# UK yields to stay low?

Investors currently buying UK government bonds are doing so in the knowledge that they are accepting a yield which is lower than the rate of inflation, i.e. the real yield is negative. Surely this doesn't make sense and so yields can't remain at these low levels?

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At LGIM, we think there are three key reasons for very low UK real yields (nominal yields minus the rate of inflation):

**(i) Global structural forces suppressing long-term economic growth**
**(ii) Weak UK economic growth**
**(iii) Demand for UK inflation-linked bonds is higher than supply**

Indeed, these factors could continue to subdue real yields for some time to come.

However, there is also a risk that the UK's structural weakness, currently keeping real yields suppressed, eventually results in either deflation taking hold, or policymakers losing control of economic deficits. This could result in a dramatic increase in real yields as well as potentially negative implications for growth assets.

Before we drill into the implications for our clients, we will first discuss the outlook for UK real yields.

## WHERE ARE UK REAL YIELDS AT THE MOMENT?

A straightforward way of gauging the market price of real yields is to look at an asset that pays a yield which is linked to inflation. For example, a 30-year inflation-linked gilt currently provides a real yield of -1.7%. This effectively means that you are lending money to the government for 30 years, and the return that you get is 1.7% **below** the rate of inflation. The greater the demand for such assets, the higher the price and the lower the real yield. However, -1.7% is probably slightly exaggerating just how low UK real yields are.

Inflation can be measured in different ways. For example, inflation-linked gilts in the UK are based upon the RPI (retail price index) measure of inflation, rather than CPI (consumer price index). Because of differences in the way that RPI is calculated, it tends to be around 1% higher than CPI on average over the medium term.

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However, CPI is the measure which the Bank of England targets, and is the one used in most other countries.

So if UK inflation-linked bonds were based on CPI, you would need to add back about 1%, leaving 30-year UK real yields at around -0.7%. Although this is higher, it still does not hide the fact that they are still extremely low.

Nevertheless, we believe there are three key reasons for low real yields, and why they could remain at such depressed levels:

**(i) Global structural forces suppressing long-term economic growth**

The UK has not been alone in experiencing falling real yields over recent years. Figure 1 shows that 30-year real yields have been falling in the US and euro zone at the same time. This suggests that there is something structural which has changed over that period.

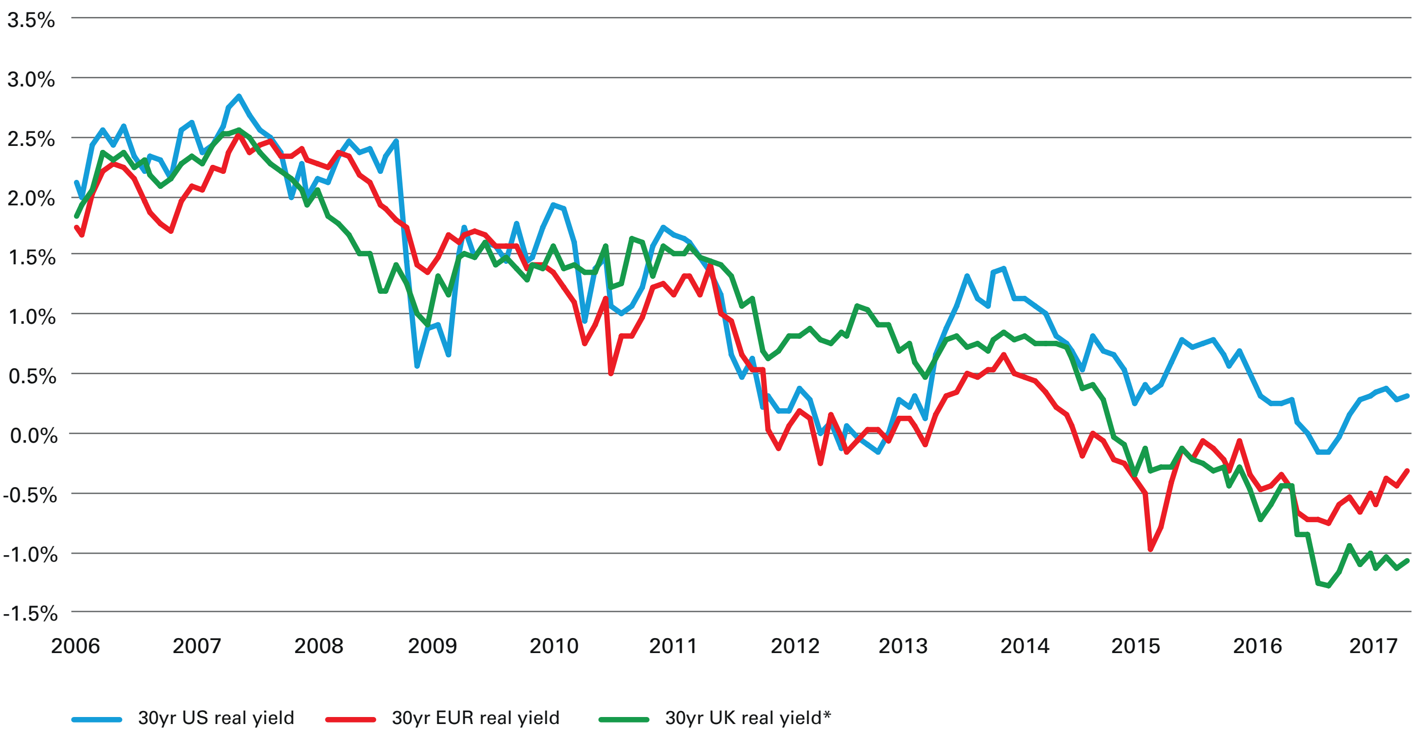
Intuitively, there is a link between economic growth and yields. Over the long run, nominal GDP should be similar to nominal yields and, by just subtracting inflation, the same can be said for real yields and real GDP.

