

THE DETERMINANTS OF SHORT-TERM INTEREST RATES

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This dissertation is dedicated to my father Selwyn, and my mother Ros who never stopped believing in me and whose emotional and financial support made this all possible.

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SUMMARY

Short-term interest rates are key economic variables, yet few people understand how these rates are determined. This confusion extends to the theoretical level. In neoclassical interest-rate theory for instance, the interest rate is determined by the supply of and demand for loanable funds. Contrary to this view, the Post Keynesian approach suggests that the interest rate is determined by central banks as a key policy variable in pursuit of its monetary policy objective/s. This dissertation examines how the current and previous Governors of the South African Reserve Bank deliberately used short-term interest rates to exert an influence on the general level of short-term interest rates. In doing so, they implicitly adopted the Post Keynesian approach. This view is shared by most central bankers today, giving credence to the widespread recognition that short-term interest rates are determined as a policy variable and not by impersonal market forces.

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CHAPTER 1

INTRODUCTION

How are short-term interest rates determined? In neoclassical interest-rate theory the interest rate is determined by the supply of and demand for loanable funds. Contrary to this view, the Post Keynesian approach suggests that the interest rate is determined by central banks as a key policy variable in pursuit of its monetary policy objective/s. This dissertation examines how the current and previous Governors of the South African Reserve Bank deliberately used short-term interest rates to exert an influence on the general level of short-term interest rates. In doing so, they implicitly adopted the Post Keynesian approach. This view is shared by most central bankers today, giving credence to the widespread recognition that short-term interest rates are determined as a policy variable and not by impersonal market forces.

The dissertation is set out as follows: In Chapter 2, alternative theories of interest rate determination are critically discussed. Questionable assumptions in both the loanable funds and the liquidity preference theory suggest that both theories are found wanting in their attempt to explain the determinants of short-term interest rates. These deficiencies are addressed in Chapter 3 with the introduction of the Post Keynesian approach to interest rate determination. According to this theory, the rate charged by central banks to the commercial banking sector for accommodation is an instrument of monetary policy, and not a market determined price. Central banks set short-term interest rates and they do so within the context of a particular monetary policy framework. These frameworks are discussed in Chapter 4. In Chapter 5 the movement in the prime overdraft interest rate in South Africa during the period 1981-2002 is discussed. The intention of this analysis is to assess whether short-term interest rates are set by market forces, or by the Reserve Bank as a policy variable. Chapter 6 concludes with the view that, from a South African perspective, short-term interest rates are determined in a manner that is consistent with Post Keynesian interest rate theory.

CHAPTER 2

INTEREST RATE THEORY

The theory of interest has for a long time been a weak spot in the science of economics, and the explanation and determination of the interest rate still gives rise to more disagreement among economists than any other branch of general economic theory (Haberler 1958: 195).

2.1 INTRODUCTION

In order to understand the determinants of short-term interest rates, it is important to first define the rate of interest. Once this has been done, the spectrum of interest rates has to be divided into long-term and short-term categories. Once we have identified the relevant category for each interest rate, we turn to economic theory in order to understand how interest rates are determined. As the focus in this dissertation is on short-term interest rates, long-term interest rates will be mentioned only briefly.

As far as the determinants of short-term interest rates are concerned, the basic question in this dissertation is whether they are determined by market forces or as a policy variable. If market forces determine short-term interest rates, then it is necessary to explore the dynamics of the supply of and demand for money in the financial markets. In such a case, short-term interest rates are determined endogenously as a by-product of market forces. On the other hand, if we accept the notion that short-term interest rates are used as an instrument of monetary policy and are manipulated deliberately by central banks in pursuance of their specific monetary policy objectives, then short-term interest rates are determined exogenously by the monetary authorities as a policy variable and their goals and actions have to be examined.

2.2 DEFINITION AND TYPES OF INTEREST RATE

2.2.1 Defining the rate of interest

Interest can be defined as the price a borrower has to pay to enjoy the use of cash which he or she does not own, and the return a lender enjoys for deferring consumption or parting with liquidity (Bannock et al 1998: 346).

The concept of interest embraces theories of time preference, marginal productivity, liquidity preference and loanable funds. The apparently diverse views of interest can be grouped into two broad classes: real and monetary. Real theories of interest are long-run theories in which interest is the return for real abstinence and the yield on real capital. Monetary theories, on the other hand, are short-run theories in which the monetary rate of interest is the cost of borrowing money and selling securities, and the yield on lending money and purchasing securities. Expressed differently, the real rate of interest is determined by the supply of and demand for real savings, whereas the monetary rate of interest is determined by the demand for and supply of money (Greenwald 1982: 536). This definition implies that short-term interest rates are determined in the money market by market forces. The validity of this statement will be scrutinised in Chapter 3.

2.2.2 Short-term interest rates

The South African money market is the market for lending and borrowing short-term financial instruments (having a maturity of one year or less). It includes the all-important interbank market¹ and the operations of the South African Reserve Bank (Reserve Bank, Bank or SARB). The Reserve Bank intervenes to establish a certain desired ‘money market shortage’, or level of borrowed reserves, and this it provides via the interbank market. The cost of these borrowed reserves is provided at the Bank’s accommodation rate, called the repo rate. These actions, and the Reserve Bank’s repo rate are designed to

¹ The interbank market is the market for banks loans and deposits among the various banks.

influence other short-term interest rates, that is, money market interest rates, and according to Faure (2002: 18) ‘they have a powerful influence on them (money market interest rates), bordering on control’ (implying that the Reserve Bank determines short-term interest rates).

Money market interest rates include the Treasury Bill rate. A Treasury Bill (TB) is a short-term money market instrument which is issued by the government. The TB rate is the discount at which the Treasury Bill is issued. The TB rate is not stated on the bill itself, but like interest rates on bonds, has an inverse relationship to its price. TBs serve as a benchmark indicator of money market conditions and act as a reference rate for the calculation of interest rates on many other money market assets (Botha 2002: 216-217).

Another key short-term interest rate is the prime overdraft rate, defined as the ‘lowest rate at which a clearing bank will lend money to its clients on overdraft’ (Eatwell et al 1987:282). The prime overdraft interest rate currently tends to be approximately 3,5 percentage points above the repo rate (although the formal link between the repo rate and the prime overdraft interest rate was abandoned in South Africa in 1982).

According to Gidlow (2002: 57) the repo rate, which is fixed by the Bank, influences the prime overdraft rate in two ways: first, it directly influences the marginal cost of funding of banks and, second, it reflects the Bank’s monetary policy stance:

...therefore even rates of banks that do not participate in the repo auctions² adjust when the repo rate is increased or decreased. In South Africa, lending rates (such as the predominant prime overdraft rate) are directly affected by the repo rate, which is fixed by the Reserve Bank according to its monetary policy objectives.

The link exists because when the South African Reserve Bank creates a money market shortage (as mentioned earlier) it forces a higher cost of capital on the banking system, and the banks are coerced (although not forced) to adjust their prime overdraft rates in proportion to the increase in the repo rate to maintain profitability.

² For a full explanation of the functioning of repo auctions, see Gidlow (2002: 59- 61).

Another important short-term interest rate that is linked to the repo rate is the marginal lending rate. Gidlow (2002: 58) defines the marginal lending rate as a ‘penalty refinancing rate that is (currently) fixed at 5 percentage points above the repo rate.’ The marginal lending facility operates by allowing banks to bridge temporary liquidity shortfalls not catered for under the repo auctions. The marginal lending rate is charged at a premium above the repo rate in order to deter banks from borrowing from the SARB (particularly in times of adverse pressure on the exchange rate, when banks often buy dollars to speculate against the rand).

2.2.3 Long-term interest rates

Although long-term interest rates are beyond the scope of this dissertation, a brief definition and a few examples are necessary. According to Faure (2002:19), the line demarcating the money and capital markets is usually drawn on the basis of term to maturity of the securities traded, and is arbitrarily determined to be one year. Broadly speaking then, the capital market (or bond market) is defined as the market for the issuing and trading of long-term securities. Four main types of financial instrument are traded in the capital market, namely bonds (such as corporate bonds, debentures, government bonds and municipal bonds), variable interest securities, shares and negotiable instruments. The rates on these instruments therefore represent long-term interest rates.

Moore (1988a: 258) argues that nominal long-term rates are based on capital market participants’ expectations of future short-term rates, that is, of future central bank policy. Capital market participants base their decisions with regard to the amount of real saving and investment they wish to undertake at the real rates anticipated over the future life of the project. These savings and investment decisions interact to determine the rate of growth of aggregate income and output, and therefore affect various key macroeconomic indices such as unemployment, capacity utilisation, inflation and growth rates.

2.2.4 The term structure of interest rates

One of the basic questions concerning interest rates concerns the relationship, if any, between short-term and long-term interest rates. The term structure of interest rates is an attempt to identify the relationship between these two types of interest rates. A diagrammatic illustration of this relationship is known as the yield curve, which illustrates the relationship between maturity and yield at any given time, assuming all other factors to be constant. The yield curve can be constructed by plotting the yield to maturity (YTM) along the vertical axis, while the horizontal axis shows the term to maturity (measured in years). According to Oost (2002: 37) yield curves change their shape over time in response to factors such as changes in interest rate expectations and fluctuations in liquidity in the economy. Several different shapes have been observed, but yield curves are usually described as upward (normal), downward (inverse) or horizontally (flat) sloped.

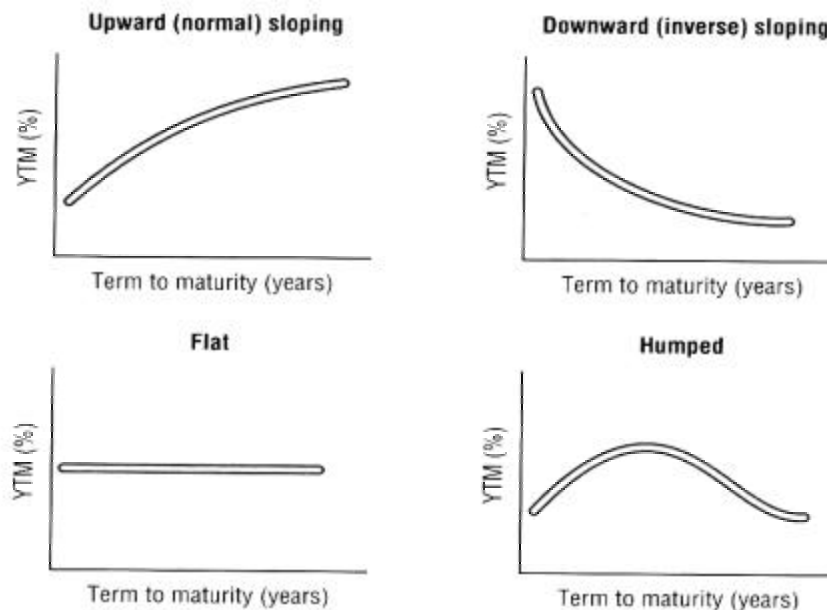


FIGURE 2.1 Different possible shapes of the yield curves (Oost 2002: 38)

According to the expectations theory, expectations play a key role in determining the shape of the yield curve illustrated in Figure 2.1. In an upward-sloping yield curve, for example, if long-term rates are higher than short-term rates, and if long-term rates are an average of expected short-term rates, then looking ahead these short-term rates must be expected to rise. A positive or normal yield curve can be interpreted to mean that on average the market expects short-term interest rates to rise. Likewise, a downward-sloping yield curve is interpreted to mean that on average the markets expect short-term interest rates to fall. Such a yield curve often prevails when interest rates are high because of tight monetary policies. Under these circumstances there may also be expectations of a fall in inflation. A flat yield curve means that the market expects short-term rates to remain unchanged, and a humped yield curve implies that short-term rates are expected to first rise and then to fall (Oost 2002).³

2.3 INTEREST RATE THEORY

Interest rate theories can be grouped into two broad classes: monetary and non-monetary theories. Non-monetary theories of interest tend to be broad, philosophical explanations of why interest rates exist, and seem only remotely concerned with the actual determination of the rate of interest in the money market. Non-monetary theorists such as Schumpeter (1956) and Bohm-Bawerk (1957), for instance, developed barter-economy models for interest rate determination that did not include any explicit variable for the quantity or velocity of money. Monetary theories of interest such as the liquidity preference theory, direct attention to the many and volatile forces which move short-term interest rates.

Interest rate theories can be divided into two main traditions: those in the tradition of real analysis and those in the tradition of monetary analysis. This distinction is due to Schumpeter (1956: 277-278):

³ See Oost (2002: 36-44) for an explanation of other yield-curve theories.

Real analysis proceeds from the principle that all the essential phenomena of economic life are capable of being described in terms of goods and services, of decisions about them ...money enters the picture only in the modest role of a technical device that has been adopted in order to facilitate transactions... so long as it functions normally, it does not affect the economic process, which behaves in the same way as it would in a barter economy: This is essentially what the concept of neutral money implies.

On the other hand, monetary analysis introduces the element of money

...on the very ground floor of our analytic structure and abandons the idea that all essential features of our economic life can be represented by a barter-economy model (Schumpeter 1956: 279).

Classical economists believed that the quantity of money did not affect the equilibrium values of real variables. Milton Friedman, a modern proponent of real analysis, based his work upon the quantity theory of money. Friedman (1974:27) stated explicitly:

...we have accepted the quantity theory presumption... that changes in the quantity of money in the long run have a negligible effect on real income, so that non-monetary forces are 'all that matters' for changes in real income and 'money does not matter'.

Friedman, like other neoclassical economists, argue that the factors determining the interest rate are real investment demand and real saving – what the neoclassical economists called the forces of 'productivity and thrift'. This is commonly known as the loanable funds theory.

To neoclassical economists, the function of money is to serve as a medium of exchange. Rational individuals have no desire to hold money for its own sake, that is, to hoard (neoclassical economists assume that there can be no willingness to accumulate idle cash because it does not earn any returns). Money is simply a 'veil' that determines the nominal value of variables such as the level of economic activity, while having no effect on the real economy in the long run, only on prices. This view was widely criticised, for

...it has to be recognised that essential features of the capitalist process depend upon the 'veil' and that the 'face behind it' is incomplete without it (Rogers 1986a: 16).

Keynes (1930) broke away from the tradition of real analysis by arguing that:

...no analysis of actual economic phenomena is complete if the role played by money is neglected.

We now examine the neoclassical loanable funds theory of interest rate determination. This will be followed by an analysis of Keynes's liquidity preference theory and its implications for interest rates.

2.4 THE LOANABLE FUNDS THEORY

The loanable funds theory is a long-run theory of interest rate determination and is most appropriate for explaining long-term interest rates. This theory attempts to identify the approximate causes of interest rate variations by analysing the supply of and demand for credit. The theory derives from the notion that savers make a decision between consumption now and consumption in the future. According to this theory, the rate of interest is determined at that level which equates the supply of securities with the demand for them, or, stated differently, the factors determining the interest rate are real investment demand and real saving – what the neoclassical economists called the forces of 'productivity and thrift' (Froyen 1996: 66).

The neoclassical view begins with the premise that an individual has many desires in life, some of which require instant gratification, while others can be deferred. In deciding between instant gratification or present consumption and future gratification or saving, the individual is concerned with the opportunity cost of each alternative. This opportunity cost is represented by the rate of interest. The higher (lower) the rate of interest, the greater (smaller) the opportunity cost of present consumption, the higher (lower) the rate

of saving. In Figure 2.2, saving is plotted as an upward-sloping function of the rate of interest.

The saving function is represented by the equation:

$$S = S(i), \text{ where}$$

S = saving

i = interest rate

Saving (S) provides the demand for bonds or, as the classical economists call it, the supply of loanable funds.

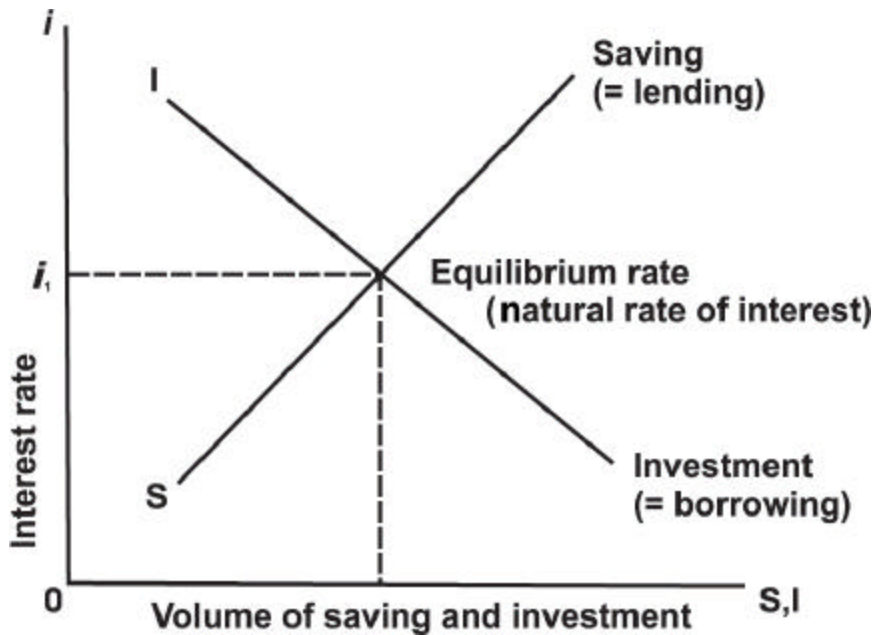


FIGURE 2.2 The classical theory of the rate of interest

Real investment, on the other hand, is a negative function of the interest rate since the interest rate reflects the cost of finance. All things equal, the lower the rate of interest, the more investment projects become profitable and the more willing investors will be to borrow in order to invest. The investment function is represented by the equation:

$I = I(i)$, where

I = investment

i = interest rate

Investment (I) is a negatively sloped schedule plotted against the interest rate. In neoclassical terminology, this is the demand for loanable funds.

In Figure 2.2 the intersection of the saving and investment schedules produces the equilibrium rate of interest, i_1 , where $S = I$. According to the loanable funds theory, given an exogenous shock, the system maintains itself in equilibrium at full employment by changes in the equilibrium rate of interest. Any fall in investment (a shift to the left of I in Figure 2.2), for instance, would be perfectly offset by an increase in consumption, and vice versa for a rise in investment demand. Similarly, any shift in the saving schedule will cause, via the rate of interest, an offsetting change in investment so as to ensure full employment:

The economy can be seen as a seesaw with full employment as its fulcrum. On the one end is investment; on the other end consumption. A fall of the investment end of the seesaw causes consumption to rise by an equivalent amount. Similarly a fall of the consumption end results in an equivalent rise in investment. The mechanism powering these just-offsetting movements is the equilibrium rate of interest. It guarantees that the seesawing between consumption and investment will in no way affect its full employment equilibrium (Rousseas 1972:95).

Wicksell (1936) referred to the equilibrium interest rate discussed above as the ‘natural rate of interest’. Any market rate of interest above or below the natural rate would automatically result in market forces restoring the natural rate of interest. The natural rate of interest is thus the cornerstone of the loanable funds theory:

...the natural rate of interest is the foundation on which the loanable funds theory rests and both stand or fall together (Rogers 1986a: 22).

The natural rate of interest is defined as the rate that:

...would be determined by supply and demand if real capital were lent in kind without the intervention of money (Wicksell 1936:15, as quoted by Smith 1984: 25).

A basic conceptual difficulty that Wicksell faced was how to translate the non-monetary concept of the natural rate of interest on capital into terms useful in a monetary system, so that a comparison between the natural rate (or equilibrium rate) of interest and the actual market rate of interest would have meaning. Wicksell used the concept of the normal rate of interest for this purpose:

The rate of interest at which the demand for loan capital and the supply of savings exactly agree, and which more or less corresponds to the expected yield on the newly created capital, will then be the normal or natural real rate. The normal rate, which is a money rate, may then be compared with the market rate of interest (Wicksell 1935: 192, as quoted by Smith 1984:27)

Wicksell was searching for a natural rate of interest around which market rates would fluctuate according to a cyclical demand and supply factor (Hanson 1969). To achieve this, he devised a long-run general equilibrium model in terms of which the natural rate was defined. This definition was, however, considered irrelevant because it could not be established outside of a one-commodity model. As Leijonhufvud (1981: 35) realised

...the denial of the loanable funds mechanism makes nonsense of the notion of a 'natural rate' of interest. The Wicksellian theme is lost.

Without any empirical foundations, the natural rate of interest was left 'hanging by its own bootstraps'. The significance of the natural-rate debate meant that 'it has effectively undermined the neoclassical statement of that theory' (*ibid*).

Hayek summarised Wicksell's argument on the actual determination of the interest rate:

If it were not for monetary disturbances, the rate of interest would be determined so as to equalise the demand for and supply of savings.

This equilibrium interest rate, as I prefer to call it, he christens the natural rate of interest. In a money economy, the actual or money rate of interest may differ from the equilibrium or natural rate, because the demand for and supply of capital do not meet in their natural form but in the form of money, the quantity of which available, for capital purposes, may be arbitrarily changed by the banks (Hayek 1931:272).

Wicksell originally argued that the money rate of interest is ultimately controlled by the natural rate, and that a fixed money rate of interest could never cause the natural rate to move in that direction. However, Wicksell later admitted that the money rate could in fact influence the natural rate. If the money rate of interest could influence the natural rate, and if the money rate is set by the banks, then in

...no sense can it be said that the underlying 'real' forces of productivity and thrift determine the growth and development of the system. Money and finance cannot be neutral. The notion of a 'real' economy separate from money and credit relations forms an unreliable and insecure premise on which to base dynamic analysis (Smith 1984: 63).

Keynes was also particularly critical of the classical theory of the rate of interest, for instance, he argued:

...the notion that the rate of interest is the balancing factor which brings the demand for saving in the shape of new investment forthcoming at a given rate of interest into equality with the supply psychological propensity to save, breaks down as soon as we perceive that it is impossible to deduce the rate of interest merely from a knowledge of these two factors (Keynes 1936: 165).

According to the loanable funds theory, the interest rate can be seen as the equilibrating mechanism that assures the maintenance of full employment in the economy (Rousseas 1972: 95). Keynes refuted this analysis. In order for the 'neoclassical seesaw' (discussed earlier) to function properly, the interest rate had to equilibrate the supply of saving with the demand for investment at its full-employment point. If the interest rate was not able to do this, then changes in investment and consumption would no longer be offsetting and

full employment would no longer prevail. As Rousseas (1972: 96) points out, in Keynes's view, the neoclassical view of interest rate determination has one critical flaw: once investment falls, the investment multiplier would break down the neoclassical seesaw, forcing consumption to fall as well (as opposed to the neoclassical view that asserts that a decline in investment will increase consumption) and there is, as a result, no automatic mechanism, such as the rate of interest, which will ensure that the economy operates at full employment.

Keynes's point was that any theory stating that a fall in investment demand will cause a rise (or a fall or no change at all) in the interest rate is telling us nothing at all. Neoclassical interest rate theory, on the basis of Keynes's analysis, was therefore indeterminate.

For this reason, as well as the various reasons discussed earlier, the loanable funds theory falls short of being a comprehensive theory for understanding the determinants of interest rates. We now evaluate an alternative theory of interest rate determination, namely the liquidity preference theory.

2.5 THE LIQUIDITY PREFERENCE THEORY OF THE RATE OF INTEREST

We now consider a major modification that Keynes made to neoclassical analysis. This modification occurred with the introduction of uncertainty which altered the classical view of interest as being the reward for waiting or for thrift, to the reward for holding assets less liquid than money in an *uncertain environment*:

The rate of interest is not the 'price' which brings into equilibrium the demand for resources to invest with the readiness to abstain from present consumption. It is the 'price' which equilibrates the desire to hold wealth in the form of cash with the available quantity of cash (Keynes 1936: 167).

