Scientific Review
UDK: 658.14
Paper received: 04/02/2016
Paper accepted: 09/05/2016

THE SEQUENCING OF FINANCIAL REFORMS AND BANK-BASED FINANCIAL DEVELOPMENT IN MAURITIUS

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ABSTRACT

This paper presents the sequencing of the financial reforms and financial sector development in Mauritius. With the aid of selected data from the World Development Indicators and the Financial Structure database, the paper also gives an analysis of the resultant changes (due to reforms) in the banking sector of Mauritius during the post-financial reform period. Inclinations show increased financial development, which can mainly be explained by increased personal credit, deposits and financial products, and increased bank competition. The maintenance of a stable macroeconomic environment, as well as a strong prudential regulation and supervision landscape, are some of the factors that have enabled financial development to become a success in Mauritius.

Keywords: *financial development, financial reforms, Mauritius, monetary policy*

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1. INTRODUCTION

The financial sector has been attested as one of the fundamental backbones for economic growth. On the other hand, some researchers have been saying the opposite – economic growth leads to financial sector development. The discussion and research on the financial development-economic growth nexus has been the subject of a number of recent and not so recent studies. However, the process of financial development for a number of African countries has not been fully documented in a chronological manner in such way that one can follow through on the resultant successes or failures achieved as far as financial development is concerned. Notable among these countries, due to its above average economic performance, is the Republic of Mauritius. Since its independence, Mauritius has made notable economic strides that have seen its development being relatively incomparable to most African countries. Starting as an economy mainly driven by sugar production, Mauritius has grown into one of Africa's success stories. Its exceptional growth was based on a number of economic stages and strategies that worked together to achieve the expected objectives. Prior to its independence in 1968, Mauritius was a low-income plantation economy based, to a great extent, on one crop, i.e. sugar. Sugar was produced on a regular basis for supply to the colonisers of the day, Great Britain, and all other manufacturing activities were centred on sugar production and its complement products like tea. Following independence, a number of strategies were put in place to expand the economy's ability to be self-sufficient and for diversification. Initially, the import substitution strategy (ISI) was adopted. Protectionism and the establishment of a development bank so as to provide a systematic flow of alternative subsidised finance to new and upcoming industries and investment projects (Jouan, 2005:3). Count down more than 40 years later, the economy of Mauritius is one of the most robust relative to other African economies and has a formidable financial services sector. Due to radical levels of growth the GDP of the economy necessitated the Mauritian government to put up a financial liberalisation policy at the beginning of the 1990s. The financial sector was taken as being of much importance in attaining national and international financial intermediation standards that would lead to even higher economic performance (Sobhee & Bhowon, 2007:31). Given the view of the government of Mauritius, the paper gives an overview of the chronological evolution of financial reforms and bank-based financial development in Mauritius. In addition, an analysis of the progression and performance of financial intermediaries with particular emphasis on bank market development gives some concluding remarks and suggestions.

The rest of the paper is structured as follows. The second section provides an initial outline of how monetary policy and financial sector reforms have progressed in Mauritius over the years. The third section gives a summary of the chronological evolution of the banking sector in Mauritius. The fourth section provides a discussion of the trends in specific financial sector and bank-performance development. The final section gives some concluding remarks.

2. MONETARY POLICY AND FINANCIAL SECTOR REFORMS IN MAURITIUS

Monetary policy in Mauritius, as in all other countries, is spearheaded by the central bank, that is the Bank of Mauritius. Despite the evolution of monetary policy through the years since the creation of the Bank of Mauritius in 1967, the handling of monetary policy has taken on a larger implication with the advent of the process of economic and financial liberalisation in the late 1980s and 1990s. During the financial liberalisation period, a number of financial reforms were implemented. These include, amongst others: i) the development of the capital and money markets; ii) the promotion of a wide range of financial institutions and instruments; iii) competition within the financial system; iv) world integration; v) the setting up of an appropriate regulatory framework; and vi) the establishment of a market-based monetary control system (see Jankee, 1999: 14).

Before the gradual process of financial liberalisation in the late 1980s, policy mainly focused on setting maxima on the credit expansion by banks through the enactment of high reserve requirements. Moreover, interest rate guidelines that were based on directed lower interest rate policy to high priority sectors (for example, the sugar plantations). Though the main objective of monetary policy was to encourage investment, the control of the financial sector by the state managed to discourage financial deepening which led to lower levels of competition amongst financial institutions.

During the financial liberalisation period, exchange controls were removed; a more flexible exchange rate regime replaced the previous basket-peg regime, and policy switched from direct control to indirect monetary management. However, the use of the Lombard Facility up until December 2006 made the Bank of Mauritius (BOM) the lender of first resort rather than the lender of last resort. Under the Lombard Facility, the Bank of Mauritius stood ready to provide overnight-collateralised advances to banks at their initiative. The rate payable for use of this facility, the Lombard Rate, acted as a signal of the monetary policy stance of the Bank. In addition, the Lombard rate signalled changes in market interest rates and was used to ensure appropriate liquidity levels in the economy. The main operations conducted by the Bank to manage liquidity are the sale/purchase of Bank of Mauritius Bills, and repurchase transactions (Heerah-Pampusa *et al*., 2006:25). In December 2006, the Repo Rate eventually replaced the Lombard Rate as the key policy rate to signal changes in its monetary policy stance (Tsangarides, 2010:5). A standing facility without any borrowing quota and through which the Bank provides a collateralised overnight facility to banks was also introduced in replacement of the Lombard Facility. The rate of interest chargeable on the Standing Facility was set at 400 basis points above the Repo Rate (BOM Annual Report, 2007:7). The change in accommodation policy enhanced the inter-borrowing relationship amongst banks in the market mainly because the money market rate has been relatively much lower than the Lombard rate. In addition, upon the enactment of the Bank of Mauritius Act of 2004, the Monetary Policy Committee (MPC) was instituted. The MPC, which includes the BOM Governor and two Deputy Governors, two Board Directors and four members as appointed by the Minister, has been formulating the monetary policy of the Bank of Mauritius since 2007 (Tsangarides, 2010:5). The advance of monetary policy and financial sector reforms from 1987 onwards is presented in Table 1 below.

