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Centrale Bank van Suriname

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Caribbean Centre for Monetary Studies

MONETARY AND FISCAL MANAGEMENT UNDER A FLEXIBLE EXCHANGE RATE REGIME:

The Jamaican Experience

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Abstract

The paper reviews the conduct of fiscal and monetary policy in Jamaica after the move to a floating exchange rate regime. In the first section, a series of benchmarks are used to see whether there is evidence to support the commonly held view that a flexible exchange rate regime encourages the authorities to be less disciplined in their approach to fiscal and monetary management . It was found that the Jamaican experience provided mixed signals as to matter of the exchange rate regime and discipline in the conduct of policy. The exchange rate regime seemed to have allowed the monetary authorities to place less emphasis on controlling the money supply and to rely more on the interest rate instrument for stabilization purpose. The second section of the paper, is devoted to an empirical investigation of the potential costs, which might have been imposed on the economy, arising from the monetary policy combination of high interest rates and rapid growth in the money supply. It was concluded, that to the extent to which the flexible exchange rate regime allowed the authorities to exercise less restraint on the growth in the money supply, the economy might have incurred higher costs, than would have been the case with a fixed exchange rate regime.

Introduction.

In this paper attention will be directed to an examination of the implications for the conduct of monetary and fiscal policy of the decision taken by the Government of Jamaica in 1983 to move from a fixed to a flexible exchange rate regime with the introduction of an auction system. The traditional view was that a flexible exchange rate system was not suitable for a small open economy, such as Jamaica. Given the thinness of the market, a flexible exchange rate system would result in great instability in the rate. The decade of the eighties witnessed a change in attitude towards the question of the suitability of a flexible exchange rate regime for developing countries(Quirk, et al., 1987). This, was in part, indicative of the growth in importance attached to economic openness and, specifically, a dynamic export sector for small developing countries. It was believed that in many countries the export sector was undermined by an overvalued exchange rate. This overvaluation resulted from a reluctance on the part of governments operating under a fixed exchange rate regime to devalue the currency. By adopting a flexible exchange rate system which would allow the rate to more directly reflect market trends, currency overvaluation could be avoided and a government would not have to be concerned with the political costs associated with a devaluation decision (Edwards, 1996, Collins, 1996).

The issue as to the suitability of a particular regime has more recently centred on the role of the regime in encouraging governments to exercise discipline in the conduct of monetary and fiscal policy. The poor economic performance of many countries over the past two decades has often been linked to excessive fiscal deficits and growth in the money supply. Under a fixed exchange rate regime, the impact on aggregate demand of expansionary fiscal and monetary policy would likely lead to a weakening in the country's balance of payments position and a run on reserves. Recognition of their limited ability to support the rate along with the desire to avoid a devaluation decision, would encourage governments to exercise a greater measure of restraint in their conduct of policy.

On the other hand, under a flexible or managed exchange rate regime the government could simply allow the exchange rate to depreciate. However, exchange rate depreciation, in small open economies will lead to higher inflation and an appreciation in the real exchange rate. Such an appreciation, by weaking the competitive position of exporters and producers of import competing goods, would have a negative impact on income. A fixed exchange rate regime is then seen as providing the appropriate nominal anchor for promoting a greater measure of discipline in the conduct of policy(Corden,1994).

Critics of the nominal anchor approach have pointed out that operating under a fixed exchange rate regime does not preclude the possibility of periodic adjustment in the exchange rate. Such an adjustment in the rate will be adopted on those occasions when, for example, the government concludes that the it is less costly to adjust the rate than to pursue monetary policies consistent with supporting an unchanged exchange rate. Nevertheless, given that there is frequently a high political cost incurred when the exchange rate is devalued, governments tend to delay the decision to devalue. A fixed exchange rate regime, rather than promoting discipline in the conduct of policy, is as likely to result in a succession of financial crises, followed by devaluations (Aghevli, Khan and Monteil,1991)

The major issues would then appear to be the following: Given that an economy will be subject to periodic internal and external shocks, a government committed to maintaining a given exchange rate, would have to rely, completely, on the use of monetary and fiscal policy to cushion the impact of the shocks. On the other hand, under a flexible exchange rate regime, the adjustment

might be brought about with a depreciation in the exchange rate and less monetary and fiscal restraint. At the same time, the authorities in small open economies are very much cognizant of the fact that depreciation in the exchange rate has the potential for setting off an inflationary spiral.