In this respect, our view that global economic growth has been weighed down for a number of years by excess debt and deteriorating demographics is very important.

Efforts by policymakers to boost growth have been repeatedly derailed because the vast mountain of debt that has been accumulated is so sensitive to any rise in real yields. This can be defined as **secular strangulation**: policymakers are forced into more and more radical forms of monetary and fiscal policy, and this just creates even more debt, thereby pulling the noose even tighter.

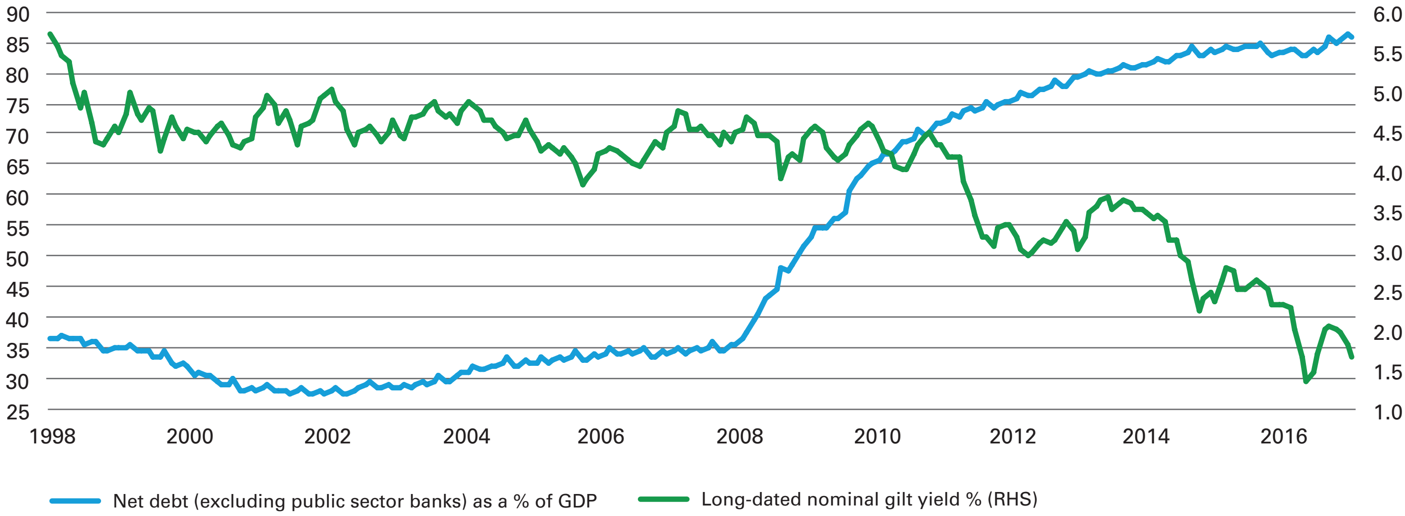
Until there are significant structural reforms or – in some cases – debt restructuring, low real yields are a necessary condition for continued economic expansion.