Table 1: Sequencing of Monetary Policy and Financial Sector Reforms

1987	• Removal of exchange control on current account (ended in 1992)
1988	• Liberalization of interest rates
1989	• Liberalization of Exchange Rate Controls
1991	• Issue of Bank of Mauritius Bills • Auctioning of bills • Gradual elimination of directed credit programme • First phase of open market operations begins with treasury bills in the primary market • Liberalization of capital account (ended in 1994)
1992	• Abolition of ceilings on credit to priority sectors • Accommodation policy reviewed so that banks having liquidity deficit seek reserves from the interbank market before seeking refinancing from the central bank
1993	• Abolition of credit ceilings on non-priority sectors • Imposition of a credit-deposit ratio • Minimum risk-weighted capital adequacy ratio of 8%
1994	• February – Setting up of the Secondary Market Cell at Bank of Mauritius • June – Bank Rate linked with weighted average yield of Treasury Bill over preceding 12 weeks plus a margin • July – Suspension of Exchange Control Act • July – Establishment of the Interbank Foreign Exchange Market
1995	• July – Bank rate linked to overall yield on Treasury Bills at most recent auction plus margin
1996	• July – Abolition of credit-deposit ratio • July – Imposition of 15% limit on the overall foreign exchange exposure • December – Bank rate linked to overall yield on Treasury bills at most recent auction plus a margin phasing out of the high reserve requirement begins

1997	• July – Cash ratio brought down to 6% and non-cash liquid asset ratio to 0%
1998	• July – Issue of 728 days Treasury Bills • December – Creation of secondary market in treasury bills through over the counter (OTC) sales of treasury bills to individuals and non-financial institutions • Phasing out of the high reserve requirement ends
1999	• December – Issue of 30-day Treasury bills • Introduction of Reversed REPO Transactions marking the second phase of open market operations which allowed the central bank to influence the liquidity of the banking sector • Introduction of the Lombard Facility
2000	• November – Introduction of Swap Transactions • December – Introduction of the Mauritius Automated Clearing and Settlement System
2001	• June – Introduction of Stock Exchange of Mauritius Automated Trading System (SEMATS)
2002	• Establishment of Primary dealer system • Bank of Mauritius therefore ceased its over the counter sale of Government of Mauritius Treasury Bills to individuals and non-financial institutions. • The established primary dealers were Barclays Bank PLC, State bank of Mauritius Ltd, The Hong Kong and Shanghai Banking Corporation Limited and The Mauritius Commercial Bank Ltd
2003	• December – Trading of Treasury/Bank of Mauritius Bills on the Stock Exchange
2005	• November – Establishment of a Credit Information Bureau
2006	• The Repo rate introduced replacing the Lombard facility as the key policy rate to signal changes in its monetary policy stance • Repo rate set at 8.5% • A standing facility introduced to replace the Lombard facility
2010	• Repo Rate cut by 100 basis points to 4.75 per cent

Source: Jankee (2006); Bank of Mauritius Reports (various issues)

3. SUMMARY OF MAURITIUS' BANKING SECTOR DEVELOPMENT

A look at the history of the Mauritian banking sector shows that it started in the early 1800s. It has, however, experienced a number of bank closures and entries throughout its more than 200 years of existence. The Bank of Mauritius is the central bank in Mauritius. Banking sector development in Mauritius has been characterised by major diversification of products and services amongst banks; as some banks have ventured into non-bank financial services. Some of the products and services offered by the Mauritian banking sector include: leasing and asset management; private equity; stockbroking; investment services; specialist services in cross-border transactions; trustee and fiduciary services; wealth management and private banking; and remittance services. In addition, the emergence of non-bank financial institutions, banking sector mergers and acquisitions, and the development of the offshore banking sector has made significant contributions to the financial landscape in Mauritius.

Table 2 presents a summary of the historical background of the banking sector in Mauritius and its legal reforms from 1810 onwards.

Table 2: Summary of Financial Development in Mauritius (1810 – 2012)

1810	• Colonial Bank of Mauritius, Bourbon and Dependencies established
1813	• Colonial Bank of Mauritius, Bourbon and Dependencies closed down in September because it did not have prior authorization from the Secretary of State • La Banque de L'ile Maurice (Bank of Mauritius) established in December
1826	• La Banque de L'ile Maurice liquidated
1831	• Banque de Maurice established
1838	• Mauritius Commercial Bank (MCB) incorporated (initially as Banque Commerciale de l'isle Maurice)
1848	• Banque de Maurice stopped operations due to the 1847 London financial crisis leaving the MCB as a monopoly banking institution
1852	• Oriental Bank Corporation established
1859	• Chartered Mercantile Bank of India established
1881	• Banque Franco-Egyptienne established
1865	• Chartered Mercantile Bank of India stopped operations
1885	• Oriental Bank Corporation exited the market
1886	• Nouvelle Banque Orientale starts operations
1889	• Banque Franco-Egyptienne exited the market
1892	• Nouvelle Banque Orientale exits the market leaving MCB as the monopoly bank in Mauritius
Late 1800s and early 1900s	• Foreign banks established local branches and a few locally incorporated banks (e.g. the Post Office Savings Bank) but MCBs dominant position continued
1916	• The Hong Kong and Shanghai Banking Corporation Limited established a branch (formerly known as The Mercantile Bank Limited).
1919	• Barclays Bank Mauritius starts operations
1955	• Mauritius Commercial Bank became a limited liability company
1959	• P.T. Bank Internasional Indonesia Tbk. (BII) established
1962	• Bank of Baroda established
1964	• Habib Bank Limited sets up a branch in Mauritius
1966	• Bank of Mauritius Act enacted
1967	• Creation of the Central Bank
1973	• State Commercial Bank Ltd established by the government, later renamed State Bank of Mauritius
1986	• Liberalization of exchange controls on both current and capital transactions
1988	• Offshore banks allowed to operate • Bramer Banking Corporation Ltd established (formerly known as South East Asian Bank Ltd) • Stock Exchange Act 1988

1989	• Stock Exchange of Mauritius created • Barclays Bank Mauritius becomes first bank to be granted an offshore banking license • Banking Act, effective on 1 January.
1991	• Banque Internationale des Mascareignes Limitee commences operations as an offshore banking business
1992	• Mauritian Offshore Business Activities Act (MOBA) enacted giving rise to the Mauritian Offshore Business Activities Authority (MOBAA), which was set up to regulate and supervise the non-bank offshore sector. • Mauritius Offshore Business Activities Authority becomes the regulator of the offshore sector
1993	• Abolition of Credit ceilings.
1994	• The liberalization of capital controls/the establishment of an inter-bank foreign exchange market and the adoption of the managed float of the exchange rate • State Bank of Mauritius opens its first overseas branch in Mumbai India.
1995	• State Bank of Mauritius listed on Stock Exchange of Mauritius • Deutsche Bank starts operations
1997	• South African Bank Nedcor acquires 20.1 % of State Bank of Mauritius • State Bank of Mauritius opens second branch in India in Chennai • Investec Bank (Mauritius) Limited established
1998	• State Bank of Mauritius opens third branch in India in Hyderabad
2001	• Financial Services Development Act which enabled the conception of the Financial Services Commission (FSC) • Standard Bank (Mauritius) Limited starts operations (November)
2002	• Financial Intelligence and Anti-Money Laundering Act introduced paving the way for the creation of the Financial Intelligence Unit (FIU) • Bank One Limited commences business operations • Barclays Bank takes over Banque Nationale de Paris Intercontinentale Mauritius (BNPI) • Standard Chartered Bank (Mauritius) Limited established
2003	• Mauritius Post and Cooperative Bank Ltd established through a merger of the New Cooperative Bank Ltd with the Post Office Savings Bank
2004	• Banque Internationale des Mascareignes Limitée changes its name to Mascareignes International Bank Ltd when it became a wholly owned subsidiary of Financiére Océor • Banque des Mascareignes Ltée another subsidiary of subsidiary of Financiére Océor began operations in Mauritius as a domestic banking business • Revision of the Banking Act and Bank of Mauritius Act
2005	• With the coming of the Banking Act 2004, Mascareignes International Bank Ltd merged its operations with Banque des Mascareignes Ltée
2006	• HSBC starts operations
2007	• Formation of a Monetary Policy Committee and the enactment of the Financial Services Act • AfrAsia Bank founded • Bank One Limited acquired through a joint venture between a local group CIEL Investment Limited and the Kenyan group, Investment and Mortgages Bank Ltd.

