

**DEVELOPMENT OF THE SOUTH AFRICAN MONETARY BANKING  
SECTOR AND MONEY MARKET**

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## **ABSTRACT**

This thesis presents a theoretical analysis of developments in the South African monetary banking sector and money market. In the first section, evolution of the political, social and economic environments over the past few decades are discussed to provide the reader with an idea of some factors responsible for the underdeveloped nature of this market. It has been argued that the domestic political and economic landscape is relatively stable. Nevertheless, factors such as Zimbabwe's political and ensuing economic turmoil, coupled with numerous financial crises in other developing nations have had negative consequences on domestic financial market development and economic growth. The current state of monetary policy is also analysed, within the economic environment, and various policy considerations have been put forth concerning the inflation targeting policy.

The thesis then goes on to scrutinise the statutory and institutional environments within which the monetary banking institutions operate. Recent changes in the regulations governing the operations of these institutions are identified, together with the consequences of such laws on banking institutions and possible amendments have been suggested. In particular, a system of Asset Based Reserve Requirements (ABRR) has been recommended, in place of the current cash reserve requirement, to ensure regulators create a level playing field in the financial sector. The system can also provide authorities with the necessary control required to direct funds to the most desirable sectors of the economy. Development of the interbank market and the effect of reduced banking competition on the efficacy of the South African Reserve Bank's refinancing operations and inflation targeting policy are also considered. Finally, the thesis analyses some effects of financial development on the South African economy, and whether it is in the best interests of the country to pursue financial reforms with such vigour. While financial development may bring South Africa closer to international standards of best practice, the timing and extent of the reforms will be critical to guarantee success.

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# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND AND RATIONALE FOR RESEARCH

It is a well known fact that the foremost purpose of financial markets in any nation, and between nations, is to facilitate the transfer of funds from economic units with no immediate productive needs (surplus units or lenders) to units with immediate needs that cannot be financed without borrowing (deficit units or borrowers). Without formal establishments to assist this process, it is unlikely that borrowers and lenders would be able to reach a mutual agreement with regards to the terms of the transaction. By providing this conduit, financial markets ensure that economic resources are allocated in the most productive manner and wasteful or inefficient enterprises are starved of this valuable resource.

The evolving composition and nature-of-business of institutions that make up the *monetary banking sector* creates an environment that is highly competitive and therefore difficult to police and safeguard against risks. These institutions, namely, the central bank and private sector banks, play a pivotal role in the economy and therefore regulation of the sector is constantly evolving and extremely comprehensive. However, there have recently been a number of small bank failures in South Africa, while some of the larger banks continue to increase their market shares through mergers and acquisitions. Some of the apparent causes of these unsettling events will be explored during the course of this thesis, together with the regulatory responses and the effect on the overall liquidity and activity in the domestic money market.

The *money market* can be broadly defined as the set of arrangements that facilitate the transfer of short-term, wholesale funds from surplus to deficit economic units. In addition, it encompasses the interbank market, which is of immense significance since its

proper functioning enables the South African Reserve Bank (SARB) to exercise considerable control over the money market shortage (i.e. the extent of borrowed cash reserves) and short-term interest rates. According to the Bank for International Settlements (BIS, 2001b: 2), “A well functioning interbank market will deliver the desired allocation of bank reserves within the banking system at the rate decided upon by the central bank.”

Goedhuys (1982: 70) states that the money market is central in mobilising temporary surplus funds and providing information about the position of market participants. Additionally, by creating a demand for short-term debt instruments the money market institutions improve the central bank’s capacity to influence the availability and price of credit. Thus, without a correctly functioning money market it will become evident that the monetary policy actions taken by the SARB will not be entirely effective. The above definition hints at the vital role played by the SARB in the money market and it is for this reason that the following discussion elucidates the relevant functions of a central bank, including its monetary policy tools, in great detail.

Sen (1967: 26) suggests that the existence of a developed money market assists, but is not essential to the functioning of the central bank, by providing a quantification of liquidity and credit growth essential for policy formulation. The depth of the market, i.e. capacity, amount of activity and range of operations, needs to be sufficient to absorb any open market purchase or sale of securities conducted by the Bank. This is done to influence the level of cash reserves held by commercial banks and to manipulate short-term interest rates. Finally, the mere existence of such a market may strengthen the position of the central bank since it has the advantages of discouraging domestic capital outflows to foreign money markets and attracting foreign capital to the country.

Thus, a central bank is not only faced with the task of coordinating the activities of institutions in the money market, but simultaneously creating an environment which encourages participants to fully embrace the domestic market. This will enable the Bank

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to influence conditions prevailing in the economy and force markets to follow suit, through the use of various tools at its disposal.

The money market can also be used by individuals and institutions with surplus balances as a temporary investment alternative to the capital markets (i.e. debt and equity), when the returns in these long-term markets are relatively unfavourable. However, there is only limited participation in the market by individuals which may, to some extent, be due to the fact that it deals with wholesale funds (i.e. denominations of one million Rand or more in South Africa). Thus ordinary individuals, including those that understand the dynamics of the market, are not able to lend or borrow in such large denominations. This is somewhat true, but it must be stated that individuals with much smaller amounts of capital to invest may gain access to money market rates through money market funds and instrument splitting facilities. Borrowers must also be of adequate status and have impeccable reputation to participate in this market, in order to ensure that securities are acceptable to lenders. These borrowers and lenders together with the various activities undertaken in the money market will be discussed in more detail in subsequent chapters.

For any market to function properly borrowers need to be assured of the fact that the securities purchased can be disposed of whenever the need arises. Thus, in addition to a wide variety of primary market instruments to choose from, a developed and extremely liquid secondary market must exist before corporations and individuals can be persuaded to part with their excess funds. Faure (2002a: 26) writes:

“The liquidity of markets depends on many factors such as the amount of securities in issue, the investment status which the instrument may have, the preparedness of the issuer (or an agent) to make a market in the instrument, the existence of speculators who are prepared to take ‘positions’ in the instrument, etc.”

Moreover, a highly organised banking system is an essential element of a developing money market since these institutions form the heart of the economy, although the mere

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existence of the former does not always lead to an active latter. Any strain or surplus in the resources of the banks will initially be felt in the short-term rates of the money market assuming the existence of appropriate instruments, funds and considerable liquidity in the form of a large number of dealers and market makers. Furthermore, the organisation of the market should be integrated in such a way that changes in the conditions prevailing in competing sub-markets, i.e. Treasury bill market, government bond market, etc., are reflected throughout the entire market. Sub-markets which are not integrated will hinder the operations of the central bank since the influence exerted on one element of the market will not necessarily filter through to the other elements (Sen, 1967: 32).

## **1.2 GOALS OF THE RESEARCH**

This thesis sets out to dissect the monetary banking sector of South Africa in an attempt to identify weaknesses in its structure or implementation, if any such weaknesses exist. In doing so, the author hopes not only to provide curative recommendations to the relevant authorities, but also to enhance the reader's understanding of the dynamics underlying the sector and the consequence of its improper functioning on the domestic money market.

It will become clear that there are numerous factors responsible for the South African money market being less active than it would be under ideal conditions. Some of these resulting from deficiencies in the market structure, some as a result of policies and regulations set down by the authorities and others simply as an outcome of human psychology. It is important to point out, that while this thesis is not written with the objective of criticising the current policies and authorities, it is meant to serve as a critique of the overall market. Thus, all the relevant aspects are considered together with their historical developments.

This dissertation is written with the broader objective of providing the South African Reserve Bank with recommendations on how best to approach the problems identified in

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an attempt to increase attractiveness of money market securities while maintaining the stability of the monetary banking sector.

### **1.3 METHODOLOGY**

The research is primarily literature based and explores different views of the state of the overall economy and banking sector. Secondary data from various sources is used to assess different aspects of the study. For example, changes in the SARB's repo rate and the resulting changes in commercial bank call rates, Treasury bill and Bankers Acceptance rates will help in measuring the effectiveness of monetary policy decisions. In particular, efficiency of the SARB's accommodation rates and open market operations will be considered. This will address the issue of how a developed money market facilitates central bank control and shed light on the importance of such a market in a developing nation like South Africa.

Various policy and financial reports containing economic and statistical information (including annual reports from current and past administrations of the South African Reserve Bank) will be a further source of information during the course of this research. These will help in understanding the issues from the public as well as the private sector point of view.

### **1.4 STRUCTURE OF THE DISSERTATION**

This dissertation consists of four chapters. *Chapter 1* presents a brief introduction to the topic and identifies the goals of the research, the research methodology and outlines the structure of the following chapters.

*Chapter 2:* The author begins the discussion on a broad basis, analysing the economic, political and social environments within which the banking establishments operate. The

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current state of monetary policy is also discussed with particular emphasis on inflation targeting, the balance of payments and government intervention.

Then the statutory setting is examined with a brief look at the different supervisory bodies and the case for a single financial regulator is explored. The regulation of private sector banks is detailed next and the shortcomings of the current system are identified. The final part of this section outlines the Parliamentary Acts governing the South African Reserve Bank and national government.

Finally, the institutional environment, i.e. the central bank and private sector banks, is discussed together with various functions that affect the money market. Secondary data is used to gauge the efficiency of monetary policy tools used by the SARB. Private sector banks and the development of the domestic money market are also covered, together with the many factors responsible for the underdeveloped nature of the money market.

*Chapter 3:* Having explored all the relevant aspects in the previous chapter, this section of the thesis attempts to address some of the major deficiencies documented. Regarding the political and social issues, some possible solutions to concerns over privatisation, labour market rigidities and HIV have been put forth. Discussion on the economic environment focuses on inflation and inflation targeting, while the argument on statutory issues looks at the possibility of an asset based reserve requirement to replace the current cash reserve requirement. The proposed system has been put forth to ensure that the authorities create a level playing field in the financial sector.

Finally, some policy considerations have been developed under the institutional environment to ensure that the disadvantages of increasing competition in the financial sector are not ignored. The level of competition in the banking sector is examined and the case for the introduction of specialised financial institutions is supported.

*Chapter 4:* This chapter presents a conclusion of the study and summarises the findings in brief.

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## CHAPTER 2

# LITERATURE REVIEW AND ANALYSIS OF THE BANKING SECTOR AND MONEY MARKET

At the outset, it must be stated that the banking sector and money market cannot be discussed in isolation. There are many factors, social, political and economic which influence *all* financial markets, directly or indirectly, and thus must be given attention. Therefore, this chapter is sub-divided into three main sections. The first part looks at the political, social and economic environments within which the banking sector and money market have developed. The current state of monetary policy is also covered in the discussion on the economic environment. Subsequently the statutory environments of the private sector banks and South African Reserve Bank are analysed and some weaknesses have been identified. Finally, the institutional environment is discussed and the various functions of the central bank and private sector banks are detailed along with the consequences for the money market.

### 2.1 POLITICAL, SOCIAL AND ECONOMIC ENVIRONMENTS

The overall environment within which individuals and institutions must operate is undoubtedly one of the most significant determinants of investment decisions taken. In the absence of a stable environment, domestic and foreign investors will find it difficult to make investment decisions and as a result, will be reluctant to devote the capital resources necessary to develop the markets to their full potential. There are various factors to be considered when determining the state of the economic environment including the monetary and fiscal stance of the authorities, inflation, the level of foreign and domestic investment, exchange controls, the statutory environment and the credit risk status of the country. Furthermore, the domestic economy is largely affected by developments in the rest of the world and therefore the international environment will be

given appropriate consideration where necessary. Before analysing some of the above factors, i.e. those relevant to the South African money market, brief consideration must be given to the country's political and social developments during the course of the last century which had an effect on the entire economy and thus all financial markets.

### **2.1.1 Political environment**

Although the current political environment in South Africa can be considered as relatively stable and conducive to production, consumption and investment, this has not always been the case. During the years of apartheid, sanctions and general negative sentiment toward South Africa limited capital flows to the country and encouraged the emigration of many foreign investors. These developments had a severe impact on the country's balance of payments, given that capital only flows to economies experiencing stable political and economic growth conditions. The large capital outflows which resulted produced a hefty deficit on the capital account of the balance of payments (as reflected in current account surpluses), and eventually led to a rescheduling of South Africa's foreign debt. As can be expected, in addition to having a negative effect on domestic growth and limiting the development of local financial markets, these events further reduced the attractiveness of South Africa as an investment destination (Faure, 2002e: 9).

Nevertheless, since the release of Nelson Mandela and the empowerment of the African National Congress (ANC), South Africa has witnessed the rapid growth of a new culture of political democracy and social equality. Together with a new governing structure and constitution, South Africa also enjoyed increasing access to foreign markets and started experiencing capital inflows, which encouraged the development of local financial services. A further increase in foreign trade can be expected during the next few years with a corresponding increase in foreign competition for domestic market share (Mboweni, 2003: 3), ensuring local companies maintain a high standard of service by adopting international best practices. The higher quality of domestic products and services will help guarantee that local firms remain competitive, boost exports and force

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the government to maintain an environment conducive to production, in effect strengthening the economy's backbone.

As already mentioned, the political and economic environment in other countries can also have a major impact on domestic growth and investment. For example, negative circumstances in neighbouring nations can lead to capital outflows from domestic (i.e. South African) markets even if the authorities have sound policies in place. This was observed recently (at the end of 2001 and beginning of 2002) during the Zimbabwe "land reform" process. The liquidity of South Africa's markets certainly contributed to the huge capital outflows experienced during this period, but according to Faure (2002e: 11) the overwhelming factor was simply negative investor sentiment towards the region.

Factors like those mentioned above, affect the money market through changes in interest rates (i.e. by affecting the demand and supply of credit), or simply by reducing the attractiveness of the instruments in issue. Borrowers will be discouraged by the decreased price and higher rates on securities, resulting in reduced trading volumes and lower liquidity in the market, while lenders will be hesitant to grant new loans due to higher risk exposures. Consequently, the financial resources required to encourage the development of the money market will not be readily available.

### **2.1.2 Social issues**

Although South Africa has overcome a number of major political and social barriers in the past, there remain some concerns, mainly social issues, that the authorities need to address before financial markets can be fully embraced. The factors listed by Faure (2002e: 17) include:

- Violent crime, lack of security and poverty.
- Inefficient justice system and corruption.

- Corrosion of the skills pool (i.e. brain drain) and poor human resource development due to increasingly high mobility and mortality of labour. The skills pool is no longer a domestic factor but rather a global one with individuals seeking the highest remuneration and best quality of life. The statistics are depicted graphically in figure 1(a).
- High incidence of HIV/Aids. This is projected to have an escalating effect on all the skills groups in the years to come, as shown in figure 1(b) below.
- Employment equity laws, job creation and black economic empowerment.
- Zimbabwe's political and economic crisis (rough neighbourhood syndrome).
- Exchange controls limit the extent of foreign assets that South African investors can purchase and discourage foreign participation in local markets.

Figure 1(a)

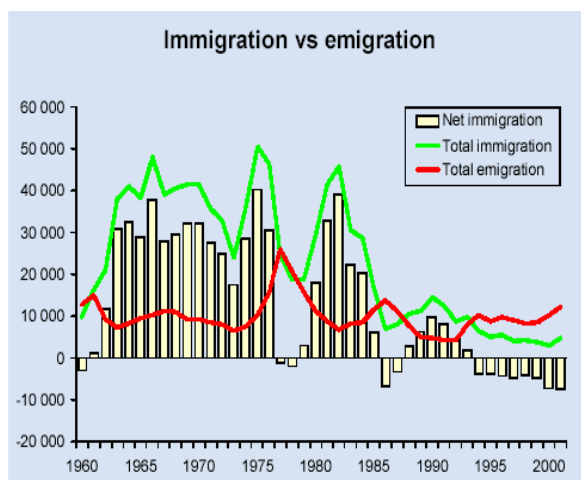
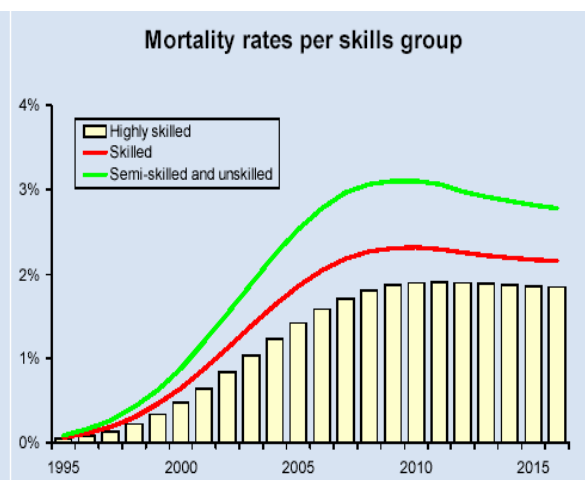


Figure 1(b)



(ABSA, 2002c: 4)

The erosion of South Africa's skills pool is an important factor restraining growth and development prospects for the future. Figure 1(a) shows that from 1962 to 1985 there had been a net inflow of individuals into the country, ranging between 10,000 and 40,000 a year, with the exception of 1977 and 1978 when there was a small outflow. Thereafter, 1986 and 1987 witnessed a net emigration followed by six years of net immigration.

However, since 1993 the flow of individuals has been out of South Africa and this is expected to continue until most of the factors listed above have been given proper attention. Figure 1(b) displays the steady rise in mortalities from 1995 onwards categorised into the various skills groups. The rate of increase in mortalities is expected to peak around the year 2010. As can be observed, the rate of growth is highest in the semi skilled and unskilled group, which can be largely attributed to lack of proper education and limited access to essential medical support. The rising death rate coupled with an increase in emigration will have a destructive effect on the labour market, reducing the size of the labour force and therefore increasing unit labour costs.

Growth in labour productivity has also been on the decline since the third quarter of 2000 (SARB, 2003c: 15), due to a number of factors including a lack of proper education and training, outdated systems and machinery, socio-political disturbances, increased and prolonged periods of poor health due to HIV/Aids and a reduction in real income for those not protected against rising inflation. High income taxes are further discouraging labour productivity with resulting household savings being extremely low; 0.3% of disposable income in 2001 as compared to 12% in the mid 1970's; effectively eating into money for investment purposes and increasing household debt (ABSA, 2002c: 20). The decline in the availability of skilled labour was also cited by the Bank Supervision Department as a prohibiting factor in the effective implementation of the new Basel Capital Accord (SARB, 2000b: 19).

The government has established a new department tasked with providing incentives for firms that undertake the training of employees. This government branch, labelled the Sector Education and Training Authorities (SETAS), pays cash-back bonuses and tax reductions to firms willing to take on and train recent graduates and unskilled individuals. The efficiency of labour was also addressed in parliament resulting in appropriate amendments to the Labour Relations Act and Basic Conditions for Employment Act during the course of 2001 (SARB, 2002a: 22).

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### **2.1.3 Economic environment and monetary policy**

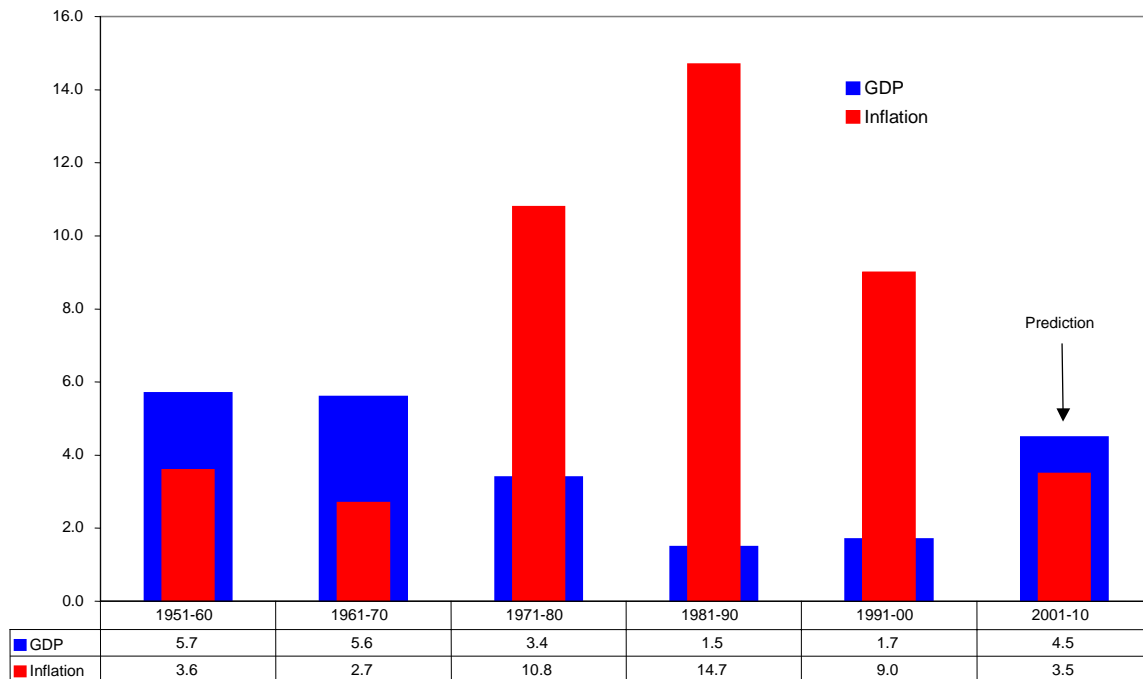
The economic environment in which financial markets operate must also be stable and conducive to the efficient allocation of resources. When considering the money market, the most important domestic factors to reflect on include inflation, monetary developments, monetary and fiscal policy, the state of government finance and economic policies. The SARB, together with a number of domestic and international regulatory bodies, endeavours to monitor and control the activities of the various institutions and individuals active in the domestic market. This is done to ensure that the policies adopted are appropriate for the current state of economic activity and at the same time guarantee the effectiveness of such policies.

#### **2.1.3.1. Inflation and monetary policy**

Most economists will agree that low inflation is necessary for high and sustainable economic growth and this argument is supported by evidence from a number of developed and developing nations. The following problems associated with high inflation have been mentioned by Mboweni (2000: 7) and are substantiated by figures 2 and 3 below.

