FINANCIAL LIBERALISATION AND MONETARY CONTROL REFORM IN MAURITIUS

by

K. JANKEE

Department of Economics and Statistics, Faculty of Social Studies and Humanities University of Mauritius, Réduit, Mauritius

(Received January 1999 – Accepted July 1999)

ABSTRACT

Financial liberalisation has been prominent in the economic agenda of policymakers since the late 1980s as part of the overall strategy of economic liberalisation. A gradual and cautious approach has been adopted towards financial deregulation in the implementation of financial reforms and institutional changes in the economy. A major institutional change has been the reorientation of monetary policy implementation towards increasing reliance on market-based techniques. This paper analyses the effectiveness of this policy change.

Keywords : Financial liberalisation, financial repression, monetary control reform, direct control and market-based techniques.

INTRODUCTION

Financial liberalisation entails an array of reforms aimed at enhancing the role of market forces in the pricing, mobilisation and allocation of financial resources in the economy. Concurrently, it is imperative to reform the monetary control system for consistency and efficiency reasons in order to reap the full benefits of financial liberalisation. The objective of this paper is to analyse the Mauritian financial liberalisation experience with emphasis on the shift in the techniques of monetary policy implementation from direct control to a market-based monetary control system during recent years.

FINANCIAL LIBERALISATION AND MONETARY CONTROL REFORM

Financial liberalisation is an extensively researched (World Bank, 1989; Caprio *et al* 1994; Fry, 1995; Dixon, 1997 among others) and controversial issue, especially following the growing disillusionment of many policymakers in the LDCs with financial reforms. Moreover, the recent wave of theoretical research and empirical evidence has led to a re-assessment and redesign of the financial liberalisation strategy. As a systematic review of the literature pertaining to financial liberalisation is beyond the scope of this paper, only selected issues would be raised to provide some insights on financial liberalisation and monetary control reform.

The advocates of financial liberalisation as growth-enhancing economic policies in the developing countries (LDCs) have based their arguments on the theoretical and analytical underpinning provided by McKinnon (1973) and Shaw (1973). They postulated that the LDCs were 'financially repressed' following the government interventionist policies such as high reserve requirements, interest rate ceilings and directed credit programmes. They challenged the conventional wisdom of maintaining low interest rates and highlighted the adverse effects of depressing real interest rates on financial deepening. Moreover, in the context of high inflation, the low or even negative real interest rates would impede economic growth mainly through their effects on the level and productivity of investment. The core elements of the McKinnon-Shaw inside money model are illustrated in fig. 1 below:

Financial institutions intermediate between savers and depositors. Saving (S) is assumed to be positively related to the real interest rate given the rate of economic growth and is a primary determinant of the supply of investible resources according to the McKinnon–Shaw model of financial development. When the nominal interest rate is administratively determined, the real rate of interest is fixed below the equilibrium interest rate. As indicated in diagram 1, the imposition of an interest

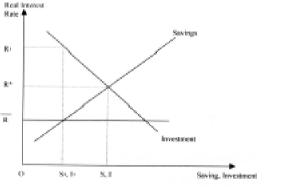


Fig I. Saving and Investment under Interest Rate Ceiling

rate ceiling at \bar{R} will lead to a lower saving at S_1 limiting investment to I_1 respectively. In such a situation, referred to as 'financial repression', McKinnon and Shaw recommend a financial liberalisation process of abolishing interest rate ceilings. They argue that an increase in the real rate of interest towards the market equilibrium level R^* will result not only to higher savings and thus loanable funds but also to a more efficient allocation of investible resources, both contributing to higher economic growth. Since then, the McKinnon-Shaw theory of financial liberalisation became the basis for financial policy and policy advice to LDCs. World Bank (1989) recommends three financial reform measures - reduction of reserve requirements, a shift towards open market operations for monetary policy purposes, removal of interest rate ceilings and a move towards a market-based allocation of bank credit.