2008	• SBI (Mauritius) Ltd established through the amalgamation of the Indian Ocean International Bank Ltd (IOIB) and SBI International (Mauritius) Ltd (SBIIML)
2010	• ABC Banking Corporation Ltd previously known as ABC Finance and Leasing Ltd granted its banking license
2012	• BanyanTree Bank Limited granted banking license (6 September)
2013	• BanyanTree Bank Limited starts operations (18 February)

Source: Jouan (2005), Seetanah, B., Padachi, K., Hosany, J., & Seetanah, B. (2011), Bank of Mauritius Annual Reports (various issues)

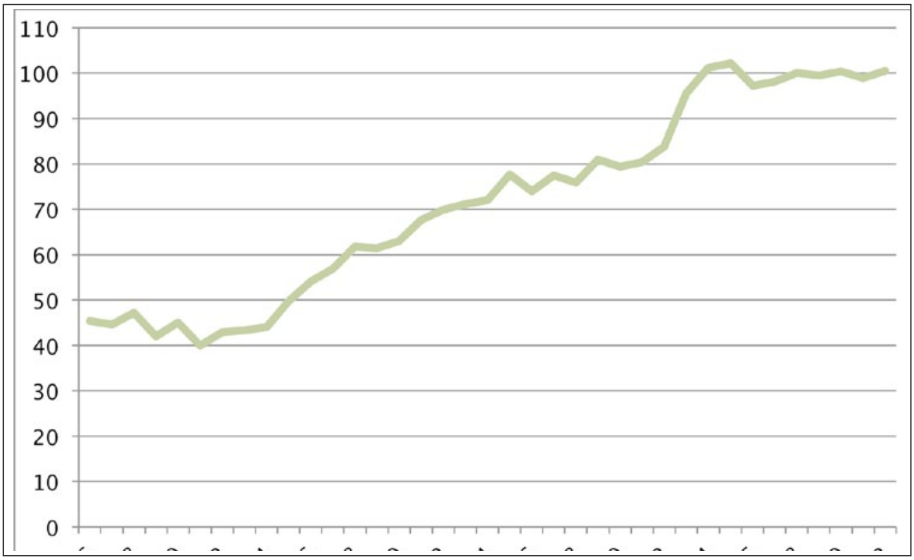
4. TRENDS IN FINANCIAL SECTOR DEVELOPMENT IN MAURITIUS

A number of financial development indicators are employed in this section as a discussion of the trends in financial development in Mauritius are ironed out.

4.1 M2 TO GDP

The ratio of broad money, M2 to GDP is the measure of financial development that shows the real size of the financial sector in a country. A higher ratio of M2 to GDP implies a larger financial sector and improved financial intermediation. In addition to being a measure of financial deepening, the M2 to GDP ratio is a measure of money supply relative to the size of the economy. Prior to the gradual liberalisation, the M2/GDP ratio for Mauritius averaged just above 40%. By 1986, with the liberalisation of exchange controls on both current and capital transactions the M2/GDP ratio increased to above 50% levels. Due to increased offshore banking services provision, the size of the Mauritian financial services sector appears to have continuously gained prominence over the years. By the early 1990s it was more than 60% of the GDP, hitting the 80% mark by year 2000. It progressively improved hitting its maxima of 102% by 2005 and from then onwards has been on a steadily maintained average of 100% of GDP. Given the resultant leap brought about by financial liberalisation, it is safe to say that the trends before 1986 show a holding back of the capacity of the financial sector maybe due to financial repression which tended to distract rather than promote financial sector investment and business initiatives. After the changes in policy (domestic and international liberalisation) in the period 1986 to 1994, the financial sector began to turn potential into reality.

Figure 1: Ratio of M2 to GDP



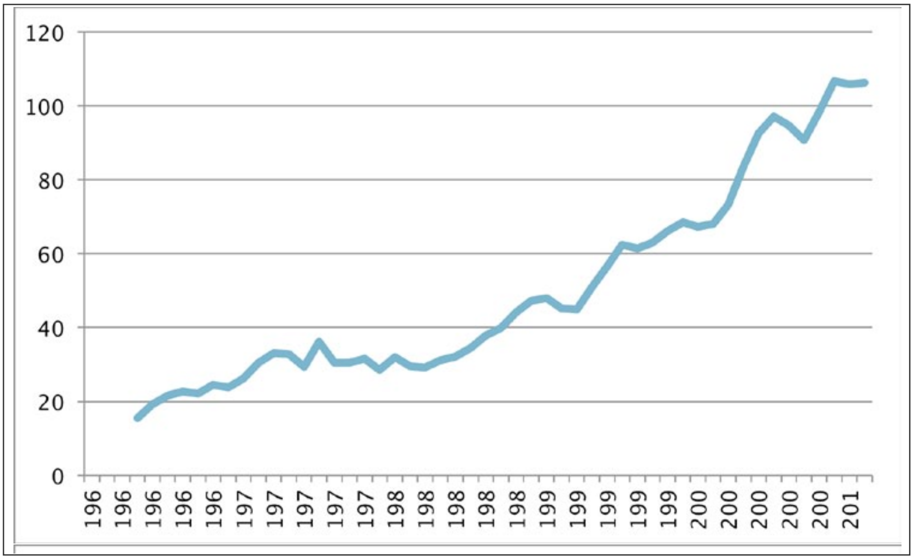
Source: World Bank, World Development Indicators, 2014

More so, according to the M2/GDP ratio, the level of financial deepening appears to have improved extensively. With banks diversifying into non-bank financial services which include leasing, factoring, asset management, private equity, stockbroking, registry, investor services business, specialist services in cross-border transactions, specialist finance and lending, trustee and fiduciary services, Islamic banking, remittance services, wealth management and private banking, the increased financial widening and deepening was inevitable. The M2/GDP ratio tends to measure the size and depth of the financial sector and its development. Therefore, the resurgent increase in the M2/GDP ratio also shows that the size of the financial sector also increased comprehensively, even relative to other sectors as it is now counted as one of the main economic sectors in Mauritius. The effect of financial liberalisation is noticeable and was mainly steered by macroeconomic stability and the achievement of prudential regulation and supervision, and more so, the gradual approach to financial liberalisation (Galbis, 1994:98).

