

# Investment News

## Monthly Bulletin from the Insurance & Investment Team

December 2017

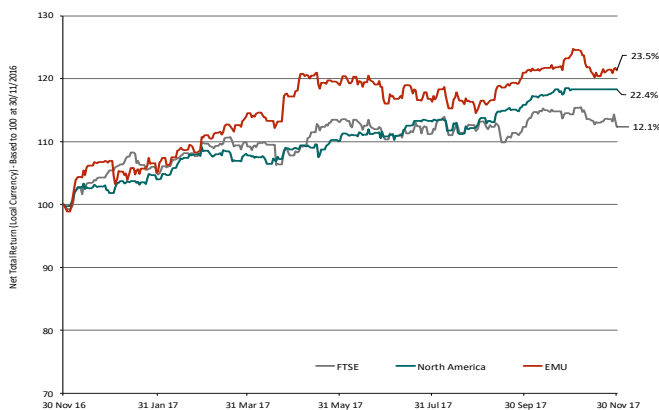
### Last Month in Brief

On 22 November, the Chancellor of the Exchequer, Philip Hammond, presented his Autumn Budget setting out the government's plans for the economy and public finances. The Autumn Budget announced the launch of a Balance Sheet Review to make more effective use of the government's holdings.

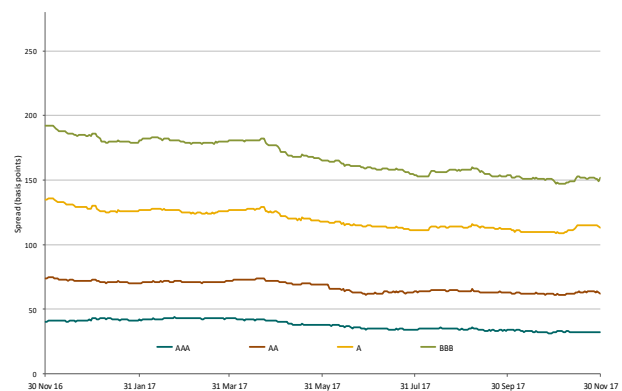
The government's consultation response to the Patient Capital Review was published alongside the Autumn Budget. This review, led by HMT, was first announced in November 2016 and seeks to identify barriers to access to long-term finance for growing firms. Patient capital is defined as 'long-term investment in innovative firms led by ambitious entrepreneurs who want to build large-scale businesses'. HMT will look to establish a working group of institutional investors and fund managers to increase the supply of patient capital, including tackling continuing barriers holding back defined contribution pension savers from investing in illiquid assets.

The UK services sector growth slowed in November, as the Markit / CIPS purchasing managers' index (PMI) for services fell from 55.6 in October to 53.8 in November. The threshold for growth for the PMI is 50, which the sector has achieved for the last 16 months. The fall in growth in November has largely been attributed to higher prices in the sector and weak wage growth for consumers. The services sector is responsible for nearly 80% of the UK's economic output.

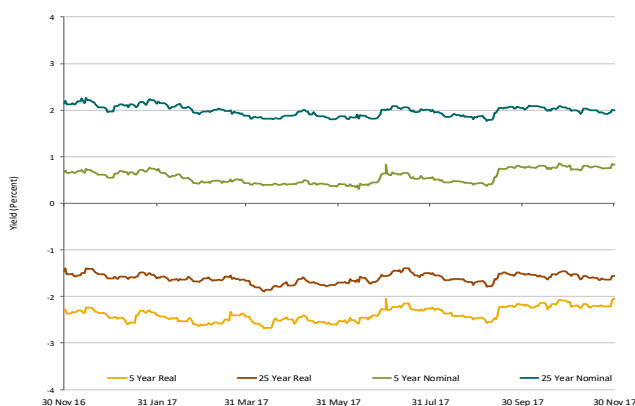
**Chart 1: Equity Indices**  
Equity markets were stable over the month



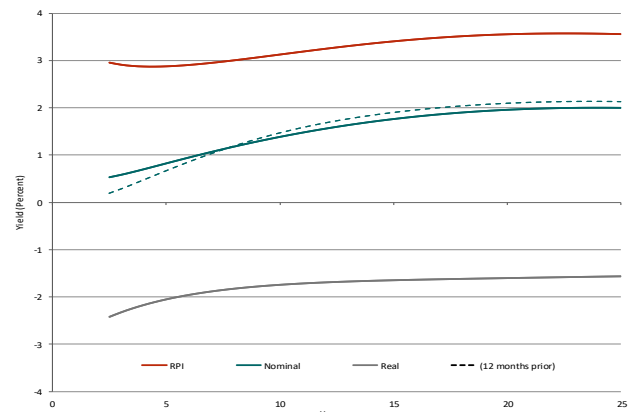
**Chart 2: Sterling Credit Spreads**  
Credit spreads were stable over the month



**Chart 3: Gilt Yields**  
Real and nominal gilt yields were stable over the month



**Chart 4: Gilt Spot Curves\***  
The yield curve was stable over the month



Source: Bloomberg, Business Insider, MSCI, Merrill Lynch Bank of America and Bank of England.

\* Data for the real and inflation gilt spot curves prior to 1st January 2017 is temporarily unavailable from the Bank of England

	Latest	Previous	Latest	Previous
<b>CPI (annual change)</b>	+2.8%	+3.0%	<b>Base rate</b>	0.5%
<b>PPF 7800 funding ratio</b>	91.2%	90.6%	<b>\$/£ exchange rate</b>	1.35
<b>Halifax house prices (monthly change)*</b>	0.5%	0.3%	<b>VIX (volatility) index</b>	11.28

\* Halifax have recently changed their methodology for calculating the above figures so the figures may not be consistent with previous updates

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

## Illiquidity premium

In the past year, \$75bn has been raised by emerging market countries (EM) through syndicated bonds as investors seek return for their capital. This represents a 50% increase on the amount raised last year. EM syndications are typically carried out by less-frequent borrowers in the capital markets. The recent growth represents the expansion of the capital markets into less traditional parts of the world as investors search for assets with a higher premium to increase their return, of which one factor is the illiquidity premium.