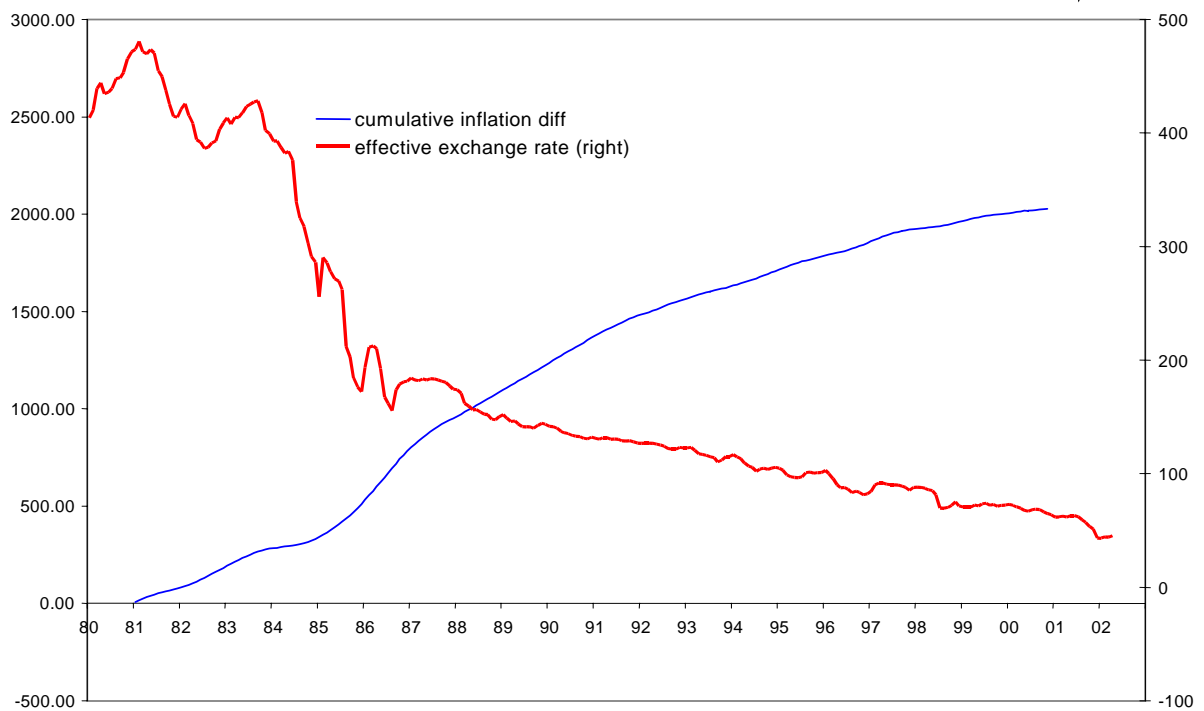
- High inflation discourages savings, prejudices salaried and low-income workers and pensioners.
- High inflation leads to the depreciation of the domestic currency and results in lower output (GDP).
- High inflation reduces a country's competitiveness in international trade.
- High inflation distorts the efficient allocation of resources and results in an unequal distribution of income and wealth.

**Figure 2: South African GDP and inflation (in decades)**



(Faure, 2002g: 6)

**Figure 3: Effective exchange rate and inflation differential (with trading partners)**



(Adapted from: Faure, 2002e: 12)

Figure 2 shows that during the 1950's and 60's when South Africa's inflation rate was between 2.5 and 2.3%, GDP was just below the 6% level. However, once inflation started to escalate, GDP fell considerably. During the 1970's and 80's, South Africa's inflation rate averaged around 13% with GDP falling to just above 3% in the 70's and later to below 2% in the 80's. The negative effect of this high level of inflation on the country's effective exchange rate can be observed on figure 3, where the value of the South African Rand suffered greatly between 1980 and 1987. This trend is especially pronounced between 1985 and 1987. Nevertheless, since the early 1990's inflation has been gradually brought under control and as a result GDP is slowly recovering and the exchange rate is stabilising.

There has been much debate over the causes of inflation but ultimately these can be categorised into cost-push or demand-pull inflation. The SARB (2004) states that cost-push inflation is a result of an increase in the production costs facing firms, which necessitates higher prices to maintain profit margins. This increase in costs could be due to:

- Rising prices of raw materials.
- Higher taxes imposed by governments.
- An increase in the cost of labour.

These factors would cause a firm's aggregate supply curve to shift inwards raising the general price level. On the other hand, demand-pull inflation is caused by an increase in aggregate prices due to an excess of aggregate demand (Goedhuys, 1982: 118), shifting the demand curve outwards. This increase in aggregate demand could be caused by a number of factors including:

- A depreciation of the domestic currency, leading to an increase in exports and a fall in imports.
  - A rapid growth of the money supply.
  - Rising consumer confidence.
  - A reduction in taxes.
- (SARB, 2004)

Goedhuys (1982: 120) states that the use of money for economic transactions along with an introduction of more money into the economy are essential for inflation to occur. On the other hand, inflation may be the result of an increase in the rate of circulation of the existing money stock. Mishkin (1984: 2) states that inflation, whether cost-push or demand-pull, confirms Milton Friedman's conclusion that sustained inflation is always accompanied by a high growth rate in the money supply, i.e. "Inflation is always and everywhere a monetary phenomenon" (Friedman, 1968: 39).

Gidlow (1998: 1) defines *monetary policy* as a set of arrangements that the relevant authorities, specifically the Monetary Policy Committee (MPC) of the SARB, formulate in order to achieve certain goals within an economy. In attempting to accomplish these goals, the appropriate use of interest rates to influence domestic expenditure and output is currently the major tool at the disposal of these monetary authorities. In recent times, it has become a widely acknowledged fact that the ultimate aim is to achieve stability in the monetary standard (i.e. currency) of the country, in other words, an economy where inflation is insignificant enough to be ignored in the decision making process. On 6 April 2000, the SARB announced that it was adopting a fresh monetary policy approach that targets price stability directly. The governor explained:

"The Reserve Bank has therefore formally adopted an inflation-targeting monetary policy framework. This means that the monetary authorities are now targeting the rate of inflation directly instead of following the previously applied 'eclectic' monetary policy approach in which intermediate objectives still played a prominent role."

(Mboweni, 2000: 6)

Although the constitution identifies price stability as the major mandate of the SARB, by formally clarifying the stance of monetary policy, i.e. establishing *policy transparency*, the governor and his team aimed to simplify the planning decisions of the private and public sectors. Transparency and communication to the public have been stressed by

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many authors (e.g. Mishkin and Posen, 1997: 94; Santos and Schaling, 2000: 11; Jonsson, 1999: 16) as essential characteristics of an inflation targeting policy.

Accordingly, an inflation target range of between 3% and 6% was set for 2002. This range was introduced to provide economic agents with sufficient information on the objectives of the monetary authorities and the general direction of interest rates. Nevertheless, the MPC still exercised discretion in implementing policies and therefore retained a degree of uncertainty and variability. The MPC states that the inflation targeting strategy has prevented an inflation spiral which would have been imminent, given the economic tribulations of 2003 (SARB, 2003c: 11).

The Bank observes trends in a number of variables such as money supply growth, expansion in bank credit, wage adjustments, exchange rate developments and the price of imported goods. These are all considered to be potential causes of inflation and therefore the Bank needs to consider which of the above are most prominent in the economy at a point in time and devise policies accordingly (Mboweni, 2002: 4).

A target of between 3% and 6% has been set for 2004 and 2005, which will require moderately high interest rates to curb credit expansion and money supply growth. One of the positive outcomes of this new approach has been the increased *interest rate stability* witnessed during the oil price shock in 2000 and exchange rate developments during, and at the end of, 2001. It is believed that this interest rate rigidity will be a major contributing factor towards sustained economic growth in the future (SARB, 2003c: 11).

### **2.1.3.2 Limitations of inflation targeting**

Some authors (ABSA, 2002a: 3) argue that inflation targeting provides ambiguous short-term objectives, while placing too much emphasis on the long-term inflation target. Also, it is feared that by pursuing the inflation target, the policy makers may neglect factors such as output growth and employment. The SARB (2000a: 1) states that while there is unquestionably a trade-off between inflation and output in the short-run, a low level of

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inflation will ultimately create an environment for sustainable growth. Furthermore, the SARB (2000a: 1) states that the Bank does not believe there is a trade-off between inflation and unemployment or growth in the long run and that the short-run costs should be weighed against the potential negative effects of not acting at all. This view is echoed by Mishkin and Posen (1997: 12) and Jonsson (1999: 6).

A further quandary associated with this policy in developing countries is the appropriate choice of the price index to target (Santos and Schaling, 2000:14). In this regard, the South African authorities have elected to use the CPIX, which excludes mortgage interest costs, with allowance being made for severe supply-side shocks. Use of the CPIX has been criticised due to the fact that it includes energy, food, medical and administered prices which are seen as cost-push factors (ABSA, 2002a: 3). However, Mboweni (2000: 7) declares that the exclusion of these items from the index will result in a measure that is unrealistic from the consumers' point of view, although easier to attain. Mishkin and Posen (1997: 95) argue that the exact choice of an index is not important, as long as the calculation of the "target series" does not compromise policy transparency due to its complexity.

There is also some agreement between the Bank and National Treasury regarding the timing and extent of government borrowing. This is necessary to ensure that the purchase and sale of government securities coincides with the market's requirements of monetary expansion or contraction. For example, if the SARB believes that growth in the money supply needs to be restrained, the SARB can instruct the Treasury to sell a specified quantity of assets to the private sector.

According to Crook (1992: 3), discreet management of government borrowing is an essential element in maintaining a low level of inflation. A concern that a number of developing economies need to address is that of high and sometimes escalating government debt, which results in increased debt service payments and high real interest rates, with a corresponding effect on the money supply. The costs of servicing are compounded by the higher interest rates and additional borrowing could eventually lead

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to a “debt trap”. On the other hand, if the deficit is financed in the domestic capital market by issuing instruments, the government is said to “crowd out” the private sector. Goedhuys (1982: 121) argues that the pressure on governments to maintain low levels of unemployment and low taxes is one of the main reasons behind inflationary financing. This source of inflation can also be seen as a tax on personal incomes that are not protected against the rising prices.

During the 1980’s and early 1990’s, South Africa was faced with swelling levels of government debt due to a number of factors such as increased expenditure on education, welfare, housing and crime prevention. Successful budget management requires a deficit at, or below 3% of GDP, coupled with regular consultations with the central bank to ensure that the financial markets are not adversely affected (ABSA, 2002c: 25).

Unfortunately, there is also some difficulty involved in accurately forecasting economic variables, which is essential for policy development, due to the substantial lags (12 to 24 months) between implementation and outcome. This could result in inappropriate decisions by policy makers (Jonsson, 1999: 7). Goedhuys (1982: 124) similarly states that present trends in the price level may be due to monetary expansion or contraction in the past and therefore may not necessitate corrective monetary policy.

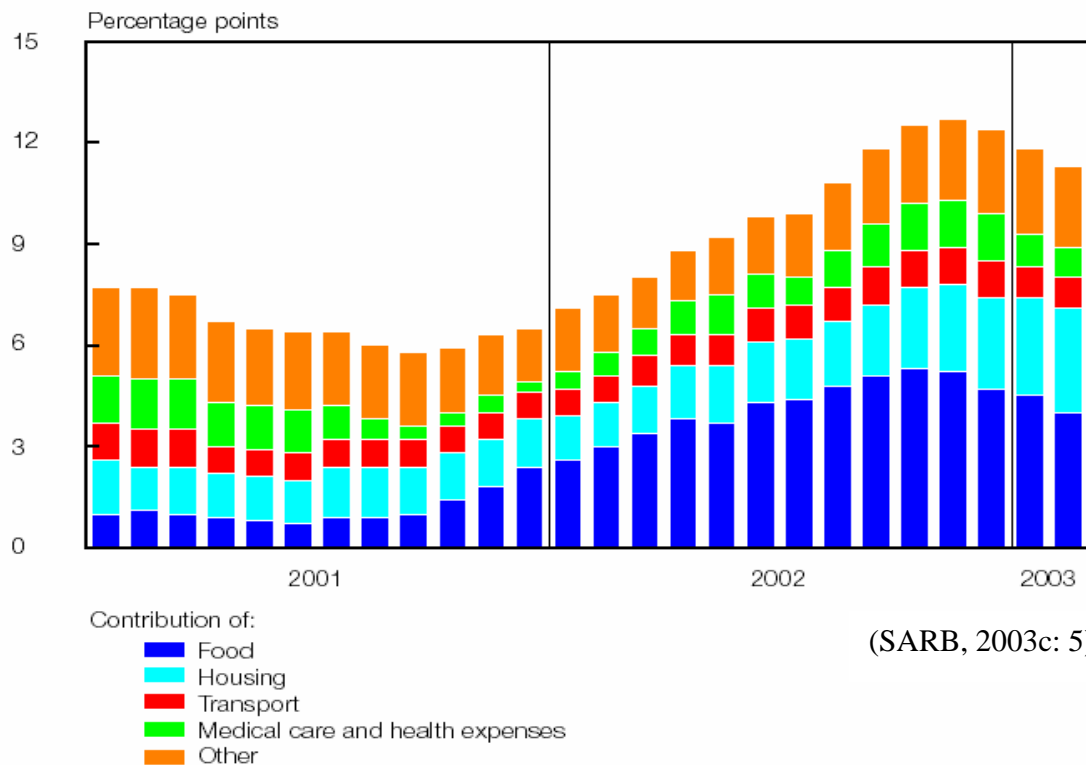
A further difficulty arises from the volatile nature of the South African Rand, due mainly to changing sentiment towards emerging markets. These shifts in the attitudes of foreign investors can result in substantial capital flows in and out of the economy, ultimately leading to changes in domestic interest rates (Theron, 1998: 50). This was witnessed at the end of 2001 when, due to various external factors, the Rand depreciated substantially resulting in an unattainable inflation target for 2002.

Finally, the delayed regional rains and consequential food shortages in some Southern African countries have exacerbated the cost-push factors mentioned earlier. This has effectively increased domestic food prices, which are considered to be a highly unpredictable component of the overall CPIX index (SARB, 2003c: 4). The following

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graph (figure 4) shows the contributing components of CPIX inflation over the past few years. Again, it is not difficult to notice that rising food prices have been the dominant factor in the index since the 4<sup>th</sup> quarter of 2001 (increasing from a 1 percentage point contribution in September 2001 to 5.3 percentage points towards the end of 2002), followed closely by ‘housing costs’ and ‘other costs’. Prior to this, housing, medical and other costs were the main components of the index. Housing costs have increased from contributing just less than 1.5 percentage points to the index at the beginning of 2001 to over 3 percentage points at the beginning of 2003.

**Figure 4: Contributions to CPIX inflation**



### 2.1.3.3 Capital flows and the balance of payments

According to ABSA (2002c: 18), apart from prudent monetary policies, the openness of an economy to international trade and capital flows is an important determinant of financial sector development. South Africa’s capital account of the balance of payments

has been very susceptible to volatile capital flows in the past resulting in an unstable currency, which was further disturbed by deficits on the current account of the Republic. ABSA (2002c: 18) suggests that government trade policy must create an environment where international competitiveness and exports are enhanced by reducing production costs, eliminating tariffs and providing incentives to develop new competitive products. A stable exchange rate is crucial to strengthen and support the current account while the capital base will benefit from an increase in Foreign Direct Investment (FDI). The global economic slowdown and depreciation of the currency in 2001 resulted in mediocre export and import volumes, from and to the Republic respectively, during the period. Nonetheless, the SARB (2002a: 22) affirms that the surplus on the trade account at the end of 2001 was significant enough to counter the deficit on the income and services account, ultimately reducing the total deficit on the current account of the balance of payments.

Mboweni (2003: 2) states that in order to encourage the inflow of FDI, South Africa needs to concentrate on the implementation of structural reform and the stability of the economic and political environment of the country and the region as a whole. In addition, Jenkins and Thomas (2002: 2) suggest that FDI decisions are based on numerous strategic factors including the availability of cheap inputs like labour and the existence of a significant market for the product in the country or neighboring region. Finally, the following have been identified by ABSA (2002c: 18) as key factors necessary to attract more FDI to South Africa:

- Abolition of exchange controls.
  - Reduction in the level of taxes and improved supply-side measures to boost production and cut costs.
  - Creation of foreign investment opportunities by selling portions of state owned assets to the private sector, i.e. privatisation.
  - Flexible labour policy with a better trained workforce.
  - Public investment in physical infrastructure, education and healthcare to develop human capital.
-

As mentioned earlier, wasteful government spending in the past resulted in abnormally high interest rates, increased debt servicing, reduced spending on social services and less effective monetary policy. A projected decrease in government dissaving and an increase in Gross Domestic Saving (as a result of decreased taxes) in the future, originally addressed in 1996 by the strategy for Growth, Employment and Redistribution (GEAR) are expected to release more funds for financing fixed capital formation projects, which in turn should attract more foreign capital to the Republic (ABSA, 2002c: 24). The actual and projected government deficit and income taxes are illustrated in figures 5(a) and (b) below.

Figure 5(a) and 5(b) show that, on average, the level of government deficit as a percentage of GDP increased steadily from 1981 to 1992 accompanied by a fall in the percentage of the total tax revenue attributable to taxes on income and wealth. However, since 1992 these taxes have been progressively increased and the government deficit has fallen considerably. The optimistic scenario suggests that the deficit will continue to fall in the years to come along with some minor downward adjustments to personal income and wealth taxes.

Figure 5(a)

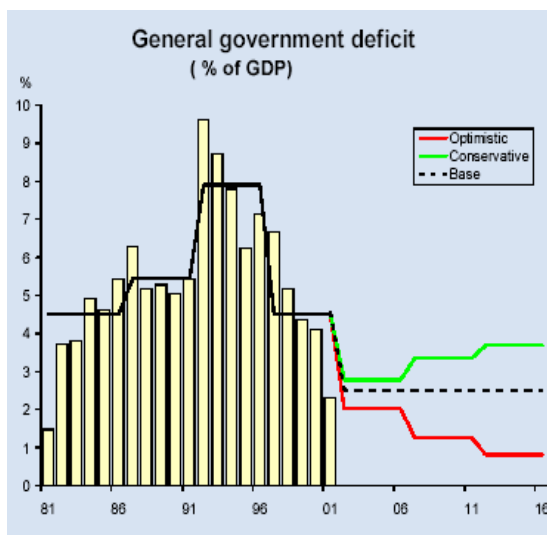
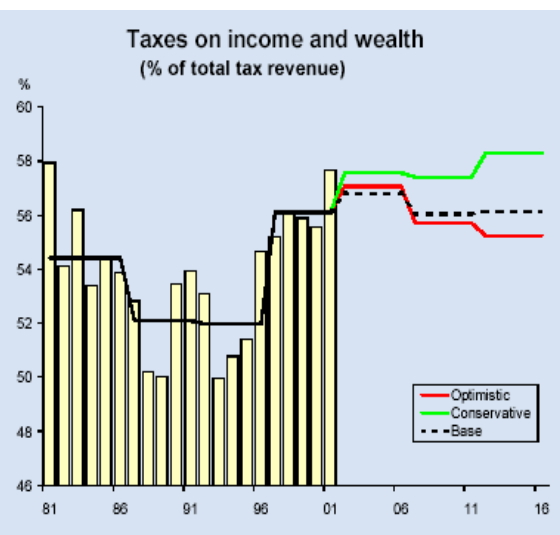


Figure 5(b)



(ABSA, 2002c: 25)

Although South Africa's fiscal policies in the past have been reckless, recent moves toward privatisation, improved revenue collection and stricter control over expenditure have reduced the governments borrowing requirements i.e. debt as a percentage of GDP. This can be seen clearly in the graph for the period 1992 to 2001. These developments have had positive effects on domestic financial markets since the government now puts very little pressure on the money supply and therefore market interest rates.

#### **2.1.3.4 Government intervention**

The extent of government intervention in the economy is another subject economists frequently disagree upon. Calitz and Siebrits (2002: 2) argue that in recent times, the so-called "freemarketeers" have been gaining considerable support due mainly to the failure of numerous government policies in the past. However, as globalisation accelerates, the role of government has matured into reducing the perceived risks and other market failures associated with increasing foreign trade. Moreover, there are a number of "fiscal reform" measures that have been adopted in other countries to address the inefficiencies and problems created by irresponsible government policies in the past including: (a) tax neutrality for individuals and institutions under similar circumstances, (b) reduction in corporate taxes to motivate private sector initiative in delivering services, (c) better allocation of economic resources and increased competition through the privatisation of state owned assets, and (d) performance contracts for public sector managers accompanied by greater accountability for the use of resources.

Governments in developing nations should be concerned with, amongst other things, the promotion of economic growth and employment, capital formation and technological progress. This requires considerable government expenditure on infrastructure and human capital while simultaneously creating an environment conducive to private investment and saving, i.e. macroeconomic and financial stability. In this regard, the South African government has yet to deal with various issues including labour market rigidities and inefficient distribution of wealth (Country watch, 2003: 29). The provision of finance for

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small businesses is another area of concern which requires immediate attention if unemployment is to be reduced (Schoombee, A., 1998).

However, the authorities are actively addressing some of the major deficiencies outlined in this section shifting attention largely towards economic growth, employment and poverty reduction. While the increasing resistance against privatisation from labour unions may obstruct the process, it is not expected to prevent the progression towards private ownership of a number of state resources. If this reassuring trend continues, it is not difficult to foresee domestic and foreign investors embracing the opportunities prevalent in the South African economy, rather than seeking distant markets as a capital and investment refuge.

## **2.2 STATUTORY ENVIRONMENT**

Every institution operating in the financial markets has certain laws and regulations governing its activities. For example, there are conventions defining each institution's business activities, borrowing powers and the securities that can be issued to raise capital. Furthermore, the characteristics of these securities and amounts that can be issued are also set down by statute. This section will attempt to highlight the important fragments of various regulations that have significance on the money market operations of the monetary banking institutions and identify possible bottlenecks created by these laws. To begin with, a brief introduction to financial regulation may be useful.

### **2.2.1 Introduction to financial regulation**

The financial sector is characterised by information asymmetries which may give rise to market failures. Market failures cannot be easily removed and thus, authorities intervene by setting down macroeconomic policies, prudential regulations and trade policies. These interventions are devised to lessen institutional failures in the market whilst ensuring that any moral hazard is not created and competition is enhanced.