4.2 DEPOSIT MONEY BANK ASSETS TO GDP

The deposit money bank asset to GDP ratio gives evidence of the importance of financial services relative to the size of the economy (Beck, *et al*, 2010:82). In other words, as the GDP expands, the deposit money bank assets to GDP ratio is also expected to expand. The trends of the deposit money bank assets to GDP ratio in Mauritius show that from the early 1960s – through the establishment of the Bank of Mauritius in 1967 – to the gradual introduction of financial reforms in the mid-1980s, deposit money bank assets appear to have been slowly and steadily increasing. Specifically, the ratio of deposit money bank assets to GDP increased by about 15%, from the early 1960s to 1984. However, following the financial sector reforms, there has been a significant increase in the ratio of deposit money bank assets to GDP. By 2011, for example, the deposit money bank assets accounted for more than 105% of GDP as compared to 34% in 1984 and 19% in 1964. This shows that financial liberalisation has enhanced financial development and increased investment in the banking industry. Figure 2 shows the trend of the deposit money bank assets as a percentage of GDP during the period 1960 to 2010.

Figure 2: Deposit Money Bank Assets to GDP (%)



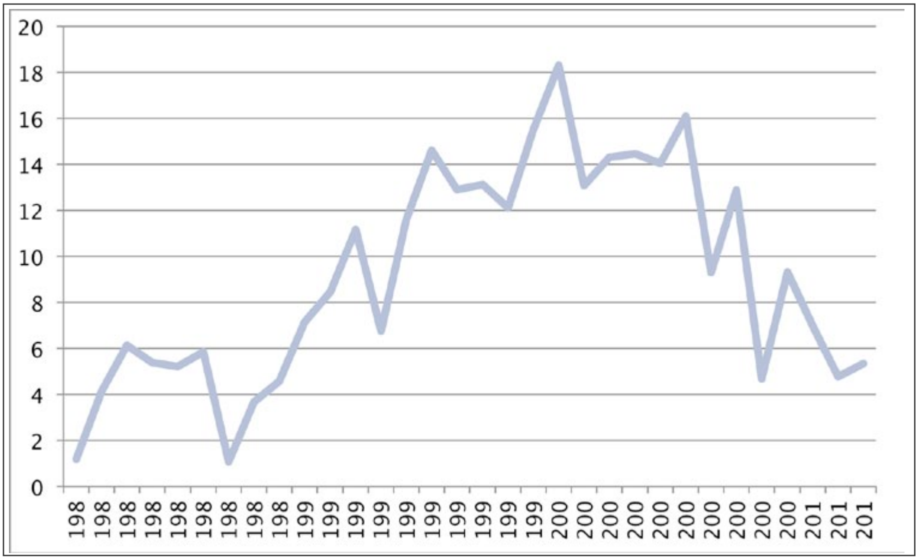
Source: Financial Structure Database- Beck, Demirgüç-Kunt, & Levine (2000, 2010) Čihák, Demirgüç-Kunt, Feyen, and Levine (2012).

4.3 REAL INTEREST RATE

For Mauritius, before the 1980s, given the highly unpredictable inflation and repressed interest rate policy, it is possible that real interest rates were generally negative. The notion of negative real interest rates is expected given that the Bank of Mauritius had a restrictive and a financially repressive monetary policy that had set the prime lending rate for particular strategic sectors of the economy and the commercial bank interest rates for each class of deposits. However, from 1980 to 1990 real interest rates were below 7% levels, inflation levels for the same period averaged just below 10%. With the liberalisation of interest rates in 1988, real interest rate levels began to gradually increase. The gradual increase was mainly due to the ongoing liberalisation of the financial sector. Other probable reasons for the rise in real interest rates after liberalisation include continuous reduction in the cost of intermediation (Jouan, 2005:216), and the increasing amount of loanable funds and advances to the private sector – due to a shift from below-equilibrium interest rate levels to higher equilibrium levels.

The liberalisation of exchange rate controls followed in 1989, the gradual elimination of the directed credit programme, the first phase of open-market operations began with treasury bills in the primary market and the gradual liberalisation of capital account followed in 1991. Furthermore, in 1992, credit ceilings to priority sectors were abolished and the BOM's accommodation policy was reviewed so that banks having liquidity deficit seek reserves from the interbank market before seeking refinancing from the central bank. These reforms came in with increased interest rates while inflation remained rather stable at below 10% levels. Hence, the overall effect of liberalisation of the financial sector inclusive of interest rate liberalisation was the gradual increase in the real interest rates. The increase continues until the year 2000 in which real interest rates reached a maximum of 18%. From 2001 onwards, real interest rates, though volatile, began to steadily decline until they reached 5.3% by 2012.

Figure 3: Real Interest Rate



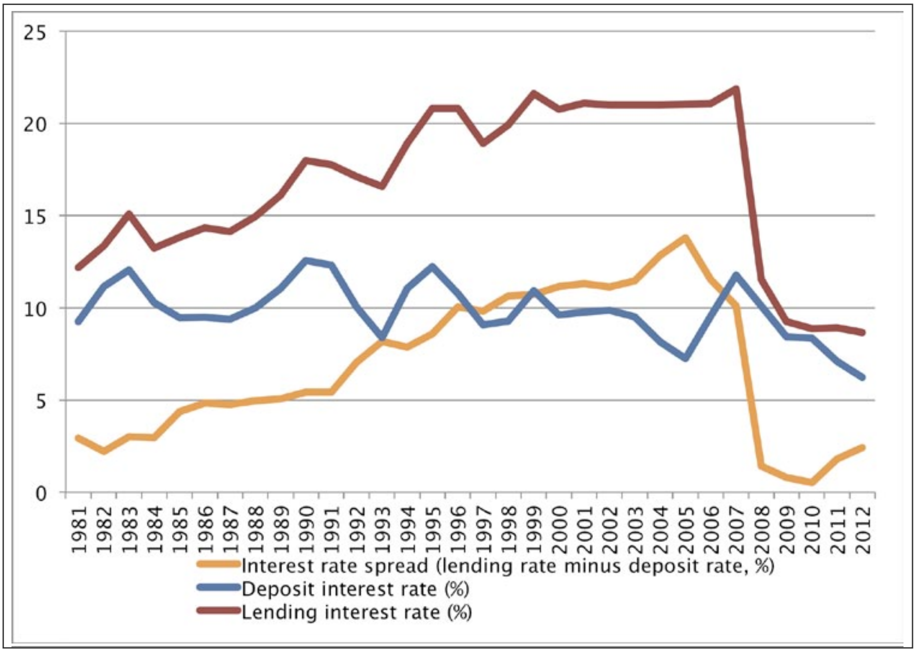
Source: World Bank, World Development Indicators, 2014

The decrease in real interest rates after 2001, although attributed to financial liberalisation, could also be attributed to the loosened financial market liquidity controls by the BOM. For example, from 1996 the BOM abolished the maintenance of the credit-deposit ratio, gradually phased out the use high reserve requirement, engaged in open-market operations, instituted the creation of a secondary market in treasury bills through over the counter (OTC) sales of treasury bills to individuals and non-financial institutions and introduced the reversed REPO transactions marking. These reforms enabled the central bank to influence the liquidity of the banking sector and the interest rates in the market therefore having an indirect effect on the real interest rate. Furthermore, the monetary policy stance of the nation became reactive to the happenings in the market. For instance, the Lombard rate, which was the Bank's signalling mechanism of its monetary policy stance, was reduced on four occasions during 2003 by a total of 125 basis points with banks reacting in tandem to policy changes. These policy changes were geared towards stimulating investment and enhancing economic growth through reduced lending rates.