### What is an illiquidity premium?

The illiquidity premium, also known as liquidity premium, is the compensation that investors receive for holding assets which cannot be traded quickly at their fair market value.

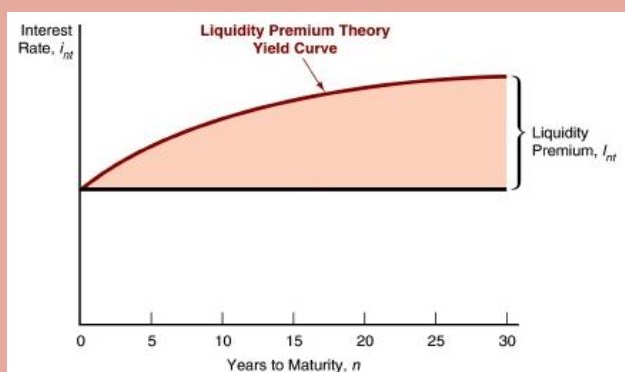
Assets such as private equity and property, can be difficult to trade quickly without trading significantly below the fair value. When markets are illiquid, the purchase or sale of such a security can cause its price to move substantially. These assets, therefore, present a risk to investors who might want to sell their asset quickly.

In order to offset this risk, a premium is offered to investors in illiquid assets. This premium reflects the nature of an asset's liquidity, including factors such as: the term of the investment, the likely time required for a sale to occur and how active the market is. In combination these factors determine the additional yield required by investors to compensate them for the liquidity risk of the asset.

The term of an investment is one factor which impacts an asset's liquidity. The Liquidity Premium Theory, otherwise known as Liquidity Preference Theory (LPT), implies the term to maturity increases the illiquidity premium as shown by the increasing gap between the LPT yield curve and the average expected future short-term rate (see figure 1). In practice, there are many other risks such as credit and market risk which affect the total risk premium investors require.

**Figure 1: Liquidity Premium Theory**

Data Source: 2009 Pearson Prentice Hall



### How is it calculated?

The easiest way to estimate the illiquidity premium for an investment is to compare two similar investment opportunities with differing levels of liquidity. If one of these assets was deemed to be liquid, such as a government bond, the illiquidity premium would be the difference in expected yields.

Calculating the true illiquidity premium remains a complex task and there

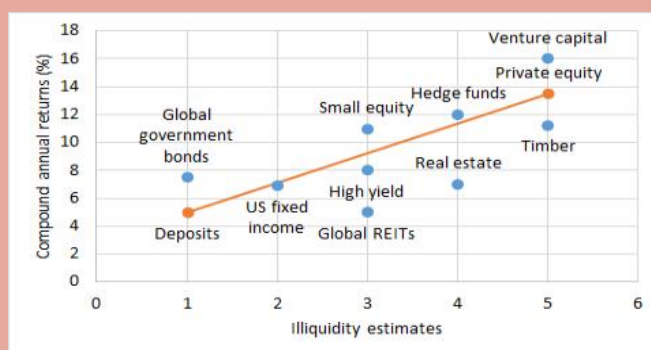
is no single correct approach. Bid-ask spreads are a strong indicator of illiquidity, and can be used to calculate premiums in reduced-form regression models. However, difficulties arise in separating and calculating the different risk categories that contribute to market returns.

### Liquidity of different asset types

The size of the market for different asset types drives how investors perceive the respective liquidity of the asset. For example currencies and commodities are often seen as highly liquid assets, as the markets are very active, and trades happen quickly and regularly. This gives investors confidence in their ability to react to change their position, and attracts a minimal premium. Illiquid assets include property and art. These markets have a much lower frequency of trading, with sales potentially taking months to organise. Figure 2 highlights the illiquidity of selected asset types, and their annual returns.

**Figure 2: Illiquidity estimates and returns**

Data Source: "Expected Returns" by Antti Ilmanen, 2011



An asset's liquidity can vary highly over time. For example, during times of market stress investors are more likely to want to sell their assets, and this sudden increase in the supply of an asset makes it more difficult to sell. This was the case during the 2008 credit crunch, when investors were forced to accept lower prices for long dated corporate bonds, particularly those with lower credit ratings.

### Pension funds and illiquid assets

A global low-growth environment has increased pressure on institutional investors to generate greater returns. In particular, some of the largest DB schemes within the UK have had to close to future accrual because of rising costs.

Earlier this year pension fund executives gathered at the World Pensions Council's investment forum in London to discuss opportunities in the low-yield global environment. One executive discussed how the illiquidity premium for assets with a historically high premium was being eroded away due to competition for an increased rate of return.

There was a consensus at the investment forum that infrastructure within emerging markets may present opportunities for pension funds to generate greater returns. Joaquim Levy of the World Bank Group valued the level of opportunities in emerging markets infrastructure at \$100 billion. Consequently, this is an area into which pension funds may look to invest.

#### Contact Information

Colin Wilson  
Deputy Government Actuary  
T: 020 7211 2672  
E: colin.wilson@gad.gov.uk

Aidan Smith  
Chief Actuary  
T: 020 7211 2632  
E: aidan.smith@gad.gov.uk

Andrew Jinks  
Deputy Chief Actuary  
T: 020 7211 2655  
E: andrew.jinks@gad.gov.uk