A quick guide to Correlation

It is necessary when considering an appropriate investment strategy that consideration is given to the effects of diversification between asset classes and the correlation between them.

For many, diversification is simply ensuring that funds are split between different geographical sectors. For example, UK, US and Far East funds. However, as these will all tend to be equity based funds there is in fact little diversification as most companies now have global reach. In fact, the major markets will all be positively correlated. That is, a rise or fall in any one market is followed by similar movements in others.

Investments can be either positively, negatively correlated or uncorrelated.

Positively Correlated: If the returns from two shares are positively correlated, then they are inclined to rise or fall in the same direction at the same time. As a result, combining two positively correlated shares would not reduce the level of risk.

Negatively Correlated: If returns from two shares are negatively correlated, then they are likely to rise and fall in opposite directions. This should therefore reduce the level of volatility within a portfolio as the gains from one will offset the losses on the other. Unfortunately, this may mean the portfolio standing still if the shares are perfectly correlated!

Uncorrelated: If returns are uncorrelated, then shares will move independently of one another, there will be no interaction between the two; if one rises the other may do so at a similar, greater or lesser rate or it may even fall.

In practice most investments show a degree of correlation, which can be utilised to balance an investment portfolio to provide optimum returns. For example, the relationship between government bonds (gilts) and equities. Generally, equities are affected by expectations of corporate profitability, whereas gilts are more susceptible to changes in interest rates.

Furthermore, equities tend to perform better when economic growth is strong and inflation high whereas gilts have historically provided better returns when economic growth is weak and inflation low.

As such, equities and gilts have tended to perform well at different times reflecting a degree of negative correlation. Holding both equities and gilts in a portfolio can therefore reduce the level of volatility, balancing potential falls with possible gains.

It is also important to assess the level of risk associated within an asset class. Risk is best illustrated when considering the level of volatility associated over a given time period (generally this is measured on a rolling monthly basis over three years)