In this paper we will examine the way in which the Jamaican government balanced these concerns over the post 1983 period. The paper will be organized as follows. In the first section a review will be conducted of the conduct of monetary and fiscal policy over the period. In the second section there will be an assessment of the potential impact on the Jamaican economy of the greater degree of flexibility permitted in monetary management associated with the flexible exchange rate regime.

Assessment of Fiscal and Monetary Discipline

The concept of a government exercising fiscal discipline, rests on the notion that there is an upper limit to the amount of government expenditure which can be supported by taxation and borrowing, without undermining the performance of the economy. A decision as to whether discipline is being exercised is usually arrived at with reference to such indicators as the ratio of debt or the deficit to GDP. These ratios will be used in this study. However, instead of relying exclusively on arbitrary values, such as the 60 percent and 3 percent, ratios of debt and deficit to GDP adopted by the European Community in setting eligibility criteria for participating in the common currency, equal attention will be directed towards examining trends in the ratios over the period.

Jamaica, had by the early eighties fallen into the category of the heavily indebted developing country with an external debt to GDP ratio well in excess of 100 percent. At the beginning of the period under review, the ratio of total debt to GDP was around 200 percent. By the end of the period, as indicated in Table I, the ratio had fallen by more than 50 percent, largely due to the decline in the external debt ratio. The decline in the external debt ratio was, in large measure, a reflection on the fact that country had effectively reached the limits of its external borrowing capability.

The overall decline in the debt/GDP ratio can be linked to the fact, that in all but three years between 1984 and 1995, the government operated with a fiscal surplus. There was an annual average fiscal surplus of 3 percent of GDP between 1990 and 1995. This trend was reversed in the last three years of the period with deficits in the 7 to 8 percent range of GDP. This can be attributed

to the financial obligations undertaken by the government in response to the crisis in the country's financial sector and led to a major increase in the internal debt to GDP ratio.

Table 1.
Jamaica: Fiscal Indicators
Percent GDP

Year	Internal Debt	External Debt	Total Debt	Deficit/ Surplus
1984	60.0	132.3	192.3	- 5.4
1985	55.2	167.4	222.6	- 3.8
1986	44.1	141.5	185.6	0.7
1987	48.6	132.4	181.0	1.5
1988	48.3	112.9	161.2	- 3.6
1989	39.1	98.9	138.0	3.2
1990	30.5	97.7	128.2	2.6
1991	21.6	110.1	131.7	4.5
1992	23.7	109.9	133.6	4.1
1993	22.4	89.1	111.5	3.4
1994	29.5	87.2	116.7	3.4
1995	27.3	64.4	91.7	2.1
1996	35.4	54.6	90.0	- 6.8
1997	42.4	48.8	91.2	- 8.4
1998	49.1	49.2	98.3	- 7.7

Source: Bank of Jamaica, Statistical Digest, Monthly.

The significant reduction in the debt/GDP ratio, and the number of years when the government operated with surpluses, would suggest that the government exercised a great measure of fiscal restraint during the period. However, the trends in the internal debt ratio since 1991 might lead one to temper such a conclusion. The internal debt ratio rose by over 60 percent between 1991 and 1996, before the onset of the crisis in the financial sector.