4.4 INTEREST RATE MARGINS

The gist of financial sector liberalization is usually to reduce the interest rate spreads, to increase the availability of financial resources through increased savings, to enhance efficiency in credit allocation, and to increase investments (Ngumi, 2014:9). Upon financial liberalization, an initial increase in the spread between lending and deposit rates is expected due to the increased equilibrium-lending rates. This theoretical link is supported by Shaw's (1973) theoretical framework, which mainly focuses on the increased debt-intermediation capabilities of banks due to financial liberalisation (Shaw, 1973). But as the financial sector becomes more efficient, the interest rate margin spread should eventually start to narrow. Moreover, for the case of Mauritius, financial liberalization was accompanied by a reduction in the reserve requirement, which in turn should increase loanable funds, putting downward pressure on the cost of funds. Therefore, expectations arising due to these developments are that the interest rate margin should decrease over time.

Figure 4: Interest Rate Spread (Lending Rate minus deposit rate, %)



Source: Source: World Bank, World Development Indicators, 2014

Conversely, for Mauritius, the interest rate margin continued to rise, meaning that lending rates rose much faster during and after the reform years than deposit rates (see Figure 4). Before 1992, the interest rate margin had a mean of below 6%. From 1993 onwards, interest rate margins went beyond 6% and continued to steadily rise until they almost reached 14% levels in 2005. Margins declined sharply thereon, reaching minima of 0.5% by 2010 and then marginally rising to 2.4% by 2012. The rather unstoppable and uncontrollable rise in the interest rate margin in Mauritius points to a financial sector characterised by oligopolistic behaviour of a few commercial banks and state dominance, that is, limited financial sector competition (Senbet and Otchere, 2006:28). The resultant decrease in the interest rate margin from 2006 onwards maybe attributed to increased competition arising from the entry of a number of banking entities and non-bank financial institutions, the increasing stock market capitalisation and also to the international financial crisis of 2008. Nevertheless for the Mauritius case the interest rate margin reflects the prevalence of market power and compensates for the quality of loans (Ramful, 2001:20).

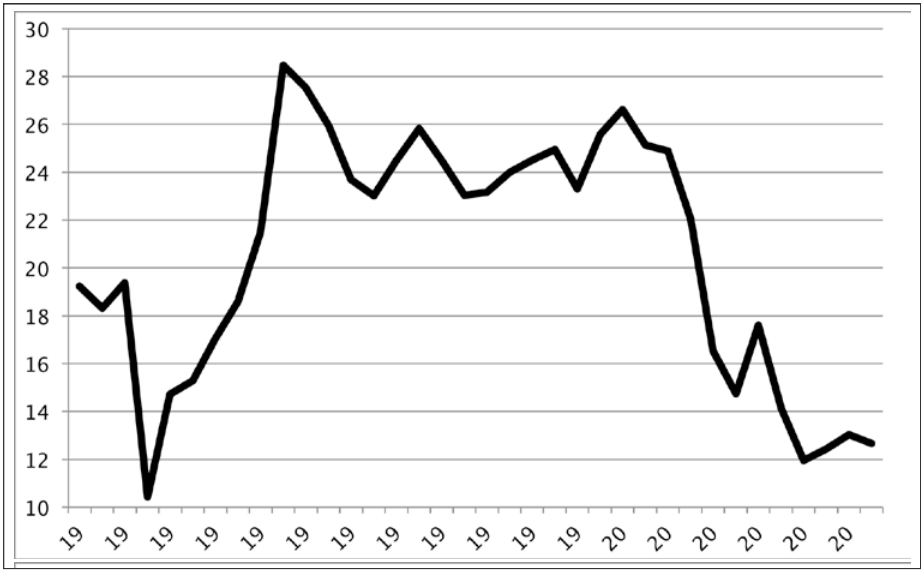
4.5 SAVINGS

From 1978, Mauritius had a domestic savings rate of 18% of GDP, which steeped down to 10% of GDP by 1980. By the advent of financial liberalisation, the gross domestic savings rate of Mauritius started to increase in such a way that it reached up to 28.5% of GDP by 1986. From 1987 to 2003, gross domestic savings averaged 25% of GDP, only to sharply decline to 14.7% by 2006 and eventually 12.7% of GDP by 2012.

After financial liberalisation, as supported by Fry (1978), expectations were that the savings would increase, due mainly to the ripple effects of increased real interest rates that would have resulted from increased competition among financial institutions and the rather permissive stable inflation rate

The effects of the increased real interest rates on savings may be explained through their substitution effect and income effect on consumption and savings. The substitution effect arising from increased real interest rates will lead to a preference to save while currently postponing consumption. Given the allowing stable inflation rate and the increasing interest rates, deferring current consumption for later becomes less costly and more beneficial in the future. On the other hand, increased real interest rates might lead to increased consumption due to increased interest income; however, if the substitution effect remains relatively greater than the opposing income effect, savings are expected to continuously increase or maintain their levels vis-à-vis the GDP.

Figure 5: Gross Savings as a Percentage of GDP



Source: World Bank, World Development Indicators, 2014

The decreasing savings rate after 2001 closely mirrors the decreasing trends in the real interest rate after 2000 and the interest rate margins after

2005. Therefore, the decrease in savings might be explained by a decrease in real return for savings that led savings to be used for other alternatives not only limited to consumption. A look at the market capitalisation of the Stock Exchange of Mauritius seems to confirm that there was increased investment in the capital market during the period of decreasing savings.