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According to Faure (2002b: 12), the core objective that drives regulation is to achieve *financial stability*, due mainly to the reality that it is an important factor in attaining high economic growth and low levels of unemployment. In other words, financial stability is necessary to create an environment conducive to production, consumption and investment. Nevertheless, regulation should augment rather than obstruct the working of financial institutions and markets and therefore, must achieve its objectives in the most cost-efficient and feasible implementation. According to the SARB (2002a: 71), recent changes in South African regulation and supervision have focused on three key areas including: (a) increasing the types of securities available to investors, (b) improving the infrastructure of domestic markets, and (c) reducing the cost of financial transactions through the removal of some taxes.

### **2.2.1.1 Supervisory bodies**

The South African Reserve Bank has a Bank Supervision Department (BSD), which in collaboration with the recently established Financial Stability Unit (FSU) of the Bank, employs certain broad guidelines to create a stable financial environment in South Africa. The two departments devise “micro-prudential” and “macro-prudential oversight” measures respectively, which allow the Bank to ensure the availability of local currency in the economy, effectively supervise the business of financial institutions, provide accommodation and support to banks when necessary and encourage the development of the local financial markets to ensure processes and participants are of a global standard. Therefore, while the BSD supervises the business and risks of banks and the FSU manages the stability of the entire financial sector, it is not difficult to appreciate the importance of cooperation between the two departments (SARB, 2001c: 6).

Furthermore, the MPC of the SARB has the intricate task of implementing sound macro-economic policies to protect the value of the currency. Unfortunately, the rapidly evolving nature of financial intermediation creates difficulties in the implementation of such measures to protect against systemic failure and other risks. Thus, authorities must

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anticipate developments and respond promptly when predictions go amiss (SARB, 2001c: 7).

The financial services sector is also covered under the General Agreement on Trade in Services (GATS) of the World Trade Organisation (WTO) which governs international trade policies and foreign access to domestic markets. A major issue being debated is the process of relaxing exchange controls without increasing a country's vulnerability to disruptive capital flows, the destructive nature of which was witnessed in a number of nations during the East Asian crisis in 1997 (Hawkins, 2002: 17). Two main reasons for increased financial instability have been put forth by Palley (2000b: 181), namely:

- *Financial market deregulation* resulting in increased capital mobility.
- *Increased financial innovation* leading to the introduction of new financial products which are not affected by existing regulation.

Both of these developments have reduced the policy maker's ability to manage the creation of credit. For example, given a sudden increase in the money supply caused by a capital inflow, the Bank currently only has control over interest rates. This entails raising the repo rate, slowing the whole economy and ultimately increasing unemployment. Such a method of control also has the disadvantage of significant time-lags between implementation and results. Therefore, by the time higher interest rates achieve the desired effect of a contractionary policy, the conditions warranting such an intervention may have dissipated.

### **2.2.1.2 Single financial regulator**

There have been proposals to establish a single financial regulator to provide for more consistent development and application of policies across all financial intermediaries. The framework will attempt to address the major forms of market failures in the sector by centralising and consolidating the efforts of the currently detached regulatory bodies outside the SARB. The Bank Supervision Department (SARB, 2001d: 9) suggests:

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“The power to make regulatory policy and responsibility for supervisory oversight should vest in the same agency. The regulatory powers should include authorisation and licensing, the power to inspect and to request information and enforcement powers, such as the authority to give directions, or to suspend operations and to appoint a curator to a regulated institution.”

A “holistic” approach to regulation is also expected to improve investor protection, minimise financial crimes and reduce systemic risk. This will ultimately improve the workings of the entire system and build confidence in the domestic financial markets (SARB, 2001d: 10). It must be noted that, while a single regulator should improve the coordination efforts between the various regulatory and supervisory departments, such a development will draw attention to the need for policies that can be applied uniformly across the full spectrum of intermediaries. This issue has been addressed in the recommendations chapter of this thesis. In addition, there have been a number of “*international financial stability proposals*” as a result of numerous tribulations in the global financial sphere towards the end of the twentieth century. These proposals set out certain guidelines (formulated by standard setting bodies) for countries to adopt, so as to ensure local and global stability without hampering innovation.

The most significant of these for the banking sector are standards set out by the Bank for International Settlements (BIS) in Basel. These principles, which include norms for good banking practices and common money laundering legislation for the region, have been accepted by all the SADC member countries. Such standards have been developed with the objective of providing universal guidelines to ensure that major discrepancies in financial regulation do not occur between countries as these may hinder regional market development or translate into trade barriers. The new Basel Capital Accord, which is intended to replace the 1998 Accord, is based on three supporting pillars: (a) Minimum Capital Requirements, (b) Supervisory Review, and (c) Market Discipline. The Accord is considerably more extensive and complex than its predecessor as a result of the growing

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complexity of the services offered, but is nevertheless aimed at promoting financial stability and enhancing competition in the banking sector (BIS, 2001: 6).

### **2.2.2 Private sector banks**

Private sector banks are arguably the most important private institutions operating in the money market; therefore banking regulation is extremely comprehensive and constantly evolving. There are various statutes governing the operations of these establishments including the *Banks Act (94 of 1990)*, *Bills of Exchanges Act (34 of 1964)*, *Companies Act (61 of 1973)*, *Stock Exchanges Control Act (1 of 1985)*, the *Financial Markets Control Act (55 of 1989)* and more recently, the *Financial Advisory and Intermediary Services Act (37 of 2002)* and *Financial Reporting Bill (2002)*. Only some of these will be examined where relevant to the discussion.

#### **2.2.2.1 Banks Act**

The Banks Act (94 of 1990), which replaced the Deposit-taking Institutions Act, provides guidelines for all banking activities and aims to control the various risks that these institutions and individuals using the services provided, are exposed to. In other words, the act is intended to protect the financial system from the adverse effects of bank failures, resulting from over-exposure to certain risks inherent in the market or as a result of incompetent management. The SARB established the Office of Banks headed by the Registrar of Banks, as prescribed in section 3 and 4 of the Act, to assist with the registration and subsequent supervision and regulation of private sector banks. Licenses for carrying out banking business are issued by the Registrar after certain conditions have been met including prudential and management strategies.

The following extract makes clear why sound management of private banks is so important and awarded enormous attention by the regulatory authorities:

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“...the business of a great bank requires a great deal of ability, and an even rarer degree of trained and sober judgment. That which happened so marvelously in the green tree may happen also in the dry. A great private bank might easily become very rotten by a change from discretion to foolishness in those who conduct it.”

(Bagehot, 1873: X.10)

It is for this very reason that the Banks Act sets out various risk management principles including “*prudential requirements*” (chapter VI of the act) and “*provisions relating to aspects of the conduct of the business of a bank*” (chapter VII of the act). The act defines the business of a bank as, among other things, accepting deposits from the general public, using these funds to grant loans for consumption or investment purposes and regularly obtaining money through repurchase agreements with the SARB.

The latter, i.e. repurchase agreements, have particular significance to the money market and are elaborated in the section discussing the functions of the central bank. Furthermore, in response to the distortions and shortcomings of institution specific regulation, i.e. laws pertaining to particular institutions, regulators are now developing guidelines based on the functions provided by these intermediaries to ensure equal treatment of all firms providing particular services. Thus, while all banks will be governed by the Banks Act, commercial banks providing insurance and brokerage services will be bound by additional regulations specific to these services, similarly applicable to insurance and securities firms.

The Banks Act also governs the issue of securities like the Negotiable Certificates of Deposit (NCDs) (Section 79.1 of Act) which, according to Faure (2002a: 99) is the money market security with the “largest market capitalisation” in South Africa. The NCD, is a receipt issued for a fixed deposit made with a bank that can be traded in the secondary money market. The Act stipulates the amount of NCDs that can be issued by a bank (Section 79.2 of Act), the period of these issues and the fact that these securities do not rank as liquid assets for banks and therefore, cannot be used for repurchase operations

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with the central bank. Moreover, the BSD monitors the development of new instruments and makes relevant changes to regulation in line with international best practice.

A fitting example was the recent establishment of a working group, created by the department to address the regulatory issues related to risk mitigation in the banking sector through the use of credit derivatives. Development of this market is seen as a vital step towards improving the stability of the sector by allowing institutions to transfer risks associated with certain assets and therefore the value of these instruments is recognised and embraced in the new Basel Capital Accord (SARB, 2001d: 75).

### **2.2.2.2 Prudential regulation**

There are numerous prudential requirements enforced on the banking sector to safeguard these establishments and more importantly depositors, from institutional failure. These include the following, listed by Faure (2002b: 20):

- Minimum share capital and unimpaired reserve fund.
- Limits on exposure to certain risks.
- Requirements for sophisticated systems to manage these risks.
- Restrictions on trades or transactions which may give rise to conflicts of interest.
- Liquidity and cash reserve requirements.
- Transparency and disclosure requirements and “Fit and proper” tests to assess competence of directors of the banks, i.e. sound corporate governance.

The *minimum share capital and unimpaired reserve fund* (Section 70 of Act) is the primary line of defence against bank insolvency and systemic failure. This requirement ensures that banks hold a sufficient amount of reserves against certain issued assets and against exposure to specific risks. The new Basel Capital Accord, based on the three pillars mentioned above, has attempted to address certain issues relating to the ratio of capital to be held by banks in certain countries. Furthermore, a proposal to enforce

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different capital ratios on banks within the same country and during different phases of the business cycle had been put forward. This scheme will use a standardised approach as well as an internal ratings-based (IRB) approach to quantify and protect against credit risk while the loans made by banks will be marked-to-market on a regular basis and adjustments will be made to capital ratios accordingly (BIS, 2001: 22).

Determining the required amount of capital will be based primarily on the risk profile of the bank, which is directly related to the credit rating issued by rating agencies, and thus there is a specific and vital role for these agencies under the new legislation (BIS, 2001: 25). As a result of increasing concerns about financial sector stability, amendments to the Banks Act in 2001 included an increase from 8% to 10% in minimum capital and reserve funds to be held by banks. Furthermore, when banks take on additional risk by providing liquidity or credit-enhancement facilities for securitisation schemes, the capital requirements will increase accordingly.

The framework additionally provides a comprehensive structure for the management of risks resulting from bank asset securitisation (traditional securitisation) and the use of credit derivatives to transfer risks to third parties (synthetic securitisation). The new Accord also recognises the need in developing countries to encourage small-and-medium-sized enterprises (SME's), and has therefore reduced the risk capital burden for banks making loans to this sector. The Accord is not only aimed at ensuring adequate capital is held against exposure to these risks, but also to promote the process of disclosure and risk management techniques in the banking sector (BIS, 2001: 29).

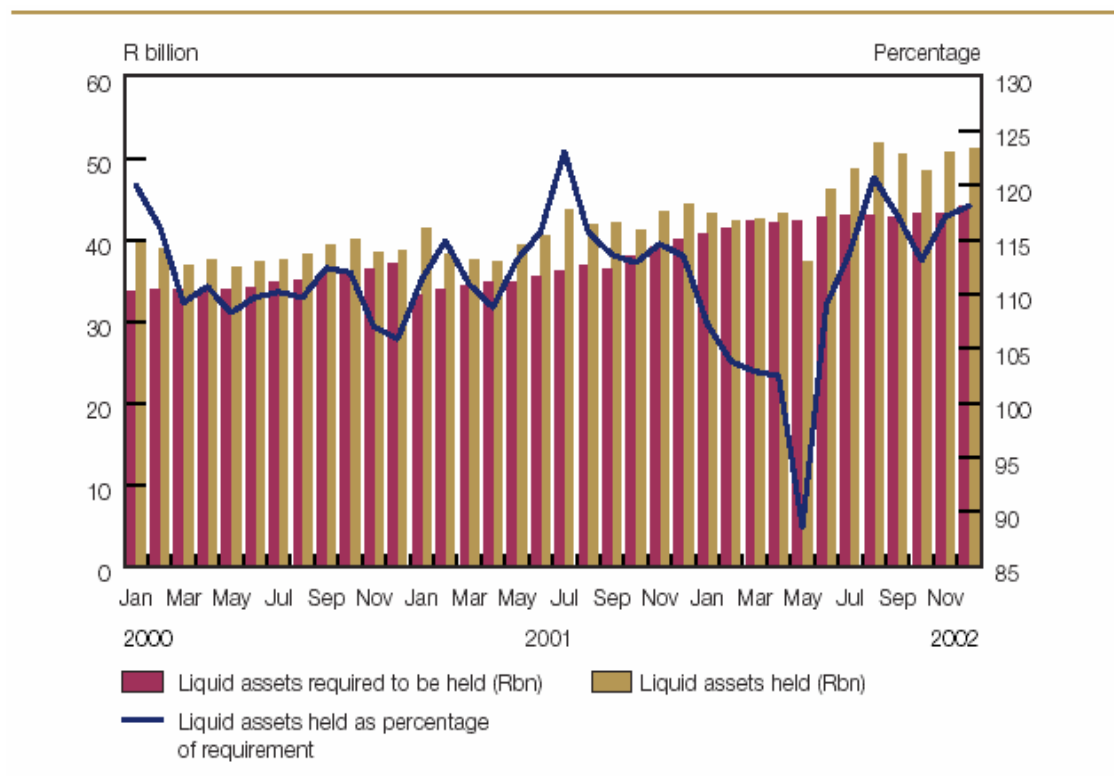
Banks are additionally required by the Act (Section 72) to hold a specified percentage of liquid assets, currently 5% of adjusted liabilities, to ensure easy access to cash in unforeseen circumstances. The Act (Section 1) defines the following as *liquid assets*:

- SARB notes and coins (excluding notes and coins taken into account for the calculation of minimum reserve balance with the SARB).
  - Credit balances in clearing accounts with the SARB.
-

- Treasury bills, short-term government bonds and SARB debentures
- Land Bank bills.

According to the SARB (2001d: 54), the graph below shows that the average amount of liquid assets held by banks in South Africa has, during the past few years, almost always exceeded the required amounts. This condition holds except for the period between February and May 2001 when actual assets fell below the required level. The Bank goes on to state that the largest proportion of assets held were government bonds, followed by Treasury bills and a small percentage of Land Bank bills.

Figure 6: Actual versus required liquid assets



(SARB, 2002d: 55)

Sound corporate governance is an additional prudential requirement and is seen as an essential element of financial stability. The directors of an institution are responsible for developing and maintaining risk management principles, the absence of which is

considered to be a major cause of bank failures. The changing environment within which banks operate and the increased services offered require constantly evolving risk management techniques and systems to ensure the creditors are safeguarded against bank failures, which may precipitate into systemic fragility (SARB, 2001c: 2).

According to the SARB (2001c: 4), most of South Africa's larger banks have competent governance, appropriate risk-management systems and have maintained adequate levels of liquidity and risk-weighted capital as shown above. The recent reduction in exchange controls has encouraged foreign participation in the domestic markets in the form of Foreign Direct Investment (FDI) and portfolio flows, but at the same time has increased the country's vulnerability to international economic cycles and adverse investor perceptions. Nevertheless, the strength of the banking sector has been demonstrated during the recent periods of financial mayhem, i.e. Asian and Emerging Market crises, due mainly to restricted international risk exposure and low levels of external liabilities, i.e. limited net open position.

### **2.2.2.3 Cash reserve requirement**

The cash reserve requirement, looked upon as a prudential requirement in the past, is now considered to be a monetary control instrument. The law stipulates what percentage of total liabilities (currently 2.5% as adjusted in South Africa) the banks are required to hold as cash, in reserve accounts at the SARB. This requirement is outlined in the South African Reserve Bank Act 90 of 1989.

According to De Kock (1946: 68), this practice originally developed in eighteenth century England, where private banks kept accounts at the Bank of England for a number of reasons, including the fact that the Bank's notes dominated those in circulation. After some time, it simply became customary for the private banks to deposit excess cash holdings at the Bank. Later, when the Bank of England undertook to operate as a settlement bank, this practice was formalised. Another reason for the development of this practice can be deduced from the following extract:

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“All London banks keep their principal reserve on deposit at the Banking Department of the Bank of England. This is by far the easiest and safest place for them to use. The Bank of England thus has the responsibility of taking care of it. The same reasons which make it desirable for a private person to keep a banker make it also desirable for every banker, as respects his reserve, to bank with another banker if he safely can.”

(Bagehot, 1873: II.8)

The consequence of having centralised reserves at one institution is that the central bank can employ the pooled cash to relieve seasonal tension caused by fluctuations in deposits. More importantly, the Bank can assist institutions in times of financial crises by providing the required liquidity. Having such accommodation to revert to in times of difficulty allows private banks to increase the frequency and forms of trades than would have been possible if reserves were to be held individually. The cash reserve requirement has, in the past, also been a key monetary policy instrument. For these reasons, the establishment of the SARB in 1921 brought with it a legislative requirement that all banks maintain, with the Bank, a cash reserve amounting to 3% and 13% of their time and demand liabilities respectively (De Kock, 1946: 72). These percentages have changed over the years, but the principle has remained the same with only minor changes in implementation.

Under the current system, the authorities can adjust the amount of reserves to be held in accordance with conditions prevailing in the market. For example, if the banks are contributing to the inflationary environment by granting too much credit, the SARB may increase the reserve ratio, effectively reducing available funds for banks to on-lend. The system also gives the authorities control over the price of funds charged to banks and ultimately the rates banks charge to customers (Goedhuys, 1982: 24). This is because the central bank lends the additional reserves required by commercial banks at the repo rate, which has a major influence on bank lending rates and most other rates in the market.

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As can be expected, there was considerable opposition to the adoption of such statutory measures in many countries. The arguments were based largely on the premise that such an inflexible law would limit the freedom of banks to carry out operations to the best of their abilities and thus undermine the banking system. Additionally, it was stated that minimum cash reserves were raising the burden on banks and accordingly reducing their competitiveness in the sector. This is due to the fact that other financial institutions were not required to follow the same practice and further, balances held with the central bank do not earn interest for the depositing institution. This burden is ultimately passed on to the banks customers in the form of stricter credit policies and higher interest rates (ABSA, 2000: 8). Use of variations in the cash reserve ratio by the central bank as a monetary policy tool has also been met with opposition, since the impact of such a change in required balances is said to have a greater effect on some banks than on others (De Kock, 1946: 85). Regarding this, Sen (1967: 93) writes:

“All methods of control are bound to fall upon different institutions with different rigour. The real question is not, whether the method of cash reserves affects banks differently, but, whether it is, on the whole, effective in bringing about a particular situation in the money market.”

It is obvious at this stage that the conditions prevailing in the money market are an important determinant of the level of reserves local banks need to maintain. An undeveloped market would necessitate higher reserve balances, while a more developed money market provides the opportunity for banks to hold assets instead of cash balances, which could be traded with ease when the need for liquidity came to pass.

Nevertheless, there are many characteristics in favour of cash reserve ratios as a monetary policy tool in underdeveloped money markets. Firstly, a change in the ratio is a more transparent indication of the central banks stance than the use of open market operations. The use of this instrument to bring about fundamental changes in the general conditions prevailing in the banking sector can be seen as supplementary or substitute to open market operations, since the latter can amount to a sale of assets held by the central bank

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which may not be desirable at times. Secondly, the lack of integration between sub-markets may result in considerable time lags between open market operations and the sought after effect. These lags are not present with reserve variations (Sen, 1967: 98).

The variable cash reserve system can play an important role in a developing market, if used vigilantly by the authorities. For example, during the upswing phase of the business cycle or after a sudden influx of foreign exchange, the Bank may find it necessary to temporarily increase the required reserve ratio to avoid excessive credit expansion or to build up reserves for the downswing that should follow. Thus, it can be said that the practice of keeping reserves with the Bank not only serves as an emergency reserve for banks in crisis but provides an important method of credit control for the authorities (Sen, 1967: 101).

The role of cash reserves to protect depositors has recently lost precedence because of deposit insurance provided by various regulatory authorities. Currently in South Africa, there is no clearly defined deposit insurance infrastructure or legislation, although the SARB does “bail out” the occasional retail depositor. Banks argue that an enforced law would simply increase their costs as well as costs to regulatory authorities. In contrast, advocates of the system insist that the average man on the street does not possess sufficient information to assess the financial position of a bank and therefore needs to be protected against bank failures (Giorgio, 1999: 5).

The use of reserve ratios as a monetary instrument has been effectively implemented in the past but is losing importance in many countries. This has been attributed to a couple of factors. Firstly, central banks now target short-term interest rates which lessens the importance of reserve ratios as a credit control, and secondly, the ratios were seen as imposing a tax on the deposit taking institutions effectively increasing or escalating any competitive disadvantage. Financial innovation in the sector has, over time also reduced the effectiveness of reserve ratios as the development of newer instruments have replaced those subject to the requirements (Giorgio, 1999: 10).

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#### 2.2.2.4 Determining the optimal level of reserves

There is much debate over determining the optimal amount of cash reserves to be held at the central bank. There is some agreement that the principal factor to be considered is the *amount of bank liabilities*, i.e. the greater this amount, the more cash reserves need to be held to cover emergencies. This could be, and in most countries has been, set as a fraction of total liabilities to the public, but the following factors listed by Bagehot (1873: XII.1) make the determination of that percentage difficult.

- The *category* of these liabilities and their respective *numerical quantities*: Call deposits would clearly require a higher reserve to be held than fixed deposits which demand a period of notice to the holding bank before withdrawal.
- The *intensity* of these liabilities i.e. are the liabilities in a small number of accounts (high intensity) or many accounts (low intensity)? A higher intensity would necessitate higher reserves as more cash could be withdrawn at any time.
- Are the depositor's *habits calculable*? If the time and amount of payments into and out of a particular account can be predicted with relative certainty then the amount of reserves needed to cover these events can also be calculated with confidence.

Bagehot (1873: XII.19) suggests that a fixed proportion of liabilities as reserves may at times be too small, and at others too large, and therefore concludes by writing “The forces of the enemy being variable, those of the defence cannot always be the same.” The administrative difficulties inherent in a system where balance sheets have to be scrutinised before determining the correct level of reserves is, in itself, reason enough not to adopt such a structure. Giorgio (1999: 10) argues that the most favourable level of reserve requirements is inversely related to an economy's level of financial development and shows, with the use of a model, that the basis of establishing a reserve requirement is inherent in the inefficiency of financial markets, since financially developed countries have lower monitoring overheads and thus the need for this costly insurance is eradicated.

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### 2.2.3 The South African Reserve Bank and National Government

The SARB and National Government play a significant role in creating an environment conducive to saving and investment which includes the Bank's colossal responsibility of protecting the value of the currency in order to encourage domestic growth.

