursuing policies in support of the external value of the EC dollar. In this sense the maintenance of a fixed exchange rate regime is the primary objective of the ECCB setup, and the 'foreign asset rule' represents the sufficient monetary policy to achieve it.

1.3 THE ECCB'S INTERNAL POLICY

Given the external policy objective of the ECCB and the policy instrument used to achieve this as discussed previously, there is no need for specific internal policy. Indeed, the external policy adopted by the ECCB determines what the internal policy ought to be. Hence, unless the external policy stance is to be frustrated, internal policies must be passive or at least consistent with the external policy of the ECCB. It is against this background that we analyse the ECCB's involvement in the development of money and capital markets. Of course, these represent only one aspect of its internal policy initiative, there exist internal monetary policy measures, which have been argued elsewhere to be irrelevant to the ECCB's maintenance of the external value of the EC dollar.

Capital Market Development and The ECCB

Money and capital markets are essential for the efficient allocation of appropriately priced funds. These two markets are in general similar in that they intermediate between borrowers and lenders. However, they differ in respect of the time horizon over which funds are loaned. In the case of the money market, this is essentially a short-term market (usually for one year and shorter) used for liquidity by its participants, whilst the capital market is engaged in long-term borrowing and lending for longer periods. The funds are usually used to support fixed investment by the borrowers. Hence, the lenders in this market are those who want to match a particular long liability structure with equally long-term assets. The capital market, moreover, consists of two main markets: the primary market and the secondary market, along with two basic instruments - debt and equity. Along with these there are the supporting institutional framework which gathers information on participants in the capital market, monitors borrower performance and in the case of default, transparent and swift procedures to facilitate the reorganisation, refinancing or merger/takeover of companies.

The ECCB, is mandated by its 1983 agreement to,

> "promote a sound financial structure conducive to the balanced growth and development of the economies of the territories of the Participating Governments"

As a result, the ECCB has embarked on initiatives aimed at developing money and capital markets in its member countries. This movement away from the traditional role of central banks of safeguarding the external value of the domestic currency to one of an agency of development is by no means new. This thrust is justified by S.N Sen who argues that central banks have been,

> "...obliged to assume some responsibility for encouraging and even undertaking the financing of development of the resources of the country."[15]

[15] *S.N.Sen, 1967.*

In 1990, the Deputy Governor, Reserve Bank of India, acknowledged that in developing countries it is important for central banks to perform a development and promotional role by fostering, institutions and instruments and by so doing increase the breadth and depth of the financial system, which is needed to promote economic growth.

The ECCB will act as a catalyst to promote the development of money and capital markets and further integrate the financial system of its member countries. This is necessary since the individual markets in these countries are too small to be viable. Therefore, the development of the financial markets, will serve to promote economic growth and development in the region by mobilising savings for investment in the productive sectors. This should address the heavy reliance of prior self-savings that limit the level of investments in the region. In addition, the level of domestic savings can be pooled resulting in economies of scale and reducing the cost of lending.

Some of the advantages which the ECCB possess in the direction of the financial market development includes the availability of financial resources, research expertise and policy credibility, and an integrated approach to financial sector development. In the first place the initial expenditures associated with the formation of new institutions can become a burden on the various governments. However, the central bank is quite profitable, with provisions in its charter for the setting aside funds from its profits for special projects. The money and capital markets initiative falls under this scheme. The regional governments will benefit much more from having one single institution perform this role than to do it themselves. Secondly, the ECCB already has a team of economists, accountants, lawyers and other professional groups at its disposal, who are all committed to an understanding of the objective conditions in the currency area. In any case, they form a core of expertise which can be tapped at short notice to provide consultant services, research on various aspects of the capital market and more so the group to lead the discussion on the issues involved in a frank and open manner. Thirdly, the ECCB has thus far pursued a credible nominal exchange rate policy. It is felt that such credibility can perhaps be transferred to the other aspects of the banks operations, and more so serve as the basis upon which the bank can facilitate financial sector development. This is important, particularly where large sums of money are to be invested and the integrity of the institutions dealing in the capital market is of utmost importance.

Finally, given the nature of the ECCB area and the uniqueness of the Bank, it is imperative that one institution take on the role of coordinating the formation of an integrated money and capital market to diversify risks through time and space. The ECCB as a multi-state central bank representing eight different countries, has autonomy and independence in its decision making process, uncharacteristic of central banks. This is because no one government can unduly influence the policies of the institution. In the individual countries there are undeveloped financial markets mainly because of the small size of the private sector and the lack of liquidity in the markets. In most of these islands there are seldom more than four large companies employing in excess of one hundred persons. In addition, in most cases these companies are privately owned. Even in the event that the companies are public companies, the majority of the shares are owned by families, with just a token amount actually publicly owned. This inhibits the growth of capital markets as there is very little opportunity for trading of the shares.

However, using the Monetary Authority as a sponsor and support for these markets, and the associated institutions and instruments necessary for their effective operation could entail significant risks for the monetary authority and its policy stance.

With regard to the regulation of capital markets in the ECCB area, the Bank recognizes the need for an appropriate legal and regulatory framework for the proper functioning of capital markets. This would involve legislative reform and include securities legislation, modern companies legislation and legislation governing the operations of other financial institutions. In addition, a comprehensive system of self regulation will be required. While it is recognised that a specific regulatory authority for capital markets will either have to be designated or developed, a policy decision has not been taken. A Regional Technical Committee however, has been identified as part of ECCB's over-the-counter call exchange proposal to oversee and regulate the operations of the call exchange. Presently, no final policy decision has been made with regard to the overall regulation of capital markets. ECCB's Monetary Council however, comprising of Ministers of Finance of the member countries, and the ECCB Board, on whom the onus and ultimate responsibility of regulating the financial system lie will inadvertently be responsible. By implication, in the event that the financial system was in danger of failure because of the possibility of a large institution going under, the Bank may, by default have to intervene. Thus it is imperative that the Bank continue to maintain, as done in the past, a foreign asset ratio above 60 per cent of its demand liabilities.