According to Keynes, the rate of interest is

...in itself, nothing more than the inverse proportion between the sum of money and what can be obtained for parting with control

over the money in exchange for debt for a stated period of time
(*ibid*).

The liquidity preference theory can be defined as a theory of the demand for money that depends, amongst other things, on the interest rate. Keynes argued specifically that the demand for money is inversely related to the interest rate: the higher the interest rate the less the quantity of money demanded (Ackley 1978: 289).

Keynes saw liquidity as flexibility in a world of uncertainty. To accept less flexible alternatives, agents had to be bribed, that is, they had to be compensated for holding an asset that is less liquid than money. The interest rate, as the representative of this compensation, had to be whatever was necessary to convince agents to ‘part with liquidity’. The higher the degree of illiquidity of an asset, the higher the compensation necessary to convince wealth holders to accept the risks it represents. In an uncertain world, people seek a degree of liquidity and it is this demand for liquidity that is a major element in the determination of interest rates (Froyen 1996: 88).

Keynes’s liquidity preference theory involved an integration of monetary theory and interest rate theory. His analysis of the demand for money, although in many respects incomplete, nevertheless went far beyond the neoclassical theory’s simple view of money’s role in the economy. Keynes, for the first time, looked seriously at the holding of money not merely as a medium of exchange, but as an asset. He accepted the neoclassical view of money as a medium of exchange and that the ‘transactions demand for money’ depends on the money value of output or income, but he broke away from neoclassical monetary theory by arguing that there were at least two other components of the demand for money – a ‘precautionary demand’ and a ‘speculative demand’. Each of these was a demand for money as an asset, not as a medium of exchange (Ackley 1978: 290). Wells (1995:18), for instance, argues that:

...liquidity preference theory is based precisely on the perception that money can be more than just a means of circulation, oiling the economic machine, but can also become a form of wealth, an asset.

The breakdown of the demand for money into precautionary and speculative demands plays a vital part in the theory advanced by Keynes to explain the interest rate. As mentioned, the proposition that money is held for transactionary and precautionary purposes does not conflict with the neoclassical view of the demand for money (a transactions balance is nothing more than money in its function as a medium of exchange, and a precautionary balance can be added to the neoclassical system without materially affecting its conclusions). The speculative demand for money, on the other hand, represents a distinct break with neoclassical theory (Shapiro 1966: 292-293).

Neoclassical theory assumes that a person would hold no money in excess of the amount needed to meet his transactions requirements. To do so would be to forego the interest that could be earned by putting that money into an interest-bearing asset. The reasoning was that, even if the rate of interest were very low, it is better to get some return than none at all. Keynes pointed out, however, that one who buys a bond is ‘speculating’ that the interest rate will not rise appreciably during the period in which he intends to hold the bond. If he believed that it would rise, he would be wise to hold non interest-bearing money. It is this uncertainty as to the future rate of interest that causes people to hold money for speculative purposes. If the future rate of interest were known with certainty, there would be no speculative demand for money, and there could be no objection to the neoclassical concept of the demand for money (Shapiro 1966: 293)

The speculative demand for money as presented by the liquidity preference theory thus represents a distinct break from neoclassical monetary theory. By introducing uncertainty into the economic equation, Keynes created an additional incentive for demanding money that alters the role of money from its traditional function of being a medium of exchange into an asset in an investor’s portfolio.

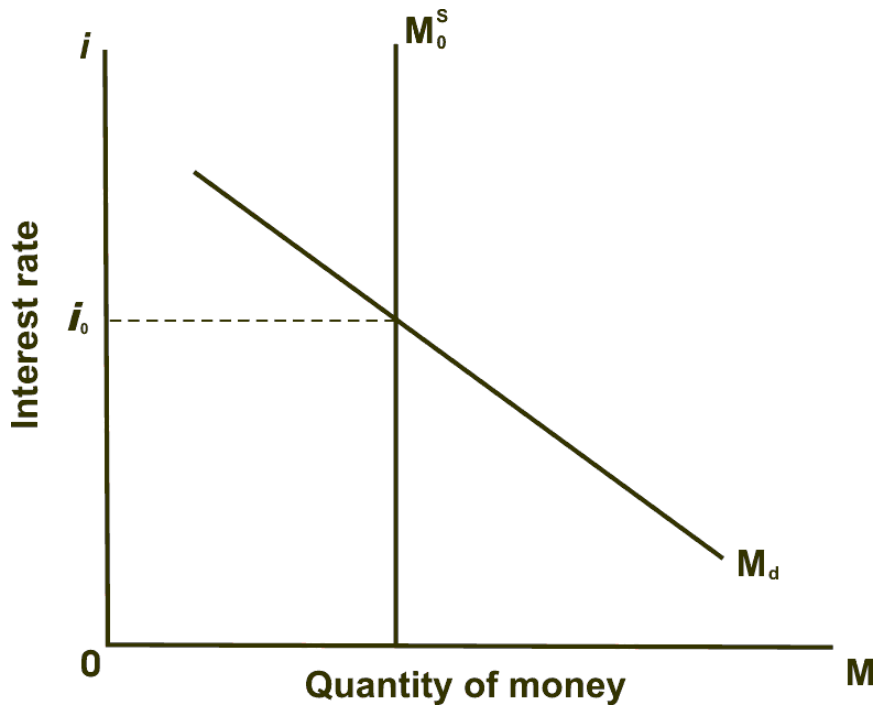


FIGURE 2.3 Determination of the equilibrium interest rate in the Keynesian system

The Keynesian view of interest rate determination is depicted in Figure 2.3 where the money supply is assumed to be fixed exogenously by the central bank at M^s_0 (the policies of the central bank are assumed to be the main determining factor). In the Keynesian system, the equilibrium interest rate, i_0 , is the rate at which the money demand schedule (in Figure 2.3) intersects the money supply schedule, that is, where the quantity of money demanded equals the quantity supplied. Factors affecting the supply of money and the demand for money determine the equilibrium interest rate. The liquidity preference theory states that the demand for money is inversely related to the interest rate - the higher (lower) the rate of interest the lower (higher) the demand for money. This is illustrated by the downward sloping demand curve in Figure 2.3.

The liquidity preference theory has the surface appearance of being a determinate theory of the rate of interest and, in substance, this was the argument used by Keynes in his *General Theory* (1936). Rousseas (1972: 108) argues that the theory is incomplete and inadequate because, like the loanable funds theory, it also assumes that the level of

income is known (since income is assumed to be unique and stable at full employment equilibrium):

But Keynes's theory was a theory of income determination and it is inadmissible to assume, in order to determine the equilibrium rate of interest, that which the theory is supposed to determine (*ibid*).

Rousseas (1972: 108) argues that Keynes was going around in circles. The equilibrium interest rate could not be determined unless the level of income was known, and the level of income could not be known without explicit reference to the rate of interest:

This merry-go-round approach to the rate of interest ignored the real sector of the economy and the demand for money as a medium of exchange. Keynes's theory of the rate of interest simply assumed what it was supposed to prove (Rousseas 1972: 109).

Keynes's liquidity preference theory was adapted by one man in particular - John Hicks. Being a contemporary of Keynes, Hicks believed that Keynes's work on the liquidity preference theory provided considerable insight into understanding the determinants of short-term interest rates, however, he also felt that the liquidity preference theory did not stand up to the rigorous mathematics embodied in general equilibrium theory. Hicks extended Walras's general equilibrium framework into a mathematical piece of analysis which, he claimed, could embody Keynes's method. Hicks's analysis was called the IS-LM system. The IS-LM label was applied because it was believed that Hicks's system summarised the four basic pillars of Keynes's *General Theory* (1936): I (investment), S (saving), L (demand for liquidity) and M (supply of money) (Davidson 1991:26-27).

The IS-LM model can be expressed formally as a system of two equations with two unknowns:

Equilibrium in the money market:

$$M^S = L(i, Y)$$

Equilibrium in the goods market:

$$I(i, Y) = S(i, Y), \quad \text{where}$$

M^S = the quantity of money supplied

L = the quantity of money demanded

i = the rate of interest

Y = the level of income

I = the level of investment

S = level of saving

The demand for money is a function of the level of income (via the transactions motive) and the rate of interest (through the speculative motive). This yields a relation between income and the interest rate that Hicks plotted as the upward-sloping LM curve. Investment is a function of the rate of interest (via the marginal efficiency of capital schedule), and income depends on investment through the propensity to consume and the multiplier. From these two relations Hicks derived his downward sloping IS curve, which shows the combinations of saving and investment at which the goods market is in equilibrium. The intersection of the IS-LM curve gives equilibrium values of income and the rate of interest (King 2002:16).

Unlike in conventional general equilibrium models in which individual prices adjust to clear the goods markets, Hicks's IS-LM model has the peculiar feature that all prices except the interest rate are taken as given (exogenous). In this model, the interest rate is the endogenous variable and ties the entire model into a neat and determinate package. As explained earlier, it is only through adjustments in income and the interest rate that equilibrium in the goods markets is restored. Once equilibrium is restored, the liquidity preference theory of the demand for money allows changes in the monetary sector to be transmitted to the real sector through changes in the interest rate (Greenwald 1982: 557-558).

Because Hicks proceeded as if the rate of interest must be endogenously determined (consistent with the ruling general equilibrium paradigm), Keynes's central notion of unidirectional causality became lost in the IS-LM interpretation of Keynes. By abandoning Keynes's partial equilibrium method and no longer treating interest as an exogenous variable, Hicks unintentionally but fundamentally distorted the meaning of Keynes's liquidity preference theory. As a result Keynes's insights into the non-neutral processes by which money affects real activity have been obscured and nearly entirely overlooked (Moore 1988a: 252).

This criticism is shared by many Post Keynesians such as Lavoie (1984) who reject the liquidity preference theory on the grounds that it involves the assumption of an exogenous money supply. They argue that in a modern credit economy, the money supply is created by the demand for it, so that any change in demand automatically brings about a change in the supply. The idea of the interest rate as the price coordinating the demand and supply of money is, thus, rejected. The usual procedure of regarding the money supply as exogenous and the interest rate as endogenous is reversed so that the interest rate becomes the exogenous variable.

Hicks (1981: 139) ultimately admitted that it was a mistake to use the IS-LM framework to interpret Keynes's liquidity preference theory as a theory of interest rate determination:

The IS-LM diagram, which is widely accepted as a convenient synopsis of Keynesian theory, is a thing for which I can not deny I have some responsibility...I have however, not concealed that, as time has gone on, I have myself become dissatisfied with it.

2.6 CONCLUSION

The loanable funds theory is a long-run theory of interest rate determination. According to this theory, the interest rate adjusts to achieve equilibrium in the loanable funds market. This theory, however, fails to be an adequate theory of interest rate determination due to certain highly restrictive assumptions regarding its formulation. The natural rate of interest (which is the cornerstone of this theory) is defined in a moneyless world and cannot be defined outside of a one-commodity model. Neoclassical monetary theory views money as if it were identical to any other commodity. Money is thus compatible with the neoclassical view of the world based on scarcity: everything worthy is scarce, including money. The price of money, the rate of interest, is market determined by a market supply and demand mechanism, as are the prices of all goods in the general equilibrium neoclassical system. However, in a capitalist economy that uses credit money, the classical analysis of price determination, in terms of costs of production, cannot be applied to determine the rate of interest because credit is not a produced commodity - it is merely a book entry.

The liquidity preference theory of interest rate determination provides an alternative approach to the loanable funds theory. This theory is presented in terms of the short-run demand and supply of money. This theory also suffers from a number of shortcomings. Keynes's original work on the liquidity preference theory of interest rate determination was never fully completed and what was completed was criticised by Rousseas (1972:108) as being 'just as indeterminate as Keynes showed the neoclassical theory to be.'

Even later adaptations of Keynes's original work on the liquidity preference theory of interest rate determination suffered serious short-comings. Hicks, for instance, applied general equilibrium analysis to policy conclusions reached by Keynes in his *General Theory* (1936) that resulted in the formulation of the IS-LM theoretical framework, which assumed away the important implications of uncertainty and interdependence between variables in the goods and money market.

In the face of the inability of orthodox monetary theory to explain the determinants of short-term interest rates, what are the options? The emergence of the Post Keynesian view appears to reconcile the behaviour of central banks with monetary theory with three interdependent properties, namely:

- the non-existence of a theory of the rate of interest
- the non-neutrality of money
- the endogeneity of money and credit (Rogers 1986a: 28-89)

These are the defining characteristics of the Post Keynesian view, which will be discussed in the next chapter.

CHAPTER 3

POST KEYNESIAN INTEREST RATE THEORY

3.1 POST KEYNESIANISM

Post Keynesianism arose in opposition to neoclassical economics in general, monetarism, rational expectations and new classical thinking. Post Keynesians support the central conceptions and insights put forward by Keynes (1936) in the *General Theory* but differ from him as far as the exogeneity of the money supply is concerned. They also build on the work of the Polish economist, Michal Kalecki, particularly in respect of the mark-up theory of interest rate determination.

Post Keynesian economics is principally associated with an eclectic group of economists located in Cambridge, England. This group included Nicholas Kaldor, Joan Robinson, and Richard Kahn. In the United States, the founding contributors to the Post Keynesian tradition in macroeconomics include Paul Davidson, Sidney Weintraub and Hyman Minsky.

The Post Keynesian conceptual framework differs markedly from that of monetarism as well as from the neoclassical synthesis interpretation of Keynes's work (and other brands of Keynesianism). Although having its roots in writings of colleagues of Keynes at Cambridge, such as Robinson and Kaldor, Post Keynesian economics became an identifiable school of economic thinking from the late 1970s, as efforts were made to develop Keynes's original insights and concepts in opposition to the neoclassical synthesis (embodied, for example, in the IS-LM model). Post Keynesians believe that Keynes provided a new way of analysing monetary economies and other fundamental insights that were not captured in the neoclassical synthesis, and that these have important consequences for economic theory and analysis (Cottrell 1994: 587).

Although there is considerable diversity in Post Keynesian views and approaches, Post Keynesians subscribe to certain common propositions which differentiate them from leading schools of economic thought. Jackson (2002: 30) argues that these propositions include an emphasis on the role of uncertainty and historical time, a deep skepticism towards economic models of a general equilibrium nature, a preference for partial equilibrium approaches using ‘stylised facts’, the view that money is integrally involved in determining real economic outcomes and is best viewed as credit money rather than commodity money, and the view that the money aggregates are outside the control of the monetary authorities (ie endogenous).

3.2 MAIN TENETS OF POST KEYNESIAN MONETARY THEORY

Post Keynesians deny the causal validity of the quantity theory and assign virtually no role to money supply aggregates when analysing inflation. Whereas a typical monetarist view holds that growth of money supply aggregates is directly and causally connected to inflation, as well as being a potential source of economic instability, the Post Keynesian view holds that monetary aggregates adjust endogenously to the demand for money and credit in accordance with interest rate levels, investment activity and income. From a policy point of view, the level and growth of money supply aggregates are thus de-emphasised as being neither controllable by the monetary authorities nor crucial in any economic causal chain.

Jackson (2002: 31) argues that this does not, however, diminish the importance of money in the Post Keynesian scheme: ‘it is simply that other aspects of money are regarded as most appropriate for policy intervention purposes.’ Within Post Keynesian monetary policy analyses, the interest rate is regarded as a crucial policy variable, being directly controllable by the monetary authorities and a key determinant of the level of investment activity through which, in terms of Keynes’s principle of effective demand (explained shortly), the economy can be brought closer to full employment.

According to (Rogers 1986a: 28-29) the Post Keynesian theoretical framework is closely aligned with modern-day central banking. As mentioned in Chapter 2, this theoretical framework is based upon three interdependent properties:

- the non-existence of a theory of the rate of interest
- the non-neutrality of money
- the endogeneity of money and credit

Each of these properties are now discussed in turn.

3.2.1 The non-existence of a theory of the rate of interest

Post Keynesian monetary theory may best be explained by way of comparison to orthodox neoclassical theory. The neoclassical approach to money arises from the fundamental presuppositions that underlie the whole neoclassical research program. In particular, the neoclassical treatment of money is based upon the general neoclassical concern for exchange and the individual. Furthermore, money is seen as a given endowment, and therefore as an exogenous variable (as is any input in orthodox general equilibrium theory). Money behaves as if it were identical to any other commodity. Money is thus compatible with the neoclassical view of the world based on scarcity: everything worthy is scarce, including money. The price of money, the rate of interest, is determined by a market supply and demand mechanism, as are all goods in the general equilibrium neoclassical system.

Calitz et al (1999: 85) argue that the Post Keynesians, in contradistinction to the neoclassical approach, regard the money supply as endogenous, and the rate of interest is seen as an exogenous variable. As Moore (1988a) emphasises in the arguments that follow, in a modern capitalist economy that uses credit money the classical analysis of price determination in terms of costs of production cannot be applied to determine the price of credit (ie the rate of interest) because credit is not a commodity produced. Post Keynesian theorists argue that the properties of their theory reveal that neoclassical

general equilibrium models cannot define the rate of interest. The rate of interest must be treated as an exogenous variable since it cannot be explained in terms of neoclassical analytical principles.

3.2.2 The non-neutrality of money

The Post Keynesian tradition of monetary analysis (as opposed to real analysis) had its origins in the 1930s, when Hayek and Keynes recognised the need to escape the sterile formalism of the doctrine of neutral money (Davidson 1991). Post Keynesians believe that monetary variables have substantive real effects in the long run as well as in the short run and their approach falls squarely into Schumpeter's monetary analysis classification.

The Post Keynesian argument against the neutrality of money is based on two characteristics of neoclassical monetary theory: Say's law and the quantity theory of money.

Say's law rests on the proposition that supply creates its own demand. The basic idea underlying Say's law is that production, by creating income, simultaneously creates the necessary means to purchase that output. Since the willingness to work is motivated by the desire to consume, there should be no limit to the sale of any volume of output. There is therefore no reason for unemployment, because output should expand to the point where the labour force is fully employed in the long run. Unemployment is thus regarded as a temporary phenomenon.

The quantity theory of money complemented Say's law, by providing an explanation of the price level. With full employment ensured in the long run and money velocity stable and changing slowly over time as financial institutions evolved, the price level was seen to be determined by the quantity of money, as illustrated by the basic equation of the quantity theory of money:

$$MV = PY$$

where the money stock (M) is treated as an exogenous variable and the direction of causality is seen to run from the money stock to the price level (P) assuming a constant velocity of money (V) in the quantity equation. The quantity theory together with Say's law led to the inevitable conclusion that money is neutral in the sense that, in the long run, an increase in the money stock will cause an increase in the price level only, with no impact on output.

Rousseas (1986: 110) argued that neoclassical theory

...deals with a barter economy operating under conditions of certainty, where money is brought in as an afterthought, if at all – either in the form of manna from heaven or, as Milton Friedman would have it, 'from a helicopter'.

In other words, in neoclassical monetary theory there is no provision for a monetary system interacting with the real sector of the economy. When money is brought in, it is in the form of the quantity theory of money, in which the money supply is assumed to be exogenously determined by the central bank. In the long run, changes in the money supply will only affect the level of prices, with no lasting effects on real output and employment – which, based upon Say's law, are in a state of full-employment equilibrium.

Post Keynesians refute this analysis. Their argument rests on the principle of effective demand to counter both Say's law and the neutrality of money implied by the quantity theory. The principle of effective demand asserts that full employment is a special case and that the level of employment is determined by the volume of aggregate demand independent of the supply decisions of the individual workers (King 2002:12). The Marshallian analysis of monetary equilibrium clarifies the concept of effective demand. The analysis suggests that if the economy is disturbed, it is likely to move between long-run equilibria, rather than to automatically return to unique full-employment equilibrium. Keynes (1979: 35) supported this argument:

In my view there is no unique long-period position of equilibrium equally valid regardless of the character of the policy of the monetary authority. On the contrary there are a number of such positions corresponding to different policies. Moreover, there is no reason to suppose that positions of long-period equilibrium have an inherent tendency or likelihood to be positions of optimum output. A long-period position of optimum output is a special case corresponding to a special type of policy on the part of the monetary authority.

To see precisely how the principle of effective demand breaks Say's law, it is necessary to examine the behaviour of the rate of interest. If the rate of interest is an independent variable (and not an equilibrating force), it cannot be analysed in terms of neoclassical principles and there will be no mechanism whereby the economy can automatically adjust to a level that will ensure full employment. By refuting the assumption of full employment, not only is Say's law broken, but neither the theory of the neutrality of money nor the quantity theory hold any longer (Calitz et al 1999: 87).

3.2.3 The endogeneity of money and credit

The endogeneity of the high-powered monetary base⁴ is an issue of central importance to macroeconomic theory and policy. The orthodox view maintains that the central bank is able to control the value of the high-powered monetary base, and so the money stock, by the purchase or sales of securities in the open market (ie the money supply is exogenous).

The exogenous money supply function is embodied in the traditional IS-LM model, with monetary policy represented by a shift of the LM curve. The monetarist approach reinforced the notion of an exogenous money supply and claimed that the rate of change of money supply determines the rate of inflation. In orthodox neoclassical monetary theory the supply of new loans depends on the availability of free reserves. The stock of high-powered money, set by the central bank, determines the stock of money and the

⁴ The high-powered monetary base constitutes the reserves of the commercial banks. The monetary base is defined as the 'total quantity of currency in circulation outside of banks plus the currency held by banks or deposited by banks with the central bank' (Walton 1994: 307).

amount of outstanding loans through the standard money-deposit multiplier. This causal relationship is shown below:

$$M = h(m) \times H, \text{ where}$$

M = money supply

$h(m)$ = multiplier

H = monetary base (ie the stock of high-powered money)

Rogers (1985: 242) argues that if the monetary authorities seek to control the money supply then the monetarists recommend that they control the monetary base (H). Given that the multiplier, $h(m)$, is stable and predictable, control of the monetary base then ensures control over the money supply. It is clear from the monetarists' argument that the direction of causation is assumed to run from the monetary base to the money supply. In other words the monetarists view the money supply as exogenous and under the control of the central bank.

According to the monetarist explanation, the central bank is able to exert tight control over the total money supply through its ability to determine the monetary base (ie the stock of high-powered money). This implies a money supply curve that is independent of the rate of interest (ie vertical in interest-money space). Complete exogeneity is also represented by a perfectly inelastic or vertical supply function in IS-LM space. Moore coined the term 'verticalists' to categorise the supporters of this view. The monetarists assume that central banks 'exogenously' set the high-powered monetary base, and that short-term interest rates are set 'endogenously' in the money market. The monetarist position can be illustrated in terms of the diagram presented as Figure 3.1.

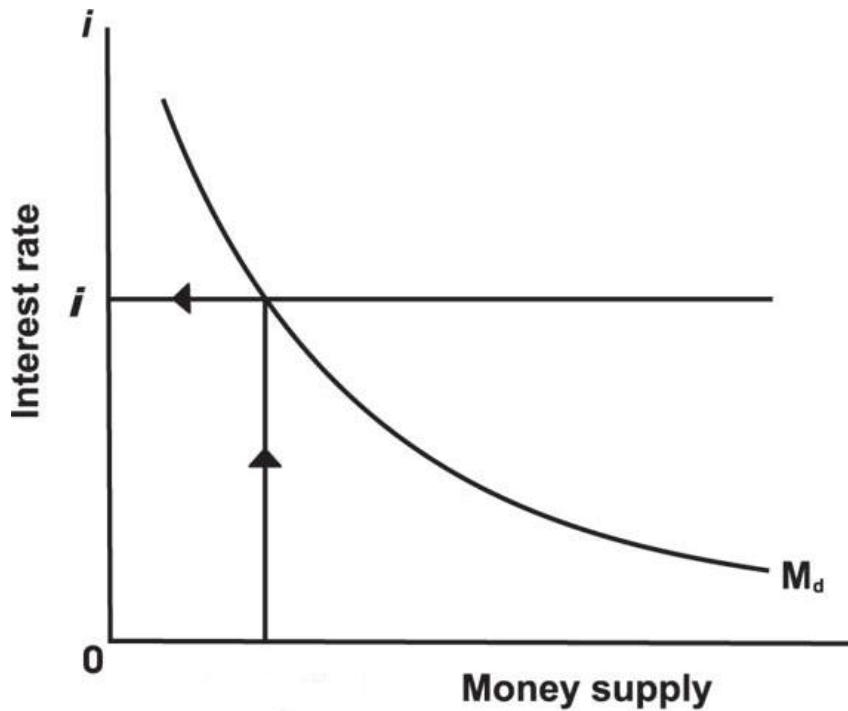


Figure 3.1 The monetarist view: endogenous interest rate (Rogers 1985: 243)

Moore (1988a: 87-88) argues that this view is mistaken as it ignores an important asymmetry in central banks' discretionary ability to influence the supply of credit money:

Since bank deposits are determined by bank assets, so long as banks find it profitable to add to their portfolios of marketable securities, central banks will be able to increase the level and rate of growth of the credit money supply at their discretion. But in the absence of direct controls on banking lending, *central banks do not have the ability to reduce the level or growth rate of the money stock or even the high-powered base at their initiative* (my own emphasis).