According to Faure (2002c), the Bank was recognised in 1921 under the *Currency and Banking Act (31 of 1920)*. This Act was devised to stabilize the deteriorating monetary and financial conditions resulting from the First World War. The SARB can be said to reside at the core of an economy's financial structure and as such has been designated, in the more current *South African Reserve Bank Act (90 of 1989)*, various functions clarified in section 2.3.1 which have an effect on the banking sector and money market in a variety of ways. In implementing its policies the Bank cannot afford to be influenced by political motives and therefore was granted independence by the *Constitution Act (108 of 1996)*. Ciocca (1987: 49) comments that a central bank cannot achieve its objectives without a large degree of policy and operational independence. Certainly, it can be said that central bank independence, i.e. instrument and policy independence is extremely vital when implementing monetary policy decisions like the inflation targeting approach adopted recently. Any form of so-called "fiscal dominance" would negatively affect the outcome of such a policy and undermine the objectives of the authorities.

"The South African Reserve Bank, in pursuit of its primary object, must perform its functions independently and without fear, favour or prejudice, but there must be regular consultation between the Bank and the Cabinet member responsible for national financial matters."

(Faure, 2002c: 4)

The Bank has been authorised under the SARB Act to issue debentures, while the *Public Finance Management Act (1 of 1999)* administers the governments borrowing habits. Different statutes exist to govern the types and quantities of securities issued by the Bank,

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for example the issue of government bonds and treasury bills are governed by the above mentioned act, while the issue of SARB debentures is governed by the SARB Act. The issue of SARB debentures is used solely for the purpose of monetary policy and amounted to just under R8 billion by the end of 2002. The SARB is also allowed entry into the market to buy and sell government securities for the same purpose. This portfolio of assets, consisting of government bonds and treasury bills, equalled 14.6 billion in December 2002 (Faure, 2002c: 18). Although the SARB Act is extremely comprehensive, the most significant parts include section 10: Powers and duties of Bank which is discussed in the next part of this thesis, and section 11: Maintenance by banks of minimum reserve balances in accounts with Bank, discussed earlier.

## **2.3 INSTITUTIONAL ENVIRONMENT**

### **2.3.1 Central bank**

The concept of a central bank has evolved over the last few centuries from a banking institution which originally enjoyed certain privileges, such as the exclusive right to issue notes and banker to the government, to the complex organisations seen today.

#### **2.3.1.1 Introduction to central banking**

According to De Kock (1946: 11), the Bank of England was the earliest bank to assume this position and build up the fundamental techniques and practices of central banking. During the nineteenth century certain banks in other countries assumed this position due to the existence of similar privileges or were established for this very reason. Apart from being appointed as the government's banker and advisor, these institutions also adopted some of the responsibilities pertinent to central banks originally developed by the Bank of England. Although central banking is not an exact science, due to the fact that methods of execution will be dependent on factors specific to each country, certain traditions and practices have developed with which most central banks concur. While most authors will

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agree on the fact that a developed money market is essential for the successful operation of a central bank, differences in implementation and practices between countries can be attributed to the following factors mentioned by De Kock (1946: 21):

- Degree of economic and financial development
- Volume and variety of economic resources
- Structure and composition of financial sector
- International credit position
- Organisation and activity of local money market.

The final point is of immense significance given that the success of the Bank of England was partly due to the unique organisation and developed nature of the London money market. Thus, adopting this Bank's techniques would be of no avail to countries which did not possess developed money markets, although money markets could not fully develop without a sound central bank (De Kock, 1946: 130).

De Kock (1946: 135) established that the impact of a developed money market on the functioning and policies of the central bank is a direct consequence of the Bank's function as the controller of credit in the economy. Since credit has come to occupy such a key position in most economic transactions, the control of domestic credit expansion is exercised mainly through the manipulation of money market interest rates by the central bank. Without such intervention, the ensuing uncertainty in the "purchasing power of money" would have severe economic and social consequences.

The ultimate objective of credit control has also been the topic of considerable debate in the past. Some economists believe the main purpose should be the encouragement of economic activity while others recommend the stabilisation of price levels or exchange rates. De Kock (1946: 139) recognises various methods by which the central bank can control the expansion of credit including:

- Through manipulating the cost of credit by changing the rate at which the Bank
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provides accommodation to commercial banks.

- Expansion or contraction of existing credit through the use of open market operations.
- Credit rationing and the control of investment.
- Regulation of institutions to ensure central bank credit is not exceedingly used to finance “non-essential” commerce.
- Moral suasion.
- The use of variable reserve ratios although the nature of this tool does not allow its use to be as frequent as may be necessary without creating uncertainty.
- Regulation and manipulation of margin requirements for security traders.

Sen (1967: 134) advises that a central bank will not be able to carry out its functions effectively without creating and maintaining a direct and permanent link with the domestic money market. This “link” has been established in many countries, including South Africa, through the regular use of rediscounting practices between the Bank and commercial banks. Sen (1967: 25) however suggested that with the establishment of a central bank, a money market would naturally develop around it. Goedhuys (1982: 189) states that since one of the primary duties of the Bank is to promote “stable monetary conditions”, this should be pursued without concern over potential profits or losses that may be incurred. Galbraith (1963: 346) declares, due to the fact that a change in reserves will undoubtedly influence a central bank’s profits, income should not be used a guide for its behaviour. The central bank should thus aim to create a financial environment which is in the best interest of the country without trying to maximise income or asset holdings.

### **2.3.1.2 Functions of the central bank**

Goedhuys (1982: 190) establishes that the central bank operates in the money, foreign exchange, public sector debt and deposit markets to protect the value of the domestic currency. The SARB carries out this vital function by buying and selling various types of debt instruments and foreign exchange. Over the years, the central bank has assumed a vital position in all developed and developing economies, adopting the following

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commonly recognised functions, listed by Faure (2002c: 6). (Only the functions relevant to this discussion are discussed comprehensively.)

### ***1. Issuer of bank notes and coins***

The Bank has been granted the sole right of currency issue (and destruction) which it must utilise to regulate the amount of notes and coins in circulation according to the requirements of the economy. This monopolistic privilege of the Bank was one of the main factors responsible for the rise of central banks. The reasons cited by De Kock (1946: 29) for centralising the issue of notes are: (a) to establish standardisation of notes in circulation and therefore give such notes better recognition in times of crisis, (b) to provide a degree of control over credit expansion and (c) to ensure the government reaps the profits associated with note issue through owning shares in the bank of issue. The main aim of a central bank was, and still is, to exercise discretion and control over expansion of the monetary base and thus influence interest rates in the domestic money market. Goedhuys (1982: 191) notes that the variations in the monetary base are offset by the Bank's operations within the banking sector and money market.

### ***2. Banker and advisor to government***

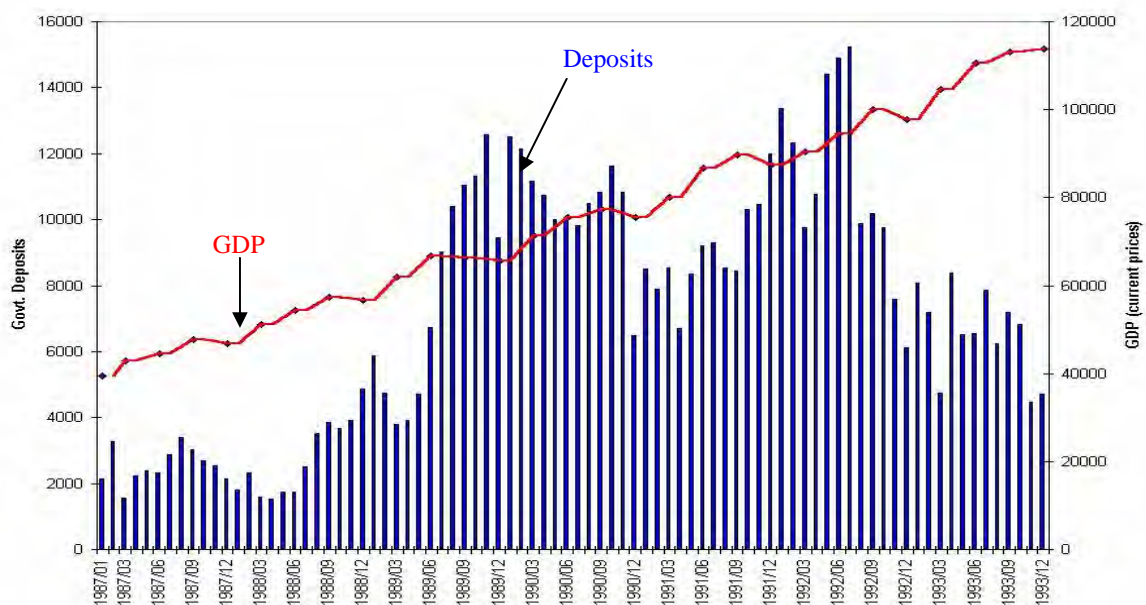
The banks that had been granted the sole right to note issue automatically assumed the position of banker to the government of their respective countries. The responsibilities associated with this function include: (a) management of the accounts of various government departments, (b) monetary advances to government during wars, recessions or other emergencies, (c) assistance in obtaining foreign exchange, (d) developing and administering exchange controls, (e) representation when dealing with other countries at a financial level (De Kock, 1946: 47). The Bank is also tasked with advising the government on monetary issues and assisting the Treasury in placing government debt on the market (Kelly, 1988: 23).

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Until 1993 (which saw the introduction of the Tax and Loan Accounts (TLAs) at qualifying commercial banks) the SARB was the sole banker to the government of South Africa. The introduction of the TLAs was aimed at reducing the volatility of the money market interest rates during periods of government receipts and payments. This irregular flow of funds (resulting from factors such as collection of taxes, sale of government securities, interest payments on these securities, etc) made it difficult for the SARB to manage the liquidity of the money market and money market rates, thus causing disturbances in the lending and borrowing process. This effectively diminished the value of the money market shortage as a tool to communicate the monetary authorities' stance at any moment in time. Furthermore, volatile interest rates made the timing and rates at which to issue government securities unpredictable (Faure, 2002f: 2).

The following graph (figure 7) shows the amount of government deposits with the South African Reserve Bank in relation to the country's GDP at current prices, from the beginning of 1987 until the end of 1993.

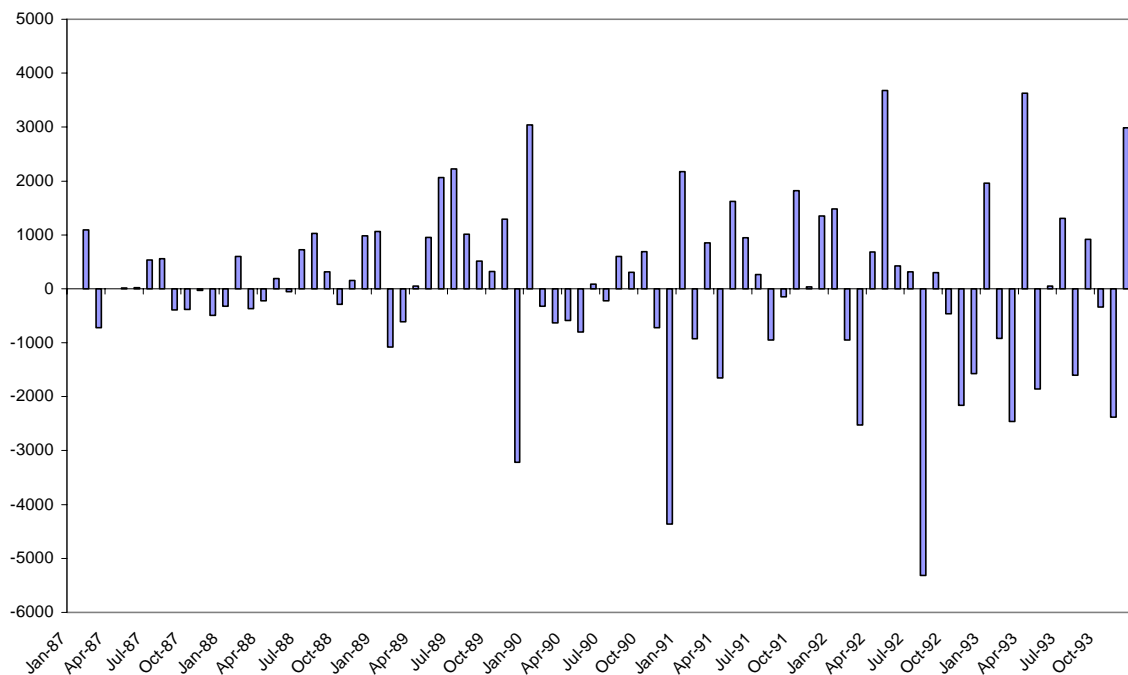
**Figure 7: Government deposits (R millions) with the Reserve Bank and GDP (at current prices)**



(Source of data: SARB web site)

As can be seen from the graph above, while the average amount of government deposits increased as the economy developed, the exact amount of deposits was unpredictable. For example, deposits fell from R3,268 million in February 1987 to R1,572 million one month later. Similarly, between November 1989 and January 1990 deposits fell from R12,576 million to R9,440 million and then increased back to R12,506 million. The largest fluctuation was witnessed in 1992 when deposits fell from R15,227 in July to R9,894 million in August. Of significance to this discussion are these erratic variations in government deposits with the SARB, which had a corresponding effect on the money market shortage. This is depicted in the subsequent graph (figure 8).

**Figure 8: Changes in government deposits (monthly) with South African Reserve Bank (R millions)**



(Faure, 2002f: 3)

Other problems resulting from this flow of funds were: (a) banks were forced to hold more eligible securities for central bank accommodation in the event of unfavourable cash flows, (b) the costs of regular refinancing accumulated and (c) random changes in

interest rates discouraged borrowers and lenders, disrupting the efficient allocation of resources.

The TLA system was introduced in 1994 and involved the appointment of four eligible banks as “*bankers to the government*”. The accounts opened at these banks were used for depositing government funds received from tax payments and the issue of securities. The effect was that there were no longer any disruptive money flows from the private sector to the SARB; instead the money remained in the banking system and therefore cash reserves of the commercial banks were not affected. Apart from this obvious advantage, the SARB could also shift funds between the TLAs and the Exchequer account at the Bank when it found it necessary to influence the money market shortage. The TLAs thus provided authorities with a powerful new tool for monetary policy purposes (Faure, 2002f: 15).

### ***3. Custodian of banks’ cash reserves and central clearance and settlement of interbank claims***

Commercial banks are required to hold a percentage of liabilities with the SARB in reserve accounts. The Bank has the authority to vary this proportion to influence the liquidity of the financial sector. The details of this function were covered in section 2.2.2.3. Private banks also have current accounts at the SARB which are used for clearing and settlement of interbank claims. These claims arise due to funds being drawn from one bank and deposited in another. The process is managed by the Automated Clearing Bureau (ACB) for the clearing of cheques and electronic transfers, while automatic teller transactions are managed by SASWITCH.

De Kock (1946: 125) states that the Bank of England originally developed this function due to the fact that it already held balances for many private banks. The clearance and settlement of accounts was the next logical step. This task, later adopted by numerous central banks, is considered to be a “necessary or natural function” of a Bank since the alternatives may not provide a perfect substitute. Having this facility at the central bank

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also ensures that commercial banks that are in contravention of reserve requirements at the end of the daily clearing process can be immediately informed. These banks can then approach the Bank for accommodation. This process also allows the central bank to determine the level of liquidity in the economy on a daily basis, which is essential for monetary policy purposes, and contributes to the efficient use of the existing money stock in banking operations.

Kelly (1988: 24) states that the need for such central clearing and settlement arises due to the fact that cheques are drawn and deposited between different institutions and therefore need to be balanced out daily on the current accounts kept at the Reserve Bank. As a consequence, central banks have developed (and are continuously improving) clearance and settlement systems, while certain international guidelines have been recommended to guarantee smooth integration of these systems in a global marketplace. The BIS (1993: 1) has identified a number of risks associated with cross-border and multi-currency settlements including liquidity risk, principal risk and credit risk. The factors responsible for these risks include:

- (i) Various types of payment and settlement systems: the systems vary in terms of the currencies used and the basis of payments (i.e. “real time” settlement, payment-by-payment basis, net settlement basis, etc.).
- (ii) Different operating hours: payment and settlement systems between countries are not coordinated.

In order to reduce some of the risks present in cross-border and multi-currency settlements, the BIS (1993: 3) had put forth a number of recommendations:

“The options that were considered by the Working Group included: (1) modifying or making available certain home-currency payment and settlement services; (2) extending the operating hours of home-currency large-value funds transfer systems; (3) establishing cross-border

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operational links between these payments systems; and (4) developing multi-currency payment and settlement services.”

In the implementation of the National Payment System (NPS), the SARB has made an effort to adhere to the “Core Principles for Systemically Important Payment Systems” detailed by the Bank for International Settlements during 2001, in an attempt to increase the stability of financial markets across the world. The general guidelines include risk management procedures, prompt and daily settlement processes, types of assets eligible for settlement, security and operational reliability measures, fair and open access rules and effective and transparent governance criteria backed by an appropriate legal framework.

The introduction of measures to reduce and monitor risks by the payment clearing house (PCH) was the first policy put into operation through the use of a settlement network and systems to support interbank transfers. The new system also introduced risk collateral and pre-funding, coupled with new legislation, to ensure protection against irregular practices. Fresh descriptions were also given to the responsibilities of various players in the market ensuring that the performance of the NPS was of an international standard so as to further encourage foreign participation in local markets (SARB, 2002c: 2).

#### ***4. Custodian of the gold and other foreign reserves of the country***

In the past, under the “gold specie standard”, the bank of issue had to hold sufficient gold coin to redeem any notes that may have been presented for payment. In due course, only a certain percentage of gold reserves were required to be held against issued notes, with the rest of the notes being covered by specific assets. Later, foreign exchange in the form of balances, bills and other assets could be held as reserves and eventually these foreign balances turned out to be useful for protecting the value of the local currency when unfavourable conditions arose on the balance of payments. These developments were observed by De Kock (1946: 90) who wrote:

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“Their foreign assets, in addition to being a source of revenue, performed the functions of a ‘buffer’ or ‘shock-absorber’ and served as an instrument for the regulation of exchange rates, while their dealings in foreign exchange were also used as one of the means of regulating money-market conditions.”

The central banks of many countries thus became the primary foreign exchange depositories and dealers. This enabled the central banks to buy and sell foreign exchange to manipulate the exchange rate, except for the Bank of England that exerted influence on the exchange rate only through money market operations. Goedhuys (1982: 27) argues that in the past there was a distinct stress on bank reserves and the monetary base when the SARB intervened in the foreign exchange market to combat inflation or encourage exports. The Bank of England only functioned in the exchange market for a short period after the abandonment of the gold standard and before the establishment of its Exchange Equalisation Account in the 1930’s.

As a direct consequence of disruptions caused by the Second World War, the SARB found a similar necessity to hold gold and foreign exchange to cushion negative balance of payments conditions and ultimately protect the external value of the Rand (De Kock, 1946: 92). Exchange control regulations limited the amount of foreign currency commercial banks could hold in the past. These laws have been increasingly relaxed over the years (Kelly, 1988: 24) and currently no restrictions exist on banks’ holdings of foreign assets. Thus, it can be said that the SARB now plays a limited role in the foreign exchange market, the operations of which have been left in the competent hands of the “*authorised dealers in foreign exchange*” (Faure, 2002c: 9).

### ***5. Rediscounting and lender of last resort (provider of accommodation)***

The centralisation of gold and foreign reserves in the central bank increased the Bank’s ability to grant credit and provide necessary liquidity to commercial banks. According to De Kock (1946: 102), the functions of lender of last resort and rediscounting are

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interconnected since the Bank accommodates private sector banks by rediscounting eligible securities. Another dimension to this function exists in the form of the central bank granting accommodation to the government or public by buying back issued securities when the need to increase the money supply arises. According to Sen (1967: 1), the Bank must always be ready to provide the rediscounting facility and therefore must maintain a particularly liquid investment position.

Before the establishment of central banks, commercial banks operating in undeveloped money markets were forced to hold large cash reserves to ensure liquidity in emergency circumstances. Because of the resulting fluctuations in cash reserves held by the banks, it simply became the norm and banks did not recognise the need for rediscounting facilities. Furthermore, governments of the time had been pursuing a “cheap money” policy to help the economies of the world recover from a trade depression, which reduced the demand for bank credit. As new central banks developed, the reluctance of commercial banks to embrace the rediscounting practice and to disclose their financial positions resulted in an ineffective Bank rate and spawned difficulties for the Bank in trying to assess the conditions in the market (Sen, 1967: 40).

Once the practice had been cultivated, institutions that required funds discounted *trade bills* with the central bank. These bills were considered as safe, secondary cash reserves by banks given their self liquidating nature. This was further enhanced by the development of discount markets and the readiness of central banks to accept these securities. The central banks had set out very strict rules with regards to the quality and maturity of securities eligible for discount status. However, these rules were flexible in emergency situations. Given the adverse environment created by war in the early part of the twentieth century, central banks began granting accommodation against *treasury bills and government securities* which were issued to finance the ever escalating expenditure and debt of governments. This new practice coupled with the increasing use of bank overdrafts, sight drafts and telegraphic remittances reduced the use of trade bills, domestic and foreign (De Kock, 1946: 104).

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With the advent of discount houses and a formal Discount Market in London, some commercial banks resorted to these institutions for short-term loans instead of dealing directly with the Bank of England. This central bank was now required to provide liquidity, not only to commercial banks, but also to discount houses and any other credit institutions whenever necessary. Thus, the essential function of the Bank commonly referred to as *lender of last resort*, originally coined by Walter Bagehot, was recognised (De Kock, 1946: 107). The importance of rediscounting securities by a central bank revolves around the liquidity created by such actions for institutions regulated by cash reserve requirements. Thus, by guaranteeing the availability of central bank credit, the authorities enabled these institutions to conduct business activities without having to ensure adequate cash reserves were at hand. This requires further elaboration.