**Figure 1. Real yields across developed markets**




*Real yields derived from nominal and inflation zero coupon swaps, with UK adjusted by 100bps to make them more comparable with the CPI-based real yields of the US and eurozone

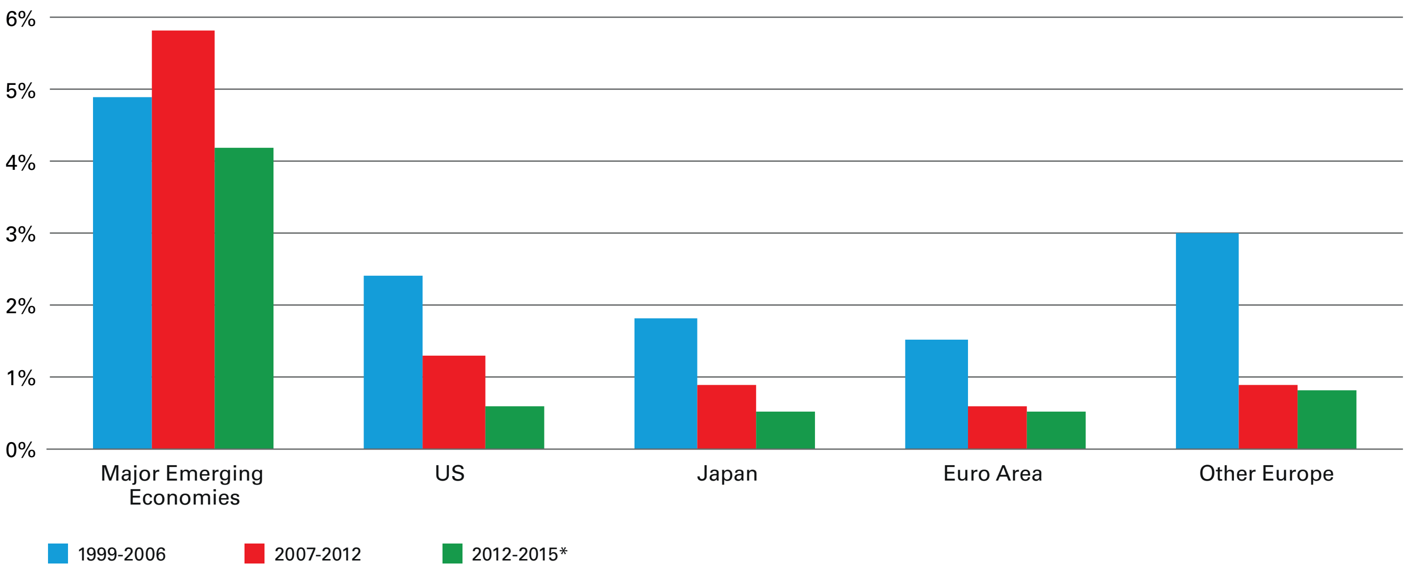
**Figure 2. UK net debt versus long-dated nominal gilt yields**




Source: Bloomberg, Debt Management Office

Meanwhile, global demographics have deteriorated. Economists often estimate the long-term rate of trend growth as the change in the working age population, plus any change in productivity growth. The size of the working age population is mainly driven by past birth rates, as well as trends in immigration, female participation and retirement ages. Our economists have aggregated these factors across 12 major economies, and their analysis indicates that the labour force is set to slow by around 1% per year. For more detail, please read our latest Fundamentals on demographic drivers[1].

**Figure 3. Labour productivity across developed economies**




*includes estimates for 2015

Source: US Conference Board (2015)

1. http://www.lgim.com/library/knowledge/thought-leadership-content/long-term-thinking/Long-term-Thinking-demographic_drivers_June_17.pdf

At the same time, global productivity growth has declined, driven by an ageing capital stock (old machines not being replaced), the survival of 'zombie' companies (those needing a bailout/support in order to survive) and a lack of capital being directed towards fresh investment.