It should be noted that the use of a market-based method of monetary control warrants an alternative financial framework where mobilisation and allocation of financial resources are effectively determined by market forces. Thus, in the absence of a developed and competitive financial system, reliance on the direct techniques of monetary policy implementation such as interest rate controls, credit ceilings, selective credit controls, central bank refinancing facilities to priority sectors, high reserve requirements and issue of government securities is inevitable. These instruments are used to influence the level and structure of interest rates, expansion and direction of credit in line with the objectives of monetary policy. There has been a lot of controversy over the effectiveness of these direct instruments of monetary control on economic efficiency and financial intermediation (Hanson & Neal, 1984; Roe & Popiel, 1988; Alexander *et al* 1995 among others). The reasons generally advanced for using direct fiscal costs and their usefulness as a second best instrument of monetary policy in times of financial crisis. On the other hand, the use of

direct monetary control mechanism has been criticised on the grounds of inefficiency in financial resource allocation and ineffectiveness arising from evasion and inequity (Lindgren (1991) among others). It has been argued that direct controls may also lead to an overhang of liquidity, financial repression and financial disintermediation. For instance, the imposition of credit ceilings on banks may lead to excess liquidity in the banking system when bank deposits are growing. Moreover, when credit ceilings are binding, savings mobilisation may not be promoted as financial institutions may find ways of paying lower effective deposit rates leading to a shift from bank-based financial savings to non-financial assets. Given the absence of well-developed financial markets in LDCs and the dominance of the banking system, financial resources may also flow to the informal sector. It is argued that the direct control instruments inhibit competition and encourage collusion among banks. There is less concern on the quality of banks' assets and hence leading to a fragile financial system. The imposition of high reserve requirements, in addition to creating a captive market for government securities, leads to an inappropriate pricing of credit. It represents an implicit tax on financial institutions which encourages financial disintermediation (situation where economic agents by pass financial institutions due to high costs of financial intermediation) and which in turn undermines financial stability.

However, with a market-based monetary control system, the central bank influences the money market rates through its ability to influence the stock of reserve money. The indirect instruments of monetary control are mainly open market operations, reserve requirements and central bank rediscount facilities. Open market operations involve the purchase and sale of financial instruments by the central bank to influence banks' liquidity positions. Changes in reserve requirements and rediscount facilities are complementary measures to achieve the desired impact on money market rates. Reserve requirements are the obligations of banks to hold a specified part of these portfolios in reserves at the central bank. They can be used as a means of sterilizing excess liquidity. Rediscounting facilities to the banking system serve three purposes: to enable the central bank to function as a lender of last resort, to control monetary and credit conditions and to allocate credit selectively. A system of indirect monetary control does not rely on high reserve requirements and a discount window facility at the central bank. Such a system depends on the ability of the central bank to manage its own balance sheet and control the terms at which it is willing to intervene as a 'lender of last resort'. The market-based instruments of monetary policy promote financial intermediation and have greater flexibility in policy implementation as compared with direct instruments of monetary control.

The establishment of an appropriate framework for monetary control in a liberal financial system facilitates the development of instruments for monetary control,

promotion of financial assets and competition in financial markets, the build up of expertise to deal with the market environment and the response of economic agents to interest rate liberalisation. A study by Alexander et al (1995) of the experiences of 19 non-industrial countries with market-based instruments of monetary control highlights that the establishment of an appropriate framework for the use of indirect instruments of monetary policy is a complex process and needs time to function efficiently. Factors including excess reserves, fiscal imbalances, high lending rates and non-performing loans led to reversals of the reform process in 6 of the 19 countries. However, countries which succeeded in adopting market-based instruments had certain features in common. Their move from direct to indirect monetary control system formed part of a broader financial reform package which included banking system reform, tightening of banking supervision, revision of the regulatory framework, pursuit of fiscal discipline and macroeconomic stability. A sequencing approach towards financial reforms was also adopted to phase out the direct instruments and create the environment for introducing indirect instruments over the transition period.

MONETARY POLICY REGIMES IN MAURITIUS

The Mauritian financial system has undergone substantial changes, especially since the late 1980s with the onset of the financial liberalisation programme, which formed part of the overall economic liberalisation strategy. The need to deal with large unsustainable fiscal imbalances, sluggish growth, high unemployment and external disequilibrium by the late 1970s, required Mauritius to embark on a comprehensive economic adjustment programme between 1979 to mid-1986 with the support of the World Bank and the IMF. The first phase of the economic stabilisation and structural programme focussed on price stabilisation, reduction of imbalances in government finances, containment of rapid credit expansion and restoring external equilibrium. Thereafter, the policy actions shifted to structural problems such as liberalisation of the exchange and trade system, privatisation of some state enterprises, tax reforms and institutional and financial reforms to liberalise the financial system.