There is also the need to manage the supervisory and regulatory functions of the Bank separate from the lender of last resort function whenever it is applied. It is true that by pursuing supervision and regulation allows the Bank to identify problem institutions. However, it is also true that the Bank may not want an institution which it is regulating and supervising to fail, precisely because of the effect this may have on the rest of the financial system. Therefore, the Bank may need to continue to manage these tasks, as separate and independent functions or otherwise risk policy conflicts which may undermine its ability to maintain the credibility of the EC dollar. However, the Bank is cognizant of this fact and has pursued a policy of Chinese Wall separation between the supervision, regulation and lender of last resort roles.

The sponsorship of institutional development which seeks to work as market makers in the regional market for capital and money by the Bank, runs the risk of creating perverse incentives. This is especially the case where these institutions are developed in a vacuum. However, this need not be the case where the financial institutions are free to choose their assets and are not mandated to invest in one particular type of asset. This highlights the need for an appropriate timing of the instruments and markets which are developed and their effect on the financial system. In addition the question of optimal contracts become a relevant consideration.

We must not, of course, be drawn into a false sense of security when all ECCB's capital markets measures are put in place, for even after then the process would have just began. Indeed, it is not entirely clear what effect capital market development would have on the economies of the area in the short term. The evidence for this skepticism exists in the wider CARICOM area, which has pursued capital market development for sometime, but has not had much effect on economic activity. This suggests that there exists a particular critical mass which must first be reached, before the benefits of capital market development can be realised. This is not to suggest, of course, that financial sector development must not be pursued by the domestic policy authorities, it only implies that the approach needed may be different to what is pursued in the wider CARICOM. In other words the pursuit of this policy ought to be based on the objective conditions which exist in these economies. In this way it may not be the best policy to isolate ourselves from developments in the rest of the world, but perhaps use some of the new developments in financial instruments to tap other regional financial centers, while at the same time exposing the financial system to international financial competitive influences. Such a policy move ought to improve the efficiency of the financial system.

1.5 SUMMARY AND CONCLUSIONS

The categorization of policy into external and internal, serves as a useful basis for analyzing the operations of the ECCB. The external policy of the ECCB determines the degree of freedom it has to pursue internal policy. In the final analysis, the internal monetary policy stance must be supportive of the ECCB's external policy.

The external policy objective of the ECCB is the preservation of the external value of the EC dollar. The pillar of this external policy is the 'foreign asset rule' requirement for the currency issue (that is, the external monetary rule), under a regime of fixed exchange rates. This external policy stance of the ECCB is a logical consequence of the nature of the region's interaction with the world economy. It therefore seems reasonable to suggest that this policy has assisted the economies of the ECCB area to achieve some element of macroeconomic stability[16].

Using the Bank to pursue capital market development has some advantages to recommend it, such as the need to pursue an integrated financial system in the ECCB area and the human resource base which the institution possess. Nonetheless, there may be some pitfalls to its involvement such as its inability to act fully as a lender of last resort if the foreign asset ratio is 60 per cent or below, the development of financial institutions in a vacuum and the optimal period for the Bank's involvement in financial sector development. However if these are recognised before and measures are adopted to deal with any eventuality, then there need not be any conflict between the Bank's operational framework and its role in the development of capital markets.

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[16] *This is defined here as a relatively stable exchange rate in relation to the US dollar and the absence of chronic external sector disequilibrium.*

BIBLIOGRAPHY

BLACKBURN, K. and Christensen, M.: "Monetary Policy and Policy Credibility: Theories and Evidence", Journal of Economic Literature, Vol. XXVII, No. 1, pp. 1-45, March 1989.

DODSWORTH, J. R.: " International Reserve Economies in Less Developed Countries", Oxford Economic Papers, Vol. 30, No. 2, pp. 277-291, July 1978.

FRIEDMAN, M.: A Program for Monetary Stability. New York: Fordham University Press, 1960.

FRIEDMAN, M.: "The Case for Flexible Exchange Rates" in Essays in Positive Economics. Ed. Milton Friedman. Chicago: University of Chicago Press, 1976.

INGRAM, James: "State and Regional Payments Mechanisms", Quarterly Journal Of Economics, Vol. LXXIII, No. 3, pp. 619-632, August 1959.

Mc CLEAN, A.W.A.: "Money and Banking in the Eastern Caribbean" Institute of Social and Economic Research. University of the West Indies Mona, Jamaica 1975.

McKINNON, R.I.: "The Rules of the Game: International Money in Historical Perspective", Journal of Economic Literature, Vol. XXXI, No.1, pp.1-44, March 1993.

SEN, S.N.: Central Banking in Underdeveloped Money Markets. Janaki Nath Basu: 1967

WORRELL, D.: "The Independence of Caribbean Central Banks", Unpublished, 1990.

OFFICIAL and INSTITUTIONAL PUBLICATIONS

ECCA Annual Reports, Various Issues.

ECCB Annual Reports, Various Issues.

ECCB CENTRAL BANK AGREEMENT 1983.

NATIONAL STEERING COMMITTEE ON MONEY AND CAPITAL MARKET DEVELOPMENT. Unpublished papers from the money and capital markets unit of the ECCB.