During the course of the business cycle, deposit institutions tend to experience large fluctuations in their deposits which have a corresponding effect on cash reserves held. Thus, without a central bank to provide liquidity at these times, the banks would have to rely on carrying sufficient cash reserves to meet any sudden withdrawal or debit balance after the interbank clearing process. Before approaching the Bank, the commercial banks would attempt to acquire the funds in the domestic money market or the interbank market, where such markets exist, although during seasonal fluctuations even money markets can be illiquid. Thus, during such periods the central bank's role as the lender of last resort is essential in guaranteeing the liquidity of solvent banks and other deposit-taking intermediaries (De Kock, 1946: 109). In addition to ensuring the availability of cash for transactions with the public, the ability to rediscount securities ensures that banks do not contravene the cash reserve requirement.

The current accommodation system in South Africa was implemented in March 1998 and is based on repurchase agreements, commonly referred to as "*repos*", between the SARB and commercial banks. This process, similar to the one used by the Bank of England, is simply the sale of eligible securities by the commercial banks to the SARB coupled with an "irrevocable undertaking" to buy back the securities after a specified period. In return, the SARB credits the bank's reserve account with an equivalent amount of cash,

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appropriately labelled “*borrowed cash reserves*”. According to the SARB (2001b: 5), the securities that qualify for these repurchase transactions also rank as liquid assets for the banks and are comprised of:

- Treasury bills
- Land Bank bills
- SARB debentures
- Government bonds

The repos conducted by the Bank can be either liquidity providing repos or reverse repos. The former, as the name suggests, are used to inject funds into the market while the latter are used to drain excess funds. Thus, the *money market shortage* is total amount by which the private sector banks are indebted to the SARB at any time and this quantity varies, sometimes to a large extent, on a daily basis. While this facility is a second last resort for banks, the repo rate is administered by the SARB and therefore allows the Bank to influence private bank deposit and lending rates (Faure, 2002d: 9).

By manipulating the bank lending rates via the repo rate the SARB has substantial command over the demand for credit, the growth in the money supply and thus the rate of inflation. Hence, apart from ensuring the proper functioning of the domestic financial markets, these operations also facilitate the Bank in the implementation of monetary policy (Faure, 2002d: 11). The last resort for South African commercial banks to acquire liquidity is the *marginal lending facility*. This option, also provided by the SARB, allows banks to obtain residual overnight cash against the deposit of the same securities mentioned above. The *marginal lending rate* is set at 5 percentage points above the current repo rate consequently discouraging banks from using this facility habitually.

According to Faure (2002g: 22), the SARB, with the use of various monetary policy tools at its disposal, ensures that the banks are always in ‘a borrowed reserves’ position. This is done to make the repo rate effective, i.e. by forcing commercial banks to borrow from the

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Bank at the repo rate, the SARB has substantial control over market call rates and bank lending rates and therefore the cost of credit to the private sector.

“The repo rate does not only have a significant influence on the banks call rates. Bank call rates, i.e. the shortest of all rates (the extreme left of the yield curve), in turn have an influence on longer-term rates. We learn in theory that all other rates are a function of the rate determined at the discount window (i.e. the call rate) and expectations with regard to where this rate will be in future. Thus call rates will be closely related to other short-term money market rates.”

(Faure, 2002g: 23)

Four conditions are necessary to ensure the effectiveness of the rediscounting practices of a central bank: (a) commercial banks are in favour of the rediscounting practice, (b) banks do not hold more cash reserves than is necessary for daily transactions, (c) the constant availability of securities eligible for rediscount with the Bank and (d) a large unpredictable demand for bank advances exists for which banks will have to resort to central bank accommodation (Sen, 1967: 38).

There exists an argument that by attempting to manage short-term rates in this manner, the SARB is hindering the development of the domestic interbank market. This is due to the fact that by draining liquidity from banks, limited funds are available for interbank deposits. This dispute will be further explored in section 2.3.2.2 where the interbank market is discussed in detail. There are many factors which can give rise to changes in the amount of accommodation, i.e. the money market shortage, which commercial banks will require from the SARB. Faure (2002g: 29) distinguishes between ‘managed’ and ‘unmanaged’ factors, the former arising as a direct result of SARB actions and the latter as a result of private transactions, which the Bank has no control over.

*Managed factors* include: (a) deliberate modifications in the cash reserve requirement, (b) shifts in government deposits between the Tax and Loan Accounts (discussed in 2.3.1.2)

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and the SARB, (c) open market operations and (d) changes in foreign or other assets held by the Bank. *Unmanaged factors* comprise of: (a) changes in the demand for currency by the private sector, (b) fluctuations in deposits with commercial banks resulting in variations in cash reserve positions and (c) occasional increases government deposits beyond what can be statutorily held in the tax and loan accounts (Faure, 2002g: 30).

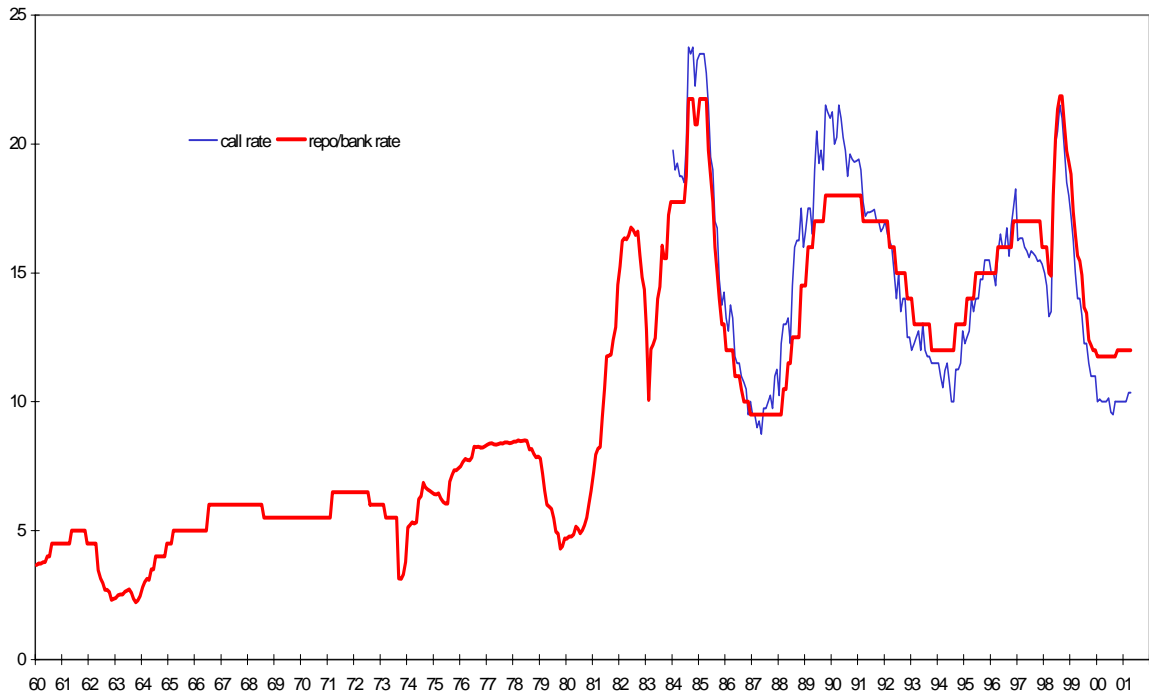
The effectiveness of the repo system can be judged by observing the degree of correlation between changes in the repo rate, call rate and other short term rates. Even though the positive correlation between the repo rate and call rate is clearly evident in the first graph below (Figure 9), the extent of the changes in the call rate are inconsistent, which can be deduced from the sometimes erratic detachment between the two lines.

Figure 10, further establishes that a positive correlation does exist between the repo rate and other money market rates. Some authors (e.g. Sen 1967: 36) have stated that the Bank rate method, previously followed in South Africa, was becoming increasingly ineffective and this argument is substantiated by the volatility that can be observed on the graph.

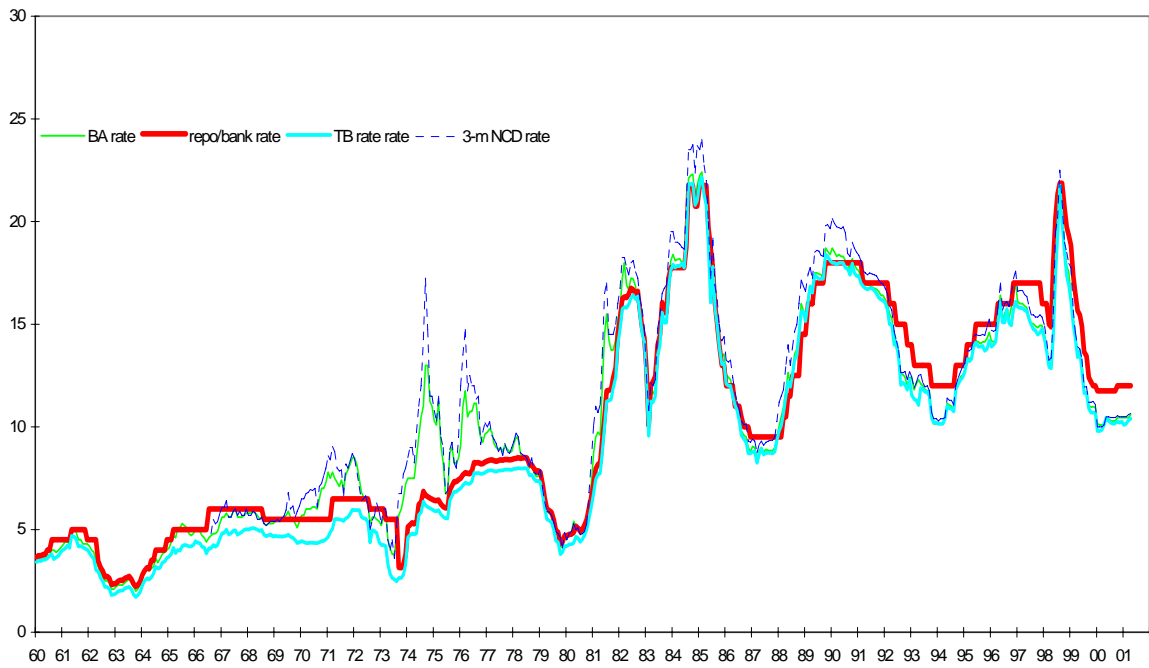
In the 1970's the negotiable certificate of deposit (NCD) rate and bankers acceptance (BA) rate differed significantly from the Bank rate with sharp increases and decreases perhaps resulting from other market forces at play. This was particularly so between 1974 and 1978 where the BA and NCD rates were at times more than 10% above the Bank rate. After 1978 the money market rates closely tracked the rate administered by the Reserve Bank with only occasional deviations in the BA and NCD rates (e.g. 1982 and 1990). On the other hand, Treasury bills (TB) rates have generally followed the Bank rate since 1974, with only mild departures in 1992, 1994 and 2000 when the South African Reserve Bank switched between expansionary and contractionary policies.

Sen (1967: 37) writes, in markets where rediscounting with the Bank is not a regular practice, market rates may not follow the Bank rate and therefore render the latter ineffective in influencing the price of loanable funds.

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**Figure 9: Repo/Bank rate and Call rate**

(Faure, 2002g: 22)

**Figure 10: Money market rates (repo, BA, TB, 3-month NCD)**

(Faure, 2002g: 23)

Although the adopted system of refinancing worked relatively well in comparison with the previously used structure (Bank rate method), various deficiencies were identified which required immediate attention. The impeding factors, due partly to uniqueness of the South African market, have been revealed in a document published by the SARB (2001a: 10), and include:

1. *Interbank overnight call rates* resisted adjustment during periods of instability i.e. during a bear market.
2. The *inefficient functioning, limited liquidity and lack of foreign participation* in the domestic money market as a whole.
3. Various money market instruments have *restrictions and characteristics* which impede or enhance their tradability.

For example, instruments that have been afforded liquid asset status (Treasury bills, SARB debentures, etc.) are more readily traded than others. The commercial paper market has not developed well due to limited corporate participation and ‘preferential status’ given to other instruments.

4. *Limited partaking by smaller commercial banks* in the daily repo tender due to large spreads between the interbank and repo rates.

The interbank overnight rate was on average 200 basis points below the daily repo rate. As a result, only banks with large market shares (i.e. A1 banks) got involved in the tenders and accordingly the repo rate did not provide a good indication of the liquidity needs of the rest of the banking sector. According to the SARB this also reduced the effectiveness of the repo rate, other monetary policy measures (e.g. open market operations) and ultimately the Bank’s influence over short-term interest rates.

5. The *‘fixing’ of the repo rates and tenders* by the SARB further reduced the effectiveness of this monetary policy tool to signal the liquidity conditions in the
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- market. The duration, magnitude and timing of the repo transactions were also considered inappropriate.
6. *Lack of transparency* in ‘bilateral open market operations’ conducted by the Bank was identified as another factor obscuring the liquidity requirements of the market.
  7. The *non-centralisation of money market scrip* and same-day settlement resulted in the money market only trading for half the day and the rest of the time being used for transfer and settlement.
  8. Deficiencies in the current ‘*benchmark rates*’ obstruct efficient price discovery.

The Bank clarifies in this regard: “The Johannesburg Interbank Agreed Rate (JIBAR) as calculated by SAFEX has various defects, making it unrepresentative of actual trades in the market. Only 17 banks quote JIBAR rates and often trade off quoted rates, leading to low transparency in the price-discovery process. The Rand Overnight Deposit Rate (RODR) is generally regarded as a better rate, but represents only a small fraction of activity in the money market and can be manipulated.” Market participants believe that the large banks may also influence these rates to their advantage (SARB, 2001a: 11).

In April 2001, after a three year period of evaluation and widespread consultation with commercial banks and other international experts, the SARB’s monetary policy sub-committee submitted a report with proposed modifications to the implementation of its refinancing system. The Bank recognised the fact that the primary objectives of stability and flexibility, which could only be obtained through a transparent refinancing system, were essential to properly functioning interbank and overall money markets. The recommended alterations consisted of:

*(a) Narrowing of spread between the repo rate and interbank rates*

The first recommendation was based on the argument that if the spread between the repo and interbank rates was narrowed, i.e. the repo rate reduced by approximately 100 basis points, then the smaller banks would be able to partake in the daily repo tenders. This

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would have the effect of creating a ‘level playing field’ by allowing *all* banks that possess the necessary assets to acquire funds more cheaply. This would ultimately increase liquidity and competition in the interbank market. By providing accommodation to a larger number of banks, the SARB should also be able to monitor liquidity conditions in the market more accurately, thus increasing the influence of the repo rate as a monetary policy tool by increasing its influence on market interest rates (SARB, 2001a: 23).

*(b) Developing a benchmark interbank rate*

The second proposition was to enhance the price discovery process by introducing an accurate benchmark interbank rate. This practice is followed in most developed markets, for example the European Central Bank publishes the Euro Overnight Index Average (EOIA), and provides all banks with the necessary information regarding overnight lending transactions in the market. The rate introduced for this purpose was the South African Overnight Index Average (SAONIA), but the desired effect may be dampened by the credit exposure limits that exist between banks. Another argument (against the rate) suggested that banks that had previously been lending funds at lower rates might be tempted to increase these in line with the published reference (SARB, 2001a: 23).

*(c) A fixed repo rate*

In order to avoid ambiguity in the monetary stance of the authorities, a fixed repo rate system was recommended given that the previously used system of a floating repo did not achieve the goals it was intended for. The use of a fixed repo had proven successful in the past by providing relative stability in times of uncertainty. It is also believed that the Bank has the best judgement of the market’s liquidity requirements and appropriate interest rate levels. However, in order to encourage development of the interbank market, the Bank had opted not to pre-announce liquidity forecasts but rather keep the banks speculating as to the amount of accommodation that would be made available. This was to ensure that the interbank rate was not too removed from its fair level and should encourage greater liquidity management in the interbank market (ABSA, 2001: 7).

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*(d) Weekly repo tenders with a longer maturity*

Further participation in the interbank market was to be encouraged by reducing the frequency of SARB repo auctions. Instead of daily tenders, the Bank introduced longer maturity repos with weekly tenders. This was expected to raise the interbank call rates significantly, but emergency ‘quick auctions’, open market operations, movement of funds between the Exchequer and Tax and Loan Accounts and access to the marginal lending facility would ensure banks did not remain with deficit or surplus liquidity positions. The *final clearing auction*, which was formerly conducted at the repo rate established on the previous day, was now to be conducted at a penalty rate and at the discretion of the SARB to ensure commercial banks did not sit back and wait for liquidity provision from the Bank. Furthermore, deposits and withdrawals from the cash reserve accounts held at the Bank would be limited to one hundred million rand to encourage banks to source funds from the market and to increase volatility in the money market (ABSA, 2001: 7).

*(e) Open-market operations in money market instruments*

The employment of open market operations on a regular basis, instead of the current occasional fine tuning operation, had been identified as another method of improving the liquidity of the money market. The Bank had proposed to concentrate such efforts on Treasury bills before encouraging trading in other short-term instruments (SARB, 2001a: 23).

The authorities maintain that the implementation of these changes would only achieve the desired effect if all, or at least most, of the proposals are executed in parallel. Employment of one or two suggestions will not increase the efficiency and liquidity of the market to the degree required in order to make monetary policy more successful. Nevertheless, a number of market participants believe that the changes have only been put forward to “bolster the competitive position” of some of the smaller banks due to the liquidity difficulties that these banks had been experiencing. On the other hand,

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proponents of the modifications argue that this support is necessary to increase competition in the sector and achieve the broader objectives of the monetary authorities (ABSA, 2001: 7).

### ***6. Public debt management***

Public debt management refers to changes in the size, composition, maturity and ownership of outstanding government debt. This includes the vital aspect of financing the budget deficit by new borrowing operations and the Bank helps the National Treasury in placing these securities in the market. As mentioned earlier, the Public Finance Management Act (1 of 1999) sets out the government's borrowing powers and therefore governs the issue of securities such as Treasury bills and government bonds which are an important component of monetary policy operations conducted by the SARB. Therefore, under ideal conditions, the Bank and Treasury should be in agreement with regards to the timing, size and maturity of new issues. Unfortunately, central bank policy independence in maintaining price stability means that the government and the Bank, in pursuing their own objectives, may have differing views concerning these actions (Faure, 2002c: 11). The effect that these day-to-day management actions have on the money supply, interest and exchange rates is detailed below under open market operations.

### ***7. Formulation and execution of monetary policy***

The current policy of inflation targeting aims to maintain inflation at a level conducive to production, investment and savings. The method adopted by the Bank to achieve this goal is through the use of the repo rate which serves as a reference rate for banks, to influence the demand for credit which in turn has a major influence on the rate of inflation. This policy was discussed in detail in section 2.1.3 and is one of the most critical functions of the SARB. While the need for reducing inflation was recognised during the 1990's, authorities believed flexible intermediate targets would dampen growth in the money supply and therefore reduce inflation. In due time, the recognition of numerous other

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responsible variables prompted the Bank to adopt a transparent policy which directly targets inflation.

### **8. *Open market operations***

“Open-market operations may be defined in a very general way as the acquisition or liquidation of marketable financial assets by the central bank, on its own initiative or as a result of market forces, which has an immediate effect on the cash reserves of the banking system.”

(Galbraith, 1963: 359)

The purpose of these operations by the central bank is thus primarily to affect the liquidity of the banking sector and prevent sharp, unnecessary changes in interest rates from disrupting business activities and decision making. According to De Kock (1946: 198), these purchases or sales of securities affect the quantity of money in circulation and has an influence on the cash reserves of commercial banks, which in turn manipulates the banks' abilities to grant credit and therefore the cost of credit. Galbraith (1963: 359) states that these operations can also be used by the Bank to simply create a market in a particular instrument, usually government securities. Galbraith (1963: 455) further states that a unique feature of open market operations is that the actions of the Bank only change the composition of private sector wealth, rather than altering the stock of wealth.

While these actions sway domestic production, prices and costs in the desired direction, the operations afford a degree of direct and immediate control over the money supply and interest rates not provided by accommodation procedures. However, Goedhuys (1982: 208) declares:

“The money supply and interest rates cannot be simultaneously controlled, either by open market operations or any other instrument, but such operations can be used in conjunction with discount policy to achieve a balanced objective for both, ...”

The central bank is prepared to deal with any interested parties, but generally it is only the financial institutions that participate in the open market operations. The effectiveness of these operations thus depends, to a large degree on the depth and liquidity of markets for both short and long-term securities, i.e. money and capital markets and the responsiveness or elasticity of credit demand to changes in interest rates. Inactive markets may present difficulties to a Bank attempting to find buyers for large quantities of securities for the purpose of draining liquidity while simultaneously upsetting the price and yields on government securities. This was seen after World War I in the United States where the extensive, uncoordinated purchase and sale of government securities by the Treasury caused “random fluctuations in the pricing of these securities..., making it more difficult to forecast auction prices” (Marshall, 2002: 51).

A second condition necessary for the effective use of open market operations in underdeveloped money markets is that banks should “maintain a fixed ratio between cash reserves and deposit liabilities”. If the short-term securities market is well developed then adherence to this practice is not essential. Thirdly, the availability of central bank accommodation to alleviate any strain in the money supply means that the Bank will have to carry out operations and raise the rediscounting rate (repo rate in the case of South Africa) simultaneously (Marshall, 2002: 52). If these conditions are not present, then any attempts to expand or contract the money supply through the purchase or sale of government securities will be futile.

In South Africa, only the first condition is not present, i.e. the money market is not liquid enough to make open market operations completely effective. Furthermore, there is some disagreement regarding the types of securities that should be used by the SARB in open market operations. This is because the extensive use of government securities is considered to be direct lending and has been proven to cause inflation. Additionally, in countries where the market for certain classes of securities is less active than desired, it may be advantageous to carry out operations using such instruments, as was done with bank acceptances in the United States. Unfortunately, such actions may promote markets

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in the respective asset at the cost of discouraging institutions from holding the securities currently occupying this position (Marshall, 2002: 52).

At this stage, it may be useful to clarify what effect the use of open market operations has on the money market. As mentioned above, under the section discussing the revised rediscounting practices of the SARB, the authorities have proposed to concentrate open market operations in the Treasury bill market. Therefore the following example assumes the sale of R10 million worth of these securities by the Bank. Naturally, the SARB's decision to contract the cash reserve holdings of the private sector banks would be a direct result of the money market shortage having decreased due to some unmanaged factor. It must be noted that the SARB will only intervene if the change in the money market shortage is undesirable from a monetary policy perspective.

