The Trustee toolkit downloadable

An introduction to investment

Tutorial five: Capital markets and economic cycles

By the end of this tutorial you will better understand:

- what a capital market is
- what interest rates and inflation are and their potential impact on a pension scheme
- the four stages of the economic cycle and the potential impact on a pension scheme

This tutorial is part of **Scenario three**.

Glossary

A detailed glossary of technical terms can be downloaded from the Resources tab when you log in at **www.trusteetoolkit.com**

The Pensions Regulator

What are capital markets?

These are markets used for buying and selling of equity and bond investments.

What do capital markets do?

Capital markets bring together suppliers of capital (eg retail investors and pension schemes) with users of capital (eg businesses, governments and individuals).

Capital markets are intrinsic to an economy and generating economic output (the quantity of goods or services produced in a time period, by a company, industry, or country).

Capital markets facilitate the issuing of equities and bonds for the medium to long-term (anything maturing over one year). Short-term instruments (anything maturing within one year) are usually bought and sold on what is known as ‘money markets’.

What is the difference between primary and secondary markets?

Primary markets

Where newly issued shares and debts are offered to investors. For example, a company issuing a bond to raise capital to invest in a new factory.

Secondary markets

Where assets that have already been issued are traded. For example, an equity manager may buy a number of shares of a company that have been held by another investor previously. This previous investor may have made a profit or loss on this holding.

Who issues securities to capital markets?

The main issuers of securities issued on capital markets are governments, supra-national bodies, quoted (or ‘listed’) companies and private companies.

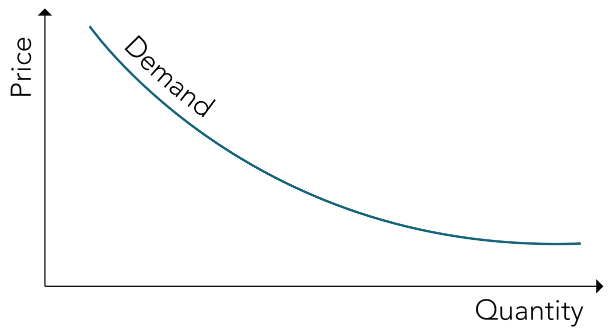
Supra-national bodies are international organisations or unions which have developed their own legal and financial identity. The European Investment Bank (EIB) is an example.

Who are the main investors in capital markets?

The main investors in capital markets are banks, pension schemes, charities, insurance companies, private investors and hedge funds.

Supply and demand

The law of supply and demand can help to explain how a share or bond is priced at any given time. It is a theory that helps explain the relationship between the supply of an item and the demand for that item and the effect these two forces have on its price.



For a given item that has a price, in general if its supply is falling and demand for this item is increasing, its price will increase. In contrast, if the supply of the item is increasing and the demand is falling, the price will fall.

A good example to illustrate the relationship between the supply and demand of an item is strawberries. Strawberries grow over summer in Britain (during winter they only grow in hotter climates), therefore they become more abundant, and, while demand is a little higher in summer, supply increases by more.

Given supply is increasing more than demand, the price falls as the supplier would rather achieve at least the lower price than none at all and watch the strawberries rot. You may notice that British supermarkets often offer strawberries for half the price during the summer but never normally in winter.

But if, for example, Wimbledon tennis was to be rescheduled to the winter, demand for strawberries may increase during this period as spectators seek to maintain tradition.

Whilst demand increases in this period, the supply is lower than that of the summer. As demand is growing but supply stable, for that time of year the price of the strawberries would be likely to increase as suppliers will feel confident that they could charge more and still sell all of the strawberries.

Interest rates and inflation

Two of the many risks facing pension schemes are interest rates and inflation. Changes in these impact the estimated value of a scheme's liabilities (or technical provisions) for a DB scheme, and the annuity cost for a DC scheme member reduces.

Both DB scheme trustees and DC scheme members can invest in bonds to help match the impact that changes in interest rates and inflation have on these.

You will find more information on this topic in the modules: 'Funding your DB scheme', 'Investment in a DC scheme' and 'Investment in a DB scheme'.

Interest rates

An interest rate is effectively the amount paid by a borrower to a lender to borrow money from them or an amount paid to a saver for saving their money with a bank or building society for example.

How are interest rates expressed?

An interest rate can be fixed or variable and money can be borrowed or saved for a very short (eg overnight) or for a very long (eg 50 years) period of time. They are normally expressed as a percentage of the amount borrowed or saved.

Bank of England base rate

The Bank of England base rate is the interest rate at which the Bank of England lends money overnight to other banks. The Bank of England moderates the supply of money (availability and affordability of borrowing money) to banks and hence the economy, by raising or lowering the base rate. Short term interest rates for high quality borrowers typically remain close to this rate.

