Government Actuary's Department

Investment News

Monthly Bulletin from the Investment & Risk Team

June 2015

Last Month in Brief

UK CPI inflation was announced as being negative in April 2015 for the first time since comparable records began. This trend of low, falling inflation has contributed to the BoE voting unanimously, once again, in favour of holding interest rates at their current rate of 0.5%. However, The Deputy Governor Minouche Shafik said that there are "encouraging signs from wage and labour market data" and that the main causes of Britain's falling inflation rate are not expected to last too long.

Nationwide predict a strong property market this year compared to 2014. They point to a rise in mortgage approvals and decreased uncertainty following the election as indicators of a surge in activity which will boost prices in the coming months.

Greece has yet to reach a deal with its creditors - recently dubbed "The Brussels Group". Markets wavered during the month following a warning from Greece that it may miss a June debt repayment.

The UK's trade deficit widened from £9.6bn to £13.2bn between the final quarter of 2014 and the first of 2015. This, alongside a services sector slowdown, contributed to relatively low 2015 Q1 growth of 0.3%. However, the CBI say that the pace of UK growth is accelerating and that "all sectors of economy are growing". This sentiment is shared by the BCC also expect improvement in the coming year.

Chart 1: Equity Indices

Equity markets ended the month broadly unchanged

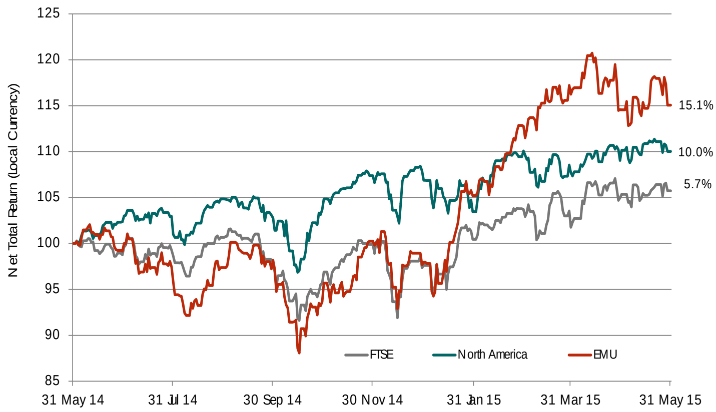


Chart 2: Sterling Credit Spreads

Credit spreads are broadly unchanged

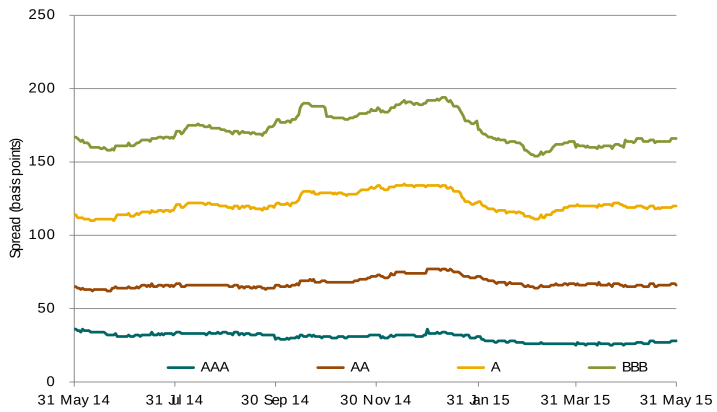


Chart 3: Gilt Yields

Yields ended the month unchanged

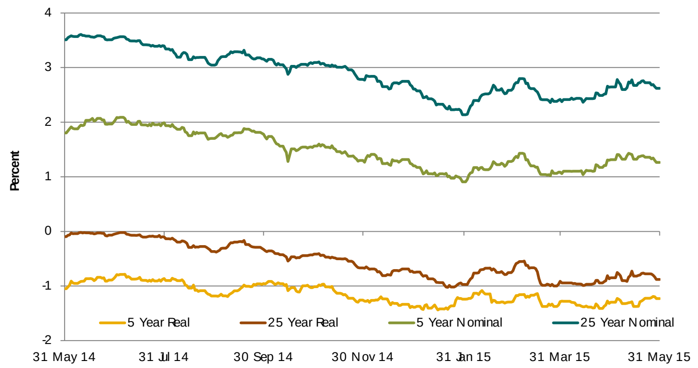
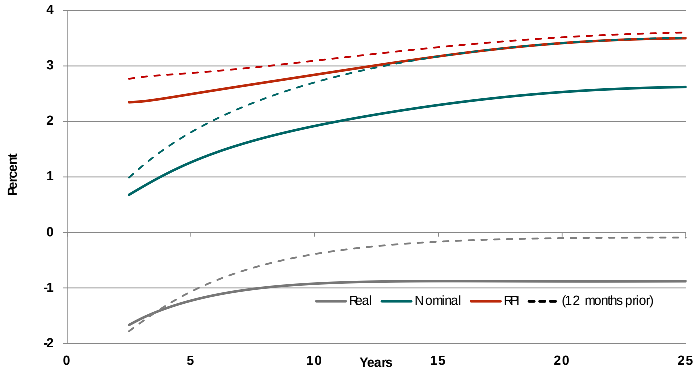


