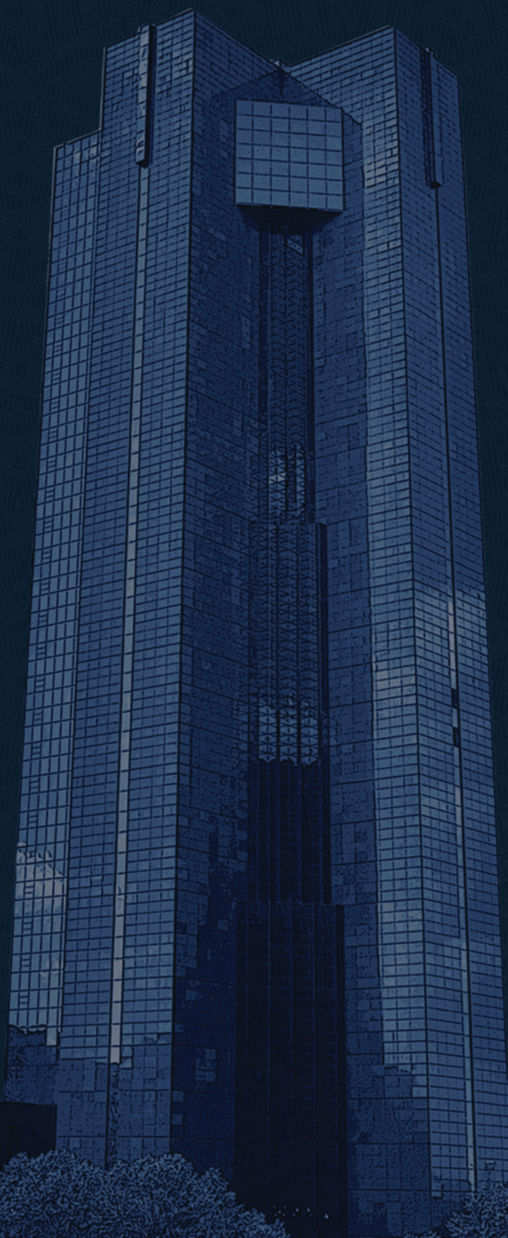
South African Reserve Bank

Interest rates and how they work



8

What are interest rates?

Interest rates are prices for loanable funds – prices of funds invested, lent out or borrowed for various periods. The supplier or lender of funds normally wants to earn an income and the user or borrower will generally be prepared to pay for the right to use the accumulated funds.

What determines the "price" of funds or level of interest rates?

The nominal or market interest rate is determined by the supply of, and the demand for, funds.

The supply of funds depends on the preference of society for current versus future consumption. Societies that are prepared to postpone consumption to a later date and that prefer to accumulate wealth now will set aside a higher portion of their current income for wealth accumulation than societies that have a stronger preference to spend now. The lower the preference for current consumption, the stronger the incentive will be to accumulate funds.

The demand for funds depends on the opportunities available for using borrowed funds efficiently and profitably. The more profitable the usage of funds, the greater the demand for funds.

Similar to the determination of the prices of goods and services, the prices of funds, i.e., the general level of interest rates, are determined by the demand for, and the supply of, funds. If the demand for funds increases and/or the supply declines, the price of funds will rise, i.e., interest rates will move higher. If the demand for funds declines and/or the supply increases, interest rates will move lower. At the same time, the interest rate level and expected changes in that level will also affect the supply of, and demand for, funds.

The period to which the interest rate relates is in the future, because funds are provided to borrowers for future repayment. The future can be foreseen only imperfectly by both lenders and borrowers of funds. Uncertainty about the future will consequently play a prominent part in the process of interest rate determination. Among the more prominent types of uncertainty likely to have an impact on the level of interest rates are the following:

- The term of the period over which funds are made available. The longer the term of the loan, the greater the uncertainty that circumstances may change and therefore the higher the compensation demanded by the lenders of funds. Thus, the longer the term of a loan, the higher the interest rate charged. Other factors may at times, however, lead to higher short-term than long-term interest rates.

- The lender of funds will also be concerned about the ability of the borrower of funds to repay the loan. The higher the risk of default by the user or the lower his or her credit rating, the higher the interest rate asked by the supplier of funds.

- If inflation is expected to be high, the buying power of borrowed funds declines rapidly. The supplier or lender of funds will seek protection against the erosive power of inflation by demanding a higher interest rate. Therefore, higher expected inflation will bring about higher interest rates.

If expected inflation is not properly accounted for in interest rates, lenders of funds will reduce the portion of their income that they are prepared to lend out. By contrast, the demand for borrowed funds will be strong under such circumstances, as potential buyers will borrow more money in order to buy ahead of the expected price increases.

The interest rate is the price that equates the supply of funds with the demand for funds. If there is an imbalance in the market for funds, as is likely to occur when expected inflation is not fully reflected in the level of interest rates, market interest rates will have to adjust in such a way that the total demand for, and supply of, funds will be equal over time.

If the supply of funds is inadequate relative to demand, the interest rate has to rise to encourage a larger supply of funds to match the demand for funds.

The South African Reserve Bank (the Bank) plays an important role in determining the level of short-term interest rates as these rates are closely related to the rates at which the Bank lends money to private-sector banks.

Types of interest rates

In economic jargon, reference is often made to "the" interest rate. Strictly speaking, this is incorrect because many interest rates are established almost continuously in the various financial markets of the economy.