This follows from the recognition that bank loans are essentially demand determined.

According to the Post Keynesians, the direction of causality is precisely the reverse of that suggested by the neoclassical view. Post Keynesians insist that the direction of causality is from right to left in the money deposit multiplier equation. The Post Keynesian interpretation of the domestic money supply process is summarised by the following equation:

$H = \{1 / m\} \times M$, where

H = monetary base (ie the stock of high-powered money)

$1/m$ = the credit divisor

M = money supply

In this expression H (high-powered base money) is now the dependent variable and M (money supply) is the independent variable. In Post Keynesian analysis the monetary base (H) does not determine M (money supply), but *is determined by* M (money supply) (Lavoie 1984: 778-780, my own emphasis).

In other words banks can always get the necessary reserves to support whatever level of liabilities they have incurred. The only influence that the central bank has on this process is to alter the price at which these reserves are obtained. The Post Keynesian interpretation of the money and credit divisor then implies that the quantity equation should be read from right to left. The Post Keynesian analysis views the money supply as perfectly elastic in the short-run at a rate of interest determined by the central bank. The case is illustrated in Figure 3.2.

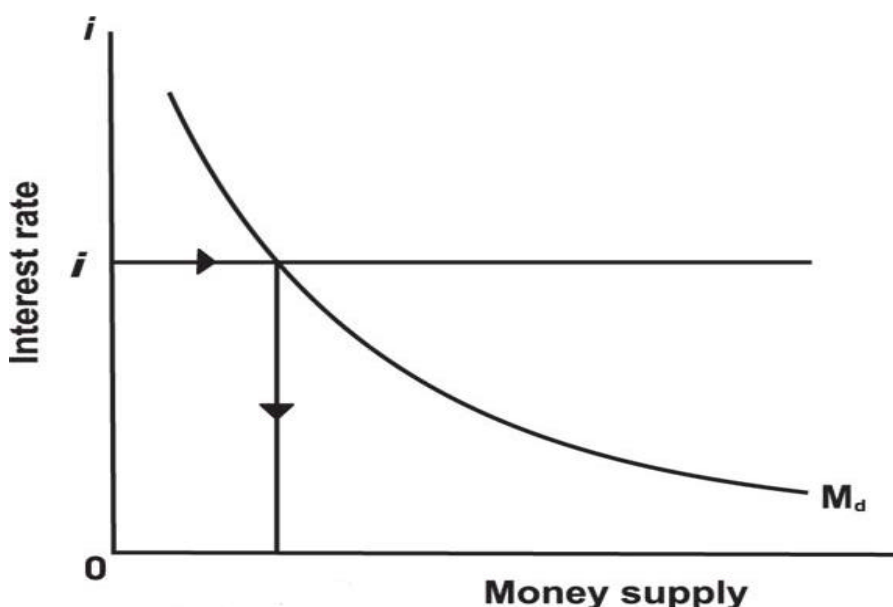


Figure 3.2 The Post Keynesian view: exogenous interest rate (Rogers 1985: 244)

Moore (1996:3) argues that

...in the real world banks extend credit, creating deposits in the process, and look for the reserves later. There is now mounting evidence that the traditional characterisation of the money supply process...is fundamentally incorrect. To the extent there is a reasonably stable relationship between the high-powered base and the money stock, and between the money stock and aggregate money income, the causal relationship implied is more like the reverse of the traditional view.

The Post Keynesian view is closely aligned with the position adopted by the Banking school. The Banking school was a group of influential British economists who opposed the rival Currency school in the mid-nineteenth-century bank charter debate over the regulation of the banknote issue. During this period, the Currency school feared that inflationary monetary overexpansion would occur unless convertible bank notes were backed one for one with gold. The Banking school, however, disapproved of all forms of monetary regulation except the requirement that banks convert notes into coin upon demand. The Banking school argued that the volume of convertible notes was automatically regulated by the needs of trade and therefore required no further limitation. This conclusion stemmed directly from the real bills doctrine⁵ and the law of reflux⁶, which together guaranteed safeguards to overissue, obviating the need for monetary control.

Both the real bill and the law of reflux doctrines embodied the notion of a passive, demand-determined money supply and of reverse causality running from prices to money rather than vice versa, as in the quantity theory. According to the reverse causality hypothesis, changes in the level of prices and economic activity induce corresponding shifts in the demand for bank loans which the banks accommodate via variations in the note issue. In this manner prices determine the money stock, the expansion of which is the result, not the cause, of price inflation (Greenwald 1982: 59-60).

⁵ The real bills doctrine states that the stock of money can never be excessive as long as notes are issued on loans made to finance real transactions in goods and services (Greenwald 1982:59).

⁶ The law of reflux asserts that overissue is impossible because any excess notes will be returned immediately to the banks for conversion into coin or for repayments of loans (*ibid*).

This point of view is adopted by Post Keynesian economists such as Kaldor (1982), Moore (1988b) and Lavoie (1984). They argue that the demand for advances of credit is the endogenous factor and that the direction of causation runs from demand for credit to the monetary or reserve base:

It should be clear, however, that the decisive factor according to the Post Keynesian view is the flow of credit.... The money stock is in fact the resulting factor of the expansion of credit... The money stock is a residual and as such cannot be causal (Lavoie 1984: 775).

The ‘verticalists’ or monetarists emphasise the following causal relationships:

H (monetary base, ie stock of high-powered money) $\Rightarrow M$ (money supply) $\Rightarrow i$
(interest rates)

The Post-Keynesians, on the other hand, adopt the following view about the causality between the key variables:

i (interest rates) $\Rightarrow L$ (demand for money balances) $\Rightarrow M$ (money supply) $\Rightarrow H$
(monetary base, ie the stock of high-powered money)

There is a general agreement among Post Keynesians as to the endogeneity of the money supply. Kaldor (1982:55) maintained that

...in the case of credit money the proper representation should be a horizontal supply curve of money, not a vertical one. Monetary policy is represented not by a given quantity of money stock but by a given rate of interest; and the amount of money in existence will be demand determined.

According to this view, the central bank does not have direct control over the quantity of money or the monetary base.

From this argument we can deduce that central banks set short-term interest rates according to some ‘reaction function’ and that the monetary base (H) is an endogenous variable. This ‘horizontalist’ Post Keynesian view has serious repercussions for economic theory:

The entire literature of monetary control and monetary policy, IS-LM analysis, liquidity preference, interest rate determination, the influence of public sector deficits on the level of domestic interest rates, growth theory, and even the theory of inflation must be comprehensively reconsidered and rewritten (Moore 1988b: 82).

This also implies that increases in monetary aggregates are not a major cause of (independent) inflation.

3.3 INTEREST RATES IN POST KEYNESIAN THEORY

3.3.1 The exogeneity of the interest rate

According to Moore (1988b: 258), it is a mistake to view interest rates as market-clearing prices endogenously equilibrating an independent demand for and supply of ‘capital’ or ‘loanable funds’. The error arises because money is viewed as if it were commodity money:

Credit money is not supplied according to some production function, with a real resource cost and a rising supply price. Rather it is supplied on demand by the central bank as the residual provider of system liquidity, at a supply price determined exogenously within wide limits as a policy variable by the central bank itself (*ibid*).

In other words, interest rates do not adjust to equilibrate the demand for real capital (investment) with the supply of finance capital (savings). Nominal short-term rates are established exogenously by central banks in pursuit of their ultimate policy goals. The interest rate takes centre stage as being both controlled by monetary authorities and a key determinant of the level of investment activity which, through the principle of effective demand, determines the level of economic activity.

As mentioned, the Post Keynesians maintain that the central bank does not have the option of exercising genuine quantitative control over the stock of money:

The accommodation of the private sector demand for money, at an interest rate of the authorities' choosing, is a 'structural necessity in a modern credit-money system' (Moore 1988b: 374).

Direct control over the monetary base would conflict with the central bank's function of lender of last resort, which is necessary for maintaining the integrity of the whole pyramid of money and credit.

Changes in money stock are driven, in the first instance, by private-sector loan demand which the commercial banks are obliged to accommodate, particularly given the prevalence of overdraft agreements and pre-arranged lines of credit. Having created deposit money in response to such demands, the banks then need to obtain extra reserves to meet reserve requirements set by the monetary authority. The central bank cannot simply refuse to supply the needed reserves as this would court financial disaster. All the authorities can do, if they wish to restrain the process of creation of bank money, is to adjust the terms on which they supply base money. These terms are dictated by the interest rate (*ibid*). The rate of interest is a

...politically determined distributional variable rather than a market-determined price (Eichner 1986: 220).

Kaldor (1982: 190) holds a similar view to both Eichner and Moore:

...a given stance of monetary policy is best expressed by a chosen rate of interest, and not by a chosen quantity of credit money in existence.

In the final analysis, Kaldor (1982: 86) argues that

...interest rates will not be endogenously determined by the interplay of supply and demand in competitive financial markets. The central bank has the power to impose its will on the market and set its interest rates where it wants – presumably at the level consistent with that rate of investment which, via the multiplier process, will validate the government's full employment policy.

According to Rogers (1986a: 25)

...the rate of interest reflects psychological, institutional, and other historical factors which cannot be specified *a priori*; it is in other words, an exogenous variable.

This is precisely what Moore (1988b) and Kaldor (1982) advocated.

What all this adds up to is that central banks adjust interest rates to predetermined levels of their choice, based upon their specific policy objectives. In South Africa, for instance, the inflation-targeting framework requires the central bank to manipulate short-term interest rates in order to lower inflation. If interest rates do rise, it is because central banks have consciously taken the political decision to raise them. Kaldor (1982: 126) states the case unequivocally:

...at any time or at all times, the money stock will be determined by demand, and the rate of interest (will be) determined by the central bank.

That is, the money supply is endogenous and demand-driven while the rate of interest is the exogenously determined price of money, set and administered by the central bank.

This implies that the central bank is able to exercise its control over the level of short-term interest rates through open market operations, not by affecting the quantity of bank cash reserves, as the money-multiplier paradigm has it, but rather by compelling banking institutions to make use of the central bank's accommodation facilities at the discount window, at the interest rate charged by the central bank. Provided that the 'market is in the Bank' (which can always be ensured by appropriate open market operations), arbitrage will ensure that market interest rates are held at approximate equality with the central

bank's discount rate. In all well-developed financial systems, changes in bank rate have a quick and roughly commensurate effect on the level of short-term market rates. Central banks can thus establish interest rates on all bank wholesale short-term securities, which affect the general market short-term interest rates (Moore 1988b: 89).

3.3.2 A mark-up theory of interest rate determination

Within both Keynesian theory and the neoclassical synthesis, the rate of interest serves as an equilibrating force, that is, as the particular variable that ties the whole system together in a neat, determinate package. In the neoclassical synthesis, for instance, the IS and LM curves (Hicks 1982) are assumed to be independent of one another and, given their relative stability (which eliminates the problem of uncertainty), the level of real output and employment and the rate of interest are determined simultaneously. No matter what form the model took, the intersection of the IS and LM curves uniquely determined the equilibrium rate of interest at which the money and goods sectors were in simultaneous equilibrium. The rate of interest, in other words, was market determined.

Rousseas (1986: 51) argues that

...if the psychological factors that underlie the IS and LM curves in a world of uncertainty make them, in fact, interdependent, the usefulness of the rate of interest as an equilibrating force quickly dissipates into a haze of indeterminateness.

Moore (1988a: 282) argues that, instead of short-term interest rates being viewed as a market-clearing process, a more realistic approach would be to view short-term interest rates

...simply as a relatively stable markup over the discount rate, which is administered exogenously by the monetary authorities.

Rousseas applied Kalecki's (1954) theory of mark-up pricing in order to get the loan rates charged by banks for bank credit.

Mark-up theory

Mark-up theory assumes an economy in which there are large concentrations of market power and in which oligopolistic firms set prices as a mark-up over unit prime costs. Likewise, the interest rate can be regarded as the ‘price’ of financial ‘goods’ in the financial sector.

According to Rousseas (1998: 64-66), the mark-up equation may be expressed formally as $P = k(u)$. This can be rewritten for commercial banks as:

$$i = k(u)$$

where

i = interest rate on loans

k = the degree of monopoly power exercised by individual banks, or, in the aggregate, by the banking industry as a whole

u = the unit prime or variable costs incurred by banks

Mark-up theory can be applied to the banking system because banks, like firms, are in business to make a profit. A few large banks tend to dominate the industry. The South African banking sector is a good example of an oligopoly. For instance, at the end of 2001 South Africa’s four biggest banks (ABSA, Standard Bank, Nedcor and FirstRand) had a combined market share of 72,7 percent of the market for bank deposits in South Africa (*Competition News*, 10 December 2002). Banks are in the business to produce a product – financial services – while incurring certain costs. They are, however, oligopolistic price setters in ‘retail’ markets, while being price takers in competitive ‘wholesale’ financial markets.

The raw materials, or inputs, of a bank are the deposits it is able to attract and its ability to borrow funds – both of which are necessary ingredients for its final product – loans. Both have costs attached to them: the interest paid on deposits and the interest paid by

banks on borrowed funds, and both are determined in highly competitive markets. Other costs include the required reserves banks must hold against their deposits and the insurance fees levied against such deposits.

The revenues of banks are largely derived from the ‘prices’ charged against bank loans, or the pattern of interest rates, and the interest income from their holding of short-term investments, such as Treasury Bills. The interest rate is thus seen as the price of the loan and is determined by a mark-up over the ‘cost of funds’. The interest rate can also be seen as banks’ profit margins.

Profit margins are determined by the lending rates of banks based on the ‘interest rate spread’,⁷ needed to achieve pre-determined profit goals. Changes in the gross profit margin or interest rate spreads are often caused by competitive scrambles for higher interest rate deposits, or by exposure to high-risk loans made by banks to countries or firms that end up in virtual default. If future profit margins are threatened by increased domestic and foreign loan defaults, banks restore their profit margins by increasing their mark-up over prime cost (ie their interest rates). If one bank in particular experiences loan defaults it may not be able to increase its profit margins, and will either be forced out of the market or it will be bailed out by the central bank (Rousseas 1998: 64-66).

As in the case of prices in other sectors, the mark-up theory of bank loan rates rejects the demand and supply analysis underlying the IS-LM determination of the equilibrium rate of interest. In this theory, an increase in demand relative to supply does not automatically result in an increase in the loan rate. Put differently, an ‘equilibrium’ approach to the rate of interest charged by banks is not regarded as being appropriate to the financial sector.

⁷ The interest rate spread is simply the margin, or mark-up, between bank costs and loans. The spread can be approximated by the difference between the ‘prime rate’ (rates set by banks for their best customers) and the ‘repo’ rate (a proxy for the cost of funds).

Rousseas (1986) argues that interest rates are determined by a stable mark-up over costs, and that changes in interest rates are consequently dependent on changes in the costs of funds to banks – namely the ‘repo’ rate. The implications of this statement in the context of Post Keynesian analysis is convincing: The ‘repo’ rate (ie short-term nominal interest rate) is determined by the central bank as an administered policy variable. Although there are a variety of interest rates in the markets (depending on their nature, maturity and risk), this theory maintains that they are all determined on a mark-up basis.

All this leads to the conclusion

...that the notion of a market clearing equilibrium ‘interest’ rate – whether in the old ‘productivity-thrift’ theory, or the ‘bastard’ Keynesian IS-LM approach, or a market determined short-run rate – is a theoretical solution within arcane models bearing no relation to the real world. In the universe of economics, interest rates are not the equilibrating factor of textbooks. They are essentially a mark-up over competitive prime costs in a broadly conceived financial sector (Rousseas 1998: 73).

3.4 CONCLUSION

Post Keynesians are a diverse group of economists who share the belief that modern macroeconomics leaves aside or explicitly assumes away many of the central elements of Keynes's *General Theory* (1936). They maintain that a number of highly restrictive assumptions in general equilibrium theory, including the implications of time, equilibrium and uncertainty, render the theory inappropriate.

According to Arestis (1992:201-203), the five basic propositions on which most Post Keynesians would find themselves in broad agreement, despite differences over their precise interpretation include the following:

First, the IS-LM version of orthodox Keynesian theory is hopelessly flawed, both as an expression of Keynes's own vision and as the basis for a satisfactory macroeconomic theory after Keynes.

Second, attempts to force Keynes's ideas into an explicitly general equilibrium or Walrasian mould were profoundly misguided.

Third, neoclassical price theory is irrelevant to the real world of giant corporate oligopolies, which are price-makers rather than price-takers and operate according to some variant of the mark-up principle in determining the prices of their products.

Fourth, the money supply is not determined outside the economic system by the decisions of the central bank. Money is endogenous and the monetary authorities are able to set only the price of money (that is, the rate of interest), not the quantity.

Finally, unlike the neoclassical approach, the focus of Post Keynesian economics is to explain why the economy does not work well.

Post Keynesians argue that mainstream theory is defective in its method, no less than in its substance:

...excessive abstraction and over-elaborate formal analysis should be avoided; economics should instead, be grounded on realistic assumptions and directed toward important issues of public policy (Davidson 1991: 34).

When a theory is devoid of any contact with reality (as the Post Keynesians argue about the neoclassical synthesis) its policy implications may be irrelevant or politically impractical. Davidson (1994: 34), for instance, argues that Keynesian theory, by virtue of its reformulation of Keynes along general equilibrium lines, has been moving increasingly away from practically realistic policy measures:

Post Keynesian theory therefore presents an attempt, still in the process of being worked out, to restore reality to economic thinking (*ibid*).

Post Keynesian monetary theory has not been successful in becoming absorbed in mainstream economics because like so much of heterodox economics, it conflicts with the mainstream neoclassical paradigm. Nonetheless, Post Keynesian monetary theory has provided the basis, albeit implicitly, for monetary policy in South Africa since the early 1980s, as will become evident in Chapter 5.

CHAPTER 4

MONETARY POLICY REGIMES

4.1 INTRODUCTION

The Post Keynesian view described in Chapter 3 maintains that in a modern credit economy, interest rates are determined exogenously by the central bank in accordance with its specific policy objectives. Short-term interest rates are determined within a policy framework, and the causes of fluctuations in interest rates may differ from country to country, and from time to time in a particular country. The determinants of short-term interest rates are specific to the monetary policy framework within which each central bank operates. A thorough understanding of the factors that cause interest rates to change thus requires an analysis of the context within interest rate decisions are made. Such an analysis requires an understanding of the different monetary policy regimes and their implications for interest rate policy. The basic monetary policy regimes include:

- direct interest rate controls
- monetary policy with an implicit nominal anchor (unconstrained discretion)
- monetary targeting
- inflation targeting
- fixed exchange rates
- exchange-rate targeting

First, however, we have to define monetary policy.

4.2 THE DEFINITION AND OBJECTIVES OF MONETARY POLICY

Defining monetary policy and its goals is not a simple exercise. Monetary policy frameworks are constantly evolving in response to new developments in financial markets. A certain theoretical framework may be in vogue for central banks around the

world in one era and out of favour in the next. A good example of this was the rise and fall of monetarism in the 1980s. In addition, the dynamic nature of globalised financial markets implied that the control of monetary aggregates (ie monetary targeting) became increasingly ineffective (eg in South Africa after the lifting of sanctions in 1994). As a result, different monetary policy frameworks have been used in South Africa since 1980.

Monetary policy, in general terms, has been defined by Meijer (1989: 492) as consisting of decisions made and implemented by the monetary authorities in their various fields of operation in order to reach or to strive to reach certain 'ultimate' objectives regarding the national economy. The De Kock Commission (1985: 13.7) also favoured a 'broad and relatively neutral' definition, that is, a definition not entirely in accordance with the tenets of a particular school of monetary thought and which does not limit the scope of monetary policy (Coelho 1992: 25). The Commission defined monetary policy as:

all deliberate actions by the monetary authorities to influence the monetary aggregates, the availability of credit, interest rates and exchange rates, with a view to affecting monetary demand, income, output, prices and the balance of payments (De Kock Commission 1985: 13.7).

Within this broad monetary policy framework, the goals of monetary policy were defined as:

...the maintenance of reasonable stability of domestic price levels (the primary long-term objective). While other ultimate objectives, such as balance of payments equilibrium, economic growth and job creation, should also rank as legitimate objectives of monetary policy, even though monetary policy alone should not be used reach these various goals (De Kock Commission 1985: 141).

The goals of monetary policy thus extended beyond long-term price stability to concern with 'general economic stability'.

During Stals's tenure in the 1990s, the goals of monetary policy were defined as '...the protection of the domestic and external value of the rand' (Stals 1993a: 31). Monetary policy was thus aimed at combating inflation, while also including some degree of

exchange rate targeting. This narrower approach contrasts sharply with the multiple goals in the De Kock era.

Mboweni, the current Governor of the South African Reserve Bank, defines monetary policy as all ‘...*deliberate* decisions by the central bank to *influence short-term interest rates*’ (Mboweni 2002) (my own emphasis). In other words, monetary policy relates to the decisions by the central bank on short-term interest rates. Implicit in this definition is a horizontalist view of the money supply or the exogenous nature of the interest rate, as explained in Chapter 3. In this framework, the SARB exogenously determines short-term interest rates in pursuit of its inflation target and then creates the necessary market conditions (through open-market operations for instance) in order to support such an interest rate.

4.3 INTEREST RATE POLICY UNDER DIFFERENT MONETARY REGIMES

All central banks conduct monetary policy within one of the monetary policy frameworks or regimes listed earlier. In addition to facilitating the decision-making itself, each regime enables the decisions to be interpreted within a specific structure or context. The different regimes are now discussed in turn.

4.3.1 Direct interest rate controls and their implications for interest rate policy

Direct or non-market oriented policy instruments refer to those measures taken by the central bank in order to achieve the aims of monetary policy by limiting or prescribing the behavioural pattern of market participants. These instruments are usually associated with a suspension of market forces, either through rigid rules or by fixing certain important variables. Should market participants not adhere to these rules, they may be liable to prosecution or penalties. Direct instruments of monetary policy include interest rate controls, bank-by-bank credit ceilings, statutory liquidity ratios, directed credits and bank-by-bank rediscount quotas.