Chart 4: Gilt Spot Curves

Yield curves remain upward sloping



Source: Financial Times, MSCI, Merrill Lynch Bank of America, & Bank of England

	Latest	Previous		Latest	Previous
CPI increase (annual change)	-0.1%	0%	**Base rate**	0.5%	0.5%
PPF 7800 funding ratio	84.0%	81.4%	**QE Level**	£375bn	£375bn
Halifax house prices (monthly change)	1.6%	0.4%	**VIX (volatility) index**	13.84	14.55
IPD TR property index (monthly change)	1.0%	1.3%	**$/£ exchange rate**	1.53	1.54

For monthly published indices "Latest" and "Previous" refers to the two most recently published statistics, otherwise numbers are quoted as at the month end.

Emotion-free trading?

One of the reasons given for active fund managers failing to perform is because they make decisions based on emotion. All investment portfolios have a strategy in place, describing asset allocation, volatility/risk appetite, types of funds to be invested in, frequency and duration of trades etc. Every now and then an active fund manager might stray from their standard tactics, in the same way a sports team might abandon the principles that were agreed in training, in the hope of clinching a last minute goal. This can often lead to negative (albeit also, sometimes, positive) outcomes. In the March edition of our I&R update, we described some of the theories that seek to explain the often irrational behaviour of investors. This month we consider the related concept of emotion-free trading.

This idea can be taken to an extreme by algorithmic trading which can completely remove the need for people to be involved when implementing trades (see Box 1). However, there is also an increasing use of technology by human traders who, while retaining control over trades, hope to use it to make better decisions by limiting the impact of emotions on their decision making process.

Box 1: Algorithmic trading strategies

Algorithmic trading relies on computers with pre-programmed instructions to perform trades. These may simply be used in an attempt to achieve the best price for a trade, for example, by dividing large trades into several smaller trades to reduce market impact. However, others try to make money by trading according to automatic algorithms. Since electronic trading became established in the late 1980s and into the 1990s, automated trading activity has grown significantly.

High-frequency trading strategies aim to make very small amounts of money from each trade but, by making huge numbers of trades, these have made large amounts of money for some companies. These strategies are not without risks and the great speed at which trades can be carried out can quickly lead to significant losses if the algorithm doesn't perform as expected. Knight Capital, which was a leading firm in this area, lost $460million after deploying a new algorithm which made 4 million trades in just 45 minutes.

Examples of trading strategies:

Arbitrage - aiming to take advantage of price differences between two or more markets. For example, purchasing FTSE100 stocks but selling a FTSE100 future where their pricing diverges

Trend following strategies - where security prices are expected to follow trends then algorithms can be set up to trade according to these

Trading in advance of index rebalancing - for example a fund may purchase shares in a company which is expected to join the FTSE100 and hope to gain from an increase in demand from index trackers

Market making - aiming to earn the bid-offer spread on securities by temporarily holding positions

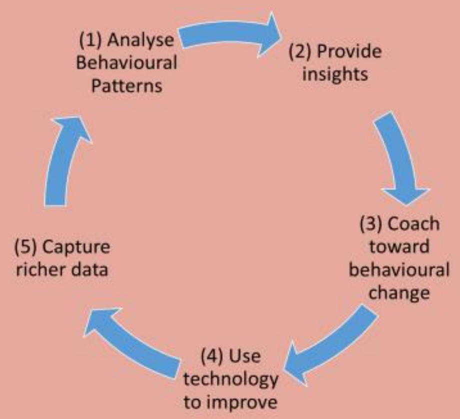
Reducing the impact of emotions

Recently, some tech start-ups claim they can help fund managers overcome their deepest cognitive biases (eg driven by fear or greed) using big data and behavioural finance techniques.

Decision-support technology is used to provide professional investors with a fuller understanding of their investment processes and the cognitive biases at play in their work. It monitors trading performance, the context in which the manager made investment decisions, and then correlates the two. The investor tells the system about his investment plans, targets, risks to look out for, even how many hours sleep or how much alcohol he had the night before. Once sufficient data has been gathered, the system can alert the manager if he is about to make a potentially poor decision based on past scenarios/conditions.

Box 2 illustrates a typical coaching process. Coaches meet with portfolio managers regularly to discuss what the data is revealing about their behavioural patterns. The software helps managers execute and improve their investment processes in a disciplined manner. Data capture informs not only what their decisions are, but why they make them, and whether decisions were based on emotion or skill. Users are able to see the cost of a biased decision immediately after making it, which should aid their discipline. The continuous process should improve managers' skill and hence results.

Box 2: A typical coaching process



The technology may not be limited to profit generation. It has the potential to reduce market speculation in times of boom and bust and could assist in avoiding misconduct and ensuring compliance with regulations. The effectiveness of such technology also depends on the context of the investor using it. For example, the decisions made by a short term investor will be different, and perhaps more subject to emotion-driven decisions, to one with a long time horizon.

Only time will tell whether such analysis generates improvements large enough to justify the cost. It may well lead to improvements in the efficiency of fund managers, however it will not stop a fund manager from making a rash decision, if sufficiently tempted.

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