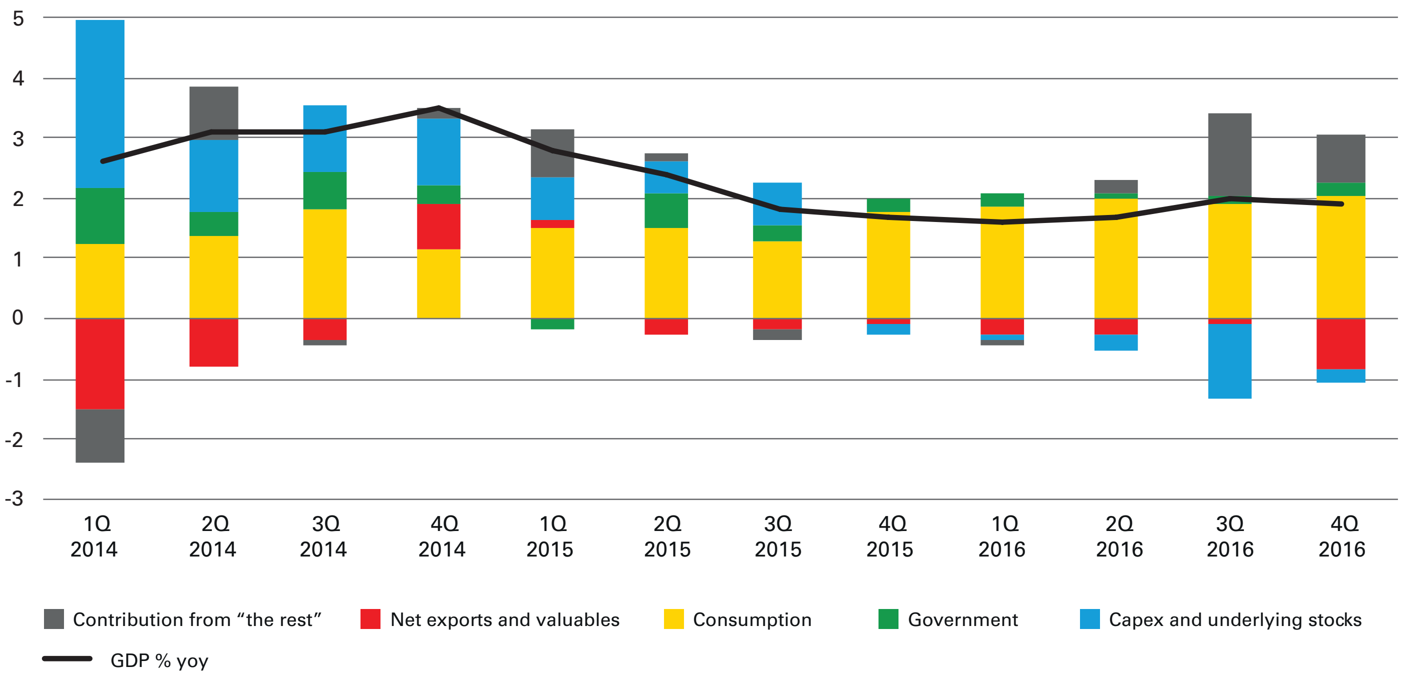
As trend rates of economic growth decline, so do long-term real yields. While economic cycles result in temporary fluctuations, this trend dominates over the longer term and central banks have been helpless to prevent it.

### (ii) Weak UK economic growth

In addition to these global headwinds, UK real yields are also being kept low by weak domestic growth.

The consumer has long been the driving force of the UK economy (Figure 4). But this engine of growth is facing a stern challenge as inflation continues to rise but wages fail to keep up. The net result: falling real incomes which are eating away at consumer purchasing power.

**Figure 4. Underlying contributions to UK economic growth**




Source: ONS

Since the EU referendum, consumer spending has remained impressively resilient. However, this has been achieved by consumers dipping into their savings, which is not a permanent solution. The savings rate is now falling, and it is becoming increasingly difficult to borrow. This suggests that consumer spending will slow in the coming months.

This could be a substantial drag on overall economic growth in the UK, so the Bank of England is likely to continue to keep interest rates low.

There has also been a sharp fall in sterling since before the EU referendum. This has made it more expensive for the UK to import goods from abroad and has therefore put upward pressure on prices. In May 2017, we saw CPI inflation rise further above the Bank of England's 2.0% target to 2.9%, and it is expected to rise further throughout the course of 2017. Investors are therefore also buying inflation-linked assets in order to protect themselves against rising inflation. This is putting further upward pressure on the price of these assets, sending real yields lower.