Evidence of monetary discipline might be evaluated on the basis of such indicators as the growth in the money supply and nominal and real lending rates. This is based on the principle that a primary objective of a central bank should be that of maintaining price stability. In an open economy, such as Jamaica, the country's inflation rate will also be influenced by the rate of inflation

in its major trading partners. Accordingly, the success realized by the central bank in achieving its goal of price stability will be assessed by examining trends in the rate of inflation, as well as the differential between the domestic inflation rate and that of its trading partners. In this instance, since the United States is the country's major trading partner, attention will be directed to the differential in the Jamaican and United States inflation rates.

The monetary policy indicators, as well as changes in the exchange rate, are set out in Table 2. It would seem that Central Bank, in all but the last two years of the period covered, adopted a rather lax approach to management of the money supply. The money supply grew at an annual average rate of 32.8 percent between 1984 and 1996. Nominal lending rates remained high throughout the period and real lending rates were, also ,very high in all but four years. The rate of inflation was high in most years. From 1990 to 1996, there was a significant increase in the annual rate of growth of the money supply, a widening of the inflation differential and large annual depreciations in the exchange rate.

Given that the rate of inflation increased and the inflation differential widened over the period, the Bank of Jamaica failed to realize a major central bank objective, that of maintaining price stability. The large annual increase in the money supply would appear to be indicative of a lack of discipline in monetary management. On the other hand, lending rates in nominal and real terms were very high. The Bank of Jamaica's foreign liabilities exceeded its holdings of foreign assets up to the end of 1993. If the country had been operating under a fixed exchange regime and had adopted the same approach to monetary management, the period would have been marked by a succession of exchange rate crises and forced devaluations. Given the high political costs associated with a government having to take explicit responsibility for currency devaluation, it might be argued that had the country been operating under a fixed exchange rate regime, an effort might have been made at an earlier stage to limit the rate of growth of the money supply.

Table 2
Jamaica: Monetary Policy Indicators & Exchange Rate Changes
(Percent)

Year	Money Supply[1]	Inflation	Inflation[2] Differential	Nominal Lending Rate[3]	Real Lending Rate[4]	Exchange Rate[5]
1984	14.4	27.7	23.4	15.5	- 9.6	204.1
1985	19.6	25.9	22.3	22.0	- 3.1	141.1
1986	37.6	15.0	13.1	28.4	11.6	- 1.4
1987	16.8	6.6	2.9	25.2	17.4	0.0
1988	49.5	8.3	4.3	24.9	15.3	0.0
1989	- 5.8	14.4	9.6	26.4	10.5	4.7
1990	28.3	22.0	16.6	34.5	10.2	24.9
1991	95.3	51.1	46.9	35.8	- 10.1	79.0
1992	49.8	77.2	74.2	53.5	- 13.3	79.1
1993	40.0	22.1	19.1	51.5	24.1	11.6
1994	13.7	35.0	32.4	62.3	20.2	29.9
1995	41.9	19.9	17.1	50.3	25.4	6.6
1996	25.6	26.4	23.5	58.0	25.0	4.2
1997	- 1.9	9.7	7.4	45.3	32.5	- 3.9
1998	5.8	8.6	7.0	41.7	30.5	3.1

1 M_1
2 The rate of inflation in Jamaica - the rate of inflation in the United States
3. Average annual lending rate of the commercial banks based on end of quarter rates.
4. Real rate = $\frac{(1 + I_t)}{(1 + \pi)} - 1$, where π is the average annual rate of inflation.
5. Based on average annual average J$/US$

Source: Bank of Jamaica: Statistical Digest, Monthly.