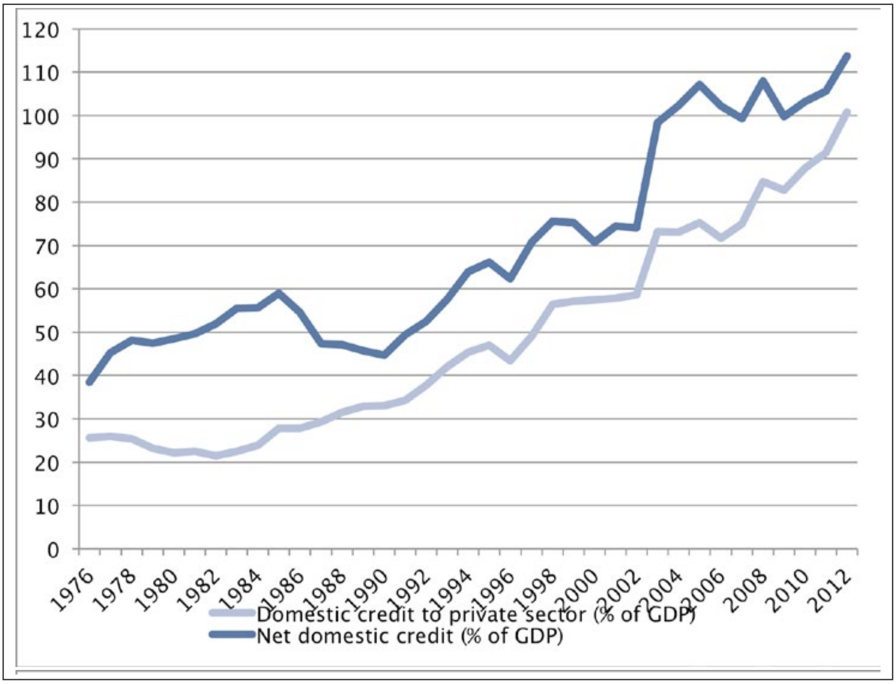
4.6 TRENDS ON CREDIT

Despite the measures of financial development already discussed in preceding sections there is need to assess other measures that pertain to credit provision in the market. Financial development should lead to increased credit provision to all sectors by the financial sector, especially after financial liberalisation. Therefore, the extent to which the financial sector is a provider of loanable funds to both the public and the private sector is a necessary and good measure of the level of financial development. The two measures of financial sector deepening and development for assessing credit provision in Mauritius that are employed in this section are the net domestic credit to GDP ratio and the domestic credit to the private sector to GDP ratio. The net domestic credit to GDP ratio is the sum of net claims on the central government and claims on other sectors of the domestic economy expressed as a percentage of GDP. The domestic credit to private sector refers to financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable that establish a claim for repayment (WDI, 2014).

The domestic credit to the private sector to GDP ratio trend shows that, despite maintaining above 20% levels, it marginally declined from 1976 onwards until 1985. The net domestic credit to GDP ratio in the same period (1976 to 1985) was generally ascending. With the advent of the financial liberalisation period, the domestic credit to the private sector to GDP ratio shows a gradual ascend which is only matched by the net domestic credit to GDP ratio after 1990. In addition, the gap between the two ratios seems to have narrowed after financial liberalisation. Financial development speared on by financial liberalisation appears to have opened a door for the once not included sectors in the private markets. In addition, increased competition for credit seems to have translated into an appreciation of the private sector as creditworthy than the status quo before liberalisation. However, it should be noted that increased financial sector competition may lead to decreased savings and even investment as they indulge in excessive credit provision for consumption purposes. This may be due to short-termism, preference for high returns and prevailing liquidity in the banking sector (Adegbite & Adetiloye, 2013:214). In the banks' lending decisions for investment purposes, the ability to repay is a significant determinant of getting credit not to mention the profitability of the sector and the associated long-term risks.

The removal of high required reserves, the improved real-time payment systems and the opening up of the economy to offshore banking are some of the reasons why the level of credit provision as a share of GDP has been increasing in Mauritius. The removal of high reserve requirements enabled banks to have extra funds available for credit. The improved real time payment systems made it quite easy not to hold on to unusually large excess reserves and led to increased financial intermediation. The opening up of the economy through offshore banking activities opened up the banking sector to new markets and has aided the financial sector to have extensive offshore banking activities (Moriera, 1999:16).

Figure 6: Trends on Credit

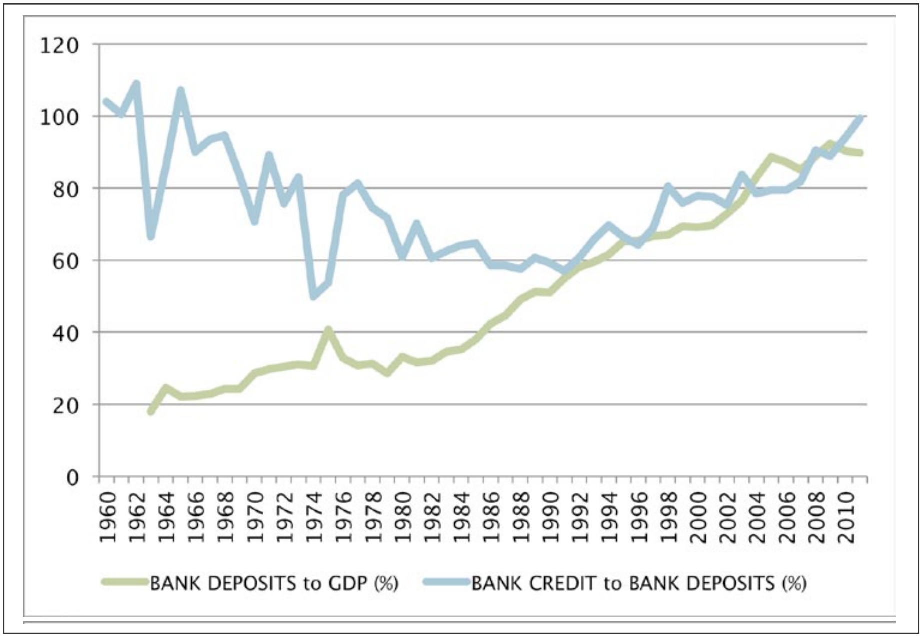


Source: Financial Structure Database- Beck, Demirgüç-Kunt, & Levine (2000, 2010) Čihák, Demirgüç-Kunt, Feyen, and Levine (2012).

4.7 TRENDS ON DEPOSITS

The level of deposits relative to the economic output, as a measure of financial development, is expected to be growing as the economy expands and as liberalisation policies are put in place. Deposits to financial institutions are liabilities from which they used to create money for themselves and also earn a profit from such financial intermediation. Furthermore, the increased mobilisation of deposits relative to the GDP tend to imply confidence with the banking industry and increased efficiency in either payment systems or savings, or both. The two ratios to be used to evaluate if the financial sector is an efficient mobiliser of deposits are the bank deposits to GDP ratio and the Bank credit to bank deposits ratio. Expectations on the bank deposits to GDP ratio are that it should be increasing to show that there is increased financial development that is reacting accordingly with any movements in national income. The bank credit to bank deposits ratio is expected to be increasing as more deposits are translated into credit otherwise deposits are more of sight deposits than long-term ones or banks are holding more excess liquidity than they should, or both.