Economic performance was impressive after 1983 with high and sustainable real growth rate averaging over 7 % till the late 1980s. Macroeconomic equilibrium was restored with full employment conditions and price stability. The balance of payments switched from large deficits to sizeable surpluses and government budget deficits substantially declined. However, by the early 1990s, in order to reap the full benefits of economic liberalisation and maintain the growth momentum, the need to liberalise and further develop the financial system as well as integrate into the world

economy, became other major policy objectives. It was against this brief background that the shifts in financial and monetary policy regimes took place. For the sake of our analysis the pre-1988 and post-1988 are referred to as the pre-reform and post-reform periods.

Financial policy shifts and monetary policy implementation

Although the objective to develop the financial system has loomed large in the economic agenda of policy makers for a long time, a conscious policy towards this goal was initiated during the post-1988 period with far-reaching financial reforms and institutional changes. There have been numerous financial and monetary policy changes associated with the transformation from a monocrop economy in the 1970s to a newly industrialising economy in the 1980s. Moreover, a substantial shift in financial policy has been taking place in the 1990s with the objective of developing the financial system not only to serve the other sectors of the economy but also to transform Mauritius into a regional financial centre.

The financial sector was relatively developed by the early 1970s consisting of the Bank of Mauritius as the central bank, eight commercial banks and a limited range of non-bank financial institutions including the Development Bank of Mauritius, Mauritius Housing Corporation, Post Office Savings Bank, Insurance Companies and Investment Trusts. However, the activities of this sector were highly regulated and restricted during the pre-reform period. The economy was in a state of "financial repression" à la McKinnon-Shaw, with administratively fixed interest rates, imposition of credit ceilings and selective credit controls and also high reserve requirements. The commercial banks played a major role in the financial markets. In addition, the banking activity was heavily concentrated within two large commercial banks which held more than 70% of the total assets in the banking system (World Bank, 1992).

The package of financial reforms targeted the developments of capital and money markets, the promotion of a wide range of financial institutions, and instruments, instilling competition in the financial system, world integration, the setting up of an appropriate regulatory framework and the establishment of a market-based monetary control system. The sequence of major financial reforms instituted since the late 1980s are given in Table 1 :

| | Table 1. Sequencing of Financial Reforms |
|---------------|--|
| July 1988 | Liberalisation of interest rates |
| July 1991 | Issue of Bank of Mauritius Bills |
| November1991 | Auctioning of Treasury Bills |
| July 1992 | Abolition of ceilings on credit to priority sectors |
| July 1993 | Abolition of credit ceilings on non-priority sectors Imposition of a credit-deposit ratio |
| February 1994 | Setting up of a secondary market cell at Bank of Mauritius |
| June 1994 | Bank Rate linked with average treasury bill - auction rate over preceding 12 weeks plus a margin |
| July 1994 | Suspension of Exchange Control Act Establishment of an interbank foreign exchange market |
| July 1995 | Bank rate linked with weighted average of the latest bill auction rate |
| July 1996 | Abolition of credit-deposit ratio.Imposition of 15% limit on the overall foreign exchange exposure |
| January 1997 | Minimum Risk Weighted Capital Adequacy ratio increased from 8 $\%$ to 9 $\%$ |
| July 1998 | Minimum Risk Weighted Adequacy ratio increased from 9 % to 10 %. Issue of 728 days Treasury bills |
| December 1998 | Over the Counter (OTC) sales to individual and non-bank financia. Issue of 30 days Treasury Bills |

Table 1. Sequencing of Financial Reforms

Source: Bank of Mauritius Annual Report, various issues

The Bank of Mauritius also introduced additional measures to consolidate the regulatory framework and prudential control in the financial system such as the minimum risk weighted capital adequacy ratio and foreign exchange exposure limit. In order to increase competition in the financial system, non-bank financial institutions were also allowed to apply for a deposit-taking business license. Other policy objectives were mainly to promote the financial markets including the interbank foreign exchange market.