The Economic Consequences of the Bank of Jamaica's Monetary Management

Although Jamaica operated under a flexible exchange rate regime, the level and stability of the exchange rate remained a matter of major concern throughout the period. The authorities were very conscious of the fact that it would be difficult to control inflation with significant rates of depreciation in the exchange rate. Given the direct link between money supply growth and the rate of inflation, if a central bank pursues a policy of relative monetary ease, it will clearly have to rely more heavily on other instruments of policy in an effort to offset the impact of monetary expansion on the exchange rate, the rate of inflation and the balance of payments. The Bank of Jamaica relied heavily on the interest rate instrument during the period of major expansion in the money supply beginning in 1991. Real and nominal lending rates, as shown in Table 2, were very high. In assessing the implications of the approach to monetary management adopted by the Bank of Jamaica during this period, the following questions arise. Did the high rates of growth of the money supply and high rates of interest on balance have a net positive or negative impact on the economy.

Several empirical investigations, based on a model developed by Lucas(1973) have been conducted on the relationship between changes in the money supply and changes in output in developing countries. The Lucas hypothesis was that only unanticipated changes in the money supply could cause output to deviate from its natural level in the short run. The findings from these studies have not unambiguously supported or rejected the Lucas hypothesis. Hansen(1980), for example, using a variant of the Lucas model, investigated the impact of changes in the money supply on output for five Latin American countries. The reduced form output equations estimated by Hansen were as follows.

$$Y_t = c_\alpha + a_1 M_t + a_2(\text{time}) + a_3 Y_{t-1} + u \qquad (1)$$

where Y_t and M_t represented the log of real output and the money supply, respectively. The equation embodied the Lucas proposition that income growth in time period t will reflect the underlying natural rate and growth in the money supply, which might embody an unexpected element. He found that a small but significant relationship existed between changes in output and unexpected changes in the money supply. Unexpected changes in the money supply was defined as

the difference between the actual change in the money supply and the rate of inflation in the previous period.

Odedokun(1993) applied the model to a broader cross section of developing countries. He found support for the Lucas hypothesis in the case of the more advanced developing countries, but not in the case of the less advanced developing countries. An application of the Hansen model to a subset of CARICOM economies covering a period from 1976 to 1990, found no significant short - run relationship between changes in the money supply and output(Bennett, 1994).

In spite of the absence of evidence of a direct link between changes in the money supply and output in the short - run, there still remains the possibility of indirect linkages. Excessive monetary creation in an open economy operating under a flexible exchange rate regime could affect the economy in the following ways. First, the potential inflationary impact of the increases in the money supply could lead to expenditure switching, lowering the demand for domestic goods. Second, the expenditure switching, given its impact on the balance of payments, would result in a depreciation of the exchange rate. This in turn would accelerate the rate of inflation. The Bank of Jamaica, as indicated attempted to dampen the inflationary pressures by maintaining high positive real rates of interest. Such an initiative on the part of a central bank is often justified on the grounds that it both encourages savings and leads to greater efficiency in the allocation of savings(McKinnon, 1973). On the other hand, the cost raising effect of high interest rates could reduce investment activity. To the extent that the positive real rates of interest helped to contain the inflationary pressures, the depreciation in the exchange rate would work to offset the impact of inflation on aggregate demand. The relationship between changes in the exchange rate and the real rate of interest on income might be expressed as follows:

$$DY_t = f(X_{rate}, Ri) \qquad (2)$$

The relationship between changes in the exchange rate and the level of the real interest rate on income could be either positive or negative. The equation was estimated by ordinary least squares using annual data for the period from 1984 to 1998. The results are reported below, the t values are in parentheses.

$$DY_t = \underset{(3.51)}{0.078} - \underset{(-1.26)}{0.041DX_{rate}} - \underset{(-3.07)}{0.159DX_{rate-1}} - \underset{(-2.76}{0.003R_{t-1}}$$

$R^2 = 0.49$; $R^2_{adj} = 0.35$; D.W. = 0.98;

where DY_t and D_{rate} are the logs of the first difference of real GDP and the nominal exchange rate, respectively and Ri the average real lending rate. The results indicate that depreciations in the exchange rate had a significant negative impact on income with a one year lag. The coefficient for the real interest rate was significant and negative but had a value not significantly different from zero