For example, if the economy experiences a sudden influx of foreign exchange, the central bank may decide to buy the foreign currency to prevent fluctuations in the domestic exchange rate. A consequence of this is that the money market shortage will fall. The Bank now has two options, i.e. (i) to sell Treasury bills to the commercial banks, or (ii) to sell Treasury bills to the non-bank private sector. The former method has the effect of directly destroying R10 million of the commercial banks cash reserves, which leaves the banks in contravention of the cash reserve requirement. Goedhuys (1982: 25) states that this operation impacts primarily on short-term interest rates as reserves are exchanged for securities.

Under such circumstances the money market shortage would now increase by the *full* amount, i.e. R10 million. The commercial banks, after exploring the interbank market for surplus funds, will have to resort to the SARB for accommodation. This will be provided at the repo rate or marginal lending rate in extreme cases. Thus, the cost of funds for commercial banks will increase and this will be reflected in their deposit and lending rates (Faure, 2002d: 28).

It may be helpful to reiterate the importance of the three conditions mentioned earlier for the effective use of open market operations:

- (a) Firstly, if the market lacks *depth* these operations will be difficult to carry out as banks may be reluctant to purchase the securities, while a large sale of Treasury bills may affect the price of these assets considerably.
- (b) Secondly, the practice of maintaining a *fixed reserve ratio* affords the Bank greater control over the money market rates through the administered repo and marginal lending rate.
- (c) Finally, if the Bank did not carry out these *open market sales and change the repo rate* in tandem, then the cost of funds for commercial banks would not be affected and the open market operations would be ineffective.

Alternatively, the Bank could sell the Treasury bills to the non-bank private sector which, if absorbed by the sector, would reduce bank deposits by R10 million. According to Goedhuys (1982: 25), “open market operations have a direct effect on the stock of money when the central bank deals with the private, non-bank sector”. As a result, R250 000 of cash reserves will be released (assuming a reserve ratio of 2.5%) and the money market shortage will only increase by R9 750 000. The banks would approach the SARB for accommodation which will be provided at the repo rate. In this way, the Bank can make the repo rate effective and influence the cost of credit to the private sector, reducing demand for credit and therefore inflation (Faure, 2002d: 29).

It is not difficult to foresee the demise of this essential monetary policy tool under a system of banking where the maintenance of fixed reserves by commercial banks is not the norm and central bank accommodation is not forthcoming. In this regard, the evidence suggests that the South African banking sector is structured appropriately ensuring the SARB has substantial control over bank lending rates and policies.

### ***9. Collection and interpretation of economic statistics***

In order to correctly interpret the state of the economy and devise appropriate policies, the SARB has a department charged with the collection and interpretation of economic data. This information is also published by the Bank to assist the private sector in understanding the stance of the authorities and plan production and investment strategies accordingly (Faure, 2002c: 12).

### ***10. Supervisor of banks***

The Bank Supervision Department (BSD), along with its major functions, has already been introduced under section 2.2 which explored the statutory environment of the South African monetary banking sector. It was noted that the BSD enforces certain international guiding principles on commercial banks to ensure the stability and integrity of the banking sector. Recent focus internationally, has been on sound corporate governance and in this regard the SARB (2001d: 21) states:

“The confidence of the public in the safety of their deposits and in the integrity and professional conduct of their bankers is essential to the business of all banks. This public trust means that the managers of banks bear a great responsibility towards depositors and have to ensure that their institutions are professionally managed and soundly based. The directors and management of a bank, therefore, must conduct their business with the highest level of care and skill.”

Of significance here is a pair of reports, the first in 1994 (King 1 Report) and the second in 2001 (King 2 Report), by the King Committee on Corporate Governance, published in response to the demand for better standards of accountability and reporting with great emphasis being placed on the responsibilities of directors and management. Consequently there have been a number of recent changes in regulation relating to banks in South Africa, taking into consideration, and in some cases enforcing, the principles addressed in

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the King 2 Report. There have also been several new initiatives by the BSD to increase access to banking and financial services for historically disadvantaged individuals. The major problems in this regard, cited during a seminar in Germany, included “loan repayment, cost recovery, accessing commercial funding and attracting private equity investment”. The SARB is currently conducting research into the major factors inhibiting the growth of micro-finance in South Africa and devising new policy approaches to ensure this service is developed without compromising the safety of the institutions involved (SARB, 2001d: 34).

### *11. Administration of exchange controls*

Currently, the Bank only plays a supervisory role in regulating foreign exchange transactions carried out by authorised dealers, appointed by the Treasury, and the transfer of funds to and from the Republic by individuals. In the past, many central banks including the SARB used foreign exchange transactions for monetary control operations which, according to De Kock (1946: 256), were a means of regulating the conditions in the domestic money markets and “insulating” the currency from temporary movements in capital. Only after certain countries experienced extremely large fluctuations on their capital accounts, as a result of large sums of foreign capital being withdrawn, was the regulation of the flow of funds deemed necessary.

The repatriation of foreign owned capital from South Africa was blocked in 1961 with the introduction of the Exchange Control Regulations, leading to the development of a second exchange rate, i.e. the “securities rand”, which allowed these balances to be traded between non-residents. In 1978 this system was transformed, by the De Kock Commission of Enquiry, to include the “financial rand” for capital transactions and the “commercial rand” for current transactions. The commission had concluded that the dual exchange rate system was complicated and discouraged foreign investment and as a result, in 1995 all such exchange controls were removed.

During the same year, local institutions were given permission to acquire foreign assets through the newly established asset swap mechanism, but this was limited to 5% of their total assets. This restriction was relaxed to 10% of total assets during 1996, and by 1997 portfolio managers were given the go-ahead to purchase foreign assets through a similar swap system. During the following years, restrictions were further relaxed and by 2001 authorities had achieved the aim of allowing firms and individuals to significantly diversify their holdings, leading to the asset swap mechanism being removed (SARB, 2003a: C3).

The SARB (2003a: E1) states that the motives underpinning the current structure of regulatory framework, relating to foreign exchange transaction conducted through authorised dealers, include the fact that foreign exchange reserves should be used in the best interests of the Republic and the loss of such reserves should be compensated by an increase in goods or services available, a reduction in debt of the parties involved or the acquisition of permitted assets. Furthermore, any foreign currency earned by residents should be brought back into the economy since this represents a loss in goods, services or assets. Regulating the amount of foreign assets held by institutions is also a means of ensuring individuals are not excessively exposed to the risks inherent in foreign transactions and asset acquisition by the custodians of their money and thus, regulation is shifting focus towards a more prudential approach.

### **2.3.2 Private sector banks and the money market**

Private sector banks are an important element of any country's financial sector because of the nature of their business. Apart from being the custodians of the economy's money stock, banks can on-lend these deposits to individuals or institutions for investment or consumption purposes which may not have otherwise been possible, and in doing so, create additional deposits (i.e. money) in the economy. This capacity to create deposits on demand is a feature unique to private sector banks, as is these institutions' access to the SARB's discount window. Before elaborating on the money market activities of banks, it

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is necessary to take a brief look at the important historical events which altered the business structure of these institutions from their original form, summarised in the extract following this paragraph, into the multifaceted variety that can be found today.

“The business of banking falls into two distinct branches: the negotiation of credit through the loan of other people's money and the granting of credit through the issue of fiduciary media, that is, notes and bank balances that are not covered by money.”

(Mises, 1912: III.15.1)

### **2.3.2.1 Development of the banking sector and money market**

According to Goedhuys (1982: 56), the era of private sector banking in South Africa began in 1836 when the Cape of Good Hope Bank opened. Before this stage, banks focused entirely on granting short and long term credit to farmers in the region. 1861 saw the establishment of the London and South African Bank followed by Standard Bank of South Africa in 1862 (Goedhuys, 1982: 57). Even though numerous private banks later emerged, the institutions had very little experience in the financial sector and once the larger, more experienced banks entered the South African market the smaller banks were either liquidated, forced to amalgamate with, or were taken over by the larger banks.

The development of the South African money market only began after the Second World War. Before this time, funds were traded on the London money market which was relatively well developed by this stage. To encourage the local advancement in call-money facilities, the government developed the National Finance Corporation of South Africa (NFC) (in 1949) which used money held on call to invest in short-term securities (Goedhuys, 1982: 72). The instant success of this public institution is said to have encouraged the private sector to initiate the development of money market services. The NFC was referred to as the “borrower of last resort” for money market institutions since it would always accept deposits, even when the discount houses could not absorb any more liquidity.

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Another milestone in the growth of the market was the opening of the first discount house in 1957, namely The Discount House of South Africa. Discount houses held a critical position in the development of the market at this stage. Faure (2002a: 9) notes that apart from creating short and long-term portfolio opportunities for institutions, the discount houses were responsible for “Centralising the banks’ cash reserve movements, developing markets in the financial securities dealt with, assisting the SARB in the execution of monetary policy and providing an outlet for the ultimate liquidity of the banking system”. The discount houses provided the central bank with a means of accurately assessing the position of banks in the sector and ensuring that money market rates reflected the sectors liquidity needs (Goedhuys, 1982: 80). Because of these institutions’ distinctive nature the SARB originally granted the discount houses exclusive access to central bank accommodation and exemption from the cash reserve requirement.

In due course, the market for short-term securities developed and as a result it became more cost-effective for banks to hold these assets, instead of putting money on call with the discount houses. This was only the first of many developments which reduced the profitability of these institutions and although discount houses still exist in many countries, in South Africa these organisations re-registered as commercial banks in 1991.

The major factors cited by Faure (2002a: 10) which were responsible for the downfall of the South African discount houses are:

- As mentioned above, banks found it more cost-effective to hold short-term assets once the securities market developed.
- Emergence of the interbank market, private bank treasury departments and more efficient central bank accommodation procedures reduced the discount houses’ trading margins and profits.
- Loss of central bank privileges and increasing sophistication of clients amplified trading and operating costs further.

It must be mentioned that the very nature of business that the discount houses undertook, i.e. to develop the markets in short-term lending facilities, is the foremost factor responsible for these institutions downfall. Thus, as noted by Faure (2002a: 11), the money market had come of age by 1991 and the need for discount houses diminished.

### **2.3.2.2 The interbank market**

The interbank market (also referred to as the interbank deposit/loan market) is the market where banks shift around existing funds within the sector. Simply put, it is the market for loans between private banks and other banks, or the SARB. The need for this market emerges due to the fact that all banks are required to hold an amount of cash with the SARB (i.e. cash reserve requirement), determined by the extent of liabilities to the public. These reserves are held in so called “reserve accounts” and the requirement increases or decreases as the amount of bank deposits vary, or as the cash reserve requirement is changed. This statutory obligation was discussed earlier.

After the interbank clearing process, conducted by the Automated Clearing Bureau (ACB) at the end of each day, the banks reserve accounts will either be in surplus or deficit. Thus, deficit banks will initially venture to obtain required funds, i.e. shortfall between the statutorily required amount and current balance, from the surplus banks. The surplus banks should be willing to lend these funds at a price. Since balances in these reserve accounts do not earn interest from the Bank, the cost of holding cash in excess of the required amount is equal to the potential profit that could have been earned otherwise. According to the BIS (2001b: 2), an interbank market that economically channels surplus funds to deficit units, creates an environment where the central bank can achieve its desired rate of interest. Furthermore, a robust interbank market can ensure that institutions efficiently trade liquidity, irrespective of the conditions prevailing in the market.

The process of borrowing and lending between banks establishes a price for funds referred to as the interbank rate. This price is an outcome of many factors, the most significant of which is the SARB's repo rate.

Finally, at the end of this process the entire banking sector is either in surplus or deficit and this is when the money market shortage comes into play. The crux of the matter is that the banking sector is always indebted to the SARB, which is a factor central to monetary policy. At the end of the interbank clearing process banks will utilise surplus funds to diminish the level of indebtedness (Faure, 2002d: 8). On the other hand, banks that are still in deficit have to resort to the SARB to make up the shortfall and these funds are provided at the repo rate. The structure currently in use for refinancing is the repo system which involves the banks selling certain eligible securities to the SARB. This process was discussed in the section on rediscounting and lender of last resort (provider of accommodation).

“An interbank market should ideally play a pivotal role in the implementation of monetary policy by a central bank in the sense that interbank and other money market rates should be sensitive to any changes in the refinancing rate of the central bank. This is because an efficient interbank market quickly transmits changes in the refinancing rates of a central bank to other money market rates.”

(ABSA, 2001: 2)

### **2.3.2.3 Factors responsible for underdeveloped market**

The sluggish development of banking activities and the financial markets in the past has been partially attributed to the widespread use of “*direct monetary control instruments*” by the SARB, which are said to repress the financial sector and distort the allocation of resources. Prominent factors noted in a publication by ABSA (1997: 1) include:

- The use of credit ceilings by the SARB to restrict overspending and to control inflation which was accelerating during the 1960's and 1970's.
- Disintermediation of the banking sector due to the growth of "grey markets". This was a result of increasing cash reserve and liquid asset requirements.

Another contributing factor was the South African policy of not allowing foreign banks entry into the Republic and strict regulation restricting the opening of foreign branches. This gave the local institutions no reason to develop services further and although these controls have been recently relaxed, foreign banks still elect only to enter niche markets. Nevertheless, increased competition in the sector has "enhanced the sophistication of the domestic banking sector, creating additional liquidity in the markets, and forcing banks to focus more on areas of core competence". Additionally, banks have been forced to increase their cost-effectiveness and reduce the cross-subsidisation of less profitable avenues of business (ABSA, 1997: 2).

The banking sector is seen as an integral component of the financial system and commercial banks play a significant role in the domestic money market. Therefore, while governing policies are essential in creating a sound environment, care needs to be taken to ensure innovation and competition in the sector are not restricted. The factors that are expected to play a major role in the development of this sector include large scale industry consolidation, provision of cost-effective services to traditional clients and the "unbanked" fraction of the population, technological advances and increased competition from non-bank financial intermediaries. Recent mergers with and acquisitions of small banks by larger competitors are expected to considerably decrease competition in the sector. Nevertheless, as the number of opportunities for expansion decrease, the consequent reduction in dealing rooms may have a negative effect on the overall liquidity and competition in the domestic money market. Internet and telephone banking is becoming an indispensable service that banks need to offer, especially as access to foreign markets increases and banks attempt to expand operations offshore (ABSA, 2002c: 34).

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The reluctance of larger commercial banks and foreign banks to take on the risks associated with smaller, low income clients and entrepreneurs has also been addressed by government. The recent string of small bank failures and acquisitions has been partially attributed to these institutions accepting the higher risks associated with granting credit to the lower income groups. Of the 22 banks that exited the South African banking sector during 2002 and the first quarter of 2003, a large number of these were catering strictly for low income customers. While the directors of Unibank and Saambou attributed both these institutions' poor performance to losses suffered in the micro-finance business, the rest of the banking sector suffered large withdrawals in the aftermath and were either absorbed by larger banks or closed down due to liquidity crises (SARB, 2002d: 8).

There are several macro-economic factors that according to ABSA (2002b: 1) have also played pivotal roles in this regard, the most prominent of which is the concentration of power in the money market resulting in a competitive disadvantage for the smaller players. Another contributing factor is the very low economic growth coupled with a small "domestic savings ratio" in South Africa (0.3% of disposable income as mentioned earlier) which, even if deposited with smaller banks, does not provide much in the way of liquidity given the higher interest rates that need to be paid to attract such deposits from the public. Ultimately, financial difficulties can be attributed to poor management rather than insufficient capital as it is the firms' executives that make the final decisions.

There have been a number of structural changes in the domestic and international environment that have had an effect on the nature of business of commercial banks. These changes have induced banks to explore new avenues of operations since the traditional sources of income are no longer profitable. For example, falling inflation has eroded the high return on assets (ROA) and return on equity (ROE) previously enjoyed by banks resulting in diversification into areas such as securities trading, asset management and insurance. Despite the inherent problems in the economy, South Africa's banking sector and overall financial system is said to be of a sound nature and this view coincides with a recent financial sector assessment conducted by the International Monetary Fund (IMF) and World Bank Group (SARB, 2002b).

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Nevertheless, ABSA (2002b) has identified some critical elements that need to be addressed by the regulatory authorities, including:

1. Tightening of regulations pertaining to micro-lenders to help banks assess the risks associated with particular clients and ventures.
2. Increasing focus to manage risks such as market risk, liquidity risk, operational risk reputational risk and most importantly systemic risk, is also required.

Reputational risk is of enormous significance in the banking sector since these intermediaries are built on a foundation of public confidence. Furthermore, while other risks are institution-specific, reputational risk has an added dimension of contagion. Thus, a loss in confidence resulting from an institution's dubious activities can precipitate into massive withdrawals and failures of other similar intermediaries. This can result in a severe liquidity crisis and ensuing banking calamity that the central bank may not be able to circumvent (SARB, 2002d: 8).

The BIS (1999: 1) has identified two related types of systemic risk. The first is the commonly documented failure of various institutions in a market, caused by some internal or external financial shock. For example, the failure of a major local or international intermediary may create an environment where the liquidity of a financial system is drastically reduced. This may cause additional failures as the remaining institutions compete for limited funds to meet increasing withdrawals. The second type of failure is a result of one institution's difficulties being projected, by individuals and investors, onto related intermediaries in the market. This is the 'contagion' effect mentioned above and the BIS (1999: 2) suggests that this may be aggravated by the extent of interbank exposures. While this conclusion assumes very low informational asymmetries vis-à-vis exposures across intermediaries, it highlights the need for an increased focus on banking risks and better settlement systems.

3. The introduction of a deposit insurance scheme for smaller clients who are unable to assess the risk of banking with a particular institution. Apart from safeguarding
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- these clients, the scheme would ensure the smooth functioning of the national payments system and protect against bank runs.
4. Better accounting and reporting standards to increase the liability of management and auditors especially as Internet and telephone based banking becomes a major component of the business.
  5. Black economic empowerment or “employment equity”, the erosion of the skills pool and strict immigration laws have been cited as the most important factors hindering the operations of banks, given that jobs can no longer be allocated on the basis of merit alone.

(ABSA, 2002b: 5).

Access to banking and other financial services for the marginalised division of the South African population is an issue that has been receiving much attention in recent times. Realisation of the fact that poverty can be reduced to some extent, by providing the poor with efficient methods of protecting their wealth has turned the attention of policy makers to the provision of these services. The Bank (2003b:1) states that the issue of ‘access’ to financial services consists of a number of elements including “physical access, product features and affordability”. The paper goes on to conclude that although many private and public sector initiatives are underway to address these issues, such schemes are not sufficient to increase access. Sound macroeconomic policies which encourage growth, individual entrepreneurship and equality in income distribution are a prerequisite to ensure the success of these projects. Moreover, policies devoid of income inequality as a major goal, can result in economic growth without any significant reduction in poverty. The following table shows the difference in credit extensions to the private sector as a percentage of GDP and interest rate spreads for South Africa, 28 upper middle income countries and 33 high income countries.

**Table 1: Selected indicators of financial development**

	1995	1996	1997	1998	1999	2000	2001
Credit to private sector from deposit money banks (per cent of GDP)							
South Africa.....	59,1	61,5	63,6	68,8	68,9	71,8	80,0
Upper middle-income countries (28 countries)	36,7	37,2	41,2	44,0	45,0	45,2	41,6
High income countries (33 countries) .....	73,0	75,6	79,6	83,8	87,8	93,5	97,7
Interest rate spread (per cent)							
South Africa.....	4,4	4,6	4,6	5,3	5,8	5,3	4,4
Upper middle-income countries (29 countries)	9,5	9,0	9,6	10,0	9,6	8,5	8,6
High income countries (31 countries) .....	4,1	4,2	4,0	3,8	3,7	3,8	3,9

(SARB, 2003b: 10)

The SARB (2003b: 9) regards these as more accurate measures of financial development than the conventional method of monetary aggregates to GDP. Research suggests that as a country's financial system develops, credit to the private sector increases while interest rate spreads, which represent the "cost of financial intermediation", narrow. The evidence shows that South Africa had higher credit extensions and lower interest rate spreads than the upper middle income countries during the observation period, suggesting a superior level of financial development. On the other hand, credit extensions were much lower in South Africa than in high income countries, although the differences in interest rate spreads were not as extreme and the data thus confirms the relationship between financial development and economic growth. The Bank has identified various obstacles to the development of banking services in South Africa, including the following:

- Corrupt public ownership or inefficient private management of banking institutions may discourage individuals from using the services offered by these

- intermediaries. This lessens the ability of all intermediaries to attract deposits, reducing available funds for development.
- A high and unstable rate of inflation diminishes the demand for money deposits and increases private holdings of other assets.
  - Underdeveloped markets result in information asymmetries which reduce the ability of intermediaries to differentiate between truthful and dishonest clients.
  - A barrier to entry created by regulation which may be too stringent strengthens the position of existing institutions and allows an increase in the spread between deposit and lending rates.

(SARB, 2003b: 12).

## 2.4 CHAPTER SUMMARY

The main factors that are responsible for the under-developed money market have been identified in this chapter. These include: the Zimbabwe land reform process, corrosion of the domestic skills pool and other labour market problems, HIV/Aids, employment equity laws, exchange controls, inflation, information asymmetries created by under-developed markets, reduction in competition due to mergers and acquisitions and competitive disadvantage created by the current cash reserve requirement on private sector banks.

Possible solutions to these issues are put forth in the following chapter, but it must be stated that while the discussion so far has concentrated on the banking institutions and money market, the recommendations have been developed in a manner that should prove beneficial to the entire financial sector. This is because development of the money market should provide individuals and institutions with an *alternative* source of funds, rather than providing the only one. Chapter 3 addresses these concerns in the same order as they were presented above.

## CHAPTER 3

### **DEFICIENCIES IDENTIFIED AND RECOMMENDATIONS**

This section of the thesis attempts to address some of the deficiencies identified in the structure of the South African monetary banking sector, the political, social and economic environments and the institutional and regulatory frameworks within which financial institutions must operate. Earlier in this thesis, mention was made of the dynamic nature of modern financial institutions and the ensuing complexities faced by authorities who endeavour to regulate them. Therefore, the recommendations put forth are formulated to address the problems facing supervisory bodies and policy makers on a long-term basis rather than solving them only temporarily. Although the proposals have been presented in sections similar to the literature review, some overlap exists due to common subject areas. For example, inflation targeting is discussed in the section on the economic environment and monetary policy but also has significance in the institutional environment. Similarly, while the discussion on mergers and acquisitions in the financial sector has important implications for regulators and policy makers, the argument has been presented under the institutional environment.