What are the motives guiding central banks decisions to control the interest rate? These motives depend on the channels through which monetary policy decisions affect aggregate demand and ultimately inflation. The channels depend, in turn, on the theoretical framework used. Interest rate controls were based essentially on Keynesian monetary theory, which maintains that firms and individuals respond to changes in interest rates by altering their investment and spending patterns. As a result, consumer spending (C), fixed capital formation (I) and real output (y) are affected. By maintaining low interest rates, the central bank can therefore try to achieve higher levels of investment and output. The monetary transmission mechanism in this case is represented by the interest rate channel:

$$\downarrow \text{bank rate} \rightarrow (\uparrow I, \uparrow C) \rightarrow \uparrow y$$

In South Africa, for instance, deposit interest rate controls prescribed maximum rates on the several categories of deposits and other borrowed funds offered or paid by deposit-taking institutions. The main reason for the imposition of this type of control, as part and parcel of the Reserve Bank's monetary policy in the 1960s and 1970s was, according to the De Kock Commission (1985: 22.20)

...the wish to prevent an increase in home mortgage rates at times when the general level of interest rates tended upwards. It was also felt that under conditions of high liquidity, when the general trend of interest rates was downwards, deposit rate control was necessary to prevent the keen competition between banks and building societies from pushing deposit and mortgage rates upwards. Competition might also lead to unsound lending at above-average rates and place an undue burden on borrowers.

By placing ceilings on interest rates, the SARB was attempting to protect borrowers (such as homeowners, farmers and small businesses) from the burden of high interest rates that would (supposedly) have occurred had interest rates not been controlled directly.

Caprio and Honohan (1990: 26) argue that the use of direct instruments (such as deposit interest rate controls) were of limited use. Such controls have been used in many African and European developing countries with little success. One of the reasons is that the definition of the institutions that were subject to controls gave rise to many opportunities for avoidance through disintermediation⁸ and the development of near-bank and parallel credit markets. Other controls, such as bank-by-bank ceilings, also distorted competition by penalising more dynamic institutions and discouraging resource mobilisation. Once a bank reached its credit ceiling, it had no incentive to compete for additional resources, regardless of the profitability of its clients' investment opportunities.

Friedman (1972: 60-73) argues further that repressing interest rates was a serious mistake for any country. If, for instance, interest rates are pegged at a very low level, or if specific interest rates are charged on special kinds of loans or special kinds of investments, people with political influence tend to have access to capital at these rates. This often results in a wasteful use of capital (by employing it in ways that have a low yield). Capital that escapes the controls (through disintermediation and grey markets) will command an extremely high rate. Meijer (1984:15) drew similar conclusions to Friedman by arguing that 'direct controls impose inequalities, distortions, inefficiencies and a general unwarranted loss of economic welfare.'

An additional cost of trying to maintain very low interest rates is that it impedes the development of financial institutions. Friedman (1972: 66) argued that the best way to foster an effective and diversified financial structure was to let the financial institutions develop in response to market forces. This recommendation has proved to be correct and today virtually all direct interest rate controls are acknowledged as causing distortions and inefficiencies, and have been abandoned.

⁸ Disintermediation refers to the replacement of credit normally or previously extended through the intermediation of a bank or other financial institution, by non-intermediated credit extended directly by credit lenders to ultimate borrowers. This definition includes a shift by banks from on-balance-sheet to off-balance-sheet financing (De Kock Commission 1985: 101).

4.3.2 Fixed exchange rates

Exchange rate pegs

A fixed exchange rate policy prevails when a currency is linked to some monetary standard and its value remains unchanged within narrow limits except for a major shift in underlying conditions. Whenever a change in value is made, it occurs by official government action and occurs through either a devaluation (ie a loss in value) or a revaluation (ie a gain in value) (Greenwald 1981: 550).

Fixed exchange rates can take various different forms. The most common form in the past was to fix the value of the domestic currency to a commodity (such as gold) or to an important currency (such as the US dollar) or to a basket of currencies. This is referred to as an exchange rate ‘peg’. Exchange rate pegs have two main potential benefits: first, it helps to achieve price stability, and second, it makes foreign finance available at a cheaper rate by reducing or eliminating exchange rate risk.

Exchange rate ‘pegs’ come in two basic varieties: ‘soft’ pegs, in which the commitment to the peg is not institutionalised, in other words, the exchange rate is implicitly targeted through interest-rate adjustments (this is also known as exchange-rate targeting). ‘Hard’ pegs, on the other hand, occur when the commitment is institutionalised, for example in the form of a currency board⁹ or dollarisation¹⁰. Currency boards choose their anchor currency for its expected stability and international acceptability. For most currency boards, the British pound or the United States dollar has been the anchor currency, though for some of the recent currency board-like systems the anchor currency is the euro (Mishkin 2001:2).

Fixed exchange rate regimes with ‘hard’ pegs have a poor track record. By fixing the exchange rate, a central bank loses the freedom to pursue an independent monetary

⁹ A currency board is defined as a monetary authority that issues notes and coins convertible into a foreign anchor currency or commodity (also called the reserve currency) at a truly fixed rate and on demand.

¹⁰ Dollarisation occurs when the value of a currency is pegged to the value of the US dollar.

policy, with the result that shocks to the anchor country, to whose currency the domestic currency is pegged, are transmitted to the targeting country (since domestic interest rates are determined in the anchor country). Exchange rate pegs thus prevent the central bank from conducting open-market operations as well making loans to domestic banks or to the government. Therefore it cannot sterilise the monetary effects of its operations in the foreign exchange market or even cushion the effects of its operations on the liquidity of the banking system. This was illustrated during the financial crisis in emerging markets in 1994/95 when the attack on the Argentine peso (which at the time was fixed to the price of the dollar) led to a fully-fledged banking crisis in Argentina (Kenen 2000:4).

Hard pegs leave countries open to speculative attacks and currency crises, which can be costly in industrialised countries, but are frequently devastating in emerging market countries, for example, in Latin America (Argentina, Mexico and Ecuador), East Asia (Thailand and Indonesia) and Turkey. The breakdown of hard pegs is particularly damaging in emerging market countries because their debt is generally short term and denominated in foreign currency, so that a successful speculative attack leads to a sharp deterioration in balance sheets and ultimately to financial crisis (Mishkin 1999: 580-581).

Given the past experience with hard pegs, few economists (if any) advocate their use as a monetary policy strategy. Hard pegs, however, may be desirable, especially in countries with weak political and monetary institutions, since they may be the only way to break inflationary psychology and stabilise the economy. Hard pegs can be regarded as the stabilisation policy of last resort, when it becomes necessary to allow little or no discretion to the monetary authorities. However, hard pegs will only be successful in promoting a healthy economy if other government policies create the right institutional environment for the peg. For example, without rigorous prudential supervision, which ensures the safety and soundness of the financial system, and sound and sustainable fiscal policy, hard pegs will not be able to stabilise the economy in the long run (Mishkin 1999: 592). This was forcefully illustrated in Argentina in recent years.

4.3.3 Exchange rate targets

Exchange-rate ‘targets’ or ‘soft’ pegs are different from ‘hard’ pegs. If an exchange-rate target is being pursued, it is achieved through a deliberate interest rate manipulation with its indirect effect on the exchange rate, that is, through the exchange rate channel that will be discussed shortly. Unlike the ‘hard’ peg, the exchange rate is not simply ‘pegged’ by a currency board. In an exchange-rate targeting framework the central bank determines the short-term interest rate as a policy variable in pursuance of an exchange rate range or target.

From Chapter 3 we saw that central banks can and do move domestic short-term interest rates independently and, *ceteris paribus*, a reduction in domestic interest rates tend to cause capital outflows and a depreciation of the domestic currency. This transmission mechanism can be summarised as follows: when domestic real interest rates fall relative to foreign interest rates, deposits denominated in the domestic currency become less attractive than deposits denominated in foreign currencies and the domestic currency depreciates. The lower value of the domestic currency (DC) makes foreign goods more expensive than domestic goods, causing a rise in net exports (NX) and hence in aggregate output. This channel can be summarised as follows:

↓ Central bank rate → ↓ interest rates → ↓ DC → ↑ NX → ↑ y (output)
or ↑ Central bank rate → ↑ interest rates → ↑ DC → ↓ NX → ↓ y (output)

In South Africa, particularly in the Stals era, short-term interest rates were used to pursue exchange rate goals, with the ultimate aim of achieving lower inflation. This view is supported by the fact that Stals did not consider the declared mission of the SARB of aiming at the simultaneous protection of the domestic and external value of the rand as being contradictory. Stals (1991:18) believed that these two objectives were supplementary:

...and the one can hardly be achieved without the other. In fighting inflation, the SARB will at the same time, and with the same

instruments of monetary policy, defend the external value of the rand (the exchange rate).

Small, open economies (such as the South African economy) rely heavily upon imported capital and goods; therefore the exchange rate has an important impact on the inflation rate. In addition to the export implications of the interest rate channel mentioned earlier, changes in short-term interest rates also affect the capital account (of the balance of payments) by altering interest-rate differentials between countries. In the 1990s for instance, Stals was determined to stabilise the real effective value of the rand (particularly after the destabilising effects of capital outflows following the Asian crisis in 1998) and he did so by raising short-term interest rates (ie implicitly pursuing an exchange-rate target). This episode will be discussed in detail in Chapter 4.

4.3.4 Monetary targeting as a framework for monetary policy

Monetary targeting is loosely based upon monetarist principles, where monetarism can be defined as:

...a theory which holds that increases in the money supply are a necessary and sufficient condition for inflation (Bannock, Baxter and Davis 1998: 278).

Monetarists maintain that if predictions about changes in the velocity of money are reasonably accurate, then monetary policy can be used to control the rate of inflation by controlling the quantity or supply of money.

The origins of monetarism in the postwar period can be traced to the work of Milton Friedman, who initiated a revival of the quantity theory tradition (see Chapter 2). He argued for a reform of the monetary and banking system and the adoption of 100 percent reserve banking. Such a step, he thought, would impose the properties of the quantity theory, which together with the self-adjusting nature of the real economy in the long run, would ensure a stable monetary environment that would contribute to growth and full employment (Calitz et al. 1999: 76).

Friedman's belief was based upon the proposition that inflation is a monetary phenomenon:

...inflation occurs when the quantity of money rises appreciably more rapidly than output and the more rapid the rise in the quantity of money per unit of output, the greater the rate of inflation (Friedman 1980: 255).

Friedman believed that the excessive increases in the quantity of money was the 'one and only important cause of inflation', therefore a reduction in the rate of monetary growth was the 'one and only cure for inflation' (*ibid*).

The monetarists' approach to monetary policy rested upon a monetary growth rule requiring central banks to fix the quantity of money or control its rate of growth in a steady, predictable manner. The monetary growth rule was supposed to be implemented by controlling the monetary base and allowing interest rates to be truly market determined. This growth rule rested on highly restrictive assumptions: First, changes in the money supply must be 'exogenous' and must not depend on changes in V , P or Y . Exogeneity of the money supply meant that 'causality', if it existed at all, would run from money supply changes to price level changes, or from the left-hand side of the equation of exchange to the right-hand side (Chapter 3). Second, V and Y must be constant during the period to which the analysis applied; alternatively they had to respond to changes in the money supply alone, and in a predictable way (Meijer 1990: 34).

Most of Friedman's findings relied upon empirical correlations between M and PY to support his claims for the quantity theory equation. However, since correlations can tell us nothing about causation, many economists were reluctant to accept this empirical 'evidence'. In reality, central banks did not implement Friedman's monetary growth rule. Friedman (1984: 382) recognised this: '...the changes to monetary policy initiated by the Thatcher and Reagan governments may certainly be described as an experiment, but not a monetarist experiment.' Friedman and other monetarists refused to classify this episode as a monetarist experiment because neither the Bank of England nor the Federal Reserve

attempted to fix the quantity of money or control its rate of growth in a steady and predictable manner.

Although central banks never implemented a monetary growth rule, they did implement a monetary targeting strategy. In a monetary targeting framework, the interest rate is used as the operational variable in order to achieve pre-determined monetary targets in pursuit of price stability. For instance, if inflation was increasing, the central bank would increase short-term interest rates in order to reduce the demand for money. In a modern credit economy the supply of money is demand determined (a view shared by the Post Keynesians). Thus, a reduction in the demand for money was intended to result in a proportionate reduction in the supply of money and therefore prices. In order to achieve money supply targets it was assumed that the demand for money was a stable function of the interest rate. Empirical studies by Eichner (1986: 65-72), however, showed that an uncertainty about the stability of the demand for money existed, indicating a lack of conclusive proof that the demand for money is inversely related to the rate of interest.

In order for monetary targeting to be implemented successfully, the central bank must be able to control the money supply. Moore (1988b: 373) argued that pro-active control of the money supply was hardly possible in economies with credit-money because neither the central bank nor the commercial banks knew when borrowers were going to utilise their available lines of credit. In South Africa, the authorities' inability to control the money supply was compounded by the impact on domestic monetary aggregates of the integration of the financial system in global financial markets. As a result, most central banks concluded that it was largely the behaviour of the private sector that determined the rate of growth in the money supply. In other words, the money supply was endogenous and could not be controlled by the monetary authorities. The inability of the central banks to control the money supply was therefore one of the main reasons why monetary targeting fell into disrepute and was subsequently abandoned.

Implications for interest rate policy

As mentioned earlier, the monetary growth rule was supposed to be implemented by controlling the monetary base and allowing interest rates to be truly market determined. Friedman (1984: 382) himself acknowledged that this rule was never implemented. This implied that interest rates were never truly market determined. Stals, albeit indirectly, supported this notion by arguing that by

managing the amount of liquidity that the Reserve Bank is prepared to provide to banking institutions, the monetary authorities maintain an important influence on the level of interest rates, and therefore on the amount of bank credit extension, and on the money supply. *Interest rates therefore serve as the main operational variable of monetary policy* (Stals 1999: 43) (my own emphasis).

In a monetary targeting framework, interest rates are the policy variable that central banks use in the pursuit of their monetary target objective. In such a system interest rates are exogenous and cannot be said to be determined by the market (Chapter 2). For instance, if the actual growth in the monetary aggregate that was targeted (in South Africa M3 was the target variable) fell below its target range, then the central bank would lower short-term interest rates to push the growth in the monetary aggregate back into the target range. On the other hand, if the actual growth in the monetary aggregate was too high, the central bank would raise short term interest rates in an attempt to force its growth back into the target range.

4.3.5 Inflation targeting

Problems encountered with monetary targeting in the 1970s and 1980s resulted in inflation targeting being adopted in a number of countries in the 1990s¹¹. The inflation-targeting framework was first adopted in New Zealand in 1990, followed by Canada in February 1991, Israel in December 1991, the United Kingdom in 1992, Sweden and Finland in 1993 and Australia and Spain in 1994. The motives for the adoption of inflation targeting have varied considerably from country to country. In some countries,

¹¹ For a detailed discussion of the problems encountered with the monetary targeting framework, see Mishkin 2000: 7-15.

such as the United Kingdom and Sweden, the collapse of their exchange rates led to inflation targeting in an attempt to assure the public that monetary policy would remain disciplined. Other countries, such as Canada and South Africa, introduced inflation targeting because of problems experienced with the targeting of monetary aggregates (Mishkin 2000: 6-7).

Inflation targeting can be defined as:

a monetary policy framework aimed at facilitating the reduction of the inflation rate or the maintenance of price stability. It is a framework for anchoring inflation expectations' (SARB 2001a: 3).

The case for inflation targeting begins with the premise that the main goal of monetary policy in any country must be to attain and preserve a low and stable rate of inflation. Although this premise was the subject of controversy among economists not too long ago, Masson (1998:1-4) argues that it has since been widely accepted because of a general agreement on the following four basic propositions:

First, an increase in the money supply is neutral in the medium to long run. This means that money supply increases have lasting effects on the price level only, not on output or employment.

Second, high and variable inflation is costly, in terms of either the allocation of resources or long-run growth in output, or both.

Third, money is not neutral in the short run. In other words, monetary policy has important transitory effects on a number of real variables, including output and unemployment. There is, however, still an imperfect understanding of the nature and size of these effects, their time frame, and the means by which monetary impulses are transmitted to the rest of the economy (the so-called 'black box' of the monetary policy transmission mechanism).

Finally, monetary policy affects the rate of inflation with lags of uncertain duration and varying strength. These lags make it difficult, if not impossible, for the central bank to control inflation on a period-by-period basis.

The difference between inflation targeting and other frameworks is that inflation targeting makes forecasting explicit and more transparent. By adopting a forward-looking approach, inflation targeting is intended to allow monetary policy to reduce volatility in business activity and smooth the growth trend (SARB 2001a: 4).

Inflation targeting as a policy framework has a number of benefits: it allows the monetary authorities to use all available information, not just one variable, to determine the best settings for monetary policy. The public easily understands inflation targets and the framework thus improves monetary policy credibility. It also has the potential to reduce the likelihood that central bank will fall into the time-inconsistency¹² trap. Inflation targets are also flexible when the target is a range instead of a number. Finally, this transparency and communication with the public leads to accountability (Svensson 1999).

Inflation targeting is no panacea. Numerous criticisms have been levelled at this framework: first, inflation expectations do not adjust immediately and inflation is not easily controlled. Second, inflation targeting may lead to low and unstable growth in output and employment. Finally, eliminating inflation is costly and building the central bank's reputation takes time.

The role of interest rates in an inflation-targeting framework

In a monetary targeting framework, the interest rate is used to affect the demand for money, which in turn affects the supply of money and therefore inflation. This transmission mechanism assumes a stable money demand relationship. Inflation targeting models by contrast, do not even include a money demand function. The mechanism

¹² The time-inconsistency trap occurs when the central bank reacts to a problem at the wrong time.

whereby interest rate changes are transmitted to the rest of the economy can be described as follows (Mboweni 2002):

- Interest rate channel: An increase (reduction) in the repo rate influences other financial market interest rates. Firms and individuals respond to this change by lowering (increasing) their expenditure patterns. This lower (higher) level of demand affects output and will eventually feed through to lower (higher) rates of inflation. This channel can be summarised as follows:

$\downarrow \text{repo rate} \rightarrow \downarrow \text{interest rates} \rightarrow (\uparrow I, \uparrow C) \rightarrow \uparrow y \rightarrow \uparrow \text{prices}$
or $\uparrow \text{repo rate} \rightarrow \uparrow \text{interest rates} \rightarrow (\downarrow I, \downarrow C) \rightarrow \downarrow y \rightarrow \downarrow \text{prices}$

- Exchange rate channel: Rising interest rates are normally associated with an appreciation of the exchange rate. This could also attract foreign investment in the form of a capital inflow. An appreciation of the domestic currency (DC) tends to lower the price of imports thus contributing towards a lower (imported) inflation:

$\uparrow \text{repo rate} \rightarrow \uparrow \text{interest rates} \rightarrow \uparrow \text{DC} \rightarrow \downarrow \text{price of imports}$
or $\downarrow \text{repo rate} \rightarrow \downarrow \text{interest rates} \rightarrow \downarrow \text{DC} \rightarrow \uparrow \text{price of imports}$

- Money and credit channel: Increased levels of interest rates usually lower the demand for domestic credit. Lower credit extension and money supply will decrease domestic demand and, with a time lag, inflation.

- Inflation expectations: Rising levels of interest rates tend to lower future expectations of inflation. These will in turn lower unit labour cost and inflation over the longer term.

A notable difference between inflation targeting and the other monetary policy frameworks is the decision-making process. As mentioned earlier, one of the features of an inflation targeting framework is a greater degree of transparency. Because inflation targeting is a forward-looking process, the central bank must convey a credible inflation target to the public in order to provide a reliable anchor for inflation expectations (Mboweni 2001:1). Greater transparency means that the central bank has to become more accountable for its actions to the public.

Previous governors of the SARB were notorious for making decisions without consulting a committee. Stals for example, was accused of running a ‘one-man-show’ during his governorship (*The Citizen* 15 October 1999: 31). Stals’s predecessor, Gerhard de Kock, also played an important role in monetary policy decisions, although his decisions were often marred by political interference.

Unilateral decisions may have been appropriate in previous monetary policy frameworks, but in an inflation-targeting framework, they lack the accountability necessary for the Reserve Bank to convey a credible inflation target. A more effective platform for the explanation of its decisions is needed. In South Africa, this platform was provided by Governor Mboweni’s appointment of a Monetary Policy Committee (MPC). By having a committee rather than an individual making interest rate decisions, it is more difficult for a single individual to dominate proceedings and decisions are also less likely to be politically motivated:

When the SARB is instructed to aim at an inflation target it has been mandated or instructed to aim at by the (democratically elected) government of the day, its decisions become technical rather than political ones, to be taken by technicians and technocrats rather than by politicians as guardians of the public weal. In accounting for its policy actions the Reserve Bank will then have to explain them (in

technical terms of their presumed effect on the forecasted inflation rate), rather than to justify them (Meijer 2000:20).

The Monetary Policy Committee's decision-making process and the factors taken into account when determining short-term interest rates will be described in Chapter 4.

4.3.6 Monetary policy without an explicit nominal anchor ('unconstrained discretion')

This strategy, which Mishkin (2001: 6) calls the 'just do it' strategy, alternatively called 'unconstrained discretion'

...involves an implicit, but not an explicit nominal anchor in the form of an over-riding concern by the central bank to control inflation in the long run. In addition, it involves forward-looking behaviour in which there is careful monitoring for signs of future inflation, coupled with periodic 'pre-emptive strikes' by monetary policy against the threat of inflation.

This definition implies a long-run commitment to control inflation, but at the same time, monetary policy is not anchored by any specific monetary policy objective and this allows the central bank to use interest rates in a discretionary manner. The central bank may thus target any number of objectives (eg inflation, output or employment) that it deems necessary at any given point in time. For example, when there is a recession, the central bank can try to stimulate the economy by lowering interest rates. In the short run, the central bank attempts to smooth out the peaks and valleys in output and employment around their long-run growth paths (Mishkin 2001: 7). Interest rate decisions rest with the chief executive of the central bank, and it is entirely within his discretion as to what policy stance should be adopted.

In recent years, several countries, most notably the United States, have achieved low and stable inflation without using an explicit nominal anchor, such as a target for the exchange rate, a monetary aggregate target, or an inflation target. The main argument for this strategy is its proven success in certain cases. However, most of its main features are

basically disadvantages. In particular, its lack of transparency and the appearance of a lack of accountability make it appear inconsistent with democratic principles.

The Federal Reserve in the United States has a unique monetary regime in the sense that it is able to, and it does, target output and employment at its discretion. This may be seen as pragmatic and sensible on the one hand, and inconsistent and lacking credibility on the other. One kind of conflict in particular involves deciding which goal should take precedence at any given point in time. For example, suppose there is a recession and the central bank successfully tries to prevent severe unemployment losses, then such short-run success could turn into a long-run problem if monetary policy remains expansionary for too long, because such a policy stance could trigger inflationary pressures. It is therefore important for the central bank to find the balance between its short-term goal of stabilisation and its longer-run goal of maintaining lower inflation.

4.4 CONCLUSION

Central banks use short-term interest rates to achieve their macroeconomic goals. Short-term interest rates are determined exogenously as a policy variable, in accordance with the Post Keynesian view explained in Chapter 2. The aim of this chapter was to summarise the various frameworks within which interest rate decisions are taken.

Actual interest rate decisions are, however, not necessarily consistent with a particular regime or policy framework. In such instances it is necessary to understand the motivations of the person(s) responsible for monetary policy decisions and the various factors which impact on the decisions. In the next chapter, the movements in short-term interest rates in South Africa, specifically the prime overdraft interest rate, during the period 1981-2002 is examined more closely.

CHAPTER 5

MOVEMENTS IN PRIME OVERDRAFT RATES IN SOUTH AFRICA, 1981 - 2002

5.1 INTRODUCTION

In the previous chapter it was emphasised that interest rate decisions are made within a specific monetary policy framework or regime. For example, in a monetary targeting framework, the central bank alters short-term interest rates in order to control monetary aggregates with the ultimate objective of lowering inflation. The determinants of short-term interest rates in such a framework would thus include all possible causes of changes in monetary aggregates. This is what economic theory dictates.