One would expect that the negative impact of depreciations in the exchange rate would be transmitted to the economy through its impact on exports and imports. It is generally acknowledged that the export sector plays a major role in the determination of income. In order to gain further insights into the impact of the performance of the sector on the economy during this period we regressed variations in GDP against variations in exports and derived the following results.

$$DY_t = \underset{(0.34)}{0.002} + \underset{(4.32)}{0.225DX_t}$$

$R^2 = 0.59$; $R^2_{adj} = 0.56$; D.W. = 1.63

where DY_t and DX_t are the logs of the first difference of real GDP and exports, respectively. These results indicate that well over one half of the annual variation in real GDP could be linked to variations in export sales.

All of the variables, as judged by the augmented Dickey Fuller test were integrated of the first order. The t statistics are reported in Table 3

To what extent were these annual variations in export sales linked to annual changes in the exchange rate? If nominal changes in the exchange rate reflected real changes in the exchange rate one would expect a nominal depreciation to have a positive impact on exports. On the other hand, the opposite would be true if there was an inverse relationship between nominal and real movements in the exchange rate. This would likely be the case if a nominal exchange rate depreciation led to an increase in the rate of inflation and ultimately an appreciation in the exchange rate. Several empirical studies suggest that a failure on the part of governments in developing

Table 3
Dickey - Fuller t - statistic

Test statistic	
DYt	- 4.58
DX_{rate}	- 3.20
Ri	- 3.57
DX_t	- 4.58
Critical values	
1%	-3.43
5%	- 2.86

countries to adopt sufficient restraint in the conduct of monetary and fiscal policy in a period following a devaluation or depreciation in the exchange rate results, quickly, in a real exchange rate appreciation(see, for example, Edwards,1989)

An estimate was made of the impact of movements in the exchange rate on exports regressing changes in exports against changes in the exchange rate with a one and two year lag. The results are reported below

$$DX_t = \underset{(2.21)}{0.081} - \underset{(-2.84)}{0.321DX_{rate-1}} + \underset{(1.10)}{0.125DX_{rate-2}}$$

$R^2 = 0.40$; $R^2_{adj} = 0.30$; D.W = 1.36

The results suggest that a nominal depreciation in the exchange rate would be associated with a decline in export sales in the following year. There would be a positive impact in the second year, however the coefficient was not statistically significant. The indirect link between changes in the money supply and output might then be through the way in which the increases in the money supply affect the rate of inflation and the real exchange rate and exports.

The post 1990 period was associated with generally high rates of inflation and economic stagnation. In a small open economy, such as Jamaica operating under a flexible exchange rate regime, the principal determinants of the inflation rate are the rate of depreciation in the exchange

rate, the growth in the supply of money and foreign rates of inflation. In the post 1991 period, the inflation rate in the country's major trading partner, the United States remained low and followed a declining trend. Consequently, it was not a significant contributor to the high rates of inflation experienced by the country in that period. In addition to the role of exchange rate depreciation and monetary growth, a question might be raised as to the role of high interest rate on the rate of inflation experienced by the country in that period. The relationship between these factors and the rate of inflation might be expressed as follows.

$$DP_t = f(M_t, Xrate, I_t) \qquad (4)$$

Increases in the interest rate could bear an inverse relationship to the rate of inflation to the extent to which it reduced the level of borrowing and spending. Alternatively, there could be a direct relationship, given the cost raising effect of higher rates. Equation 5, was estimated by ordinary least squares using quarterly data covering the period from quarter 4 1991 to quarter 4 1998. All the variables, with the exception of the money supply, as judged by the augmented Dickey - Fuller test were stationary. The money supply variable was integrated of the first order. The results are reported in Table 4

The coefficients for the interest rate and lagged exchange rate variables were both highly significant. Increases in interest rates helped to accelerate rather than dampen the rate of inflation. A 10 percentage point increase in the lending rate would lead to an increase of almost 2 percentage points in the rate of inflation. It appears that the increases in interest rates worked to increase rather than moderate the rate of inflation.