Figure 7: Bank Deposits to GDP and Bank Credit to Bank Deposits (%)



Source: Financial Structure Database – Beck, Demirgüç-Kunt, & Levine (2000, 2010) Čihák, Demirgüç-Kunt, Feyen, and Levine (2012).

From the above-illustrated trends, though the ratio of bank deposits to GDP started at just above 20% in early 1960s it gradually ascended through the years to 90% by 2011. Notably, the ratio of bank deposits to GDP was increasing at an increasing rate with the advent of financial liberalisation in the mid 1980s from whence it surpassed the 40% mark. By 1993, deposits accounted for more than 60% of GDP. The increasing trend of deposits relative to GDP can best be explained by the opening up of the financial services sector both domestically and internationally (increased offshore banking activities) and more so the increasing real interest rate which was boosted by stable inflation rates. Notably, after 2003, the ratio of bank deposits to GDP, driven mainly by the opening up of the financial sector, continued to increase – despite declining real interest rates.

On the other hand, the bank credit to bank deposit ratio reveals that the banking sector was far more efficient in converting deposits into credit in the earlier years than it became in the later years – due to the non-prevalence of repressive forces in the later years. The maximum share of credit it managed to obtain was 109% in 1962; from thereon it has been experiencing stretches of declines (rather than inclines) as the ratio of credit to deposits generally averaged between 60% to 80% for the period 1961 to 1990.

From the year 1991 onwards, the ratio of bank credit to bank deposits has been on a general ascent, although it did not manage to eclipse the levels that had existed in the early 1960s. However, it should be noted that the bank credit to bank deposits ratio contains demand deposits, that is, it is the private credit by deposit money banks as a share of demand, time and saving deposits in deposit money banks. The extent to which demand deposits account for the total deposits might be the reason why the ratio tends to show the inefficiency of money creation by banks. If the bulk of the deposits are short-term deposits, that is, mainly six-month fixed deposits, call and current account deposits, then the deposit base that financial institutions have to create credit is not sufficient enough to accommodate such as expected since most of the deposits are relatively sight deposits. The other reason that might have significantly hampered the performance of financial institutions in the provision of credit is the influx of substantial offshore banking based deposits that are being directed to the capital market rather than the money market. Furthermore, there are a number of non-bank financial institutions that offer products and services that compete directly with those offered by banks, and these form part of the unaccounted-for competition for deposits in the market. Inherently, in the later years, the gap that used to exist between bank deposits to GDP and bank credit to bank deposits has been obliterated as the level of bank deposits continues its ascent.

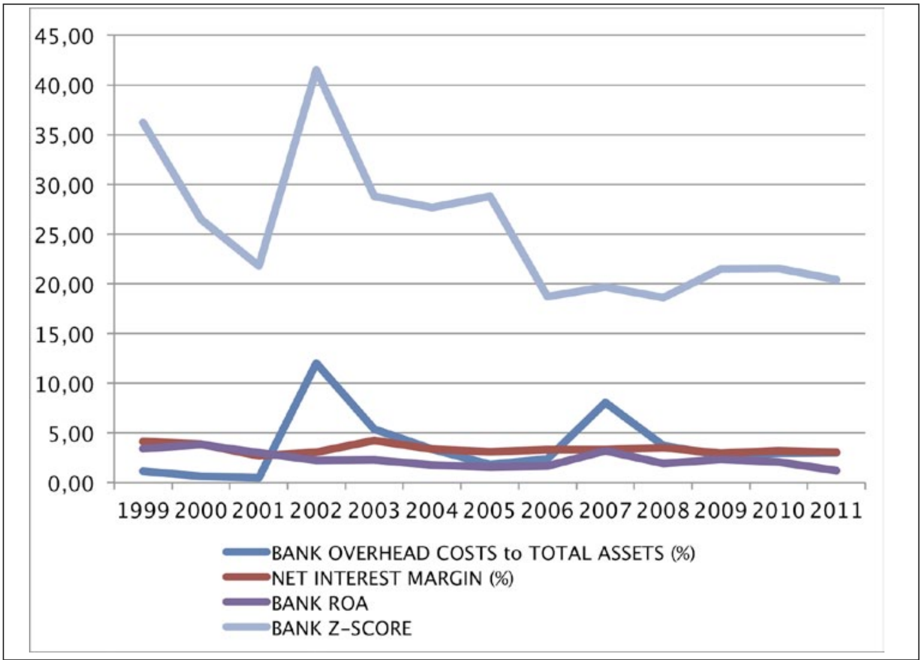
4.8 OTHER BANK PERFORMANCE MEASURES

Since financial depth ratios tend to measure the size of the financial intermediary sector, it is necessary to accommodate other financial system measures that can be an accurate proxy for the functioning of the financial system

(Levine, 2003:32). Therefore a number of other indicators are employed in this section to assess the profitability, efficiency and performance of the banking sector in Mauritius.

To assess profitability, operating efficiency and the overall performance of Mauritius banks, a look at the most recent trends in the net interest margin, bank overhead costs to total assets, the bank average return on assets (Bank ROA), the bank z-score (Figure 8), the bank concentration, the return on equity and the bank cost to income ratio are discussed herein.

Figure 8: Bank Performance Indicators



Source: Financial Structure Database- Beck, Demirgüç-Kunt, & Levine (2000, 2010) Čihák, Demirgüç-Kunt, Feyen, and Levine (2012).

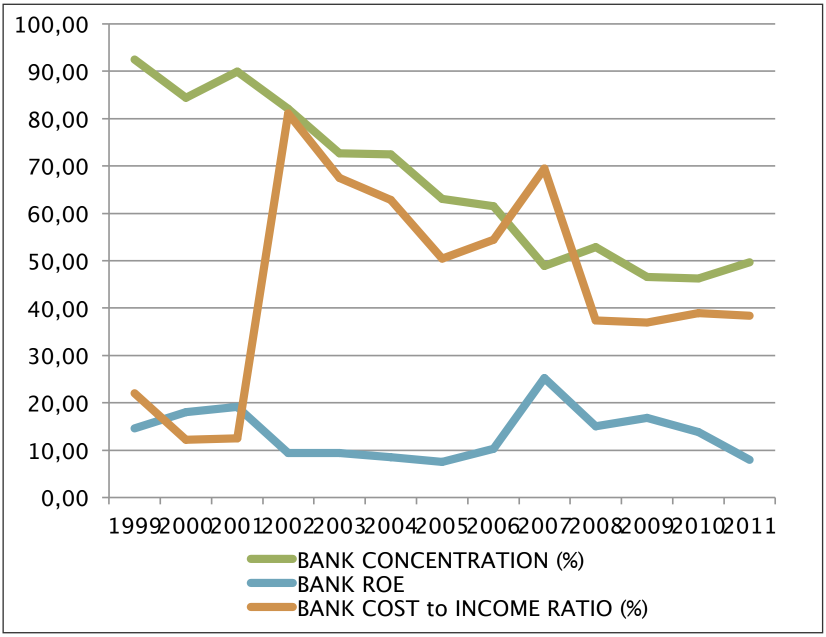
A look at the net interest margin, the ROA: the overhead costs to total assets and the z-score show that banks in Mauritius are existing in a relatively stable market as compared to most other African countries (Moyo *et al.*, 2014: 19). Net Interest margin is the difference between interest income and interest expenses expressed as a percentage of average total assets. The ratio identifies the major income generating capacity of the banks, i.e. the ability to use assets to generate income (the core earnings capability of the bank). In addition, the net interest margin can also be used as an indicator of the financial sector's competitive structure, although many factors may influence interest margins

(Beck *et al*, 2000:601).