The first part of this chapter considers some of the problems identified in the political and social environment of South Africa. The issues covered include privatisation, labour market inflexibilities and HIV/Aids. Thereafter, the economic environment is discussed with emphasis being placed on the issues surrounding inflation and the inflation targeting policies of the current administration. The problems identified earlier with the current cash reserve requirement are examined in section 3.3 and finally, the drawbacks of reduced competition in the banking sector, as a consequence of recent mergers and acquisitions, are detailed in section 3.4.

## **3.1 POLITICAL AND SOCIAL ISSUES**

### **3.1.1 Privatisation and the creation of employment**

Apart from a dismal attempt to help resolve the problems in Zimbabwe, which has resulted in severe criticism from local and international press and leaders, South Africa's political environment and foreign relations are relatively stable. Within the country, the ANC and COSATU need to find some common ground and resolve issues surrounding the privatisation of state assets and creation of employment, even if some political representatives believe the two are mutually exclusive. While the initial drawbacks of privatisation are higher prices and perhaps increased unemployment, these are easily outweighed by the advantages. In the short run, the sale of government owned assets to private investors would bring much needed investment capital to the country. This will be accompanied by newer technology, better management and the possibility of human resource development, which is critical given the recent net outflow of skills from South Africa. However, the long run benefits are twofold, including reduced prices due to increased competition, financial market development, efficient allocation of resources, increased employment opportunities with superior wages and ultimately, higher economic growth (Taylor, 2003: 283). Unfortunately these advantages are not immediately observable and, like most long-term initiatives, will require patience and perseverance on the part of all concerned.

On the subject of long-term initiatives, the dawdling progression of the *NEPAD* (New Economic Partnership for African Development) initiative can also be partially linked to the land invasion problems and ensuing social and economic crisis in Zimbabwe. The failure of most African leaders to reprimand President Mugabe and thus, in effect support the measures adopted by the Zimbabwean government, has critically compromised foreign relations in the region. It is also not difficult to understand why overseas investors may feel a sense of reluctance to devote financial resources to a region where political stability, human rights and general good governance are not the norm, but rather subject

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to debate. Additionally, the current cost of NEPAD is passed on primarily to South African taxpayers since most of its infrastructure is based in the Republic (Taylor, 2003: 285). While “quiet diplomacy” is indeed better than the antagonistic methods of the western world, it is imperative that President Mbeki works speedily with other African leaders to resolve the issue and build the infrastructure and partnerships necessary to fully implement NEPAD, before the developed world loses all confidence in the continent.

The major social problems facing South Africans were discussed in section 2.1.2 and the author believes that by directly addressing these issues the authorities will endow the country with the necessary tools for financial development. Factors such as *crime and poverty* are major concerns for domestic and foreign investors and therefore require immediate attention. The government has presently identified these negative issues and is actively devising methods to overcome some of the obstacles. Unfortunately, these efforts are not considered to be aggressive enough and greater use of long- and short-term initiatives to address issues such as unemployment, crime and poverty is advocated. More resources need to be engaged in furthering projects such as NEPAD, and issues such as personal tax reduction and limitations on skilled immigration need to be addressed promptly.

While these issues are relevant to the subject of financial market development, an in-depth analysis of each of the above problems is beyond the scope of this dissertation. However, various authors (e.g. Schoeman and Blignaut, 1998; Loots, 1998; Taylor, 2003; Calitz, 2000) have explored these problems and devised policy recommendations accordingly.

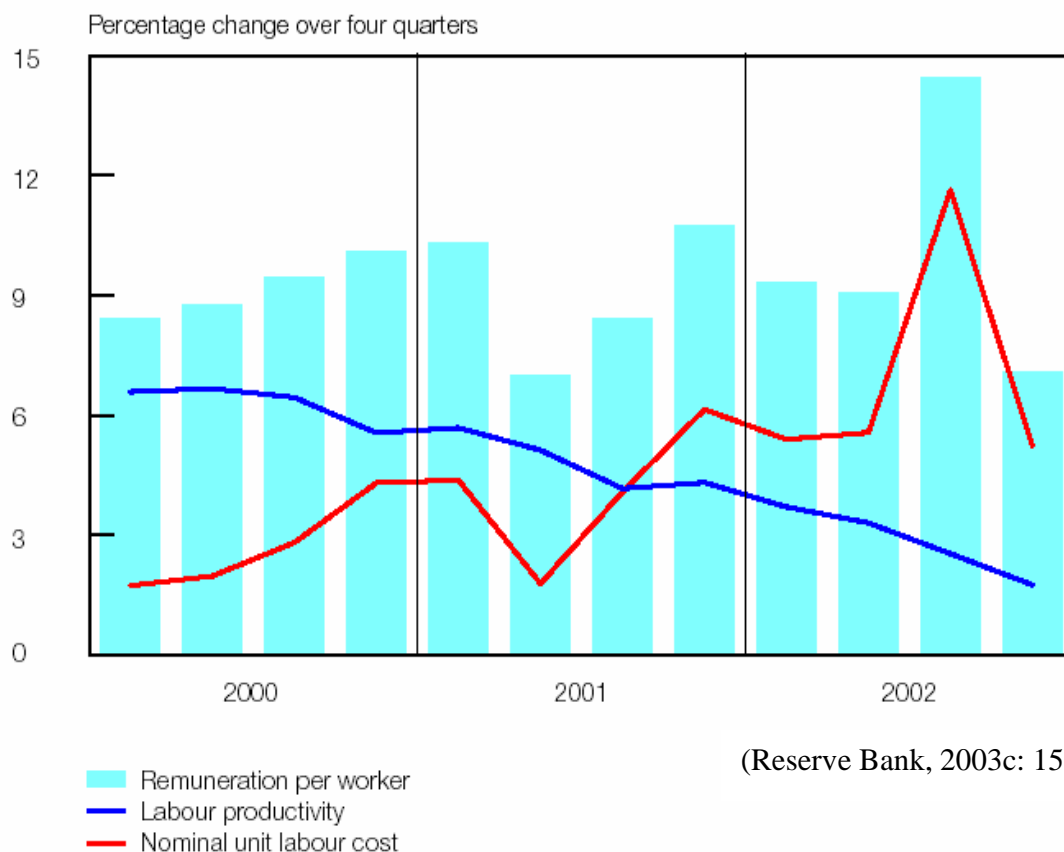
### **3.1.2 Labour market**

Additional concerns include the erosion of the domestic skills pool, labour cost developments and the decline of labour productivity. As already mentioned, incentives have been offered to firms by the Sector Education and Training Authorities (Setas) to train individuals with little or no experience, but progress in this regard is slow. The

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following graph shows the changes in labour costs, productivity and remuneration over the last three years. While the rate of increase in labour productivity has been constantly falling, except for a short period between 2000 and 2001 and amid the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2001, remuneration per worker and unit labour costs have been increasing at rates of between 7% and 14% during the same period. According to the graph, growth in remuneration only slowed between the 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2001 and the last two quarters of 2002. The Bank (2003c: 15) states that these variables are monitored closely since they play a significant role in the inflation process and in shaping future inflation expectations.

**Figure 11: Labour market**



The exodus of qualified persons, appropriately labelled the “Brain Drain”, to more industrialised countries is partly as a result of social concerns such as crime and poverty,

but more so due to aggressive recruiting programs carried out by other countries that offer better salaries and overall packages. Crush (2002: 150) states that the authorities in South Africa underestimate the gravity of the problem since official statistics undercount the skills loss by around two thirds. For example, South African statistics show that during the ten-year period between 1987 and 1997, just over ten (10) thousand professionals emigrated from the country while international statistics put the figure at just above thirty two (32) thousand. This flight of skills has also been attributed to poor salaries exacerbated by high levels of personal taxation and a general negative sentiment toward government intervention in the labour market.

This issue is among the major concerns for foreign investors, who may consider the obligation to employ South Africans without proper training as a restriction on operations and thus a major barrier to trade. The unavailability of skilled persons and increasing cost of obtainable labour may result in a similar mass departure of manufacturing and service companies to countries where labour can be sourced at cheaper prices, and where labour policies do not regulate the market to the point of inflexibility (Crush, 2002: 169).

The solution to this dilemma is not as complicated as some might believe, bearing in mind that globalisation has created a labour market that extends far beyond the borders of any particular country. Therefore, all that is required in South Africa is a more accurate account of the number and qualifications of skilled individuals leaving annually. Once this has been achieved, a similar quota of work permits can be issued to foreigners with comparable qualifications that wish to immigrate to the Republic. This idea was incorporated into the Immigration Bill passed in 2002 but is now under review along with a point system similar to that used in the developed world. Nevertheless, whether the quota system or the newly proposed point system is adopted, a decision needs to be made soon and implemented swiftly. Although the author believes such a policy will have to be implemented with incentives attached to grasp the attention of prospective immigrants, it presents an opportunity for South Africa to replace the skills that have been lost to other countries.

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Further, by increasing the supply of expert labour and easing immigration barriers for foreign students graduating in the country, policy makers may succeed in attracting much needed FDI to South Africa. This investment, which is currently withheld due to the direct interventionism in employment patterns, could circumvent a possible economic crisis with severe secondary consequences.

### **3.1.3 HIV prevention**

AIDS is another key concern, for South Africa and the rest of the region, which requires more feasible solutions to be explored immediately. Estimates suggest that between 2.5 and 4.2 million people are HIV positive in South Africa and by 2005 somewhere between 354 and 383 thousand people will die of AIDS annually, negatively affecting growth by up to four percent in each successive year (SA Review, 2003: 29). The increase in mortality rate will have an alarming effect on the labour market, reducing the supply of labour as well as labour productivity due to poor health and increased leave taken from work. Government expenditure on health services for the ill and care for orphans will escalate (Bonnell, 2000: 825) resulting in the neglect of other services, which may also have spill-over consequences in the form of reducing investment and tourism.

This epidemic is also having a devastating effect on the social and economic structure of the country (Bonnell, 2000: 824), and without a foreseeable solution to the debate over production and procurement of drugs to treat HIV patients, this crisis will get worse before it gets better. The repercussions of this on the financial sector will initially be felt by the banking institutions. While these intermediaries may experience an increased demand for credit, as a result of individuals spending a greater proportion of their disposable income on health care, the risk of default on these loans will also be higher. This could easily precipitate into a liquidity crisis and therefore will lead to a reassessment of bank lending policies to account for the higher risk and information asymmetries. The above factors, coupled with escalating health and life insurance claims

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will reduce the quantities of financial assets purchased in the market, decreasing the price of such instruments and slowing economic growth in the long run.

The solution evidently lies in poverty reduction and better education for the masses, but it is a battle that government cannot fight single-handedly and the participation of community leaders and respected members of social circles will be an essential component of any HIV prevention effort. Even so, while the extent of poverty in the region is considered by most foreign leaders and governments to be alarming, it is disheartening to see the majority of local government policies and disputes addressing economic empowerment and foreign investment. While these are undeniably important matters, more needs to be done to protect and serve the interests of the average South African if the concepts of “equal opportunity” and “sustainable economic development” are to be realised.

In view of the fact that investors are not only concerned with good economic performance but also a sound social and political environment of a country, investment flows to South Africa will be somewhat dependent on all of the above factors. The apparent lack of eagerness on the part of the governing authorities to solve the problems that have previously been identified has led to the domestic and international press portraying a pessimistic image of the region to the rest of the world. In order to grab the attention of foreign investors, South Africa must address the abovementioned problems in a manner that proves the country’s commitment to social and political reform. Unfortunately, even with improvements in these areas, struggles in neighbouring Zimbabwe and various other African countries will undoubtedly leave investors reluctant to commit capital to the region, while intensifying the already relentless emigration of accomplished individuals.

## **3.2 THE ECONOMIC ENVIRONMENT AND MONETARY POLICY**

### **3.2.1 Inflation and inflation targeting**

A sound and predictable economic environment is considered to be one of the most important preconditions for financial development. The economic environment of South Africa was discussed in section 2.1.3 with great emphasis placed on inflation and inflation targeting. In this regard, the policies adopted by the South African authorities can be justified provided that they are implemented with considerable discretion. For example, a high level of inflation has major disadvantages for the economy and thus the monetary policy objectives developed around aggressively targeting inflation are fitting. This holds true, with one exception, i.e. the author considers the goal of price stability which implies zero inflation, not appropriate for South Africa. Rather, the current inflation target range of 3% to 6% is regarded as more suitable and should be reinstated on a permanent basis. Apart from the reasoning below, this proposed range takes into account that the authority's measure of inflation may be overstated and therefore actually lower than recorded. Thus, the range can be considered as being between 2% and 5%, with allowance for a 1% margin of error. The conclusion reached above is based on an argument, put forth by Palley (2000a), which emphasises the importance of positive levels of inflation for both the labour and financial markets.

### **3.2.2 Significance of inflation and inflation expectations**

The significance of inflation within the labour market stems from the argument that wages are characterised by downward rigidity. Thus, instead of creating a deflationary environment where firms have to negotiate wage reductions, policy makers can allow for low levels of inflation. This will ensure that if wages are periodically increased, firms profit margins are not simultaneously eroded. This upward price movement, which could be caused by an increase in nominal demand, should be accompanied by reduced

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unemployment and will stimulate growth. At the very least, the economy will not show symptoms of increased joblessness or slowing growth.

The evidence offered by Palley (2000a: 281) focuses on Japan's growth and inflation levels in the 1980's and 1990's. In the former period, when inflation levels were positive, Japan was experiencing rapid economic growth and falling levels of unemployment, both of which were reversed in the latter period when inflation targeting policies prevented similar trends in price adjustments. Furthermore, the effect of deflation and reduced wages can have severe consequences on the repayment of existing debts (i.e. those carrying a fixed rate of interest), while the restraint placed on the economy by nominal interest rate floors, i.e. nominal rates cannot fall below zero, will prevent markets from adjusting in the direction necessary to boost investment and consumption spending. Thus, inflation under difficult economic conditions can help restore economic stability by increasing the nominal value of assets held by individuals and firms and therefore is appropriately referred to as "disequilibrium inflation".

The second argument is based on the inflation expectations of the market. If, under normal economic conditions authorities create an environment where inflation expectations are zero and as a result interest rates are low, then in an economic recession when the need for negative real interest rates arises, the interest rate floor of zero will prevent this from being attained. On the other hand, if inflation expectations have settled at the lower limit of the proposed range, i.e. 3% and interest rates are a little higher, then when the need arises a negative real rate can be attained by simply reducing rates by 1% or 2%. This is referred to as "equilibrium inflation". Here again the example of Japan is used to show how animal instincts can drive individuals and firms to speculate over asset prices during a boom and get over burdened with debts that cannot be repaid once the economy slows. Under such circumstances the need for negative real interest rates arises and if no such allowance has been made, the recovery process can be long and agonizing (Palley, 2000a: 290).

A further argument cited by Palley (2000a: 291), is based on the fact that inflation erodes the purchasing power of money and thus makes holding other assets i.e. bonds, treasury bills etc., more sensible while shifting consumption spending from later periods to the present. As a result the prices of assets increase, this in turn increases investment spending, capital accumulation, research and development, which ultimately lead to economic growth. On the other hand if zero inflation is attained, interest rates are low and the possibilities of deflationary shocks still exist, the return on money will be equal to or close to that on assets resulting in what is commonly referred to as a liquidity trap. Under such conditions monetary policy will be rendered ineffective since individuals and firms will prefer holding money to any other assets. This will have a negative effect on the liquidity of the asset market, driving prices down and diminishing the ability of local firms to raise capital for expansion.

Moreover, since wages are sticky downwards, in an environment where inflation is negative the increase in real wages will erode the profit margins of firms resulting in lower output and employment. This is compounded by the fact that firms cannot produce and sell their goods instantaneously, but rather there exists a time lag between production and sale similar to the time lag between capital investment and the productive use of that capital. Consequently, in a deflationary environment or one in which the possibility of a negative inflation shock exists, firms may have to cut back on employment or reconsider investment decisions to ensure survival. A very low level of inflation hence also increases the cost of credit due to the uncertainty of performance and risk of deflationary shocks. This further discourages borrowing and places additional burdens on existing debts that carry a floating rate of interest.

Therefore, the central bank objective of price stability should be re-evaluated and policies which allow for positive, low levels of inflation must be implemented. The authorities need to find a balance between maintaining a level of inflation consistent with South Africa's growth requirements and ensuring that negative investor sentiments do not arise resulting in the disadvantages mentioned above.

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### 3.2.3 Asset price and debt bubbles

An additional policy consideration is the distorting effect of asset price and debt bubbles on the authority's measure of inflation, i.e. the CPIX index. Temporary increases in asset prices results in a boost in aggregate demand based entirely on reversible wealth effects. In other words, the increasing value of personal assets drives wealthy consumers and firms to borrow and spend more without considering the possibility of future asset price deflation. This increase in consumption and investment has an inflationary effect leaving the authorities with no option but to raise interest rates, even under previously taut monetary conditions. The problem is complicated further by the secondary loan market where institutions can dispose of their loans, effectively removing them from the firm's balance sheets and therefore avoiding any liquidity crisis. Finally, any attempt by policy makers to target balance sheets would have negative consequences on the rest of the economy with no real progression towards price stability (Palley, 2002: 49).

Mishkin (2001: 15) argues that while movements in real estate and stock prices have an important impact on aggregate demand, targeting of these asset prices by the authorities would be challenging without determining the precise cause of the price change. However, Cecchetti, Genberg, and Wadhvani (2002) state that while monetary policy should not *target* asset prices and also should not react to *all* asset price changes, there is a case for corrective monetary policy when asset price fluctuations are not justified by underlying macroeconomic fundamentals, i.e. asset price bubbles. The authors state:

“Raising interest rates modestly as asset prices rise above what are estimated to be warranted levels, and lowering interest rates modestly when asset prices fall below warranted levels, will tend to offset the impact on output and inflation of these bubbles, thereby enhancing overall macroeconomic stability.”

(Cecchetti, *et al*, 2002: 3)

Bordo and Jeanne (2002) state the need for proactive policy intervention in certain markets (e.g. property) but do not recommend hard and fast policy rules to deal with inflated asset prices in all markets. Cecchetti, *et al*, (2002: 15) also stress the importance of an accurate assessment of the causes of specific asset price misalignments by the authorities. Gruen, Plumb and Stone (2003) concur with the views put forward by the above authors, i.e. monetary policy should only react to asset price changes that could affect the realisation of the inflation target. The authors (Cecchetti, *et al*, 2002: 16) refer to the BIS (2001c: 141) annual report where it has been suggested that the very occasional use of such policies should not be completely ruled out. Nevertheless, the BIS (2001c) is still unconvinced that the advantages of using such policy measures outweigh the potential dangers of flawed policy response.

Bollard (2004: 4) suggests that whereas cautious lending by intermediaries can shield the financial system from the negative effects of asset price bubbles, the consequence on the economy at large can be severe. The author goes on to argue that targeting inflated asset prices would require a substantial adjustment to interest rates, which could defeat the inflation targeting policy and have negative results on the rest of the economy. This view is consistent with that of Palley (2000b: 183). Additionally, Mishkin (2001: 16) states that the authority's ability to control stock prices is very limited and central bank policies that attempt to control numerous economic elements simultaneously may be considered too dictatorial and ambitious.

Kent and Lowe (1997: 20) argue that while improved prudential regulations may reduce the need for policy intervention, such regulation needs to be applied consistently across the whole spectrum of financial intermediaries. The absence of uniform regulation will simply result in a shift of funds and risks onto the balance sheets of less regulated institutions. Schwartz (2002) also argues the case for stricter capital controls but does not consider a uniform approach. Bollard (2004: 5) concludes by stressing the difficulty in dealing with such speculative bubbles and points to the need for additional policy tools that work in union with the current prudential regulations, but states that any such tools need to be counter-cyclical.

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Similarly, many other authors (e.g. BIS, 2003b; Lim, 2003; Gruen, Plumb and Stone, 2003) have recently examined the effects of asset price bubbles on the economy and have evaluated the possible strategies that policy makers can adopt to counter them. While most of the above have suggested a combination of long-term monetary policy strategies and revised prudential regulation, a convincing solution has yet to be published.

This predicament indicates the need for a complementary tool for policy makers to use in addition to interest rates and prudential requirements, which will allow the authorities to control the activities of all financial institutions, without unsettling the broader economic environment. One possible solution will be discussed in the following section on the statutory environment.

### **3.3 STATUTORY ISSUES**

#### **3.3.1 Transformations in the regulatory framework**

Recent transformations in the regulation of financial markets and institutions within South Africa have been aimed at providing individuals and firms, foreign and domestic, with an environment conducive to investment. While improved legislation will help bring the country closer to international standards of best practice, advance customer protection and service quality, it can also be counter productive. The difficulty in devising such regulation stems from the fact that although South Africa is considered as one of the most developed nations on the continent, in terms of world economic development the country is still emerging. As a result, policy makers cannot simply observe the systems used in more developed nations, like the United Kingdom, and adopt them verbatim. Any such attempt could result in a regulatory framework that obstructs the natural development of financial markets and consequently delays, rather than assists the country's integration into the global financial system.

Furthermore, the implementation of a new framework brings with it additional costs for both firms and the authorities. Institutions will need to restructure business activities in order to conform to new laws, while authorities will incur additional administration and policing expenses. Therefore, while attempting to create an environment conducive to foreign investment and economic growth, authorities must be cautious and continue to use the discretion that has been a reassuring characteristic of the current monetary regime.

Some authors have also expressed concerns regarding the proposals to introduce a single financial regulator in South Africa. The argument is based on the premise that the establishment of a single regulator implies that the country has a financial sector with homogenous priorities. The authors found that this was not the case, since the priorities of the commercial credit and micro-credit sectors, pertaining to the provision of micro-finance, are not the same in the domestic market. Commercial banks in South Africa are concerned primarily with profit performance, service quality, client focus and improving revenue growth. On the other hand, specialised micro-lenders are concerned about the high costs, quality of loan books, irregular cash flows and incomprehensive legislation. As a result of the differences, the authors conclude that “a mega-regulator would not be able to manage two distinct sectors as a uniform entity” and thus, the government should continue to apply unique regulations (Volschenk and Biekpe, 2003: 7).