In reality, central banks are often faced with conflicting objectives and even though they may subscribe to a particular monetary policy framework – be it inflation, monetary or exchange rate targeting or monetary policy without an explicit nominal anchor – their policy decisions may not always be consistent with their particular monetary policy framework. It is thus necessary to examine the reasons behind each interest rate decision. Moreover, each country has its own unique financial system and economic environment and due cognisance has to be taken of the particular and changing circumstances in a country. In South Africa, for example, exogenous shocks often required interest rate changes that did not necessarily accord with the policy framework in operation at the time.

This chapter examines the setting of short-term interest rates, specifically prime overdraft rates, in South Africa for the period 1981 to 2002. Prime overdraft rates, in turn are linked to the rate at which the central bank provides accommodation to the banking system. The activities of the central bank therefore have to be investigated. In this chapter the policy choices of the South African Reserve Bank (SARB or Reserve Bank) are

examined to determine if they were consistent with the principles underlying the monetary policy framework within which the decisions were taken. One of the main objectives is to determine whether interest rates were set by the Reserve Bank or whether they simply reflected economic or market forces.

The period from 1981 to 2002 is subdivided into three main sub-periods, one for each of the Reserve Bank governors who served during this period. Each of these sub-periods is then sub-divided further on the basis of changes in the monetary policy framework and trends in short-term interest rates.

5.2 THE DE KOCK ERA (1981- 1989)

5.2.1 Background

In order to understand movements in prime overdraft interest rates during this period, it is necessary to first get an impression of Dr de Kock and his theoretical views and to establish a broad overview of the economic climate in which he operated.

Dr Gerhard de Kock served as governor of the SARB from 1 January 1981 to his untimely death on 7 August 1989. He also served as Chairman of the Commission of Enquiry into the monetary system and monetary policy in South Africa (the De Kock Commission) that published its final report in 1985.

The De Kock Commission (1985: 13.7) defined monetary policy as:

all deliberate actions by the monetary authorities to influence monetary aggregates, the availability of credit, interest rates and exchange rates, with a view to affecting monetary demand, income, output, prices and the balance of payments.

According to this definition, the goals of monetary policy extend beyond the sole concern of long-term price stability to concern with economic stability in general. In other words,

short-term interest rates and other monetary variables were regarded as instruments that could be used to achieve various policy goals, including not only price stability but also general economic stability in the form of growth, employment and balance of payments equilibrium.

Prior to the adoption of a formal monetary targeting framework in March 1986, De Kock adopted what can be regarded as an 'eclectic' approach to monetary policy decisions. Although he had 'unconstrained discretion' with respect to monetary policy decisions, in the sense of not having to consult a committee, such as the present Monetary Policy Committee (MPC), the SARB did not enjoy full operational independence. As will be explained later, he often had to abide by the will of his political 'masters'.

Political resistance to higher interest rates was a continuing obstacle to the SARB's freedom to vary Bank rate as economic conditions demanded. This in turn led to reluctance to reduce rates, since it might have proved difficult to raise them again. The SARB looked for ways to 'depoliticise' Bank rate, and hoped to do this by ending the convention of a fixed link to the commercial banks' prime overdraft rates. It announced, in February 1982, that the banks were free to set their prime rates independently, but instead they agreed among themselves to keep the prime rate at around three percentage points above Bank rate (Goedhuys 1999: 155).

Interest rate policy changed radically from the 1970s to the 1980s. During the 1970s monetary policy was conducted through direct controls on interest rates and bank lending, liquid asset requirements and cash reserve requirements. If monetary policy is implemented by setting an interest rate (eg Bank rate) and allowing the quantity of money to adjust to the interest rate, then it could perhaps be said that monetary policy is being implemented in terms of interest rate targets. However, if the central bank simultaneously wishes to limit the quantity of money through 'direct' controls on the lending activities of commercial banks, the policy cannot be described as market-oriented. The control of the quantity of money can be achieved, in principle, by increasing the cash or reserve requirements of the commercial banks or by imposing credit ceilings, that is, by placing

limits on the amount and type of credit that commercial banks can extend to the private sector. This approach, described here as interest rate targeting, came to be associated with Keynesian economics in the 1970s.

With the increase in inflation during the 1970s, the use of interest rate targets for monetary policy fell into disrepute. One difficulty that was obvious to everyone, was that under inflationary conditions, nominal interest rate targets were no longer an indication of the real cost of borrowing. In an inflationary environment it was not uncommon to have both positive nominal interest rates and negative real interest rates. These negative real interest rates caused an increase in the demand for credit and therefore an increase in the money supply – with obvious implications for inflation. In addition to this, direct interest rate controls caused disintermediation problems - with parallel grey markets supplying credit outside of the formal banking sector, making monetary aggregates increasingly difficult to measure (Calitz et al 1999: 222-226).

The monetarists under Friedman argued that interest rate targeting was an inappropriate policy. The monetarist solution was to fix a target for the money supply and allow interest rates to find their own market-determined levels. More specifically, monetarists recommended a monetary growth rule in terms of which the growth of a narrow monetary aggregate is restricted to a predetermined steady rate of growth of the labour force. This implied a money supply target rather than an interest rate target. The approach reflects a belief in the quantity theory of money and the view that monetary growth is the sole cause of inflation.

The monetarist monetary growth rule was never implemented in South Africa (or, for that matter, anywhere else). Instead, central bankers set target ranges for the growth of the M3 monetary aggregate that they then sought to achieve by suitable adjustments of the interest rate. Monetary targeting as a framework for monetary policy framework was adopted in South Africa in March 1986. The instrument for attaining the target rate of growth in the M3 was Bank rate and the SARB's discount policy was supported by open market operations and public debt management. The ultimate objective was to achieve

price stability by means of a low and stable rate of increase in the money supply. The SARB continued to exercise discretion with respect to interest rate decisions and, from time to time, allowed the primary objective of price stability to be modified or even overridden temporarily by exchange rate and economic growth objectives. Goedhuys (1999: 153) has argued that the turbulent conditions of the time (discussed below) made such a qualified commitment to monetary targeting inevitable.

From a theoretical perspective, the introduction of the monetary targeting framework implied a shift in philosophy towards a synthesis of monetarist and Keynesian ideas. The De Kock Commission (1985: 173) described the theoretical underpinnings of monetary policy at the time as being a blend of ‘conservative Keynesian demand management and pragmatic monetarism.’ The pragmatic monetarist element was contained in the importance attributed by the Commission to the control of the money supply and the need for monetary targeting, whilst the Keynesian element referred to the use of interest rates to influence the demand for credit, and, thus, to maintain the selected monetary aggregate, M3, within the predetermined target range.

In order to implement monetary targeting successfully, interest rates could no longer be targeted or held stable over time, because adjustments to interest rates were required to keep the monetary aggregate within the target range. In the South African debate, this aspect has been presented in terms of the philosophy of a market-oriented monetary policy promoted by the De Kock Commission. In effect, the Commission recommended the abolition of direct controls, that is, interest rate controls as well as credit controls. A major step forward, according to Strydom (2001: 31-48), was the introduction of a managed floating exchange rate system for the rand in early 1979, while monetary policy was to rely more on cash reserve requirements and supporting open market operations. These reforms allowed interest rates to follow market signals and from 1980 onwards interest rates adjusted towards higher levels, signalling a definite break with the rigid control system of the 1970s with its bias towards low interest rates (Goedhuys 1999: 157).

De Kock propagated the idea that interest rates had to be allowed to adjust to realistic or market-related levels. This did not imply, however, that interest rates were market-determined (Rogers 1986b: 73). In the 1980s, following the earlier trend in the major industrial countries, the SARB attempted to hit monetary targets by manipulating interest rates. So, although interest rates were no longer targeted, interest rate adjustments were still important for achieving monetary targets.

5.2.2 Economic context

This section provides a broad overview of the economic conditions within which De Kock operated during his tenure as Reserve Bank Governor. De Kock took over the reins at the SARB in the midst of one of the strongest post-war economic booms with an inflation rate that had already been in double digits for seven years.

During the economic boom in the early 1980s (driven, many argue, by the high price of gold), the economy was characterised by buoyant domestic demand – as indicated by rising gross domestic expenditure that created inflationary pressures (due to capacity constraints). De Kock, in an attempt to achieve inflation levels comparable to those of South Africa's major trading partners, raised interest rates in response to these inflationary pressures and, as a result, the prime overdraft rate increased from a low of 9,5 percent on 6 May 1981 to as high as 25 percent on 4 August 1984. Table 5.1 shows the movements in the prime rate, as well as other key variables that will be used in the analysis of the prime overdraft rate during the De Kock era.

According to De Kock (1981a), interest rate movements depended to a large extent on the behaviour of the gold price and overseas interest rate movements. He argued that if interest rates came down for the right reasons (because the economy was cooling down or because the rate of inflation was falling), then the Reserve Bank supported and encouraged the interest rate decline. However, in certain instances, for example in an inflationary environment, he argued that it was in the best interest for the economy to raise interest rates to reduce the growth in the money supply:

The Reserve Bank's policy is not one of 'high' interest rates or 'low' interest rates but one of 'realistic and flexible market-related' interest rates resulting from effective control of the money supply. Sound money is the prerequisite for optimum growth in South Africa (De Kock 1981a: 34).

Gold and other mineral exports therefore had a significant impact on liquidity in the financial markets as well as the exchange rate. Increases in the price of gold, Rogers (1986b: 72) argued, were equivalent to exogenous increases in the money stock - thereby acting as a causal factor in demand-pull inflationary episodes. Since gold accounted (at the time) for about half of export earnings, changes in the price of gold had a large impact on the current account of the balance of payments and therefore also on the exchange rate. The price of gold was particularly volatile in the early 1980s. For example, it reached a high of around US \$850 dollars in 1980 and subsequently declined to as low as US \$296 in 1982. These movements had significant macroeconomic effects. With the high gold price in 1980 the economy was thriving, recording real GDP growth well above 5 percent for the year. In 1983, with the gold price tumbling, real GDP shrank by almost 2 percent.

By the mid-1980s, a declining gold price, sluggish world growth, droughts and political upheavals created balance of payments problems. As a result, the exchange rate came under severe pressure. According to Mohr (2001: 121), De Kock reacted to these balance of payments problems by raising and maintaining high interest rates and permitting significant depreciations of the rand against major currencies. For instance, when De Kock became governor the prime interest rate was 9,5 percent and a US dollar cost less than 75 South African cents. When he died on 7 August 1989 the prime rate was 20 percent and a US dollar cost R2, 72.

Nattrass (1998:169-171) has argued that the trade balance was related to short-term interest rates in a way that provides interesting insight into the practice of monetary policy during the De Kock era. She argues that the two variables were inversely related in

a highly consistent way: when the trade balance deteriorated, interest rates increased, and vice versa.

A deficit on the trade account must be financed with foreign exchange. Thus a country's ability to run a consistent trade deficit is limited by the access to foreign capital. For various reasons that will be discussed shortly, the foreign financial community was often reluctant to provide South Africa with foreign exchange. So as the balance of trade deteriorated, and foreigners proved unwilling to supply the shortfall in foreign exchange, the SARB regarded the trade deficit as unsustainable. The SARB consequently raised interest rates with the intention of reducing the money supply. This reduction was intended to dampen spending on imports and to achieve a sustainable balance of payments position.

A great deal of South Africa's economic woes during this period was attributable to events on the political front. From 1984 onwards, South Africa increasingly became the target of disinvestment campaigns, trade and financial sanctions and boycotts as a result of the discriminatory policies embodied in apartheid. South African exports were denied access to certain markets, certain essential imports became more difficult and expensive to obtain and the net inflow of foreign capital turned into a net outflow. These events culminated in a foreign debt crisis in 1985. After protracted negotiations, a debt rescheduling agreement was reached with the creditor banks. South Africa's isolation from international financial markets in the following years meant that the authorities had to engineer surpluses on the current account of the balance of payments to meet the debt repayment commitments. As emphasised by Nattrass (1998: 169-171) this meant that relatively high interest rates had to be maintained to stifle domestic demand for imports, so as to achieve balance of payments equilibrium.

It should be clear that international developments significantly influenced the performance of economic policy during the De Kock era. As mentioned earlier, in a small open economy, balance of payments considerations are often an overriding concern, and

in the face of unfavourable disturbances, stabilisation policy in South Africa often had to be geared to achieving or maintaining external equilibrium.

Table 5.1 MOVEMENTS IN KEY VARIABLES DURING THE DE KOCK ERA

Year	Real GDP growth	Average annual increase in CPI	Growth in M3	Guideline range for M3	Current account balance	Financial account balance	Prime overdraft rate at year end
	(%)	(%)	(%)	(%)	(R m)	(R m)	(%)
1981	5,4	15,2	17,26	n/a	-4176	744	17,0
1982	- 0,4	14,7	14,41	n/a	-3557	4609	18,0
1983	- 1,8	12,3	16,42	n/a	-428	135	20,0
1984	5,1	11,7	17,56	n/a	-2517	1151	24,0
1985	-1,2	16,2	12,25	n/a	5208	-8442	16,5
1986	0	18,6	10,28	16 - 20	6328	-5285	12,0
1987	2,1	16,1	12,93	14 - 18	6708	-3564	12,5
1988	4,2	12,0	25,53	12 - 16	3383	-6863	18,0
1989	2,4	14,7	24,50	14 - 18	3467	-4704	21,0

Source: SARB *Quarterly Bulletin*, various issues

The picture presented of the South African economy in the 1980s was thus one of gloom and decline. The growth rate of GDP in real terms averaged a mere 1,2% per annum. Since the population increased much faster than that, real GDP per head fell by no less than 13% over the decade. Fixed investment shrank in every year after 1981, discouraged by declining profits (Goedhuys 1999: 146). Short of civil war, a worse environment for monetary policy could hardly be imagined. So, far from promoting economic growth, or even combating inflation, monetary policy had to enforce a painful downward adjustment in consumer and investment spending in the private sector to compensate for the rising government spending and also produce a current account surplus on the balance of payments. It did so by maintaining relatively high interest rates (but eased the pressure in 1985 to 1987 when the economy could not be depressed further anyway), and by

permitting a persistent decline in the external value of the currency. Gidlow (1995: 12) argued that during De Kock's tenure

...monetary policy was conducted in a crisis atmosphere for parts of the last decade amid persistent financial instability reflected in the relatively high inflation rate, and sharp fluctuations in interest rates at the time.

5.2.3 Movements in prime interest rates during the De Kock era

February 1981 – December 1982: A period of rising interest rates

During this period, the prime overdraft rate was increased on six occasions. It moved from a low of 8 percent on 3 February 1981 to a high of 18 percent at the end of December 1982.

De Kock ascribed this period of rising interest rates to 'natural' economic forces. These include the combination of a lower gold price, worldwide recessionary tendencies and continued high overseas interest rates, coupled with a strong demand for credit in the buoyant South African economy and the decline in the value of South African exports owing to a severe drought. The result was a tightening in the financial markets with the resultant rise in interest rates.

Therefore as a matter of policy, the authorities allowed interest rates to rise in response to market forces (De Kock 1981a: 25).

At the same time, De Kock argued that the interest rate increases represented an

...essential part of the anti-inflationary monetary policy, which was aimed at slowing down the excessive expansion of the money supply and reducing the pressure of excess demand (*ibid*).

De Kock's decision to raise short-term interest rates during this period was explained in the context of curbing the excessively high rates of growth in the money supply that had become an important intermediate objective of monetary policy in the process of reducing the rate of inflation. This is an interesting argument. On the one hand he argued that *market forces* were responsible for the rising interest rates, while on the other hand, he admitted to allowing these rates to rise as a *deliberate* monetary policy decision to reduce the rate of growth in the money supply in pursuance of lowering inflation (my own emphasis). Were interest rates determined by market forces or was the interest rate a policy variable? De Kock's motives are confusing. The answer seems to be that he responded to market forces when setting interest rates but only so far as they were consistent with his policy objectives.

Even if market forces did determine interest rates, it was still the Bank's decision as a 'matter of policy' to allow the markets to push interest rates up in the first place. The Bank appeared to have controlled interest rates in pursuance of its objectives - even if controlling interest rates implied allowing the markets to determine their appropriate level by deliberately not intervening.

Prior to 1986 De Kock operated within a purely discretionary framework, targeting a variety of variables – including growth, inflation and the balance of payments. De Kock's motives for justifying interest rate changes therefore depended on the objective being targeted. In line with his promotion of free markets, he was reluctant to admit that the Bank was not standing entirely aloof from what was happening in the markets, and that it was still playing an important role in the determination of interest rates. The level and structure of interest rates cannot be said to have been determined by the market alone, especially if supply and demand were influenced by the Bank through open-market

operations and other instruments of monetary policy. This view was supported by Rogers (1986b: 73) who pointed out that

...it is important not to lose sight of the fact that it is the SARB, and not the markets, which determines the level at which interest rates are set.

Kantor (1986: 52) underscored this view by arguing that

...the market-oriented interest rates argued for in the Report (1985) are not market-determined rates in the usual sense of the term. What is recommended is that all interest rates be closely aligned with those short-term interest rates controlled *directly* by the Reserve Bank through its more or less continuous interaction with the money market, banks and discount houses (my own emphasis).

This argument is closely aligned with the Post-Keynesian emphasis on an exogenously determined short-term interest rate. Nel (1994:17) discussed this further by arguing that Bank rate being declared market related did not imply that this rate was set by the market, but rather that it was set at a level which was seen by the Reserve Bank as appropriate

...in light of trends in the financial markets, the business cycle, growth in the money supply, gold and foreign exchange reserves, inflation and the exchange rate (*ibid*).

Schmulow and Greyling (1996:179) also support the notion of interest rate exogeneity in their explanation of the mechanics of monetary policy during De Kock's tenure as Reserve Bank governor. They argue that the SARB's operational variable for seeking to manage the rate of monetary expansion, was the level of short-term interest rates; and the Bank's prime instrument for influencing the general interest rate level consisted of variations in Bank rate. The interest rates then become *exogenous* variables and the

money supply an endogenous variable, with banking institutions being allowed, or forced, to make good a shortfall in their cash reserve holdings by means of ‘accommodation’ at the SARB’s discount window. The transmission mechanism operated with the understanding that as the SARB raised interest rates, so the demand for credit would decline. This would then cause the rate of increase in the money supply to decline as well. The unfortunate side effect, however, was that economic growth declined as interest rates rose, with adverse implications for the domestic financial situation.

December 1982 – March 1983: A period of declining interest rates

During this period the prime overdraft rate was reduced on three occasions. It moved from a high of 18 percent in December 1982 to a low of 14 percent on 3 July 1983.

In recognition of the rapid movement in both the current and capital account of the balance of payments, the further slowing down of the domestic economy and the substantial decline in overseas interest rates, the monetary authorities have, *as a matter of conscious policy*, permitted domestic interest rates to decline substantially in *response to market forces*. To that extent, there has been an easing of monetary policy as a *deliberate* contra-cyclical measure (SARB 1983a: 6, my own emphasis).

Two points are worth mentioning here. First, as mentioned earlier, the fact that the monetary authorities were ‘deliberately’ allowing interest rates to decline ‘...as a matter of conscious policy...’ implied that interest rate movements were managed as a policy variable (ie determined exogenously). Second, these interest rates were supposedly realistic in the sense that they were responding to ‘market forces’. This does not imply, however, that they were determined by the market.

The Bank’s statement that it ‘...permitted domestic interest rates to decline substantially in response to market forces’ (*ibid*) is particularly dubious in light of the political

pressure faced by the Bank in February 1983 (this was not mentioned in any of the *SARB Quarterly Bulletins*), when the ruling National Party faced a serious challenge from the Conservative Party in the by-election in the Primrose district of Germiston. The Bank was induced (if not forced) to lower its discount rate from 12,81 percent to 10,06 percent. The following month it raised the rate again to 12,04 percent. This temporary low discount rate, reflected also in the prime rate, came to be known as the 'Primrose prime', and it helped to retain the Primrose seat for the National Party (Goedhuys 1999: 146).

From an analytical perspective, it is difficult to see how the Bank was able to argue in favour of an interest rate reduction caused by market forces – when in fact it was being coerced into setting a specific level for the prime for political reasons! Interest rate decisions were not always in the hands of the Bank or De Kock. Politically motivated decisions render an analysis of the determinants of short-term interest rates in the context of any specific monetary policy framework extremely difficult. Nevertheless, any analysis of the determinants of short-term interest rates prior to the Reserve Bank being given constitutional independence has to account for politically motivated decisions.

Nel (1994: 25) summarised the difficulties De Kock experienced in implementing monetary policy quite succinctly by arguing that

...in the De Kock era it was especially difficult to walk this (political) tight rope. The usual problems around domestic monetary control, the balance of payments and the rate of exchange were compounded by the demands of politicians embroiled in the financing of ill-conceived schemes at home, answering to the increasing demands of homelands governments, and waging a full scale war in Angola.

June 1983 – August 1984: A period of rising interest rates

This period saw a dramatic increase in the prime overdraft rate. The prime rate was increased eleven times in this fourteen-month period, from 14 percent on 20 June 1983 to 25 percent on 4 August 1984.

A number of economic events impacted on the path of interest rates during this period. A short-lived ‘mini-boom’ occurred between March 1983 and the middle of 1984, and helped to create excess demand, which the Bank believed to require strong corrective measures. The increase in the gold price from the middle of 1982 and a higher level of interest rates than that prevailing overseas resulted in the abolition of the financial rand (tantamount to the lifting of exchange control on non-residents) in February 1983. The result was a net inflow of capital, stimulated by the higher gold price, and this in turn helped to fuel the demand for assets, both real and financial. The rand appreciated against the major currencies until July 1983, despite a sharp fall in the price of gold in February, but then entered a phase of almost continuous depreciation (SARB 1983: 5-7).

The drought that began in 1983 intensified and became more damaging to the economy. Maize exports were replaced by maize imports. The gold price continued its slide throughout 1984, with domestic demand, including the demand for imports, remaining buoyant, resulting in deficits on the current account of the balance of payments during the third quarter of 1983 and throughout the first three quarters of 1984. The rand continued to depreciate against the major currencies.

De Kock justified his decision to increase interest rates on the basis of the notably higher rate of increase in the money supply (see Table 5.1), a sharp decline in the price of gold and its effect on the net foreign reserves and on liquidity in general and, finally, the impact of increasing domestic demand, including its effect on the level of imports (SARB 1984: 8).

The interest rate adjustments during this period were regarded as necessary to

...strengthen the balance of payments and the external value of the rand and to lower the rate of inflation, all with the view of sustaining growth in the longer-term (De Kock 1984a: 23).

De Kock thus argued that the restrictive monetary policy was aimed at slowing down the rate of increase in the money supply and total spending in order to prevent undue depreciation of the rand and a further increase in the rate of inflation.

In a small open economy such as that of South Africa, which is dependent on imported capital and intermediate goods and in which exports account for about one third of its GDP, the balance of payments has often been an overriding consideration. In fact, it has frequently been argued that

...balance of payments stability should be viewed as a constraint, rather than a policy objective. In other words, if a serious balance of payments deficit occurred, economic policy simply had to be geared to the elimination of this deficit (Calitz et al 1999: 172).

The impact of the balance of payments was clearly illustrated during this period of high and increasing interest rates.

The need to maintain a relatively high rate of interest for balance of payments purposes was by no means costless. There were inevitably going to be tradeoffs – the rate of real economic growth slowed down and inflation rose (see Table 5.1). De Kock was severely criticised by many during this period for implementing a policy of high interest rates. For example, Botha (1997: 535) argued

...that it is one of the conundrums of the South African monetary scene that it is difficult to reconcile the circumspect reasoning around the question of interest-inelasticity with the policies that the Reserve Bank has adopted since the early 1980s. The facts show that

the money supply is fundamentally unrelated to the level of the rate of interest...the facts show the relationship between the money supply and the rate of interest is not nearly as close and sensitive as De Kock has made it out.