Techniques of monetary policy implementation

The thrust of monetary policy in the Mauritian economy has mainly been the maintenance of price stability, promotion of economic growth and attainment of internal and external equilibrium. Since the early 1970s, two major approaches towards monetary policy implementation can be distinguished: the pervasive use of direct techniques of monetary policy the early 1990s and thereafter, the shift to an indirect market-based monetary control system. However, the period 1990 to 1996 represents the transitional phase from the direct method of monetary control to the establishment of market-based control mechanisms.

Direct Control Mechanism

Until the early 1990s, the authorities intervened intensively in the pricing and allocation of loanable funds with reserve requirements, credit ceilings, and interest rate ceilings as the main weapons of monetary policy. Commercial banks were required to maintain reserve ratios consisting of cash in their vaults and balances with the Bank of Mauritius and non-cash liquid assets such as Treasury Bills, Bank of Mauritius Bills and Government securities in accordance with the Section 17 of Banking Act. Changes in the reserve requirements were used to control credit creation capacity of commercial banks. Table 2 below shows the changes in the reserve requirements after 1969.

Until recent years, the imposition of high reserve requirements on commercial banks has been an important tool of monetary control. In 1978, the non-cash liquid asset ratio was introduced reinforcing the direct control on credit expansion. Notwith-standing, the move towards financial liberalisation in the early 1990s, total reserve ratio remained at 33% until June 1996 indicating the gradualistic approach to financial deregulation. However, a more flexible approach was adopted since July 1996 with a decline in the cash ratio and the phasing out of the non-cash liquid asset requirement.

| | Cash Ratio % | Non-Cash liquid Asset Ratio % | Total Reserve Ratio % |
|-----------|-----------------|-------------------------------------|-----------------------------|
| 1969-72 | 5 | - | 5 |
| 1973-74 | 8 | - | 8 |
| 1974-75 | 12 | - | 12 |
| 1978 | 12 | 13 | 25 |
| 1979-82 | 12 | 18 | 30 |
| 1983-87 | 12 | 20 | 32 |
| 1988-96 | 10 | 23 | 33 |
| July 1996 | 8 | 20 | 28 |
| July 1997 | 6 | 0 | 6 |
| July 1998 | 5.5 | 0 | 5.5 |

Table 2. Required Reserve Ratios, 1969-98

Source: Bank of Mauritius Annual Report, various issues

Credit ceilings

Credit ceilings were another powerful tool of monetary policy. They were introduced in 1973 in order to reinforce the monetary policy of 'restrained credit expansion'. They were restricted to the trade sector initially, but between 1974-1992, they were applied to the whole private sector. In addition to the overall credit ceilings on banks, a sub-ceiling was also imposed on the non-priority sectors. This system of quantitatively controlling the availability and the direction of credit was used to achieve the objective of price stability and to sustain economic growth by directing financial resources to the priority sectors of the economy. With selective credit policies, the share of credit to the non-priority sectors was kept at a maximum of 25 % and was brought down to 18% in July 1984. In line with the objective of financial

liberalisation and reforming the monetary control system, credit ceilings on the priority sectors were lifted in July 1992 and abolished in July 1993.

Interest rate policy

Another tool of direct monetary control were the ceilings on lending and deposit rates of commercial banks. Commercial banks used to peg their interest rates to yield rates on Treasury Bills and the Bank Rate fixed by the monetary authorities. Moreover, given the period of high inflation and fixed interest rates, the financial system was repressed with negative real rates until the early 1980s as indicated in Table 3 below. Thereafter, a more flexible approach was adopted and deposit rates were increased to provide for a positive real return on savings. The process of interest rate liberalisation started during early 1980s with the lifting of interest rate ceilings until finally in June 1988, interest rates were fully liberalised.

Monetary policy control reform

The reform of the monetary control system in Mauritius has been part of a broader framework of economic and financial liberalisation initiated during the early 1980s. The shift to a market-based monetary control system has been a lengthy process, accompanied by an array of financial policy and institutional reforms aiming at the development of the appropriate financial infrastructure and regulatory framework. Policy makers have also implemented complementary measures like the establishment of a conducive macroeconomic environment to facilitate the process of financial deregulation. However, the shift in the techniques of monetary implementation went through various stages.