### **3.3.2 Asset based reserve requirements**

In the previous section, mention was made of the need for additional tools for policy makers in South Africa attempting to regulate the activities of financial institutions. Given the rapid pace of financial innovation and deregulation, together with the blurring of boundaries that once distinguished the various intermediaries, any policy recommendation needs to be applicable across the full spectrum of institutions so that no single group of financial intermediaries is discriminated against, possibly resulting in competitive disadvantage.

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Falkena, *et al* (2001: 3), also advocate the use of regulatory policies that ensure “competitive neutrality” between competing suppliers of financial services, in order to promote efficiency in the sector and “create a level playing field”. The current cash reserve requirement is a case in point. The statutorily enforced requirement that commercial banks must keep a certain amount of cash, equal to some percentage of their liabilities to the public, in accounts held with the central bank serves as an important monetary policy tool. While providing the Bank with the necessary liquidity to avert financial crises, this obligation increases the operational costs of banks and is looked upon as a sort of tax whose burden is ultimately passed on to the bank’s customers. Furthermore, the difficulty in determining the appropriate level of reserves renders this tool complex and thus vulnerable to errors which may prove costly to the economy in the long run. All these shortcomings have been discussed comprehensively in the literature review.

Additionally, Palley (2000c: 7) draws attention to the fact that the current system requires authorities to continuously scrutinise the quality of loans made by banks and ensure that the internal systems that have been put in place are adequate to monitor changing risks in lending patterns. Commercial banks have also successfully managed to drastically reduce the holdings of liabilities that necessitate reserves to be held with the central bank. One solution to this could be for the Bank to start paying interest on reserves deposited by commercial banks, although the mere cost of such a scheme would render it uneconomical.

The solution to this dilemma lies in implementing a system of governance that allows the authorities to regain command over the creation of credit and at the same time, ensure a level playing field in the financial services industry. The SARB’s proposal to establish a single financial regulator that can exercise “regulatory power and supervisory oversight” across all financial institutions could be a step in the right direction, except for the problems mentioned by Volschenk and Biekpe (2003). Nevertheless, whether a mega-regulator is instituted or the structure remains tiered, the supervisory body will need to

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develop a structure of policy that addresses some, if not all, of the shortcomings mentioned above.

Regarding this, the author recommends a system of Asset Based Reserve Requirements applied consistently to all financial institutions. The idea was originally developed by Palley (2000b), in response to the increased occurrences of financial crises towards the end of the twentieth century. This system embraces the idea of regulation by function and could be applied to all financial institutions, therefore directly eradicating the discriminatory weakness of the current cash reserve requirement.

Simply put, the scheme would require banks to hold an amount of reserves that is directly dependent on the classes of assets purchased instead of the amount of liabilities held. The amount of required reserves for a particular asset class, which should be variable, will reflect, amongst other things, the policy maker's view of the relative risk inherent in holding that asset. For example, the SARB may believe that intermediaries are purchasing too many equities and too few government bonds, resulting in inflated stock market prices and a fall in the Treasury's ability to sell government securities. Then by simply increasing the reserve requirement on equity holdings, the cost of holding equities will increase and therefore discourage further share purchase by institutions and encourage a shift to a different class of asset (Palley, 2000b: 180).

This recommendation immediately brings into question the ability of the monetary authorities to correctly identify inflated asset classes. This was discussed in section 3.2.3. Moreover, given that policy makers have the same information as market participants, it can be argued that individuals active in the market should be able to recognise the inherent risks and act rationally (Mishkin, 2001: 15). Cecchetti, *et al*, (2002: 16) once again turn to the argument put forth by the BIS (2001c: 136) which states that while policy makers and individuals may have access to the same market information, differences in responsibilities will spawn dissimilar reactions. In other words, while rising asset prices in the property market for example, may send investors into frenzy, the

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authorities can consider the long-term effects of the over-priced assets on inflation and devise appropriate counter measures.

Furthermore, Cecchetti, *et al*, (2002: 19) argue that since authorities, with the use of econometric models, are constantly estimating and predicting movements in much more complex measures such as the Non-Accelerating Inflation Rate of Unemployment (NAIRU) and output gaps, devising a model to correctly identify inflated asset classes should be a relatively mundane task. Lim (2003: 314) discusses three types of “bubble tests” available to the authorities, but maintains that interpreting the results is not a straightforward task as these depend heavily on the type of test, frequency and accuracy of the data used. Nevertheless, as stated by Cecchetti, *et al*, (2002: 19), the difficulties in devising and interpreting such tests or models should not be used as the basis to cast them aside.

Under the ABRR system, reserves deposited with the central bank could be in the form of cash, as is the case now, or in the form of liquid assets at the discretion of the Bank. Cash deposits will earn no interest from the Bank, but as with the repo transactions, any payments earned on assets deposited for reserve requirement purposes will remain the property of the depositing institution. This will also allow an institution’s balance sheet to continue reflecting ownership of the asset.

Thus, since all financial institutions purchase assets, the Asset Based Reserve Requirement (ABRR) will affect all intermediaries with similar rigour. The system also exhibits an “automatic stabilising mechanism”, in the form of increasing or decreasing reserve requirements when asset prices rise or fall during the different business cycle phases. For example, during the downward phase of the business cycle when asset prices fall and bank lending slows down, reserves will be automatically freed and thus, automatically contribute towards monetary expansion (Palley, 2000b: 182).

### 3.3.3 Macroeconomic advantages

There are a number of additional macroeconomic advantages to a system of ABRR. The variations in reserves can be used to fight inflationary pressures that may be originating from particular asset price inflation. Thus, instead of raising interest rates and slowing the entire economy, which would be the current solution, authorities can target the specific asset group by raising its reserve requirement. This implementation would also avoid the negative consequences on exporters, of currency appreciation resulting from increased interest rates. In short, “Recourse to the economic ‘amputation’ associated with raising the general level of interest rates in thereby avoided” (Palley, 2000b: 183).

The ABRR also presents an enormous opportunity for economies characterised by underdeveloped money markets such as South Africa. By reducing the relative cost of holding money market securities, i.e. by reducing their reserve requirement, policy makers can increase the attractiveness of these assets and stimulate growth of this market. This can be applied to all money market securities or individual assets, e.g. Treasury bills, depending on the need to encourage private holdings of these assets and will additionally enhance the liquidity and activity of the secondary market.

Earlier in this thesis, concern was expressed over the lack of finance available for the development of small and medium sized businesses. While one of the underlying factors is the higher risk weighting associated with these transactions, which has been addressed in the new Basel accord, the proposed system of ABRR can also be used to encourage the flow of funds to these economically and socially beneficial projects. The system can therefore work in union with the capital standards by allowing authorities to reduce the reserve requirements on loans made to finance such development.

The significance of good judgment in devising methods to regulate and supervise financial institutions should also be apparent from the above argument. While the proposed system may seem appropriate for the country, the accountability of policy makers should also be made explicit. This is because the control provided by the scheme

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would allow authorities to channel funds into any desirable sector of the economy. Thus, it is necessary to ensure households and firms that authorities will not be biased in their decision-making, given that any such prejudice will obstruct the private sector's decision-making process. Furthermore, Palley (2000b: 185) states that although such a system may be criticised for interfering with the allocation of resources in financial markets, all systems of monetary control, i.e. interest rate policy, cash reserve requirements etc., intervene to similar extents. Thus, the question to be asked is not 'if' the system directs the allocation of resources but rather 'how efficiently' it achieves its objectives.

In conclusion, by using the ABRR in conjunction with the already existing interest rate policy, the SARB can regain control over the creation of credit and thus strengthen the effectiveness of monetary policy. Furthermore, the system may provide a more effective means of encouraging financial institutions to extend loans for worthy projects, instead of obliging the institutions to do so through the passing of legislation.

For example, although the Community Reinvestment (Housing) Bill (CR Bill) is a commendable effort on the part of government to try and encourage banks to finance low cost housing, the unwillingness of the private sector to embrace this initiative stems from the increased risk of default inherent in such ventures. The SARB (2002d: 30) states that the Bill may harm the financial system by increasing the burden on institutions, which are already experiencing difficulties due to recent problems in the banking sector. Furthermore, the Bill does not make allowances for banks to protect depositors' funds against deceptive borrowers. Thus, the ABRR structure can encourage the flow of funds into low cost housing, while maintaining a degree of security and flexibility by allowing the commercial banks to determine the profitability and consequently, the extent of such investments.

### 3.3.4 Complementary to current capital standards

Although the current system of capital standards has been designed to help discourage excessive risk taking in financial markets, they are only applicable to deposit taking institutions. Moreover, as already mentioned, commercial banks have found various ways of avoiding business transactions that require capital reserves to be held. Risk based capital standards are also not designed for practical monetary policy purposes (Palley, 2000c: 9).

The proposed system would provide an additional, complementary tool to the authorities by “strengthening the robustness and economic connectedness of the demand for reserves” (Palley, 2000b: 184). More importantly, this method of control can alleviate the hazards of risky foreign investments. Foreign loans and asset portfolios are currently subject to capital requirements, which can be destabilising when asset prices fluctuate. Under the proposed system however, the higher reserve requirement will not only reduce moral hazard but also provide much needed liquidity in the event of loan default, by freeing up the reserves held with the central bank. In other words, while concerns have been expressed over the pro-cyclical nature of the current risk based capital system, the proposed structure of ABRR can be counter cyclical by providing liquidity, in the form of freed reserves, when it is most difficult to obtain (Palley, 2000c: 9).

The ABRR system can also improve the effectiveness of monetary policy by ensuring that the demand for government securities is maintained. If banks continue to find ways and means to avoid capital requirements the use of government securities in open market operations will become obsolete, as will these operations themselves. Finally, the effectiveness of such a system which classifies assets into risk categories has already been proven. A similar scheme, albeit on a lesser scale, was implemented by the insurance industry in the United States to reduce the risk of sceptical investments. The resulting stability of the sector has been attributed to the use of this mechanism by the regulatory authorities (Palley, 2000c: 8).

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“Implemented correctly, a comprehensive system of ABRR could fill the regulatory void that now exists and contribute to the restoration of sound domestic markets that are a prerequisite of a stable, prosperous international order.”

(Palley, 2000c: 10)

## **3.4 INSTITUTIONAL ENVIRONMENT**

### **3.4.1 Mergers and acquisitions**

The recent spate of mergers and acquisitions within the South African financial sector has been another topic of many debates. On the one hand, the absorption of inefficient companies by larger, more competent organisations is said to improve the management of risks within the market, resulting in a relatively more stable environment. However, some authors (Falkena, *et al*, 2001) believe that the consequential decrease in competition in an industry that has such high entry barriers should be of concern to the authorities. Falkena, *et al* (2001: 3), go on to explain that the promotion of competition within the financial system should be a major goal for regulators, since it promotes efficiency within the market and eliminates “restrictive practices”. Accordingly, the abovementioned authors suggest that it may be in the best interests of the South African authorities to encourage greater competition within the banking and insurance sector, by removing the current restrictions on the business of overseas banks and insurance companies operating in the domestic markets (Falkena, *et al*, 2001: 5).

Indeed, if foreign institutions are allowed to pursue the same business objectives as domestic service providers, without incurring any additional costs, this will create an aggressive environment where nothing less than international best practices will suffice. This lifting of barriers may also be successful in reducing the price of services, thereby encouraging institutions to extend intermediation to the poorer communities that have largely been ignored to date.

As always, there is a counterargument. Firstly, an increase in the number of institutions operating in the sector will carry the need for improved regulation and supervision by the authorities. This will amplify the monitoring costs of the Bank Supervision Department and Financial Stability Unit to ensure that excessive risks are not undertaken by the commercial banks and other intermediaries, due to a decrease in market share and dwindling profits. However, the ABRR system proposed earlier can help reduce these risks by allowing the authorities to direct funds out of unsafe or undesirable investments. For example, if the BSD believes that commercial banks are taking unnecessarily high risks by lending to small and risky individuals or businesses, the department can simply increase the reserve requirements on such transactions to discourage the practice or at the very least, the increased reserves will provide a safety net in the event of borrower default.

The second argument has been put forth by Beenstock, *et al*, (2003) who developed a macroeconomic model based on the banking system of Israel. The exact details of the analysis will not be reiterated but it is worth mentioning that during the time period over which the model is based, there were four main commercial banks in the country that were experiencing increased competition from foreign markets due to the relaxation of exchange controls. Additionally, the period was characterised by inflation targeting monetary policy, central bank refinancing, short run interest rate fixing by the central bank and a relatively new interbank market.

Thus, it is not difficult to note the similarities between the current state of the South African economy and the Israeli economy during the observation period. The consolidation witnessed within the South African banking sector during 2002 resulted in the “big four” banks boasting 74% of the market share, which was further increased to 82% after the merging of BOE Bank, Cape of Good Hope Bank and Nedcor Bank in 2003. Using the Herfindahl-Hirschman Index (H-index), a commonly used measure of competition in the banking sector, the SARB (2002d: 13) has concluded that there exists a very high concentration of power in the domestic banking sector, which presents commercial banks with an opportunity to exploit clientele.

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While events of the past will have certainly improved the stability of the sector, major concerns have been expressed over the effects of such consolidation on the transmission of monetary policy. This is supported by the above-mentioned model, which shows that under conditions of imperfect competition in the banking sector, i.e. under conditions where only a few commercial banks exist, the quantity of bank credit extended to the private sector is reduced along with an increase in the price of credit. Furthermore, the evidence suggests that under such conditions, interest rate policies adopted by the central bank are less effective because commercial bank lending rates are less responsive to changes in the Bank rate. As a result, limited competition in the banking sector can be detrimental to central bank control over the creation of credit and therefore may be unfavourable during an economic slowdown (Beenstock, *et al*, 2003: 464).

The reduction in competition also has a negative effect on the liquidity of the money market and thus the price of securities traded. The closure of dealing rooms associated with the merging intermediaries has decreased competition in the market, effectively widening the spreads quoted on instruments while simultaneously extending the economy's unemployment line.

### **3.4.2 Competition, inflation and financial development**

On the other hand, some authors (Beenstock, *et al*, 2003: 465) believe that while an increase in banking and financial sector competition will certainly enhance the effectiveness of central bank interest rate policies and enhance market liquidity, growth in the amount of money in circulation will become less restrained and any inflationary forces that may have been previously contained will be released. This is because firstly, the supply of funds increases with the introduction of new banks which will also result in a lower rate of interest on borrowed funds. Secondly, because local banks will be competing with international players, these intermediaries may find it necessary to maintain good customer relations by providing loans whenever necessary.

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However, it must be brought to the attention of the reader that, even in the unlikely event that an increase in banking competition will encourage expansion of the monetary aggregates, the improved correlation between commercial bank lending rates and the Bank rate will allow a tightening of monetary policy to slow credit extension by commercial banks.

A far more convincing argument is put forth by Theron (1998) who examines the possible effects of exchange control liberalisation in South Africa. The author draws on the experiences of Uruguay, Chile, Argentina and Israel where the lifting of exchange controls was accompanied by large capital inflows and appreciation of the exchange rate due to “sustained interest rate differentials”. Apart from the resulting fall in exports, the growth of the domestic monetary base, which was not accompanied by a rise in production, ultimately caused inflation. Theron (1998: 65) thus recommends a much more gradual relaxation of controls accompanied by policies to ensure capital inflows are of the long-term nature rather than temporary. Unfortunately, under such circumstances, the severity of any possible inflationary shocks cannot be accurately predicted and while contractionary monetary policy may be able to slow the growth rate in monetary aggregates, the forces may be too large to eradicate completely.

Hung (2003) developed an endogenous growth model to study the effects of financial development on economic growth. Although the evidence supports earlier findings that suggest a positive correlation between financial development and economic growth (e.g. Shaw, 1973 and McKinnon, 1973), the author states that this condition only holds true when the initial rate of inflation in a country is reasonably low. However when a country is already experiencing fairly high levels of inflation, financial development as measured by a reduction in monitoring costs, fuels additional inflationary pressures and eventually results in lower economic growth.

“This has led to the World Banks’ Operating Directive on the financial sector to recommend developing countries not to pursue financial reforms unless their inflation rates are sufficiently low.” (Hung, 2003: 49)

The paper goes on to examine the effects of expansionary monetary policy in economies with high initial inflation rates, concluding that such policy is effective in reducing inflation and promoting growth. On the other hand, inflation increases and growth is reduced, as a result of such policy in countries where inflation is initially low. The author concludes by proposing either a “reduction in government spending” or “repression of the financial system” in a developing country where inflation rates are high (Hung, 2003: 63).

The significance of these findings for South African policy makers lies in the fact that inflation targeting should, for the time being, have precedence over financial reform. Once the recommended target inflation range of 3% to 6% has been achieved and sustained for a considerable period of time, financial development can be encouraged. The same condition applies to the relaxation of exchange controls. Although this reform is necessary for encouraging local and foreign investment and improving the efficiency of financial markets, it will weaken the ability of policy makers to combat inflation and thus undermine the public’s confidence in the current regime.

### **3.4.3 Specialised financial institutions**

The SARB (2003b: 13) has proposed the development of specialised financial institutions in South Africa to improve the efficiency and risk assessment capacity of the financial sector. Growth of the micro-finance industry has also been encouraged in this regard, since the nature of these institutions entails greater access to finance and financial services for the ‘unbanked’ fraction of the population. Accordingly, there has also been a proposal to establish “narrow or core” banks. These intermediaries will be granted limited banking licences and therefore, will be subject to lower entry criteria. In other words, while the establishment of these banks is intended to increase competition within the sector, the institutions will only be allowed to carry out basic banking practices (e.g. deposit taking and extension of loans). On the other hand, risky business practices such as derivatives trading or the taking of positions on foreign exchange rates will be prohibited.

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These restrictions will help ensure that the stability of the sector is not compromised in the name of competition (SARB, 2002d: 30)

Schoombee (1998) explores the advantages of “linkage” between large commercial banks and specialised financial institutions. The author argues that by exploiting such partnerships, commercial banks may be able to provide conventional deposit and credit facilities to micro-entrepreneurs. The proposal alleviates the problem of high risk lending for banks since the specialised intermediaries have experience in this area. Furthermore, the smaller intermediaries will not be concerned with banking licences and scarcity of funds for granting loans. The partner banks will provide these.

The introduction of a “credit information bureaux” has also been anticipated, to endow the financial sector and households with a centralised source of information on firms and individuals performance and credit status (SARB, 2003b: 14). While such market progression is necessary for economic growth and poverty alleviation, the authorities cannot disregard the consequences of the increase in credit extensions that will result. Thus, as mentioned before, any such developments have to be accompanied by appropriate policies to ensure inflation does not go unchecked.

### **3.5 CHAPTER SUMMARY**

This chapter dealt with some of the major deficiencies observed in the South African economy, the money market and the banking sector. These were addressed in a top down manner, initially looking into the broader issues of the political and social environments. The problems with Zimbabwe, privatisation, labour markets and the escalating HIV epidemic need to be resolved immediately to ensure investment capital continues to flow into the country. Thereafter, inflation targeting and monetary policy were discussed and the conclusion reached is that the central bank objective of price stability should be abandoned. This is because the evidence presented has exposed the significance of inflation and inflation expectations within the labour and financial markets.

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With regards to the statutory environment, a system of Asset Based Reserve Requirements has been recommended to replace the existing cash reserve requirement. This system ensures that private sector banks are not discriminated against and guarantees that competitive neutrality is maintained within the financial sector. The last section considered the institutional environment and concern was expressed over the recent reduction in competition within the banking sector. The major consequences identified include a reduction in market liquidity and a breakdown in the relationship between the SARB's repo rate and commercial bank lending rates. Unfortunately, merely encouraging greater competition within the sector may reduce the stability of the entire financial system. The next chapter presents the conclusion to this dissertation and a summary of the findings.

## CHAPTER 4

# CONCLUSION

The purpose of this thesis was to analyse the monetary banking sector and money market in South Africa and the factors responsible for the sluggish development of the market have been presented in a top-down approach. Initially, the political, social and economic environments were explored and relevant aspects discussed including labour market rigidities, privatisation of state assets and the inflation targeting monetary policy. It has been argued that although privatisation has initial drawbacks in the form of higher prices and unemployment, the long-term benefits such as the efficient allocation of resources, increased competition and employment with superior private sector wages, and ultimately higher economic growth ought to be kept in mind.

Regarding the central bank objective of price stability, the argument put forth suggests that zero inflation may be harmful to the overall objectives of employment creation, financial market development, and economic growth. Thus, the author has recommended that the inflation target range of 3% to 6% should be implemented on a permanent basis. While the authorities can be criticised for their inability to resolve pressing issues (such as the relaxation of immigration controls) credit must be given for the macro-economic stability witnessed in the country during recent global financial crises, which has contributed to improved international investment ratings over the past few years

Thereafter, the statutory environment was discussed in detail and a key problem identified is the current cash reserve requirement, which results in commercial banks suffering a competitive disadvantage to other financial institutions. This thesis advises that if a system of Asset Based Reserve Requirements is adopted to replace the existing liability based structure, in addition to creating a 'level playing field' in the financial sector, the authorities will benefit from superior control over the allocation of resources due to this systems' ability to target specific asset classes.

Finally, the institutional environment was dissected with appropriate attention given to the various functions and activities of the central bank and private sector banks. Competition in the commercial banking sector of South Africa is very limited and this can have negative consequences on the correlation between the Bank's refinancing rate and commercial bank lending rates. While the breakdown in the relationship between these two rates has not been as pronounced as some authors predicted, an increase in banking competition will undeniably make the Banks' interest rate policy more effective.

On the other hand, the Bank has also proposed the establishment of 'specialised' financial institutions and the evidence suggests that these intermediaries will encourage the provision of financial services to the poor. Similarly, it can be argued that while financial market deregulation and relaxation of exchange controls may improve capital mobility and encourage foreign investment, the increased supply of funds may render the inflation targeting policy ineffective.

In conclusion, while activity in the domestic money market has been relatively buoyant during 2002, this can be largely attributed to the firm inflation targeting policy and resulting higher interest rates. Once the inflation target is within reach and rates begin to fall again, there will be a need for some degree of structural reform in the market. While the implementation of the proposals put forth will certainly represent additional costs for both the authorities and private sector, these can be weighed against the potential benefits of increased employment, poverty alleviation, financial market development, and ultimately higher economic growth.

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