The interest rate instrument was also used to relieve pressure on the balance of payments and the exchange rate by dampening borrowing and spending. At this stage attention will be directed to the extent to which increases in interest rates worked to offset increases in the money supply and help stabilize the exchange rate. The immediate and delayed impact of changes in the money supply and interest rates on the exchange rate could be represented as follows.

$$DXrate = \beta_0 + \beta_1 DM_t + \beta_2 DM_{t-1} + \beta_3 DI_t + \beta_4 DI_{t-1} \qquad (5)$$

Table 4

Estimates from Equation 4,

Dependent Variable DP_t, The inflation rate

Explanatory Variable	Coefficient	T statistic
Constant	0.191	8.02
DM_t	0.063	1.39
DI_t	0.207	3.89
DX_{rate-1}	0.191	4.00

$R^2 = 0.82$; $R^2_{adj} = 0.80$; D.W.1.76

Variable	ADF t - stat
DP_t	- 4.59
DM_t	- 3.38
DI_t	- 3.59
DX_{rate}	- 4.75

DP_t, DM_t and DI_t are the log of the first difference of the consumer price index, money supply and the end of quarter average commercial bank lending rate. $DXrate_{-1}$ is the log of the first difference of the end of quarter exchange rate lagged one quarter.

The following results were derived

$$DX_t = -0.001 + 0.191M_t + 0.238M_{t-1} + 0.505DI_t - 0.30DI_{t-1}$$
$$(-0.02) \quad (1.44) \quad (1.83) \quad (3.57) \quad (-2.17)$$

$R^2 = 0.53$; $R^2_{adj} = 0.45$; D.W. = 2.51

The results, indicate that the initial consequence of an increase in the nominal lending rate would be a depreciation in the exchange rate. This would be followed by an appreciation in the

rate beginning in the second quarter. An increase in the money supply would lead to an immediate depreciation in the exchange rate. The impact of a money supply increase on the exchange rate would overwhelm the interest rate effect. For example, a 10 percentage point increase in the real interest rate would result in a 3 percentage point appreciation in the exchange rate in the second quarter. An equivalent increase in the money supply would have led to a 2 percentage point depreciation in the first quarter followed by an additional 2 percentage point depreciation in the second quarter. The combined effects of rapid increases in the money supply and high interest rates, on balance appeared to contribute to a depreciation, rather than a stabilization of the exchange rate. Given the strong impact of exchange rate depreciation on the rate of inflation, this more than likely gave rise to a sequence in which a nominal depreciation was quickly followed by a real appreciation. This helps explain the observed negative relationship between lagged changes in the exchange rate and changes in GDP between 1984 and 1988. In summary, the Bank of Jamaica's strategy, particularly in the post 1991 period, of high interest rates and large increases in the money supply, might on balance have been more costly than beneficial to the country's economy.

The very large increases in the money supply and depreciation in the exchange rate, which occurred after 1990, appears to have had a negative impact on exports and income. The major portion of Jamaican exports consist of products, such as bauxite and alumina, sugar and bananas. Sales of these products would not be affected in a significant manner by changes in the exchange rate. On the other hand, the non - traditional exports, primarily manufactured products, were, potentially, more likely to be affected by changes in the exchange rate. This would be the case when a nominal depreciation in the exchange rate resulted a real depreciation. However, as indicated above, a depreciation in the exchange rate had a major impact on the rate of inflation leading to situation in which a nominal depreciation was unlikely to result in a sustained real depreciation. In addition, producers of non - traditional exports could also be unfavourably affected by the Bank of Jamaica's high interest rate policy.