Although interest rates were fully liberalised in July 1988, reliance on the direct system of monetary control continued up to early 1990s. Over this period, commercial banks followed the guidelines issued by the Bank of Mauritius and pegged interest rates to the Bank Rate and yields on Treasury Bills fixed by the monetary authorities. As a first step towards market-based technique of monetary control, short-term financial assets namely the Bank of Mauritius Bills were issued in June 1991 and were auctioned along with Treasury bills in November of the same year. The next major reform was the complete abolition of credit ceilings as from July 1993, marking the end of the phase of direct control system. Moreover, in order to promote the secondary bill market and strengthen open market operations as a monetary policy tool, a secondary market cell was set up at the Bank of Mauritius in February 1994 and the REPO system was also introduced on a temporary basis. As part of the on-going monetary reforms, the exchange control was suspended and an interbank foreign exchange market was set up. In order to move closer to market-

Financial liberalisation

| Year | Inflation Rate | Deposit Rate | Real Deposit Rate |
|------|----------------|--------------|-------------------|
| 1971 | 0.3 | 4.0 | +3.7 |
| 1972 | 5.4 | 4.0 | -1.4 |
| 1973 | 13.5 | 4.0 | -9.5 |
| 1974 | 29.1 | 4.0 | -25.1 |
| 1975 | 14.7 | 4.0 | -10.7 |
| 1976 | 13.4 | 4.0 | -9.4 |
| 1977 | 9.2 | 4.5 | -4.7 |
| 1978 | 8.5 | 6.5 | -2.0 |
| 1979 | 14.5 | 7.5 | -7.0. |
| 1971 | 42.0 | 9.0 | -33.0 |
| 1980 | 14.5 | 9.0 | -5.5 |
| 1981 | 11.4 | 9.0 | -2.4 |
| 1982 | 5.6 | 9.0 | +3.4 |
| 1983 | 7.3 | 8.5 | +1.2 |
| 1984 | 6.7 | 8.5 | +1.8 |
| 1985 | 1.8 | 8.5 | +6.7 |
| 1986 | 0.6 | 8.0 | +7.4 |
| 1987 | 9.2 | 10.0 | +0.8 |
| 1988 | 12.6 | 10.0 | -2.6 |
| 1989 | 13.5 | 12.0 | -1.5 |
| 1990 | 7.0 | 11.0 | +4.0 |
| 1991 | 4.6 | 7.0 | +2.4 |
| 1992 | 10.5 | 8.0 | -2.5 |
| 1993 | 7.3 | 9.0 | +1.7 |
| 1994 | 6.0 | 8.0 | +2.0 |
| 1995 | 6.6 | 8.0 | +3.7 |
| 1996 | 6.6 | 8.0 | +1.4 |
| 1997 | 6.6 | 8.0 | +1.4 |
| 1998 | 6.8 | 9.0 | +2.2 |

 Table 3. Real and nominal deposit rates of commercial banks (per cent)

Source: Bank of Mauritius Annual Report, various issues

determined interest rates, the Bank Rate was linked to the latest overall weighted auction yield rate on Treasury Bills. The non-cash liquid asset ratio and creditdeposit ratio were also phased out. The automatic credit facilities of the Bank of Mauritius to commercial banks and the government were also reviewed.

Moreover, the Bank of Mauritius set up a Monetary Policy Committee and Reserve Money Programme as part of the new framework of monetary policy implementation. The weekly auctioning of bills and the central bank intervention in the foreign exchange market henceforth became the major tools used for liquidity management in the economy. Recently, in order to facilitate the transition to a full-fledged market-based financial system and develop open market operations as an effective tool of monetary policy, the Bank of Mauritius has also instituted an 'Over the Counter' sales of Treasury Bills to the non-financial sector. In addition to mopping up the excess liquidity in the financial system the aim of this instrument is to promote competition and develop the money market.

IMPACT OF MARKET- BASED SYSTEM OF MONETARY CONTROL

In this section, an attempt is made to assess the Mauritian financial liberalisation experience with emphasis on the effects of market-based techniques on financial market efficiency and potential for monetary control. A precise evaluation of these effects is constrained by the small sample size as the new system of monetary control became effective only after the mid-1990s. Moreover, with the presence of other financial reforms over this period, it may be difficult to isolate the effects this policy change. Given the problems of using the econometric techniques in this specific case, the analysis is limited to developments in related financial variables over the period.