He argued further that the Bank persistently overemphasised the role played by the rate of interest in stimulating or slowing down the pace of the economy and, internationally, in attracting investment capital from abroad:

South Africa's sluggish growth, characterised by high levels of unemployment while at the same time having high growth potential called for low interest rates - not the unrealistically high rates that the country had been wrestling with since 1980. The SARB is adamant that the high rates are needed to keep inflation and the money supply in check, and that any lowering of the rate would aggravate inflation and cause the money supply to rise beyond control - the rate of credit creation in the South African economy has been singularly unaffected by the level of interest rates over a long period of time (Botha 1997: 536).

From this argument, he concluded that there was no evidence to assert that De Kock's views were correct.

Nel (1994: 17-19), like Botha (1986: 41-54) found no clear relationship between the money supply and interest rates. Botha's studies showed that enormous increases in interest rates were accompanied by correspondingly high increases in monetary aggregates over an extended period. Botha thus accused De Kock of adopting a static, first-year textbook view of interest rate policy:

The interest rate policy of the Bank, based upon the narrow interpretation of the dynamics of interest rates, greatly intensified the economic misery experienced by the farming community, small businessmen and home-owners of this country during the second half of 1984 and most of 1985. This policy does not reflect

positively on the professional competence on the part of the Bank (Botha 1986: 38).

May 1985 – December 1986: A period of declining interest rates

During this period, the prime overdraft rate was reduced on thirteen occasions. The prime rate was reduced from a high of 25 percent on 6 May 1985 to a low of 12 percent on 24 December 1986.

In 1985 the rate of increase in the growth of monetary aggregates declined substantially. It seems that the prohibitively high interest rates in the 1984 period had, to some extent, achieved their objective of stifling the demand for credit. Major developments also occurred on the political front. Socio-political unrest began in 1984. The infamous Rubicon speech by the then State President P.W. Botha, followed by the declaration of a state of emergency, played havoc with the foreign exchange market, as manifested in volatile capital movements, and leads and lags in terms of import and export payments (SARB 1986: 5-7).

On 1 September 1985 a ‘standstill’ in respect of a large portion of South Africa’s debt was declared and exchange controls over non-residents in the form of the financial rand were reintroduced. South Africa also imposed payment restrictions on its foreign debt when certain foreign banks (mainly in the United States) refused to roll over short-term loans (Strydom 2001: 36). The rand began depreciating sharply as a result of the massive capital outflows on the capital account of the balance of payments induced by these political problems. This had serious implications for inflation that shot up to 16,2 percent in 1985 (see Table 5.1) from the previous year’s level of 11,7 percent.

After mid-1985, monetary policy operated continuously under the shadow of the foreign debt problem. The economy had become hostage to the capital account as South Africa faced a ‘unilateral transfer problem’ (Goedhuys 1999:162). Huge surpluses on the current account had to be generated in the face of sanctions and boycotts, to finance the capital

outflow in each year from 1984 onwards. High interest rates in 1984 and 1985 and continuous rand depreciations were the means employed.

Despite the unfavourable political developments and the resultant moratorium on debt repayments, the SARB continued with its policy of leading interest rates downwards by a series of orderly reductions in Bank Rate. The Bank took the view that the new depreciation of the rand and the persistent high rate of inflation after July were mainly the result of non-economic developments and not of overspending or unduly low interest rates. In these circumstances, and given the recessionary conditions in the large sections of the economy, the

...Bank deemed it necessary to contribute to the utilisation of the scope existing in the economy for increased spending and output, rather than attempt to strengthen the rand through raising interest rates and applying classical deflation in general (De Kock 1985: 20).

This policy choice implies that a shift of priorities had occurred from combating inflation to the promotion of growth and employment.

Prior to the introduction of a formal monetary targeting framework on the 17th of March 1986, De Kock had a considerable amount of discretion with respect to monetary policy decisions, although his overall goal was to ensure low levels of inflation. By operating within a pragmatic monetary targeting framework, De Kock was able to manipulate interest rates for controlling other variables besides monetary aggregates - in this situation he targeted growth and employment through a policy of maintaining low interest rates. De Kock could just as easily have raised short-term interest rates in light of the fact that inflation was still a problem – yet he decided that the causes of inflation at the time were not related to demand. He therefore consciously made the policy decision to lower interest rates. This reinforces the view that De Kock acted in a way that was more theoretically aligned with the Keynesian view than a monetarist view.

Rogers (1985: 241-247) supported this explanation when he evaluated the Reserve Bank's monetary control procedures and found that they were incompatible with monetarism but compatible with Post Keynesian monetary theory. He argued that monetary policy during De Kock's tenure should not be described as a variety of monetarism:

The SARB is simply following the fashion established by other central banks. Central banks around the world implicitly employ a Post Keynesian analysis of the money supply even though they present a policy of monetary targeting as monetarist!(Rogers 1985: 238).

He concluded by arguing that central banks did not implement monetary base control as called for by the monetarists. The reason is that an endogenously determined money supply is consistent with the world in which central banks operate, but the monetarist approach is not. Rogers argued that pragmatic 'monetarism' was therefore a misnomer.

Policy change: The introduction of a monetary targeting framework

The SARB formally adopted a monetary targeting framework on 17 March 1986. The objective was the pursuit of price stability by means of a low and stable rate of increase in the money supply. The SARB chose M3 as a comprehensive monetary aggregate that could serve as an intermediate target in attempts to control inflation. The instrument variable for attaining the target was Bank rate, which was influenced, in turn, by the market-oriented methods of discount policy, open market operations and public debt management.

The SARB, under Gerhard de Kock, did not regard its monetary policy as a rigidly determined monetary rule along the lines of monetarist thinking. De Kock continued to exercise a fair amount of discretion with respect to interest rate decisions. From time to time, he still allowed the primary objective of price stability to be overridden by exchange rate and economic growth objectives.

With the introduction of the monetary targeting framework, Bank rate (ie the SARB's discount rate for liquid assets) was (re-)established as the pivotal instrument of monetary policy. This required several years of prior reform. Before December 1983, the SARB applied a discount rate at a fixed spread above market rates for the assets concerned, which meant that it followed rather than led the market, but after that date it quoted rates that it determined according to the type of asset tendered, and that were higher for banks than for discount houses until February 1989 (Goedhuys 1999: 153).

The relationship between Bank rate and the prime overdraft interest rate was studied by Botha (1997: 532-567). He argued that Bank rate and the prime overdraft interest rate had always been key elements of monetary control in South Africa, as the latter served as an important guideline in the determination of interest rates on several credit instruments in the financial markets. On 16 February 1982, the SARB abandoned the link between the two variables. As could be expected, this resulted in a decrease in the correlation between the two for the period 1983-1987. During 1983 this gap was particularly unstable and varied between 3,5 and 5,5 percentage points. In 1984 it was more stable, in the 2,25 to 3,25 percentage point range. In 1985 it was stable at 3,5 percentage points. After 1986 the course of the prime overdraft rate once again became closer to that of Bank rate. This occurred in an environment where the two rates were not formally or semi-formally linked.

A detailed theoretical exposition of the way in which the SARB controlled Bank rate, thereby establishing influence over money market interest rates, is beyond the scope of this dissertation, but may be found in the analysis by Whittaker and Theunissen (1987). The developments in the money market accommodation procedures of the SARB are contained in the analysis undertaken by Meijer (1991: 135-142).

January 1987 – October 1989: An extended period of rising interest rates

The prime overdraft rate was increased on eleven occasions during this period. It increased from a low of 12 percent on 24 December 1986 to a high of 21 percent on 11 October 1989.

Improved domestic economic conditions in early 1988 saw domestic demand creating demand pressures for both inflation and the current account of the balance of payments (through increases in the demand for imports). The improvement in the overall economic conditions manifested itself in the form of burgeoning growth rates (see Table 5.1).

The strengthening of the economy also resulted in sharp increases in the demand for credit, indicated by a marked acceleration in the growth rate of the money supply. As a result, M3 overshot its targets for both 1988 and 1989. The SARB made it clear that

...it did not intend to force M3 back into its target range as this would have an unduly contractionary effect on the economy (SARB 1988: 4).

The SARB believed that the

...stricter monetary policy now being applied and the return to interest rate levels that are materially positive in real terms should contribute in a fundamental way to the strengthening of the balance of payments and the exchange rate value of the rand in the period ahead (SARB 1988: 5).

Interest rate policy was thus implemented in order to achieve balance of payments objectives.

During his tenure, De Kock switched between inflation, balance of payments, exchange rate, growth and monetary target objectives. These policy objectives occasionally clashed. In particular, a notable clash over interest rate policy occurred in early 1988.

During the preceding two years, the SARB had advisedly adopted a low interest policy, because under foreign financial and trade sanctions business was so depressed that the risk of over-stimulating the economy was remote. By 1988, however, continued inflation, some business revival, and the low foreign reserves urgently demanded higher interest rates, but the State President absolutely forbade it in order to ward off the electoral threat of the Conservative Party (Goedhuys 1999: 86). Political interference once again impacted on the course of short-term interest rates. De Kock was well aware of the dangers of politically motivated monetary policy decisions. He warned constantly of how politics was impinging on the well being of the economy, and urged reform. The refusal of the cabinet, for political reasons, to allow interest rates to rise was a great weight that De Kock had to bear. It frustrated his control of the money supply – which shot out of its target range, boosted by the provision of too cheap forward cover. It undermined the currency, misallocated resources, fuelled inflation, cut savings and choked off investment. It essentially fostered stagflation – low growth and high inflation (*Financial Mail*, 11 August 1989: 32). Movements in short-term interest rates during this period were governed by policy choice (both economic and political) and not, as De Kock would have us believe, by market forces.

5.2.4 Concluding remarks on the De Kock era

It may appear that we have been particularly critical of De Kock and his policies. In all fairness, it should be recognised that this was possibly the most difficult decade in the history of the SARB, operating as it did in the face of widespread international hostility and growing resistance to the consequences of the economic and racial policies of the government at the time. In spite of these unfavourable domestic and international conditions, a variety of often far-reaching institutional reforms were implemented in the 1980s. According to Goedhuys (1999: 147), the

...enduring achievement of the De Kock era is the reform of the institutions and methods of monetary management in both its domestic and external aspects.

In order to draw any conclusions of the type of monetary policy applied in this era and about the determinants of interest rates in particular, it is necessary to understand the SARB's theoretical view and to analyse the various policy choices. The monetary policy framework applied during most of the 1980s was defined by the De Kock Commission (1985: A13) as being a blend of 'conservative Keynesian demand management and pragmatic monetarism.' What precisely did this mean? Economists have conflicting explanations. Strydom (1991) claimed that the widely fluctuating and unstable pattern of interest rates was probably best explained by the major contradictions that characterised monetary policy during this period:

The monetary authorities applied a Keynesian approach but flirted with monetarism and displayed little understanding for the fundamental conflicting elements underlying these two approaches (Strydom 1991: 375).

This statement is supported by the following somewhat conflicting views over the precise meaning of the theoretical framework the SARB claimed to have been operating within.

Calitz et al (1999: 222-226) argue that the pragmatic monetarist element was contained in the importance attributed by the Commission to the control of the money supply and the need for monetary targeting, whilst the Keynesian element was perceived in the use of interest rates to influence the demand for credit, and, thus, to maintain the selected monetary aggregate, M3, within the predetermined target range.

This synthesis between Keynesian demand management and pragmatic monetarism reflects the Keynesian-monetarist synthesis which has occurred at the level of theory, and which, to some extent at least, provides the eclectic basis in terms of which monetary policy is assessed (Calitz et al 1999: 223).

Rogers (1986b: 67), on the other hand, felt that, from an analytical perspective this blend of 'conservative Keynesian demand management and pragmatic monetarism' obscured more than it revealed. He argued that from the point of view of monetary policy, the

monetarist element should be identified with the influence of the gold price on the money stock and not on the monetary targeting framework *per se*, with the Keynesian element being associated with the behaviour of the domestic banking system.

In an attempt to clear up this confusion, it would perhaps be best to recap the defining characteristics of each school of thought. As pointed out in Chapter 2, the defining feature of monetarism is the quantity theory of money. The traditional quantity theory is used to justify the argument for a fixed monetary growth rule as a centrepiece of monetarist doctrine. This monetarist doctrine was based upon Friedman's belief that a 100 percent reserve ratio banking system would impose some of the stability properties of the classical quantity theory of money on the domestic price level and prevent any cost shocks from initiating the inflationary process. With the domestic price level anchored by a fixed or slowly growing money supply – in terms of the money growth rule – inflation would increase in direct proportion to this fixed increase in the growth of money supply.

The Post Keynesians reject this analysis on the grounds that it reflects a gross misunderstanding or misspecification of the money supply process in an economy with a modern banking system (as explained in Chapter 3). They argue that, in such a system, Bank rate is a key exogenous variable and is thus not market determined. In recognising this, they implicitly accept the notion that the money supply cannot be controlled as an exogenous variable, and is therefore largely endogenous.

Meijer (1984: 12) outlined the monetary control system employed by the SARB during the 1980s:

An inspection of the description of these procedures reveals that they are comparable with Post Keynesian monetary theory but incompatible with monetarism.

In particular, he argued that the SARB's monetary control measures were inconsistent with the quantity theory of money. For instance, Meijer (1984: 11) explained:

...finally and most significantly, the money supply and its rate of growth now have become more explicitly demand determined at the general level of interest rates as influenced by the authorities discount policies and supporting actions in the financial markets.

Many years later, the endogenous nature of the money supply was recognised explicitly by the SARB:

...the money supply in South Africa is largely demand determined (SARB 1997: 35).

Under these conditions, the traditional quantity theory breaks down, as the direction of causation is no longer unidirectional, from MV to PT , as in the quantity equation (remembering from Chapter 2, that one of the most important assumptions underlying the quantity theory is that the money supply must be exogenous and therefore independent of changes in V , P or Y). In other words, the evolution of the banking system opened up the possibility of reverse causation because it eliminated, or at least considerably limited, the existence of an independent, exogenously determined money supply function.

There is therefore nothing remotely monetarist about the SARB's monetary control system (Rogers 1986b: 79).

In effect, the SARB's monetary control system, although it included a commitment to monetary targeting, suggested that the cornerstone of monetarism – the quantity theory of money – was rejected in favour of a Post Keynesian approach to monetary control. The SARB's exogenous Bank rate was the key operational variable used to control the demand for money and thus, indirectly, to maintain the rate of monetary growth within the SARB's pre-determined monetary targets or guidelines.

From the earlier discussion it is apparent that De Kock's rhetoric differed from what he was practising. When the quantitative controls were reduced in the late 1970s and abolished in the early 1980s, the SARB was left with the qualitative weapon of interest rates plus the quantitative control of open market operations and public debt management. De Kock vehemently denied that the Bank was fixing either the level or the structure of interest rates. He argued that a rise in market interest rates was

...essentially a consequence of the decision to curb the creation of credit as an absolute prerequisite for controlling the money supply and total spending (De Kock 1988: 31).

De Kock often stressed that the SARB had a money supply target and not an interest rate target. In order to curb the money supply, the SARB had to curb banks' credit. And to do that, the SARB had to curb its own creation of cash reserves for the banks. And when the SARB did that at a time when economic activity was vigorous and the demand for credit high, normal market forces would raise short-term interest rates. In his words,

...if something is made scarcer, it is only logical that its price should rise (De Kock 1988: 31).

Furthermore, he emphasised that

...the rate of interest is not an 'administered' price to be determined by either the government or the SARB like the price of maize or railway tariffs. There is not one interest rate but dozens of interest rates or yields. They normally fluctuate daily in response to changes in demand and supply in the relevant financial markets... But neither the government nor the SARB sets either the level or the structure of interest rates in the manner in which 'administered' prices are determined (De Kock 1998: 31).

For this reason, De Kock argued that short-term interest rates were determined by market forces and were ‘market related’ in the sense that the SARB followed the market in setting its rates.

However, when there was a deliberate shift in monetary policy objectives, for instance in the 1985 – 1986 period where interest rates were reduced deliberately to promote growth at the expense of inflation, it becomes difficult to justify De Kock’s assertion that interest rates were determined by market forces. If short-term rates were indeed determined by the market, the SARB could be expected to align itself to market developments and allow interest rates to respond to the high level of inflation by raising interest rates – not dropping them.

If the market alone determined interest rates, it would mean that the SARB would logically surrender its control function to the market, with open market operations remaining as the only means of influencing the money supply. This was not the case. In reality, market participants kept a watchful eye on the interest rate policy of the SARB. The interest rate (Bank rate) was fixed by the Bank and functioned in the market as the anchor rate, which then affected the structure of interest rates on papers of various maturities and risks. This left the SARB as the major player in field. Interest rates were determined exogenously as a policy variable and the type of monetary policy applied during this period was consistent with the Post Keynesian theoretical framework.

5.3 THE STALS ERA (1989 –1999)

5.3.1 Background

Dr Chris Stals succeeded Gerhard de Kock on 8 August 1989. He served as Governor for a full ten-year period, until August 1999. Stals firmly supported monetary discipline and made it clear from the outset that he was determined to reduce the inflation rate to significantly lower levels. In some ways the philosophy of monetary policy did not

appear to change with the appointment of Dr Stals as Reserve Bank Governor. He described his philosophy as a

...‘monetarist’ approach based on the direct control of the money supply. South Africa...introduced money supply targeting as an anchor for monetary policy during the course of the 1980s (Stals 1997b: 36).

A strict monetary policy path was also pursued throughout the 1990s, aimed at

...the protection of the domestic and external value of the rand (Stals 1993a: 31).

In official statements on monetary policy, the lowering of the inflation rate was accorded the highest priority, but the low levels of foreign exchange reserves in fact often forced the Reserve Bank to apply a restrictive policy. The exchange rate of the rand also featured as an important anchor for monetary policy.

Stals was committed to keeping inflation low, but was equally committed to ensuring balance of payments stability. He stated that

South Africa learned from the bitter experience of 1985 that a country that allows a balance of payments problem to develop to a point where it can no longer be managed pays a high price in terms of lost international credibility for its failure. Corrective action is therefore necessary at an early stage, which may even at times, require the abortion of an economic upswing in its infancy (Stals 1993b: 30).

In addition, he argued that

...the balance of payments remains a sensitive regulator that will always serve as a reminder to ourselves of our own economic limitations. No nation can live beyond its means for any lengthy period of time without running into an external economic problem. The balance of payments therefore serves as a sensitive disciplinary

force on all countries and as a constant reminder that there is no alternative for hard work (Stals 1993b: 28).

It is difficult to determine in what order the objectives of price stability and balance of payments stability should be ranked for this period. Nonetheless, there was a significant, lasting change in monetary policy in the 1990s, implying an almost exclusive focus on the monetary sector of the economy, and on achieving and maintaining greater monetary discipline (Calitz et al 1999: 222).

Stals's tenure at the Reserve Bank was also characterised by greater Reserve Bank independence. This was a major breakthrough for interest rate policy. Independence meant that monetary policy decisions were free from the political meddling that was often evident in the De Kock era.

According to the South African Reserve Bank Act (which came into effect on 1 August 1989):

...the Bank shall pursue...monetary stability and balanced economic growth.

This statement was interpreted by SARB officials in the Bank's April 1990 Mission Statement as:

...the protection of the domestic and external value of the rand.

Note that Stals had a narrower focus compared with the multiple goals formulated in the De Kock era.

During the period from 8 August 1989 to 6 March 1998, the SARB adopted a theoretical position that Moll (1993:3) termed 'principled monetarism'. Drawing on public statements, Moll argued that this approach rested on three fundamental principles. First, inflation was viewed as terribly destructive. From the outset, Dr Stals advanced inflation as the touchstone by which he would like to be judged, often stressing the devastating effects of the 'high' inflation from which the economy was suffering at the time (Stals 1993a: 32-34). In his opinion

...it remains the prime objective of monetary policy to achieve low and stable rates of inflation to ensure durable economic growth (Stals 1993d: 14).

This seems to have meant inflation at or near industrial country levels of 3-4 percent. He emphasised that a low and stable inflation rate was required for prices to convey information efficiently and for appropriate savings and investment decisions. He also argued that a low and stable level of inflation reduced the erosion of the accumulated savings of the poorer segments of society as well as risk, and encouraged fixed investment.

Secondly, Moll (1993: 3) argued that the Stals program was aimed at creating scope for individual markets do their work. For instance, during Stals's era the Reserve Bank argued

...the state should withdraw from the economy as much as it can, and where intervention is unavoidable, should follow the guidance of the market where possible. The state's macroeconomic role is seen as establishing a stable market-oriented framework for individual decision makers, and once this is in place, the economy should grow of its own accord (SARB 1990: 5).

Counter-cyclical macroeconomic management was viewed with suspicion, the ideal being that the authorities should merely ensure macroeconomic stability, with prices under control and real interest rates positive, and rely on markets to gravitate towards their natural equilibria (along the lines of neoclassical thinking).

Third, the SARB should be independent of politics, aiming only and consistently at financial stability and low inflation (SARB 1992: 33). In this regard, Moll (1993: 4) stated that:

...politicians, it seems, are fickle, biased and perhaps incompetent; independent well-informed technocrats can manage monetary policy far better.

In the De Kock era, for instance, it was plain to see that political meddling sometimes caused interest rates to move in a way that was unrelated to both market forces and economic theory.

Moll (1993: 1-5) emphasised that these three principles constituted a simple but powerful theory, often presented by the SARB as encapsulating the latest theory and research from abroad. He referred to this theoretical framework as ‘principled monetarism’, which led directly to the tight monetary policies that were applied vigorously from 1989 onwards.

This ‘principled monetarist’ policy framework was criticised on various points. Although inflation was undeniably a problem, it was argued that the precise transmission process between interest rates and the money supply (and therefore inflation) was not clear. High interest rates were often associated with unnecessary pain and misery for the domestic economy while having only a tentative correlation with the money supply (and therefore inflation).

Stals (1996b: 26) began questioning the monetary targeting policy framework, along the aforementioned lines, by arguing that

...the integration of South Africa in the global financial markets, and the innovations caused by the introduction of new payments and money transmission techniques, make the money supply a less useful indicator of potential underlying inflationary pressures in the economy.

He recognised that the money supply was becoming an inappropriate basis for monetary policy decisions.

On 7 March 1998, Stals concluded that the liberalisation of and increasing integration of financial markets (following South Africa’s re-introduction into the global economy with the democratic elections in 1994) and the increasing importance of large and volatile international capital flows, had resulted in the usefulness of the M3 money supply as a

target for monetary policy being diluted to a point where some alternative anchor for monetary policy had to be considered. In his last annual address as Governor of the SARB, Stals (1998: 44) put it as follows:

...the Reserve Bank accepts, however, that important structural changes in the South African financial system in recent years have weakened the more stable relationships that previously existed between changes in the money supply and in bank credit extension, on the one hand, and in normal spending on goods and services and in prices, on the other hand. Changes in the monetary aggregates have for the time being lost some of their usefulness as the most important indicators of future trends in inflation, and therefore also as an anchor for monetary policy decisions.

In response to this, the SARB started to follow an eclectic approach towards monetary policy. This implied that although the SARB's final objective was the control of inflation, and monetary aggregates were still considered to be intermediate targets, the Bank would not change its policy stance automatically when the monetary aggregates were not adhering to their growth targets. This new eclectic theoretical framework was based upon an in-depth analysis of the factors responsible for inflation. These factors included a wider range of financial aggregates, including changes in the amount of bank credit extended to the private sector, the deficit before borrowing and the overall borrowing requirements of government, the level and structure of interest rates and the foreign exchange reserves, and changes in the nominal and real effective exchange rate of the rand. Monetary policy was, therefore, conducted within a long-term framework where inflation and several financial variables were considered instead of merely concentrating on M3 as an intermediate target (Strydom 2001: 31-48).