The various interest rates not only reflect the total demand for, and supply of, funds in the different markets, but also play a role in allocating funds between various applications. Some of the better-known interest rates are those for home mortgages, instalment sale

financing, overdraft borrowing, deposits and government bonds.
In a market-orientated economy such as in South Africa, interest rates have to be flexible and sensitive to changes in underlying market forces. Government interference in the financial markets, which prevents the efficient functioning of market forces, reduces the effectiveness of the price mechanism and can easily lead to permanent undesired distortions in the flow of funds.

Money creation

Money is created in South Africa mainly through the extension of bank credit to the non-bank private sector. The demand for bank credit, like the overall demand for funds, is affected by changes in interest rates. A policy aimed at managing the rate of increase in the money supply must therefore take into account the likely response of the demand for bank credit to changes in interest rates and the potential effect that changes in bank lending have on the money supply.

Bank credit extended to the government sector, for example, to finance public-sector budget deficits, is also a source of money growth. In this instance, the tax and spending policies of public-sector institutions, rather than changes in the level of interest rates, are the prime determinants of the demand for credit and consequently also of money growth.

How does the Bank influence interest rates?

The repurchase or repo rate is the interest rate at which the Bank lends money to private banks. The Bank acts as banker for private banks. Banks experience a cash shortfall or a need for liquidity on a daily basis and their lender of last resort is the Bank. A formal system is in place to guide the process through which banks borrow from the Bank and it is called the 'repurchase transactions system' (repo system). The repo system of borrowing and lending involves the temporary sale of a financial asset by the borrower (bank) in exchange for the needed cash from the lender (the Bank). In such a transaction, there is an explicit agreement that the borrower must repurchase the financial assets at an agreed future date, for example, after one week. The list of eligible assets accepted by the Bank as collateral in its refinancing operations include, among other things, rand denominated government bonds, Land bank bills, South African Reserve Bank debentures and Treasury bills.

The repo rate is determined by the Bank at each meeting of its Monetary Policy Committee (MPC). It is expressed as a rate per annum. The repo rate serves as a benchmark for the level of short-term interest rates, for example, if the repo rate increases, banks have to pay more for repo funds. To maintain their existing profit margins, banks raise the interest rates at which they take deposits from, and lend money to, their customers. This causes a general rise in interest rates or the cost of holding money, and this eventually helps to control inflation by reducing the demand for credit to be spent on the purchase of goods and services. The actions of the Bank described here are also known as the formulation and implementation of monetary policy.

Money supply and interest rates

In pursuing its objective of achieving and maintaining price stability, the Bank conducts monetary policy under the inflation-targeting framework. Inflation targeting is a monetary policy framework characterised by an announcement of a numerical target point or range for the inflation rate that is intended to be achieved over a specific future period. In South Africa the inflation target has been specified as achieving a 12-month rate of increase in the headline consumer price index (CPI for all urban areas) of 3 to 6 per cent.

When setting monetary policy the Bank decides on the level of short-term interest rates necessary to meet the inflation target. The Banks' MPC looks at a range of domestic and international economic factors that will have a bearing on future inflation – usually focusing on a time horizon of about two years, this being the time it takes for the full effects of changes in interest rates to work through the economy and impact on inflation. The MPC's decisions influence the overall lending policies of the banks, and also the demand for money and credit in the economy. If the committee's evaluation indicates that with an unchanged repo rate inflation will rise above the inflation target in about two years' time, it will tend to raise the repo rate. If its evaluation indicates that inflation will fall below the target, the committee will tend to reduce the repo rate.

The Bank plays an active part in promoting the development of relatively free and efficient money and capital markets, which are also prerequisites for the effective application of monetary policy measures, since they allow repo rate changes to be transmitted efficiently to the economy.

Are South African interest rates much higher than in other countries?

South Africa has a small, open economy and domestic interest rates are bound to be affected by events in other countries. If interest rates increase in

one country, that country becomes relatively more attractive to international investors than other countries (assuming that the risks associated with investing in that country have not changed) and interest rates in these countries will tend to respond if outflows of capital are to be averted. South African interest rates have therefore become increasingly more sensitive to developments in both developed and emerging financial markets.

The very low savings ratio of South Africa requires relatively high interest rates. Inflation in South Africa also contributes to high interest rates because interest rates have to be at least higher than current and expected inflation to encourage domestic saving. Inflation in South Africa is well above that in the country's main trading partners, which are typically more economically developed with more diversified sources of saving and tax revenues. It can therefore be expected that South African interest rates will also be much higher than the interest rates of those countries.

The level of interest rates in South Africa is, however, not exceptionally high in comparison with most of the other emerging economies. Prospects for interest rates will depend on:

- the maintenance of discipline in public-sector finances;
- growth in bank credit extension and the money supply;
- the national saving effort;
- the current account of the balance of payments and the level of foreign reserves;
- the relative strength of the currency vis-à-vis other currencies;
- current and expected changes in the rate of inflation; and
- the level of interest rates and inflation in other parts of the world.

Attempts to manipulate the general level of interest rates, or any specific interest rate in the financial markets, could easily have an adverse effect on the total amount of funds available and on the allocation

This is the eighth in a series of fact sheets on the South African Reserve Bank, compiled by the Research Department: Information Division and distributed by the Strategy and Communications Department.

Available: http://www.reservebank.co.za

For further information on the content or to obtain printed hard copies:
Click on the **contact us** icon to submit your request

To access an electronic copy of this fact sheet:
Click on **Publications and Notices > Fact sheets**

Last updated: March 2015