On the average, the net interest margin for the Mauritius banking sector has remained largely stable due, most likely, to the rising share over this period of treasury bills in total assets and the increased incidence of sight deposits that cannot be used to generate interest income. Implications on the banking sector's competitive structure from the stable net interest margin seem to point to an oligopolistic competitive structure in which banks are more inclined to non-price (interest rate) competition. In an oligopolistic market, the market is made up of a few large banks; because the size of the banks is very large, its actions will affect the market conditions due to the fact that in the oligopoly market, there are a small number of banks and each bank is large enough that its actions will affect the market conditions. However, in other cases of oligopoly, they will be lead firms or, in this case, banks that dominate the market despite the existence of many other small banks. Therefore, the structure in the market (the existence of dominant banks) tends to determine the conduct of the whole banking market and inherently the performance of the industry. A look at the concentration level is required to validate the existence of oligopoly and its extent thereof.

The z-score, reflects the extent to which banks are able to absorb losses and is, therefore, an indicator of banking stability, is the ratio of return on assets plus capital-asset-ratio to the standard deviation of return on assets. The higher the z-score, the more stable the bank. The z-score shows that Mauritian banking sector is more stable than that of South Africa and Botswana because it averages 20% while those of South Africa and Botswana average 8.1% and 14.1%, respectively for the same period.

Figure 9: Other Bank Performance Indicators



Source: Financial Structure Database- Beck, Demirgüç-Kunt, & Levine (2000, 2010) Čihák, Demirgüç-Kunt, Feyen, and Levine (2012).

The stability of the Mauritian banking sector is also proven by the unchanging trends on the average of the bank overhead costs to total assets and the bank average return on assets.

Financial development can also be analysed using measures of concentration in the banking system. It is assumed that a less concentrated (and presumably more competitive) banking system reflects a greater level of financial development which is better suited to serve the diverse and emergent needs of a growing economy. In addition, access to financial sector products can be either improved or decreased by, among other things, the concentration levels in the economy. For example, a very high concentration of banks that are very much against lending to small to medium enterprises (due to they being a high risk client than household consumer credit) might stifle the growth of domestic companies and hence economic growth. However, the effect of concentration levels in the financial sector is also highly dependent on other aspects of the economy, including the economy's development plans, the banking environment being promoted and the openness of the financial sector to international players.

The degree of concentration in the banking sector as measured by the three-bank concentration ratio, which measures the market share of the largest three banks in the economy, shows a noticeable decrease from 92% in 1999 to 50% by 2011. The decreased trend in the concentration ratio can be explained by the increased entry into the banking sector by many banks that seem to have diluted the market. The opening of new banks appears to have induced increased competition and efficiency. The bank cost to income ratio shows a rather volatile trend that has eventually capsized at below 40% levels from 2008 onwards showing greater efficiency than in the latter years. Therefore, the entry of these new commercial banks has made a significant impact on the market structure and the competitiveness in the banking sector.

5. CONCLUSION

The aim of this article was to provide a sequential analysis of financial reforms and banking sector development in Mauritius. In addition, an analysis of the resultant changes (due to reforms) in the banking sector of Mauritius is discussed. Though the existence of the banking sector dates back to 1810, the institution of major financial reforms was made in the mid- 1980s. These reforms led to the opening up of the financial sector to both domestic and international investors. In addition, the use of repressive financial sector polices was reduced as the Bank of Mauritius adeptly moved away from direct policy instruments to indirect ones. Notable for Mauritius is the success of her economic reforms. The success can be attributed to controlled and well-maintained fiduciary management principles and other intra-industry policies (ISI, EPZ, etc.). In addition, the maintenance of a stable macroeconomic environment, a strong prudential regulation and supervision landscape in Mauritius are some of the factors that enabled financial development to be a success. The institution of financial reforms has resulted in a number of significant benefits for the economy. For example, before significant financial reforms were put in place, two banks, the MCB and the State Bank of Mauritius, mainly dominated the financial sector of Mauritius. Eventually, with the gradual liberalisation of the sector, the level of bank concentration has decreased from above 90% levels before year 2000 to just below 50% in 2012. Therefore, there has been a marked increase in bank competition which has in turn led to greater efficiency and a higher than average z-score. Moreover, financial development in Mauritius has been characterised by major diversification of products and services amongst banks as banks also ventured in non-bank financial services. Products and services offered include leasing, factoring, asset management, private equity, stockbroking, registry, investor services business, specialist services in cross border transactions, specialist finance and lending, trustee and fiduciary services, Islamic banking, remittance services, wealth management and private banking, showing increased financial widening and deepening. Even though the development of the banking sector in Mauritius has been more of a success than a failure, there is need to take note that banking sector development is only a partial solution to complex development issues and it can only be effective when it works in unison with other government interventions. For example, with the advent of the 21st century, it appears the level of gross domestic savings as a percentage of GDP have declined. This gives rise to a number of research questions that were not specifically answered by this research. Given that the Stock Exchange of Mauritius was automated, has the increased efficiency (if inherent) resulted in decreased savings? How does the capital market interact with the banking sector? Further research might need to be employed to evaluate the pros and cons of gradual financial sector liberalisation and the big-bang approach with special focus being given to economies in Africa.

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TIJEK FINANCIJSKE REFORME I RAZVOJ BANKARSKOG SEKTORA NA MAURICIJUSU

SAŽETAK RADA:

Rad predstavlja tijek financijske reforme i razvoj financijskog sektorana Mauricijusu.

Uz pomoć odabranih podataka *World Development Indicators and the Financial Structure* baze podataka rad daje analizu promjena koje proizlaze iz reformi bankarskog sektora na Mauricijusu tijekom post financijskog reformskog perioda. Povećani financijski razvoj najbolje se može objasniti povećanjem osobnih kredita, depozita, razvojem financijskih proizvoda te povećanom konkurentnošću banaka. Održavanje stabilnog makroekonomskog okruženja, jake bonitetne regulative te nazdora neki su od glavnih faktora koji su omogućili uspješan razvoj financijskog sektora na Mauricijusu.

Ključne riječi: *financijski razvoj, financijska reforma, Mauricijus, monetarna politika*