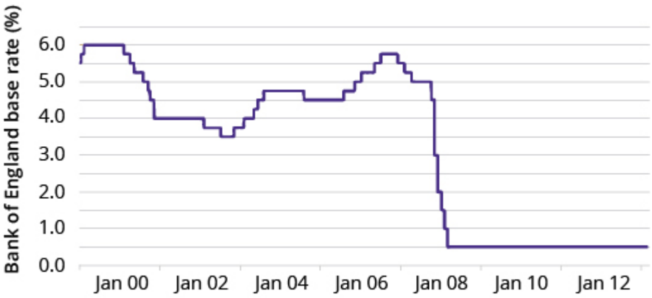
When the Bank of England changes the base rate, it is attempting to stimulate or slow down the economy. This is known as monetary policy.

Example of monetary policy

A reduction in the Bank of England base rate makes saving less attractive and borrowing more attractive, which is likely to stimulate spending. Lower interest rates can boost the prices of assets such as shares and houses.

Higher house prices can enable existing home owners to extend their mortgages in order to finance higher consumption. Higher share prices can raise households' wealth and can increase their willingness to spend.

Following the financial crisis of 2008, in March 2009 the Bank of England's Monetary Policy Committee (MPC) announced that it would reduce the base rate to 0.5% to stave off the falling economic activity.



Quantitative easing (QE)

The MPC also announced its other monetary policy to undertake a series of asset purchases, also known as quantitative easing (QE). QE is another method of increasing the money supply in order to stimulate the economy whereby a country's monetary authorities offer to buy specified securities (eg government bonds) in exchange for cash. The hope is that the cash will be used to fund productive economic activity.

Inflation

Inflation is the rise in the general level of prices. In the UK the two main measures are the Consumer Price Index (CPI) and the Retail Price Index (RPI) published monthly by the Office for National Statistics (ONS).

How are RPI and CPI different?

These measure the change in the cost of a different basket of goods and services. They are also calculated using different formulae. The key difference between them is that RPI includes housing costs (such as mortgage interest payments and council tax, insurance), whereas CPI does not.

CPI is usually lower, though this is as much due to the differences in the calculation formulae as it is the differences in coverage of the baskets.

How do they impact pension schemes?

RPI is used to determine the coupon (ie interest) and payment at maturity on index-linked gilts and is the basis for uplifting some occupational pension scheme benefits.

The UK Government announced in their June 2010 budget that CPI would be used in place of RPI for uplifting of some benefits with effect from April 2011.

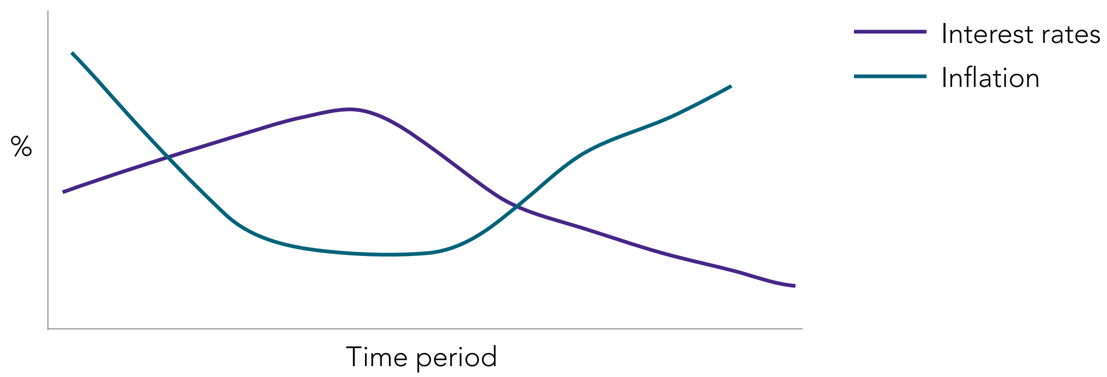
How do they impact state pensions?

The UK Government confirmed in their autumn statement in 2011 that the state pensions would increase by the CPI, the RPI or 2.5% – whichever was the greater.

Impact of changing interest rates and inflation

Rising or falling interest rates and inflation impact the economy in different ways.

Inflation



Falling inflation

Negative inflation can hurt the economy. If people expect the value of their money to rise, it encourages them to defer consumption as they will be able to buy more goods and services in the future by simply waiting.This can lead to lower economic activity. As both high inflation and negative inflation can hurt an economy, in a number of countries the central bank will set an inflation target.

Rising interest rates

In general as interest rates are increased, consumers tend to have less money to spend. With less spending, the economy slows and inflation decreases.

Falling interest rates

The opposite holds true for falling interest rates. As interest rates are lowered, more people are able to borrow more money. The result is that consumers tend to have more money to spend, causing the economy to grow and inflation to increase.

Rising inflation

High inflation can hurt the economy too as higher prices in general might lead people to demand higher wages so they can still buy the same amount of goods and services. An increase in wage costs might then feed through to a further rise in prices and in turn increase inflation further.