Firstly, as a preliminary exercise to examine financial liberalisation experience, we look at the extent of financial deepening. Given the dominance of the banking sector in the economy, financial deepening has been measured using the ratios of monetary aggregates, total domestic credit and total private sector deposits to Gross National Product (GNP), respectively. Table 4 below shows the estimated financial indicators.

Apart from the ratio of money supply to GNP, all the other indicators highlight increasing financial depth in the economy after 1970. The downward trend in the ratio of money supply to GNP can be explained by the shift in the financial portfolio of economic agents from holding narrow money (currency and demand deposits) to broad money (aggregate monetary resources).

Financial liberalisation

| | 1970 | 1980 | 1990 | 1997 |
|-------------------------------------|-------|-------|-------|-------|
| Total Domestic Credit / GNP | 0.221 | 0.521 | 0.455 | 0.723 |
| Money Supply / GNP | 0.218 | 0.202 | 0.143 | 0.124 |
| Aggregate Monetary Resources / GNP | 0.437 | 0.450 | 0.631 | 0.792 |
| Total Private Sector Deposits / GNP | 0.280 | 0.360 | 0.550 | 0.671 |

Table 4. Indicators of Financial Deepening

Source: Bank of Mauritius Annual Report, various issues

Further it would be interesting to analyse the changes in the level and variability of interest rates following liberalisation. First of all, we find a remarkable shift from negative real deposit rates in the 1970s to positive real ones in the early 1980s as indicated in table 3. However, during the post-liberalisation period, very little changes have been observed on the level and variability of interest rates in Mauritius. This is similar to the experiences of some African countries with interest rate liberalisation (Turtelboom, 1991). Turtelboom finds that interest rate liberalisation in these countries have partially affected the level and variability of interest rates in spite of substantial progress in the implementation of monetary reforms. Moreover, during the transition to a market-based financial system he also finds that the spread between lending and deposit rates increased in these countries, which he explains in terms of macroeconomic instability, oligopolistic financial markets, absence of developed capital markets, asymmetric availability of information and inappropriate sequencing of liberalisation programmes. On the other hand, a study by Alexander et al (1995) shows that the shift from direct methods to a market-based monetary control system in a sample of LDCs increases financial intermediation efficiency and enhances the potential for monetary control.

In the case of Mauritius, both interest rate spreads and their averages as indicated in the Table 5 below have fluctuated over the years. However, with the introduction of the new system of monetary control, there has been a remarkable increase in these spreads since 1993. Moreover, it is found that despite the changes in the Bank Rate, the pattern of interest rates has remained fairly unchanged. This could be an indication that efficiency in financial intermediation has not increased significantly despite the institutional changes and financial reforms implemented in the economy.

The next exercise is to investigate whether the indirect market-based monetary control mechanism has increased the potential for monetary control. Following Alexander *et al* (1995), the changes in money multipliers and growth in reserve money for the pre-reform and post-reform period are estimated for the economy as indicated in Table 6 below.

Since 1992, we find the average money multipliers for both money supply and aggregate monetary resources have been generally lower as compared with the prereform period. There also seems to be a higher control on reserve money with the use of an indirect market-based control mechanism after 1993.

Therefore, based on the above indicators, there is a general indication that the adoption of indirect techniques of monetary policy has increased the potential for monetary control in Mauritius.