In March 1998 this approach to monetary policy was extended by the introduction of the repurchase-based auction system (the repo system). In the past, the Reserve Bank had offered overnight loans at Bank rate to banks to enable them to comply with the Bank's cash reserve requirements. Under the new system, Bank rate was replaced by repo rates, which were the outcome of a process whereby banks entered into repurchase agreements

in respect of various securities which were sold by tender to the Reserve Bank on a daily basis for the purposes of acquiring liquidity (Calitz et al 1999: 220).

Gidlow (1999: 320) describes this system as one whereby the amounts offered at tenders by the Reserve Bank were usually equal to the projected liquidity needs of the banks. In other words, the Bank normally financed the total liquidity shortage by means of the repos. However, on occasion the new repo system was operated in such a manner that all the liquidity needs were not provided by the Bank. Fixed amounts of assistance were announced beforehand and offered at the daily or intraday tenders, leaving the banks short of cash, which could only be replenished by borrowing from the Reserve Bank at a penalty rate (the marginal lending rate) fixed by the Bank (in effect the equivalent of the previous Bank rate). This system therefore allowed for a differential between the lower repo rates and the higher penalty rate or marginal lending rate and a narrowing of this differential in rates could be an important indicator of a pending rise in the repo rate, and vice versa in the case of a widening differential.

Under this system, the repo rates could change on a daily basis in line with the results of the daily repo tenders, with the repo rate exerting a major influence on the money market interest rates of the banking institutions, and therefore also overdraft rates. In effect, the repo system facility entailed daily tenders being submitted by the banks to the Reserve Bank, where fluctuations in the repo rates were expected to lead to a more flexible structure of interest than that prevailing under the previous Bank rate system.

Mohr (2001: 126) creates an overall impression of Dr Chris Stals as a man being firmly in charge of monetary policy during his decade at the helm. If anything, Mohr argues, he was possibly too firmly in charge and sometimes took important decisions on his own, based on his own analysis and diagnosis, without consulting some of the senior bank officials. He viewed the task of the SARB as 'the protection of both the internal and external value of the rand', and was therefore sometimes quite willing to raise domestic interest rates and use massive amounts of foreign exchange reserve to shore up the

international value of the rand during the periodic foreign exchange crises experienced during his term of office.

5.3.2 Economic context

In early 1989, South Africa entered the longest recession of the postwar period (of about four years), and the deepest since the Great Depression of the 1930s. The cost of a record drop in inflation was a formidable fall in GDP per capita, of over 12 percent, between the first quarters of 1989 and 1993. Real GDP growth as well as the movement of other key variables are summarised in Table 5.2.

A number of major political and exogenous shocks also affected the course of monetary policy during this period. These began with President De Klerk's initiation of the process of political reform on 2 February 1990, by announcing the immediate unbanning of the African National Congress (ANC) and other political organisations, as well as the imminent release of Nelson Mandela. These decisions heralded the return of South Africa to the international political, financial and economic arena but the journey was not smooth.

The early 1990s were tumultuous years, both politically and economically. For instance, on the international front monetary policy had to respond to the repercussions of the Gulf crisis and the concomitant oil price increases for the measured inflation rates. A tightening of monetary policy resulted in intensified downward pressure on domestic demand and activity over a fairly extensive period, and was considered inappropriate for countering the once-and-for-all effect on the general price level of such an isolated exogenous event. Such a policy response, some argue, would have been justified only if the exogenous shock on the price level was exerting a lasting effect on inflation expectations, and was causing a more permanent acceleration of the wage-price spiral. However, Mohr (2001: 126) argued that the direction of monetary policy was often still prescribed by balance of payments considerations rather than by domestic economic objectives.

Table 5.2 MOVEMENTS IN KEY VARIABLES DURING THE STALS ERA

Year	Real GDP Growth	Average annual increase in CPI	Growth in M3	Guideline range for M3	Current account balance	Financial account balance	Prime overdraft rate at year end
	(%)	(%)	(%)	(%)	(R m)	(R m)	(%)
1990	- 0,3	14,4	15,33	11-15	5324	- 2410	21,00
1991	- 1,0	15,3	14,35	8 – 12	6241	- 2543	20,25
1992	- 2,1	13,9	8,23	7 – 10	5552	- 1491	17,25
1993	1,2	9,7	7,01	6 – 9	4867	- 5669	15,25
1994	3,2	9,0	15,72	6 – 9	336	4359	16,25
1995	3,1	8,7	15,18	6 – 10	- 7989	19871	18,50
1996	4,3	7,4	13,61	6 – 10	- 8128	13394	20,25
1997	2,6	8,6	17,15	6 – 10	- 10426	27049	19,25
1998	0,8	7,1	14,55	6 – 10	- 11630	17300	23,00
1999	2,0	6,9	10,15	6 – 10	- 3398	32515	15,50

Source: SARB Quarterly Bulletins (December 1998, December 2000, June 2003)

The political changes initiated in 1990 culminated in the first fully democratic elections in 1994, and in the lifting of sanctions and the normalisation of South Africa's international economic relations. The end of apartheid improved investment conditions in South Africa, alleviated the balance of payments constraint and raised the country's growth potential.

These developments ultimately paved the way for the abolition of the financial rand on 13 March 1995 and the gradual phasing out of foreign exchange control on residents. But it also generated new uncertainties. The international community was unsure about what policy directions the new government would pursue and there was also uncertainty about the sustainability of the net inflow of foreign capital. The adoption of the growth, employment and redistribution (GEAR) strategy in June 1996 went a long way towards reducing uncertainty about economic policy. However, South Africa's reintegration into the global world economy meant that the economy was now considerably more vulnerable to exogenous events. For instance, in May 1998, the impact of the financial turbulence in Asia, which had been felt since the second half of 1997, caused severe pressure on South African financial markets. The collapse in East Asian economies, such as those of the Republic of Korea and Malaysia, resulted in increasing nervousness among international investors about the return on and risk associated with their investments in so-called 'emerging markets'. Negative market sentiment spread all over the world and the indiscriminating nature of market nervousness was particularly striking. The impact on South Africa was sudden and severe, and entailed major speculation against the rand. The nominal effective exchange rate of the rand depreciated by 13,5 percent from 22 May to the end of June 1998. The capital account of the balance of payments was severely affected, with massive capital outflows occurring in a short space of time (Calitz et al 1999: 262). The full impact of these events on interest rate policy will be discussed in the analysis that follows.

5.3.3 Movements in prime interest rates during the Stals era

August 1989 – October 1991: A period of fluctuating interest rates

Prime increased by 100 basis points on 11 October 1989 to 21 percent. It was then reduced by 100 basis points on 2 April 1990 to 20 percent. It was subsequently raised 25 basis points, reaching 20,25 percent in October 1991.

Stals (1990: 42) justified the first increase on the basis of increases announced in the discount rates of a number of central banks in Western Europe and in the United Kingdom. Higher foreign interest rates cause a shift in trade financing from foreign to domestic sources, putting the capital account of the balance of payments under pressure. This, Stals (1990: 43) argued, was particularly problematic for South Africa because

...the pressure on capital account of the balance of payments puts pressure on the exchange rate and eventually on inflation. In view of the relatively low levels of South Africa's foreign reserves and existing commitments to repay foreign loans, and also taking account of the relatively low price of gold at this stage, the country can ill afford any further pressure on the balance of payments.

The current account of the balance of payments was also coming under pressure on account of the low gold price and the higher level of imports. The SARB had to consider the responses of monetary policy to the repercussions of the Gulf crisis and the concomitant oil price increases for the measured inflation rates.

There were also a number of domestic economic developments that, according to Stals (1990), made it important for South Africa to maintain nominal interest rates at an appropriately high level. The growth in the money supply (M3), for example, remained above its targeted range. The range was set at 14 – 18 percent in 1989 (see Table 5.1), while the actual outcome was around 24 percent. In 1990, the target range was reduced to

11 to 15 percent but was once again overshoot, albeit by a small margin (see Table 5.2). Against this background, Stals believed that it was necessary to maintain positive real rates of interest in the fight against inflation and for the protection of the balance of payments.

In determining short-term interest rates the Bank therefore took account of movements in foreign interest rates and its implications for the capital account of the balance of payments, the level of foreign reserves and exchange rate changes. From a theoretical perspective, Stals's monetary policy framework of 'principled' monetarism was thus not dissimilar to De Kock's 'pragmatic' monetarism of the 1980s, although Stals did seem to attach a greater emphasis to lowering inflation.

April 1992 - November 1993: A period of declining interest rates

During this period the prime overdraft rate was reduced on five occasions. It was lowered from a high of 20,25 percent on 1 April 1992 to a low of 15,25 percent on 1 November 1993.

The prime overdraft rate was reduced in a series of orderly reductions, mainly as a result of a decline in the inflation rate and the low rate of growth in the M3 monetary aggregate. In 1992, the rate of increase in M3 fell well within the range of 7 to 10 percent. In 1993, after lowering the target range to 6 to 9 percent, the actual rate of M3 growth came in at around 7 percent (see Table 5.2). Moreover, the economy was in a downward phase of the business cycle. This corresponded with worldwide recessionary tendencies. In an attempt to revive economic growth, many central banks in European countries dropped interest rates and the SARB could therefore also reduce rates without putting undue pressure on the capital account of the balance of payments. There was also some easing of the pressure on the SARB's net gold and other foreign reserves as a result of an overall surplus on the balance of payments.

In a speech given by Stals (1993a: 31-35), he re-emphasised his view that the SARB followed a monetary policy aimed at protecting the value of the rand. In pursuit of this mandate, the SARB followed a certain sequence in its decisions on monetary policy. First it set and announced guidelines for an acceptable growth rate in the money supply at the beginning of each year. Second, the SARB recognised the fact that money was mostly created through the extension of bank credit in South Africa (ie the money supply was endogenous), therefore the SARB kept a close watch on the increase in outstanding bank credit. Excessive increases in bank credit were seen to lead to excessive increases in the money supply and therefore inflation. Third, the SARB had to guard against increases in overall liquidity using open-market operations. Fourth, to the extent that the rate of increase in the money supply was driven by the demand for funds, it was imperative that realistic interest rates be maintained at all times.

This led Stals (1993a: 33) to conclude that the SARB *could* and *did* influence interest rates in two ways: through changes in Bank rate and open-market operations. This argument causes one to question Stals's rigid adherence to the belief that short-term interest rates were determined by market forces. His claim that 'realistic interest rates must be maintained at all times' (Stals 1993a: 32) implied short-term rates were deliberately manipulated through changes in Bank rate in pursuance of a stable currency.

September 1994 – July 1996: A period of rising interest rates

During this period, the prime overdraft rate was increased on six occasions. It was raised from its low of 15,25 percent on 26 September 1994, to a high of 20,5 percent on 20 May 1996.

From 1994 to 1996, bank credit expanded strongly. M3 growth exceeded the guideline range, owing to buoyant economic conditions (reflected in the high level of economic activity in the financial markets and the relatively high rates of GDP growth) and the switching of foreign trade financing from foreign to domestic sources of credit (see Table 5.2). In response to these developments, Stals (1995: 27) argued that

... financial stability will not be sustainable and inflation could easily accelerate if these growth rates in the money supply and bank credit extension are not checked.

Broadly speaking, Stals justified the interest rate changes during this period as steps to bring the Bank's rates more in line with market-related interest rates to

...carry a clear signal of the resolve of the monetary authorities to bring rates of growth in the monetary aggregates back to a level more in line with the objective of the authorities to reduce inflation gradually to a more acceptable level (Stals 1995: 28).

A major development during the first 5 months of 1996 was the turmoil in the foreign exchange markets and the impact this had on the rest of the economy. The external value of the rand fell sharply. The disturbances in the foreign exchange market had serious consequences for South Africa's transactions with the rest of the world. The large net inflows of capital, which had been recorded from the second half of 1994, changed to a large outflow of capital. The SARB responded to these developments by increasing Bank rate.

Calitz et al (1999: 239-240) argue that these interest rate increases occurred at a relatively early stage of the economic upswing of 1994–1996 in response to signals in the international financial markets and the possible impact of interest rate differentials on capital flows and trade financing for the financial account of the balance of payments.

Critics such as Nel (1994) argued that the monetary authorities should have allowed the rand to depreciate, rather than push up interest rates. The stimulative effect of the depreciation of the currency, he argued, would have resulted in higher economic growth and a more protracted upswing. The monetary authorities' concern with the adverse inflationary consequences of a major fall in the external value of the rand as a result of the financial crisis in early 1996 (given international markets' risk aversion to a country with high inflation and low foreign exchange reserves) meant that both the balance of payments and price stability received a higher monetary policy priority than short-term

economic growth during this period. Interest rates continued to be used for balance of payments purposes – to underpin the inflow of foreign capital and to build up foreign reserves. This is supported by the statement that it

...has become a first priority to restore some stability to the foreign exchange market, and to find a new stable base for the exchange rate of the rand from which the future course of monetary policy can be guided (Stals 1996c: 29).

Despite these interest rate increases, the relatively high growth in M3 continued and significantly exceeded the guideline range. Interest rate policy thus appeared to be losing its effectiveness as an instrument for controlling the money supply. Stals realised, on the one hand, that the excessive expansion of bank credit was putting undue pressure on the money supply and dictated the need for maintaining high interest rates. On the other hand, due to the abolition of apartheid and the increasingly open nature of the South African economy, higher relative interest rates were attracting more short-term and volatile capital from the rest of the world, which was adding to domestic liquidity and to the ability of the banks to extend more credit, thereby adding to the money supply. As a result, Stals (1996a: 29) admitted that

...it is becoming increasingly more difficult for the Reserve Bank to control the money supply.

July 1996 – October 1997: A period of fluctuating interest rates

The prime overdraft interest rate was reduced by 25 basis points on 1 October 1996. It was then increased by 100 basis points on 21 November 1996, followed by a 100 basis point decline on 21 October 1997. On this date, the prime overdraft interest rate was 19,25 percent.

The initial 25 basis point adjustment on 1 October 1996 was a technical adjustment and did not reflect a change in the monetary policy stance of the SARB. Towards late October 1996, the rand depreciated a further 5 percent and Stals (1996d: 29) argued that the

steady depreciation of the rand that began in February 1996, had reached a point where the value of the currency no longer reflected basic economic developments (such as changes in the purchasing power of the currency, the international competitiveness of the South African economy or cyclical trends in the current account of the balance of payments). Stals (1996d) believed that the depreciation of the rand held serious threats for an escalation of inflation in the next year, which justified the need for a more cautious monetary policy stance aimed at 'protecting the internal value of the rand'. In response, the SARB decided to raise Bank rate from 16 percent to 17 percent on 21 November 1996, resulting in an increase in the prime rate to 20,25 percent. This interest rate increase was also attributable to the excessive growth in M3 for 1996 and 1997 (see Table 5.2).

By September 1997, growth in real GDP slowed down to 1,7 percent from 3,2 percent in the previous year (see Table 5.2). The tightening of monetary policy in 1996 appeared to have averted a potentially harmful spiral of wage and price increases from the repetitive depreciations of the rand. Stals (1997a: 33) believed that after the 21,9% depreciation of the currency in 1996, the exchange rate had stabilised.

Most of the financial aggregates used by the Reserve Bank as a basis for monetary policy decisions (such as the growth in real GDP and foreign exchange reserves) moved in the right direction to justify an interest rate reduction. Even though in some instances, for example, in the case of money supply, the rate of increase in the M3 still exceeded what was regarded as sustainable for financial stability (see Table 5.2). The Reserve Bank was, however, satisfied that a reduction of 1 percent was justified. As from Monday, 20 October 1997, Bank rate was reduced from 17 percent to 16 percent. The next day, the prime overdraft rate was reduced from 20,25 to 19,25 percent.

October 1997 - August 1998: A period of rising interest rates

The prime overdraft rate was increased on 5 occasions during this period. It increased from a low of 18,25 percent on 9 March 1998 to a high of 25,50 percent on 31 August 1998.

As a result of the growing complexity of functional relationships between the various financial variables, the Bank decided it would be unwise to over-emphasise money supply and bank credit extension as indicators for its monetary policy decisions. On 7 March 1998, the Bank decided to adjust its monetary policy framework. It abandoned monetary targeting and opted for a more eclectic approach to monetary policy. The Bank's monetary policy stance was influenced by guidelines for the M3 money supply as well as by a range of other financial indicators, including changes in the amount of bank credit extended to the private sector, the deficit before borrowing, the overall borrowing requirement of government, the level and structure of interest rates, the foreign exchange reserves and changes in the nominal and real effective exchange rate of the rand (Strydom 2001: 33).

In March 1998 this approach to monetary policy was extended by the introduction of the repurchase-based auction system (the repo system). In the past, the Reserve Bank had offered overnight loans at Bank rate to banks to enable them to comply with the Bank's cash reserve requirements. Under the new system, Bank rate was replaced by repo rates which are the outcome of a process whereby banks enter into repurchase agreements in respect of various securities which are sold by tender to the Reserve Bank on a daily basis for the purposes of acquiring liquidity (Gidlow 1999: 320).

Soon after this change in monetary policy framework, financial problems experienced in emerging-market economies in South East Asia triggered an unexpected contraction of the net inflow of portfolio investment. This put the new repo system to a severe test. In order to protect the capital account of the balance of payments (and the currency), monetary conditions were tightened by successive increases in the repo rate. The rate was

increased from 17 percent on 18 June 1998 to 20,4 percent the next day and to 24 percent on 22 June 1998. The prime overdraft rate increased from 18,25 percent in March 1998 to 25,50 percent in August. These changes were made with the intention of raising the cost of speculating against the rand with domestic funds, thereby protecting the capital account of the balance of payments:

...this once again demonstrates the continued impact of balance of payments considerations on interest rate policy in no uncertain terms (Calitz et al 1999: 255).

These interest rate increases succeeded in halting the fall of the external value of the rand, but at the cost of substantially higher interest rates.

Oddly, this episode was preceded by a period during which the underlying financial situation was inherently sound and even strengthening. The deficit of the national government was shrinking, inflation was declining and international reserves were increasing. As a result, there were widely-held expectations of a decline in the official lending rates of the Reserve Bank.

The above episode illustrates that exogenous events were often important determinants of interest rate movements. It also emphasises the importance of balance of payments considerations for interest rate policy. This view is supported by the fact that Stals did not consider the declared mission of the SARB of aiming at the simultaneous protection of the domestic and external value of the rand as being contradictory. Stals (1991:58) believed these two objectives were supplementary:

...and the one can hardly be achieved without the other. In fighting inflation, the SARB will at the same time, and with the same instruments of monetary policy, defend the external value of the rand.

In view of the close interrelationships between the internal and external value of the rand, the question may be asked whether the priority of monetary policy was the reduction of the rate of inflation or to ensure the stability of the external value of the rand. Stals (1991: 61) was of the opinion that in South Africa it would be a very difficult task to reduce the rate of inflation without first ensuring exchange rate stability. The reason for this was that a substantial percentage of South Africa's gross domestic product was directly affected by variations in the external value of the rand:

It is almost a precondition that the exchange rate of the rand be stabilised before any success in reducing inflation is achieved in South Africa (Stals 1991: 62).

October 1998- October 1999: A period of declining interest rates

In a series of 11 consecutive reductions in just more than 12 months, the prime rate decreased from its high of 25,50 percent on 19 October 1998 to a low of 15,50 percent on 4 October 1999.

From October 1998, stability returned to global financial markets. With the return of stability, capital flows to emerging markets resumed, exchange rates stabilised and as the domestic economic conditions remained subdued, the demand for credit remained low and growth in M3 slowed down quite perceptibly (see Table 5.2). With little inflationary pressure and a sound balance of payments, Stals decided to ease interest rates.

Although monetary targeting still featured as an anchor for monetary policy, M3 was no longer used in isolation as a criterion for interest rate decisions. Stals's decision to reduce interest rates during this period also took into consideration the level of South Africa's reserves, the overall balance of payments position and the implications of the current monetary policy stance for future levels of inflation.

Stals (1999a: 92) indicated that until inflation targeting was formally adopted, the Bank would continue to remain flexible in its policy implementation strategies:

The intention is not to implement policy according to any strict policy rule. The Bank will, rather, exercise *discretionary judgment* in deciding what combination of money supply growth, changes in bank credit extension, amount of liquidity in the banking sector and levels of interest rates should be aimed at in any given set of circumstances in order to achieve the objective of low inflation (my own emphasis).

5.3.4 Concluding remarks on the Stals era

At a gala dinner in his honour at his retirement, Stals (1999b) listed what he regarded as the ‘Twelve commandments of Central Banking’. His first commandment was that a ‘true central banker will always be against inflation’. Stals’s commitment to achieving a low level of inflation at all costs was also reinforced by his earlier statement that

...the objective of monetary policy, namely to protect the value of the currency, should...not be disrupted by the changing phases of the business cycle (Stals 1993a: 34)

Was Stals’s obsession with a low level of inflation at the expense of growth a wise position or not? Nattrass (1998: 189) argued that South Africa’s economy had been severely affected by the willingness of foreign investors to supply the domestic economy with financial capital (particularly during the De Kock era, when the authorities operated under a balance of payments constraint). In the De Kock era we saw that a persistent deficit on the current account of the balance of payments was unsustainable as long as foreigners were reluctant to supply financial capital. During a significant part of his tenure, Stals was relatively free from the burdens of the balance of payments constraint and he consequently pursued a vigorous anti-inflationary policy by contracting economic activity. The willingness of foreign investors to supply financial capital has been absolutely crucial to the South African economy. For this reason, Stals’s tough position against inflation might have been justified if the position served to encourage inflows of foreign financial capital. This could well have been the case, because foreign investors were unwilling to risk their financial capital in the context of a depreciating currency. An

anti-inflationary policy in South Africa could thus actually have induced foreigners to invest, precisely because it eliminated the risk of persistent currency depreciations. However, investors may have been equally discouraged by the slower growth caused by Stals's restrictive policies (*ibid*).

Stals was heavily criticised for these restrictive policies. Moll (1993:13) for instance argued that Stals was operating under a monetarist 'straightjacket' by justifying his interest rate decisions in pursuance of sound money. He argued that Stals's view of lowering inflation by crippling high interest rates at a considerable cost to growth and welfare - all in pursuit of 'ideologically-laden goals' - may have been misplaced:

A gentler adjustment program, taking account of the social costs involved need to preserve investments and encourage industrial exports, would have permitted a slower but steadier transition towards lower inflation, with fewer resources destroyed in the process, creating greater political credibility and better growth prospects (Moll 1993:14).

What theoretical framework did Stals align himself to? Moll (1993) described Stals's theoretical view as being 'principled monetarist'. This theoretical view was based upon the monetarist proposition that inflation is a monetary phenomenon, in line with the quantity theory of money (a view shared by De Kock). Stals was a firm believer of maintaining positive real interest rates with the objective of controlling the money supply. In consequence, South Africa experienced a prolonged period of high interest rates. Tight money, Stals argued, was supposed to rein in the money supply and reduce inflation.

However, from the analysis of the Stals era, it appears that the theoretical framework was more Post Keynesian than monetarist in nature. This conclusion is based upon two arguments. First, the monetary authorities were unable control the money supply - particularly in an open economy with foreign capital flows and its impact on liquidity within the domestic markets (this is consistent with the Post Keynesian assumption of an endogenous money supply).

Second, Stals was fond of telling his audiences that he did not set interest rates - he merely followed the lead of the financial markets. In his view, the market determines interest rates. While it was clear that the SARB did set interest rates, in the sense that movements in the repo rate affected the structure of interest rates, Nattrass (1998: 65-80) argued that there was also something to the Governor's argument.