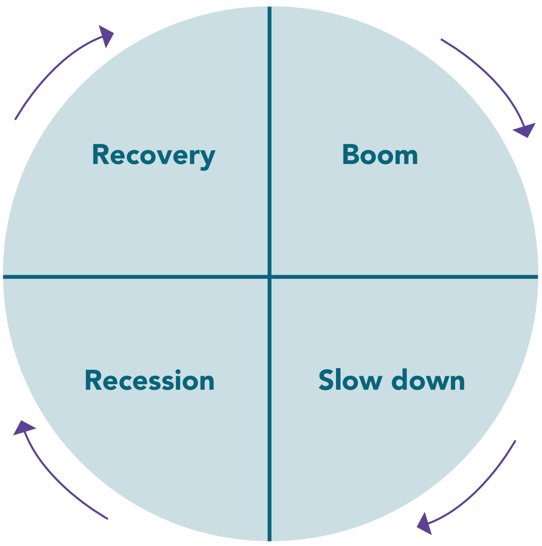
This circular process may lead to instability and uncertainty in the economy and is particularly damaging to people on fixed incomes (eg pensioners with fixed annuities). As both high inflation and negative inflation can hurt an economy, in a number of countries the central bank will set an inflation target.

Economic cycle

Typically there are four key stages to the economic cycle that broadly follow each other due to the cyclical nature of the market and the economy:

- boom
- slow down
- recession
- recovery

It is important to consider how these will affect capital markets and pension schemes.



Boom

This is a period of high consumption in the market.

What happens during the boom?

Sales of a product or business activity increase very rapidly. Companies are likely to report large profits and equity investors will tend to see an increase in their equity valuations. These increases are likely to be volatile.

This general 'feel good factor' and positive news is likely to encourage spending and in turn increase inflation.

Interest rates are expected to rise to combat inflationary pressures, along with bond yields / coupons. As coupons increase the price of bonds will fall. Bond investors will then see a negative return on their investment.

What does this mean for DB schemes?

These conditions are usually positive for DB schemes. Rising equity values will have helped to grow the assets. Although the scheme's bonds will have fallen in value, it is likely that the estimate of the scheme's technical provisions will have fallen too.

Typically a scheme's technical provisions will have fallen by more than the bond assets. This will result in reduction in the deficit and a scheme being better funded.

What does this mean for a DC scheme member?

These conditions are also generally positive for DC members. For members in the early stages of their career who are invested in equities, the increase in these values will most likely have helped to grow their size of their fund.

For members approaching pension age, the value of their pot may have fallen due to the fall in value of bonds. However it is likely that an increase in interest rates will have improved the annuity rates they will be offered.

You will find more information in the Tutorial: 'Decisions at pension age' in the Module: 'How a DC scheme works (2014)'.

Slow down

After a time of a booming economy, the economy usually eventually slows down.

What happens during the slow down?

Following a boom period, interest rates will generally continue to rise. As the availability and affordability of borrowing money declines, company profits may be squeezed as spending is reined in causing equity and bond valuations to suffer.

Overall the growth of economic output will tend to slow. In turn it is likely that interest rates will begin to fall to increase availability and affordability of borrowing money and try to stimulate the economy.

What does this mean for DB schemes?

This is generally less positive news for DB schemes as equities and bonds both begin to fall in value. Generally, the initial increase in interest rates will have reduced the estimate of the technical provisions. Typically this reduction will be offset as interest rates begin to fall.

What does this mean for a DC scheme member?

For a DC member this is generally not positive news. Members in the early stages of their career may see their value of their pension pot fall in value along with those approaching their pension age. Annuity rates will tend to become less attractive as interest rates begin to fall.

Recession

Recession means that there is a significant decline in activity across the economy with a period of negative economic growth.

What happens during a recession?

Company profits are generally lower causing business confidence to be at a low level. In turn, company share prices decrease. Interest rates remain low, now coupled with low equity valuations. This causes investors to seek 'safe haven' assets (an investment that is expected to retain its value or even increase its value in times of market volatility).

This shift from ‘risky’ assets to ‘less risky’ bonds increases demand for bonds, pushing prices up and consequently the yield or coupon down.

The market looks ahead to a recovery but remains volatile.

What does this mean for DB schemes?

These conditions are bad news for DB schemes as both equity values and interest rates will tend to fall. The fall in interest rates is likely to cause the estimate of the technical provisions to increase and this is usually only partially offset by higher bond prices. This will tend to increase a scheme’s deficit and worsen the scheme’s funding position.

What does this mean for a DC scheme member?

For a DC member this is not good news. Members’ pension pot values tend to fall where equities are held. For those approaching their pension age, annuity rates are likely to become less and less attractive as interest rates fall further, though this may be mitigated to some extent if the member is already invested in bonds.

Recovery

There is increased business activity signalling the end of a recession.

What happens during a recovery?

Companies become more optimistic about the future and begin to expand production and restock inventories in anticipation.

Interest rates remain low but with market expectations of an increase. Bond prices begin to fall as demand calms; companies start to recover and share prices increase as money is invested.

What does this mean for DB schemes?

These conditions are likely to see an improvement for DB schemes as equities start to recover.

As interest rates are expected to begin to rise, it is likely that the estimate of the technical provisions will start to decrease. In turn, schemes will tend to see an improvement in their funding position.

What does this mean for a DC scheme member?

A DC member will typically see the value of their pension pot start to increase as equities increase in value if they are invested in them. Annuity prices will tend to become more attractive once interest rates begin to rise.

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