| December | Bank Rate | Lending Rate Personal & Professional | Savings Rate | Spread | Average spread |
|----------|--------------|--|--------------|------------|-------------------|
| 1985 | 11 | 15.5 - 17.0 | 8.5 - 9.0 | 7.0 - 8.0 | 7.5 |
| 1986 | 11 | 15.5 - 17.0 | 8.5 - 9.0 | 7.0 - 8.0 | 7.5 |
| 1987 | 10 | 16.5 | 8.0 | 8.2 | 8.5 |
| 1988 | 10 | 15.5 - 20.0 | 8.0 | 7.5 - 12.0 | 9.5 |
| 1989 | 12 | 17.0 - 20.0 | 12.0 | 5.0 - 8.0 | 6.5 |
| 1990 | 12 | 19.0 - 21.0 | 12.0 | 7.0 - 9.0 | 8.0 |
| 1991 | 11 | 14.0 - 20.5 | 11.0 | 3.0 - 9.5 | 6.25 |
| 1992 | 8 | 16.0 - 19.5 | 7.0 | 9.0 - 12.5 | 10.75 |
| 1993 | 8 | 16.0 - 19.5 | 8.0 | 8.0 - 11.5 | 9.75 |
| 1994 | 12.33 | 16.0 - 23.0 | 9.0 | 7.0 - 14.0 | 10.5 |
| 1995 | 9.92 | 14.0 - 22.0 | 8.0 | 6.0 - 14.0 | 10.0 |
| 1996 | 1.32 | 14.0 - 21.5 | 8.0 | 6.0 - 13.5 | 9.75 |
| 1997 | 8.96 | 12.5 - 19.5 | 8.0 | 4.5 - 11.5 | 8.0 |
| 1998 | 12.19 | 10.0 - 20.5 | 9.0 | 1.0 - 11.5 | 6.25 |

 Table 5. Interest Rate Spread, 1985 - 1998 (Per cent)

Source: Bank of Mauritius Annual Report, various issues

| Year (June) | Money Supply | Aggregate Monetary Resources | Average Reserve Money (Rs mn) |
|----------------|--------------|---------------------------------|----------------------------------|
| 1985 | 1.32 | 4.30 | 1,403.4 (7.9) |
| 1986 | 1.29 | 4.41 | 1,629.8 (16.1) |
| 1987 | 1.12 | 5.13 | 1,992.3 (22.2) |
| 1988 | 1.12 | 5.33 | 2,510.6 (26.0), |
| 1989 | 1.09 | 5.37 | 3,102.3 (23.6) |
| 1990 | 1.14 | 5.53 | 3,665.1 (17.4) |
| 1991 | 1.15 | 5.57 | 4,363.0 (19.4) |
| 1992 | 0.62 | 2.95 | 10,067.8 (130.8) |
| 1993 | 0.72 | 3.61 | 9,521.5 (-5.4) |
| 1994 | 0.79 | 4.54 | 8,745.3 (-8.2) |
| 1995 | 0.93 | 5.30 | 8,395.2 (-4.0) |
| 1996 | 0.80 | 5.14 | 10,013.4 (19.3) |
| 1997 | 0.81 | 5.21 | 10,556.1 (+6.4) |

Table 6. Average Money Multipliers

Source: Bank of Mauritius Annual Report, various issues * Growth Rate in parenthesis An analysis of the macroeconomic developments in the post-liberalisation period may also be helpful to provide some insights on the financial liberalisation experience. A stable macroeconomic environment is generally regarded as a prerequisite for successful financial reform. Policy makers have pursued macroeconomic policies geared at containing inflationary pressures, promoting growth and achieving a sustainable balance of payments. Table 7 highlights the trend in the major macroeconomic aggregates and Table 8 indicates the contribution of financial services sector to economic growth over the same period.

| | Inflation Rate % | Growth Rate % | Budget Deficit * | Balance of Payments (Rs mn) | Savings Ratio * | Investement Ratio * |
|------|------------------------|------------------|------------------------|-----------------------------------|--------------------|------------------------|
| 1985 | 6.7 | 6.9 | 5.3 | +398 | 21.6 | 18.6 |
| 1986 | 1.8 | 8.9 | 3.5 | +643 | 28.6 | 19.8 |
| 1987 | 0.6 | 8.4 | 1.4 | +2,572 27.7 | | 21.4 |
| 1988 | 9.2 | 6.2 | 1.3 | +2,728 26.1 | | 28.2 |
| 1989 | 12.6 | 4.6 | 3.7 | +1,996 23.8 | | 26.1 |
| 1990 | 13.5 | 7.2 | 3.2 | +3,041 | 23.6 | 30.6 |
| 1991 | 7.0 | 4.4 | 2.2 | +3,113 | 24.9 | 28.6 |
| 1992 | 4.6 | 6.7 | 2.7 | +3,048 | 26.1 | 27.8 |
| 1993 | 10.5 | 5.0 | 1.9 | +-909 | 24.5 | 28.4 |
| 1994 | 7.3 | 5.2 | 2.4 | -962 | 23.4 | 30.7 |
| 1995 | 6 | 5.6 | 3.7 | -1,009 | 23.3 | 24.2 |
| 1996 | 6.6 | 5.2 | 6.0 | +3,841 | 24.0 | 26.0 |