When the SARB decided on what rate to offer the private banks at the discount window, the Governor took various indicators in the financial markets into account. One important indicator was the market yield on Treasury Bills (TB's). According to Stals, a Treasury Bill rate higher than Bank rate could only be tolerated if the gap between the two was less than a quarter of a percentage point. If the yield on the Treasury Bill rose higher than this, then it would pay the commercial banks to borrow from the SARB and buy Treasury Bills (the reason why a quarter percentage point difference could be tolerated was that such a margin would effectively be eliminated by transaction costs). This implied that if the financial markets drove up the yield on Treasury Bills, the SARB would be forced to follow the market's lead and raise Bank rate. Nattrass argued, however, that the SARB had not been shy to influence market interest rates. In May 1996, for instance, the SARB actively entered the market for Treasury Bills in an effort to curb the rise in the yield, and hence avoid having to raise Bank rate. Bank rate was 16 percent at the time, and Stals did not want the Treasury Bill yield going higher than 16,25 percent. So the SARB entered the market to buy up Treasury Bills (which put upward pressure on the price and downward pressure on the yield) (Nattrass 1998: 74).

During the early 1990s, however, interest rates were *deliberately* kept at high levels in pursuance of lower inflation. If interest rates were determined by the market, they would have fluctuated with liquidity conditions in the financial markets and it would not have been possible to maintain high interest rates. The Bank was able to deliberately control liquidity conditions (through open-market operations for instance). The Bank's actions were thus consistent with the Post Keynesian assumption of an exogenous interest rate. This statement was supported by Stals (1998: 43):

In managing the amount of liquidity that the Reserve Bank is prepared to provide to banking institutions, *the monetary authorities maintain an important influence on the level of interest rates...*Interest rates therefore serve as the main operational instrument of monetary policy (my own emphasis).

If the Bank used the interest rate as the main operational instrument of monetary policy, it is not endogenous (this is consistent with the Post Keynesian assumption of an exogenous interest rate).

The only hint of monetarism in Stals's theoretical framework appears to be the recognition of a relationship between the money supply and prices. This relationship was tentative at best (as was argued in the analysis of the De Kock era). It was predicated on the quantity theory of money, the main assumption being that the money supply is exogenously determined (which was officially refuted by the SARB in 1997).

5.4 THE MBOWENI ERA (1999-2002)

5.4.1 Background

Shortly after assuming office as Governor of the SARB on 8 August 1999, Mboweni announced, in the governor's annual address to shareholders of the Bank (on 24 August 1999), that a Monetary Policy Committee (MPC) was to be formed, consisting of the governor and deputy governors of the bank as voting members and senior officials of the Bank as non-voting members. The creation of the MPC was a major departure for the SARB. The previous governors of the SARB had traditionally taken important policy decisions on their own, after consulting with only their most trusted advisers, and took sole responsibility for such decisions (Mohr 2001: 130). The 14-member MPC would now make joint decisions with regard to monetary policy decisions.

The MPC held its first meeting on 13 October 1999, and in his opening statement, Mboweni said that the MPC would

...consider and evaluate the state of the economy, the current stance of monetary policy and the operational procedures in the conduct of monetary policy, and formulate the changes deemed necessary on monetary and operations procedures (Mboweni 1999a: 59).

As far as the monetary policy framework is concerned, Mboweni continued operating within the 'eclectic' framework (introduced after the abandonment of monetary targeting in 1998) until a formal inflation targeting framework was introduced on 23 February 2000. In line with this 'eclectic' theoretical framework, specific note was taken by the MPC of the following factors when determining short-term interest rates (Mboweni 1999b: 61-64):

First, it looked at international economic developments – for instance, South Africa's real interest rates would be compared to those in other countries and the impact on the balance of payments would be considered.

Second, the MPC evaluated real economic conditions in South Africa. Here consideration was taken of factors such as:

- the growth in real GDP
- the growth in real domestic expenditure
- the rise in the cost of labour and wages
- nominal consumer price inflation (based on the CPI)
- nominal production price inflation (based on the PPI)

Third, domestic monetary developments were taken into consideration. This was evaluated based upon:

- growth in the M3 money supply
- growth in total domestic credit extension

Fourth, domestic money and capital markets were evaluated. In particular, the focus was on liquidity in the money market and its effect on consumer price inflation.

Fifth, the balance of payments position and the foreign exchange market were considered, particularly the current account and the country's ability to finance a current account deficit.

Sixth, the total gold and other foreign reserves and the impact of interest rate changes on the nominal effective exchange rate of the rand were examined.

Seventh, stability in the financial sector was evaluated, including analyses of the resilience of the banking sector in terms of how well domestic banks were capitalised and the extent to which other sound banking supervision principles were being applied.

Finally, monetary policy developments, including an analysis of domestic economic conditions, were taken into consideration when deciding on changes in the repo rate.

On 23 February 2000, the Minister of Finance announced in his budget speech that the government had decided to adopt a formal inflation targeting framework and to set an inflation target range of 3-6 percent for the year 2002. One of the underlying reasons for the change in the monetary policy strategy was the view that a stable money demand relationship had become increasingly difficult to identify. The ambiguous nature of M3 money demand studies in South Africa (see Moll 2000) confirmed that the link between money, income and prices had become less stable in recent years, suggesting that M3 had lost its usefulness as a reliable indicator of monetary policy. The endogeneity of the money stock appears to be one of the main theoretical propositions underlying the basic model of an inflation targeting strategy. One of the main advantages of such a strategy is that it incorporates all the available information and not only one monetary aggregate. In fact, many inflation targeting models do not even include a money demand function, and those that do, tend to treat money as endogenous to a wide range of structural and cost-push forces of inflation (Svensson 1999).

The transmission mechanism of inflation-targeting models includes an aggregate demand channel, which interacts with inflation expectations, domestic inflation and the exchange rate (see Chapter 4). Monetary policy affects inflation directly through aggregate demand channel via short-term interest rates. In inflation targeting models causation runs from

prices to the money supply, and not vice versa, as the monetarists believe (Nell 2003). This is consistent with the Post Keynesian view outlined in Chapter 3.

Monetary aggregates are, however, still monitored closely, together with other economic indicators (such as the level of international interest rates, the shape and position of the yield curve, changes in nominal and real salaries and wages, changes in employment, general money market conditions, changes in asset prices, the overall balance of payments position, the terms of trade, exchange rate developments and the public sector borrowing requirement) in deciding on the course of interest rate movements (Mboweni 2000a: 59).

Inflation targeting was adopted in South Africa, as it had developed a good track record as a reliable anchor for monetary policy in a number of countries, including New Zealand, Canada, the United Kingdom and Israel¹³. Inflation targeting has a number of distinct advantages. First, it makes the objective of monetary policy clear - thereby improving planning in the private and public sectors. Second, it forms part of a formalised, co-ordinated effort to contain inflation in pursuit of the broader economic objectives of high economic growth and employment creation. Third, it helps to focus monetary policy, thereby enhancing the accountability of the central bank to the public. Finally, it provides an anchor for expectations of future inflation that should influence price and wage setting.

Mboweni defines the primary objective of monetary policy within this new monetary policy framework as being to:

Protect the value of the currency in order to obtain balanced and sustainable economic growth in the country (Mboweni 2000a: 57).

This implies price stability in the sense that changes in the general price level do not materially affect the economic decision-making processes:

¹³ For an overview of the international experience with inflation targeting, see SARB 2001a: 5.

Although relative price movements will still have an impact on production, consumption, savings and investment, the rate of inflation or deflation would be so low that it would no longer be an important factor in economic decision-making (*ibid*).

Although the achievement of the inflation target becomes the overriding objective of monetary policy in an inflation-targeting framework, Mboweni (2000a: 59) was quick to point out that the adoption of the new framework did not mean the central bank must apply rigid rules and was left without any discretion:

Exclusive emphasis on inflation goals without a careful analysis of economic conditions can lead to serious distortions in the economy that could result in higher inflation over the long term. A rigorously applied rule deprives the central bank of its ability to deal with unusual or unforeseen circumstances. In the application of inflation targeting, allowance will be made for serious supply shocks. Some discretion must be applied in order to avoid costly losses in terms of output and jobs (*ibid*).

Mboweni (2002a) expresses this point quite succinctly by arguing that the analysis and decision making with respect to monetary policy is more a ‘science of feeling’ - where the possible impact of monetary policy decisions are based upon a variety of variables including politics, inflation rates, balance of payments, money market variables, capital market variables and the share market.

The philosophy of interest-rate policy changed dramatically with the introduction of inflation targeting. For instance, Mboweni (2002b) explicitly acknowledges that the Reserve Bank is responsible for determining short-term interest rates. As mentioned earlier, the SARB no longer uses intermediate targets such as the money supply or other variables as a means towards achieving its overall objective of price stability (in an inflation-targeting framework the causal relationship between money and prices no longer applies). Instead the Reserve Bank uses interest rates *directly as a policy variable* in achieving its inflation target. In other words, the SARB determines short-term interest rates based upon its policy objective of targeting inflation, and then creates the necessary market conditions (through open-market operations for instance) in order to support such

an interest rate. This is an explicit confirmation of the Post Keynesian framework of economic analysis and is in sharp contrast to the ‘monetarist’ frameworks in which both De Kock and Stals operated.

Within an inflation targeting framework, Mboweni (2002a) listed the following variables as among those that were considered when a decision on the appropriate level of interest rates was taken:

- food price inflation
- trends in the CPI, PPI, core CPI and CPIX
- reports on inflation expectations
- the balance of payments position, particularly the current account
- non-resident behaviour in the bond and share market
- unit labour costs
- labour productivity
- oil price developments
- unemployment and growth prospects
- commodity prices
- yield curves
- monetary aggregates (particularly M3)
- credit extension
- government expenditure behaviour
- money market interest rates
- the gap between the repo rate and other market interest rates

5.4.2 Economic context

In an inflation targeting framework, the inflation environment is affected by several factors. These factors include the key variables summarised in Table 5.3 below. In order to apply monetary policy effectively, these factors, which include the external environment and exchange rate developments, have to be assessed.

Table 5.3 MOVEMENTS IN KEY VARIABLES DURING THE MBOWENI ERA

Year	Real GDP Growth	Average annual increase in CPI	Growth in M3	Current account balance	Financial account balance	Prime overdraft rate at year end
	(%)	(%)	(%)	(R m)	(R m)	(%)
1999	2,0	6,9	10,15	- 3926	32 515	15,5
2000	3,5	7,8	7,50	- 3653	2 220	14,5
2001	2,8	6,6	16,72	- 1687	- 4 413	13,0
2002	3,0	9,3	12,78	3280	18 728	17,0

Source: SARB Quarterly Bulletin, June 2003

In 2000, a number of developments occurred on the international front. A major factor was the oil price increases owing to production cuts by OPEC. The rising oil prices had a direct impact on domestic prices and were a key consideration in monetary policy decisions. Another key factor was the general state of the international economy and world interest rates. During the second half of 1999 and the first half of 2000, the United States economy continued its unprecedented economic expansion. This resulted in the Federal Reserve (Fed) raising interest rates no less than six times between June 1999 and May 2000. This upward trend in world interest rates was also observed in the euro area where the European Central Bank (ECB) raised interest rates on seven occasions between November 1999 and October 2000.

The path of the rand exchange rate also figured prominently in monetary policy decisions, given its direct and indirect impact on domestic prices. The exchange rate

came under consistent pressure during 2000, partly as a result of capital flowing out of emerging markets into the buoyant stock markets in the United States. Political upheaval in Zimbabwe during April/May 2000 put further pressure on the rand. However, during 2000, the rand's weakness was mainly against the strong US dollar and had less effect on consumer prices than had been expected (SARB 2001b: 10).

The second half of 2000 saw a dramatic change in the growth rate in the United States, although the full extent was only evident at the end of the year. In September 2000, the bursting of the dotcom bubble and corporate scandals heralded the end of the economic boom. The well-known adage, that when the United States sneezes the rest of the world catches a cold, applied once again. Growth in most countries slowed down in tandem with the slower growth in the United States, and the general pressure on world interest rates abated during the last few months of 2000.

During 2000, international developments were generally a negative factor for the inflation outlook and therefore for short-term interest rates. Rising oil prices, rising international interest rates and high interest rates in the United States made it difficult to reduce South African interest rates.

In 2001, the United States economy went into recession. Terrorist attacks in New York and Washington on September 11, 2001 caused panic in financial markets and compounded the economic problems that had already begun with the stock market collapse in 2000. These events had a number of detrimental effects on the South African economy. First, sluggish growth after the dotcom bust caused a slowdown in South African exports. Second, a general climate of risk-aversion meant that emerging markets were subject to volatile capital flows. In addition to this, South Africa's large net open forward position in foreign exchange markets resulted in speculative attacks that saw the rand depreciate significantly, with severe implications for the inflation outlook.

During 2001, the rand continued to depreciate against the US dollar, moving from around R7,60 at the beginning of the year to over R9,30 in the second week of October. The rand

depreciated against all the major currencies. Its weakness during this period was a result of both internal and external factors. Internal factors included the impact of strikes, delays in the restructuring of public enterprises and leads and lags in foreign payments and receipts. External factors included the deteriorating situation in Zimbabwe and the negative sentiment towards emerging markets in general following the crises in Turkey and Argentina. Towards the end of the year the rand depreciated sharply against the major currencies and during 2001 as a whole, it depreciated by a massive 37 percent against the dollar.

In 2002, the rand rallied making it one of the world's top-performing currencies. Part of the appreciation was ascribed to exporters' repatriation of export earnings, declining pressures on emerging-market currencies, the weakening of the dollar following the corporate governance scandals in the United States, and the gold price rally, accompanied by an improved outlook for commodities (SARB 2002: 12).

5.4.3 Movements in prime overdraft interest rates during the Mboweni era

August 1999- January 2000: A period of declining interest rates

The prime overdraft rate was reduced on two occasions, from 16,50 percent on 2 August 1999 to 14,50 percent on 24 January 2000.

The decision to reduce interest rates during this period rested with the MPC. This was an important milestone in the history of the SARB as the decision to change interest rates was no longer made by the governor alone. The MPC used an eclectic view to decide on interest rate changes. The stance of monetary policy was based upon international economic developments, stability in the financial sector, the state of the balance of payments and the foreign exchange market and domestic money and capital markets. Monetary aggregates, particularly the M3, continued to be used as a basis for interest rate decisions.

The MPC decided to reduce interest rates during this period owing to South Africa's sound economic fundamentals, as indicated by a decline in inflation (see Table 4.3), the reduction in government deficits and the restructuring of South African businesses in the late 1990s. The Reserve Bank also deliberately eased liquidity conditions in the money market during the last four months of 1999 to allay fears arising from the millennium change. The strength of the United States economy also influenced the decision to reduce interest rates (SARB 2000a: 1-5).

February 2000 – September 2001: A period of declining interest rates

On 24 January 2000 the prime overdraft rate was lowered from 15,50 percent to 14,50 percent. It was reduced on two further occasions during this period, reaching a low of 13 percent on 25 September 2001.

For most of 2000, monetary policy was influenced by domestic and international factors moving in opposite directions, with different intensities at different points in time. For instance, domestic factors remained conducive to continued declines in inflation owing to low levels of capacity utilisation and declining rates of increase in labour costs. In addition, overseas interest rates began declining in the face of a deepening global slowdown. Political events during this period, however, had negative effect on the outlook for inflation. Crises in Zimbabwe, Argentina and Turkey impacted negatively on the rand, with potentially inflationary consequences. In the aftermath of the attacks on New York and Washington, further pressure was placed on the rand.

It was felt, nevertheless, that the target rate of inflation could still be achieved. Interest rates were reduced during this period due, inter alia, to the fact that the inflation rate as measured by the overall consumer price index excluding mortgage interest costs (CPIX) declined to the top end of the inflation target range in July 2001 (SARB 2001b: 14).

Inflation targeting is a forward-looking approach and an inflation-targeting central bank has to decide how its current policy stance will affect future price developments. Decisions to change interest rates in this framework therefore depend on expected future price developments. However, interest rate changes appear to have been made in line with *current* CPIX inflation, rather than the forecasted inflation. In this period, for example, interest rates were lowered because the top end of the inflation target had been achieved for the current period. In an inflation-targeting framework, interest rate decisions are supposed to be based on future price developments.

The Reserve Bank uses a ‘fan chart’ as a tool to estimate the range of future price levels (SARB 2001b: 26-27). An inflation forecast is subject to a large degree of uncertainty, and the fan chart depicts the degree of uncertainty surrounding the projection, but the MPC appears to have paid lip-service to the fan charts and other tools when making interest-rate decisions.

January 2002- December 2002: A period of rising interest rates

The prime overdraft rate was increased on 4 occasions during the course of 2002. It was increased from 14 percent on 16 January 2002 to 17 percent on 16 September 2002.

During this period, monetary policy was dominated by the response to the sharp depreciation of the rand in November and December 2001. The MPC did not have a target for the exchange rate, but

...clearly the path of the exchange rate is a factor that has to be taken into account in determining the stance of monetary policy (SARB 2001b: 21).

The rand’s depreciation had a negative impact on the inflation outlook. CPIX inflation continued to rise (see Table 5.3) and there was also a concern about the continued high

rate of growth in the money supply and credit extension, the state of the balance of payments and the acceleration in labour costs (SARB 2002: 1).

In light of these facts, the SARB decided to raise interest rates during this period. These interest rate increases were justified on the basis that, in the wake of the rand's depreciation, it was necessary to prevent inflation from escalating. Higher interest rates were intended to dampen consumer spending while at the same time, improving interest rate differentials.

5.4.4 Concluding remarks on the Mboweni period

A feature of monetary policy has been the 'stop-go' phenomenon where monetary policy was tightened only when inflation had clearly moved up. So, instead of being pre-emptive, monetary policy was reactive in the sense that it was only changed when inflationary expectations became entrenched and were reflected in wage demands. This required a tighter monetary policy stance in terms of higher interest rates and for longer periods than might otherwise have been the case (SARB 2001b: 4).

Inflation targeting is intended to be a forward-looking approach, responding to expected future price developments only. However, the Bank's avowed forward-looking rhetoric is questionable. Instead it appears that the Bank still responds to current CPIX data when making interest rate decisions.

In an inflation-targeting framework, the primary objective of monetary policy is the attainment of price stability. This does not, however, exclude the impact of economic growth on monetary policy decisions, as the state of the economy is one of the important determinants of the rate of inflation. For instance, a downturn in the domestic economy reduces the pressure on demand inflation and creates scope for an easing of monetary policy. This does not mean that the monetary policy objective of lowering inflation is abandoned, rather that the level of aggregate demand or the state of the economy is such that the lower interest rates will not hinder the attainment of the inflation target. The

objective is also not to achieve long-run price stability at all costs. Ideally the path to lower inflation should not result in excessively high interest rates and or excessively sharp reductions in output (SARB 2001a: 4-5).

Although Mboweni has not formally stated his theoretical framework, he has on many occasions hinted to an alignment with the Post Keynesian view. For example, in a speech given in Pretoria (Mboweni 2002a), he mentioned that the SARB's role with respect to monetary policy is to 'set the interest rate'. This differs from both De Kock and Stals, who maintained that the market determines short-term interest rates.

With the adoption of an inflation-targeting framework, the SARB no longer recognised a stable relationship between the money supply and prices, which was the cornerstone of both Stals's and De Kock's theoretical framework. Mohr (1986: 28) argued that these frameworks were problematic in that they implied too narrow an approach to the diagnosis of inflation (eg by the De Kock Commission).

Unlike the monetarist framework and its rigid adherence to the quantity theory of money (based on the assumption of a stable relationship between the growth in the money supply and inflation) the inflation-targeting framework implies that inflation is determined by a number of cost-push as well as demand-pull factors. Unlike the monetary targeting framework proposed by the De Kock Commission (1985), the inflation-targeting framework acknowledges that there are non-monetary elements in the inflation process. This implies that economic forces besides monetary aggregates are important in explaining the inflationary process. In Stals's 'principled monetarism' and De Kock's 'pragmatic monetarism' non-monetary forces were ignored or downplayed, since they were inconsistent with the quantity theory of money. By abandoning the quantity theory of money, and aligning itself with an endogenous theory of the money supply, the SARB under Mboweni appears to have adopted a more explicit Post Keynesian approach.

CHAPTER 6

CONCLUSION

The conflict between neoclassical economics and modern day central banking is arguably most evident when dealing with interest rate theory. This dissertation has aligned itself with the Post Keynesian view of interest rate determination. The latter is distinctive in that it views the short-term interest rate as an instrument of monetary policy and not a market-determined price.

This Post Keynesian view was supported by an analysis of the monetary frameworks each Reserve Bank Governor operated within. First we examined the De Kock era, which lasted from 1981 to 1989. The monetary policy framework applied during this period was defined by the De Kock Commission (1985: A13) as being a blend of ‘conservative Keynesian demand management and pragmatic monetarism.’ Within this theoretical framework, De Kock repeatedly denied that the Bank was fixing either the level or the structure of interest rates. De Kock argued that short-term interest rates were determined by market forces and were ‘market related’ in the sense that the SARB followed the market in setting its rates. However, when there was a deliberate shift in monetary policy objectives, for instance in the 1985 – 1986 period where interest rates were reduced deliberately to promote growth at the expense of inflation, it becomes difficult to justify De Kock’s assertion that interest rates were determined by market forces. Moreover, we saw that in some instances during De Kock’s tenure, short-term interest rates were not only deliberately manipulated as a policy variable, but were also manipulated for political reasons, as demonstrated by the ‘Primrose prime’ incident. In the De Kock era it was plain to see that political meddling sometimes caused interest rates to move in a way that was unrelated to both market forces and economic theory.

In the course of the analysis of the SARB’s monetary control system during the De Kock era it was shown that, although the framework included a commitment to monetary

targeting, it suggested that the cornerstone of monetarism – the quantity theory of money – was rejected in favour of a Post Keynesian approach to monetary control. The SARB's exogenous Bank rate was the key operational variable used to control the demand for money and thus, indirectly, to maintain the rate of monetary growth within the SARB's pre-determined monetary targets or guidelines.

Dr Chris Stals succeeded Gerhard de Kock on 8 August 1989. He served as Governor for a full ten-year period, until August 1999. Stals described the Reserve Bank's monetary control system as a 'monetarist approach based on the direct control of the money supply (Stals 1997b: 36)'. Stals's approach to monetary policy was not dissimilar to De Kock's, however, his tenure at the Reserve Bank was characterised by greater Reserve Bank independence. This was a major breakthrough for interest rate policy. Independence meant that monetary policy decisions were free from the political meddling that was often evident in the De Kock era.

Stals, like De Kock, was fond of telling his audiences that he did not set interest rates - he merely followed the lead of the financial markets. In his view, the market determines interest rates. In official statements on monetary policy during Stals's tenure, the lowering of the inflation rate was accorded the highest priority, but the low levels of foreign exchange reserves often forced the Reserve Bank to apply a restrictive policy. In order to apply a restrictive policy (or a contractionary policy for that matter), the short-term interest rate was *deliberately manipulated* to achieve inflation, exchange rate or balance of payments objectives.

Tito Mboweni assumed office as Governor of the SARB on 8 August 1999. One of the most notable events of his Governorship was the formation of the MPC (Monetary Policy Committee). This committee sought to increase the transparency of monetary policy decisions by taking the interest rate decision-making process out of the hands of the Governor alone and entrusting it to a committee. On 20 February 2000, inflation targeting was formally introduced as the Reserve Bank's new monetary policy framework. This

decision was in line with the tendency of foreign central banks to control the inflation rate as their primary objective in the interest of sustainable economic growth. One of the most distinctive features of the inflation targeting framework is the abandonment of the quantity theory. The inability of the Reserve Bank to control monetary aggregates was acknowledged as early as 1997, when Governor Stals argued that the effects of the integration of the South African economy into world markets was causing havoc with the Reserve Bank's attempts to control monetary aggregates in the interest of lowering inflation.

The money supply is determined endogenously, in other words, the supply of money in a modern-credit economy is demand driven – a key Post Keynesian assumption. The Post Keynesian view was explicitly adopted by Mboweni (2002b) when he acknowledged that the Reserve Bank is directly responsible for determining short-term interest rates.

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