The United States was a major market for the country's non traditional exports. That economy experienced a growth rate of unprecedented duration during the decade of the nineties. The following model was used to assess the implications of the nominal depreciations in the exchange rate, high interest rates and the high US growth rate on non - traditional exports.

$$DX_{nt} = f(DX_{rate}, DI_t, USGDP) \quad (6)$$

The equation was estimated by ordinary least squares covering a period from the third quarter of 1992 to the first quarter of 1998. The procedure employed various lagged values for the variables. The results are reported in Table 5.

The rate of growth in the United States did not have a consistent positive impact on the non - traditional exports. There was a significant positive relationship only in the case of a two quarter lag. The estimates involving a three quarter lag for the variables were the only ones where all the coefficients were statistically significant. It shows that two thirds of the positive impact of an exchange rate depreciation on non traditional exports would have been offset by the increases in the rate of interest. The US growth rate had a negative impact, however the coefficient was only significant at the 10 percent level.

Table 5
Estimates of Lagged Impact of Changes in the Exchange Rate, Lending Rate and US GDP on Non - Traditional Exports

$$DX_{nt} = \underset{(1.17)}{0.070} - \underset{(-0.99)}{0.429DX_{rate-1}} + \underset{(0.31)}{0.125DI_{t-1}} - \underset{(-0.84)}{4.761USGDP_{t-1}}$$

$R^2 = 0.12$; $R^2_{adj} = -0.02$; D.W. = 2.76.

$$DX_{nt} = \underset{(-1.72)}{-0.097} - \underset{(-0.06)}{0.025DX_{rate-2}} + \underset{(0.96)}{0.333DI_{t-2}} + \underset{(2.23)}{11.767USGDP_{t-2}}$$

$R^2 = 0.22$; $R^2_{adj} = 0.10$; D.W = 2.82.

$$DX_{nt} = \underset{(1.22)}{0.063} + \underset{(2.97)}{0.995DX_{rate-3}} - \underset{(-2.16)}{0.694DI_{t-3}} - \underset{(-1.54)}{7.438USGDP_{t-3}}$$

$R^2 = 0.33$; $R^2_{adj} = 0.23$; D.W. = 2.41.

$$DX_{nt} = \underset{(0.67)}{0.041} - \underset{(-0.45)}{0.112DX_{rate-4}} - \underset{(-0.03)}{0.010DI_{t-4}} - \underset{(-0.37)}{1.988USGDP_{t-4}}$$

$R^2 = 0.02$; $R^2_{adj} = -0.14$; D.W. = 2.77

Conclusions

The fiscal and monetary policy indicators in the period after the move to a floating exchange rate regime, do not provide a clear signal as to the effect of the move on the exercise of restraint in the conduct of policy. On the fiscal side, when one employs commonly used indicators, such as the ratio of the debt and deficit to GDP, the government would seem to have exercised considerable restraint in most years. On the other hand , the growth in the level of internal debt would lead one to temper such a conclusion.

In the case of monetary policy, the large expansion in the money supply would appear to indicate that the Bank of Jamaica pursued a policy of monetary ease. However, the bank strategy of working to maintain very high rates of interest is indicative of its interest in exercising control on the level of aggregate demand.

Although the country was officially on a flexible exchange rate standard, the importance attached to exchange rate stability meant that concerns about the exchange rate played a prominent role in the conduct of macroeconomic policy. The only difference which the choice of exchange rate regime might have had, in so far as monetary policy was concerned, was with respect to the manner in which policy instruments were used. If the country had been operating under a fixed exchange rate regime, it might have, at an earlier stage, attempted to impose rigid limits on growth in the money supply, rather than relying on raising interest rates, in an effort to stabilize the economy.

The impact of the policy mix of rapid growth in the money supply and high interest rates, on the exchange rate and the rate of inflation, appears to have imposed a high cost on the economy. The effort of the Bank of Jamaica, since 1996, to concentrate on exercising rigid controls on the monetary base and the money supply seems reflective of an acceptance of the fact that such an approach will impose a smaller cost on the economy.

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