 Table 7. Macroeconomic Developments

Source: Bank of Mauritius Annual Report, various issues

*: as a percentage of GDP at market prices

| | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Growth rate (%) of Financial Services sector | 6.0 | 6.0 | 8.6 | 9.5 | 14.5 | 14.3 | 7.8 | 7.2 | 6.0 | 6.5 | 6.6 | 6.2 | 5.9 |
| Growth rate of whole economy (%) | 6.9 | 8.9 | 8.4 | 6.2 | 4.6 | 7.2 | 4.4 | 6.7 | 5.0 | 5.2 | 5.6 | 6.0 | 5.2 |
| Contribution to GDP (%) | 4.7 | 4.6 | 4.5 | 4.6 | 5.0 | 5.3 | 5.5 | 5.3 | 5.4 | 5.4 | 5.5 | 6.0 | 6.0 |

Table 8. Growth Rate of Financial Services and Contribution to GDP, 1985-97

Source: C.S.O Annual Digest of Statistics, various issues

* estimates

From the above tables, we find that the financial liberalisation experience seems to be a puzzle to our policymakers. This is due to a declining trend in savings, investment as well as the growth rate of the financial services sector in the post-liberalisation period. A proper explanation of this phenomenon needs an indepth analysis of the economy and a study of the contribution of the financial system to economic growth.

CONCLUSION

The financial liberalisation experience in Mauritius has not been quite different from those of some African countries (Turtelboom 1991). Policymakers have pursued a gradual and cautious approach towards financial deregulation and also reoriented monetary policy control towards the use of market-based techniques. Over the transition period, the use of direct and indirect techniques of monetary policy has coexisted in order to facilitate the adjustment to the new financial policy framework. A preliminary evaluation of the effects of the newly introduced method of monetary policy control has indicated that the potential for monetary control has been enhanced but efficiency in financial intermediation has not increased.

REFERENCES

- ALEXANDER, W. E, BALINO, T. J. T & ENOCH, C. (1995). The Adoption of Indirect Instruments of Monetary Policy. *IMF Occasional Paper*, **126**, Washington.
- CAPRIO, G. (Jr), ATIYAS, I. & HANSON, J. A. (eds) (1994). *Financial Reform Theory and Experience*. Cambridge University Press.
- DIXON, H. (1997). Controversy Finance and Development. *The Economic Journal*, 107, May, 752-753.
- FRY, M. J. (1995). *Money, Interest and Banking In Economic Development, 2nd edition.* Johns Hopkins Press, Baltimore.
- HANSON, J. A. & NEAL, C. R. (1984). A Review Of Interest Rate Policy In Selected Developing Countries, 1970-82. World Bank Research Report, 5391, Washington DC, World Bank.
- LINDGREN, C. J. (1991). The Transition from Direct to Indirect Instruments of Monetary Policy. In The Evolving Role of Central Banks pp 309-29. (EDS P T DOWNES & R VAEZ- ZADEH). Washington, International Monetary Fund.
- MCKINNON, R. I. (1973). Money and Capital Market. *In Economic Development*. Washington DC, The Brookings Institution.

- MCKINNON, R. I. (1973). Financial Liberalisation and Economic Development: A Reassessment Of Interest Rate Policies In Asia and Latin American (1989). *Oxford Review of Economic Policy*, **5** (4), pp 29 34.
- ROE, A. R. & POPIEL, P. A. (1988). Managing Financial Adjustment in Middle Income Countries. *Economic Institute Seminar Report*, no.11, Washington DC: World Bank.
- SHAW, E. (1973). Financial Deepening. In *Economic Development*. Oxford University Press New York.
- TURTELBOOM, B. (1991). "Interest Rate Liberalisation: some lessons from Africa", *IMF Working Paper* WP/91/121 (Washington: International Monetary Fund).

WORLD BANK (1989). World Development Report, Oxford University Press.

WORLD BANK (1992). Mauritius Financial Sector Review.