**(iii) Demand for UK inflation-linked bonds is higher than supply**

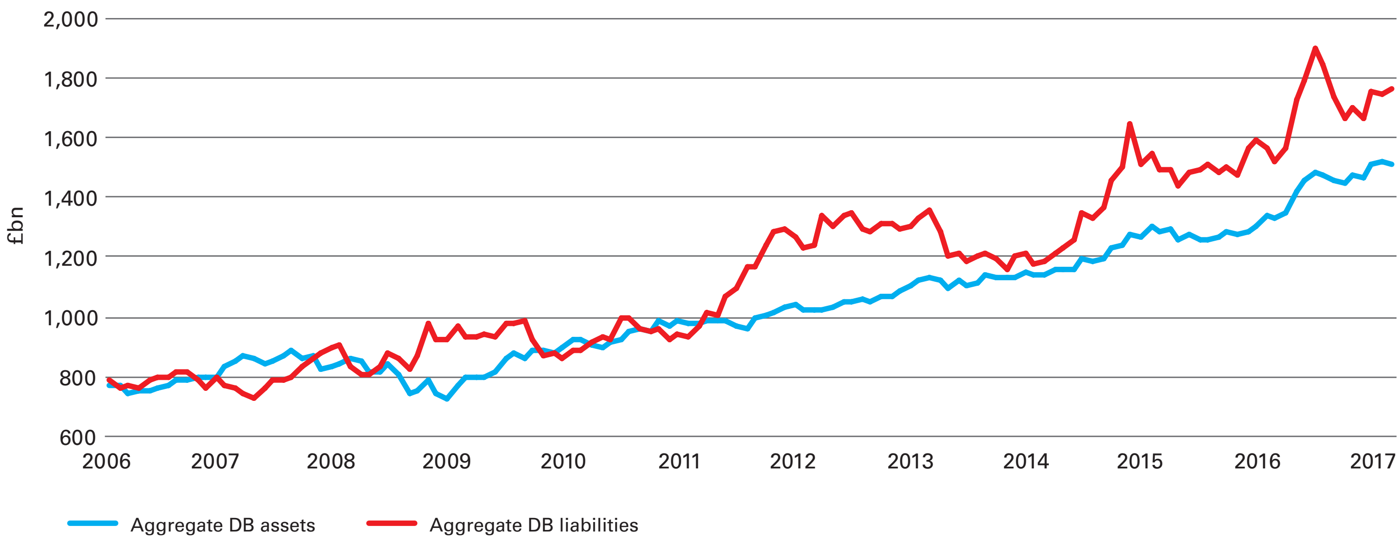
It may seem strange that long-dated UK real yields are even lower than in the euro zone, where the European Central Bank is still buying bonds as part of its quantitative easing programme.

There is a large mismatch between the demand for UK government bonds by UK pension funds, and the amount available for them to buy. In contrast, this is not the case in Europe: there is no sustained, large natural buyer of long-dated European inflation-linked bonds at present. Most Dutch pension schemes have funding-level dependent inflation-linkage, while German schemes prefer 5-10 year bonds.

In the UK, defined benefit (DB) pension schemes have promised to provide a retirement income to their members. This income is based upon factors such as the level of interest rates and inflation. Therefore, in order to ensure that schemes can pay members what they are owed, they have been increasingly buying assets which protect them from changes in the level of interest rates and inflation. Consequently, long-dated inflation-linked gilts are a natural asset to own.

On aggregate, UK defined benefit pension schemes have around £1,765 billion of these liabilities (according to data from the Pension Protection Fund as of the end of May 2017). A large portion of these are linked to inflation, thereby highlighting the importance of the level of **real** yields for pension investors. Set against this, the total size of the UK inflation-linked bond market is around £400 billion. Therefore, the scale of the mismatch between supply and demand is clear.

**Figure 5. UK defined benefit scheme assets versus liabilities**




Source: Pension Protection Fund

Meanwhile, the scrutiny on the size of pension fund deficits has increased in recent years. From here, we think it is likely to rise further, and expect the Pensions Regulator to be given more powers to protect pensioners. This means that long-dated inflation-linked bonds are likely to remain in high demand.

One risk to monitor is around transfers out of DB schemes. This would tend to increase scheme hedge ratios naturally (assuming hedging assets are not being sold to fund the transfers), and therefore implies that less new hedging may need to be done, which could result in lower demand for long-dated inflation-linked bonds. That said, it is unlikely at this juncture to expect many existing hedges to be unwound, and so the impact now would be fairly limited.

Consequently, we think the imbalance between demand and supply is likely to persist, which should help keep UK real yields low.

## WHAT COULD MAKE REAL YIELDS RISE?

There are, therefore, good reasons for low UK real yields, and why they could remain low for some time to come. But taking the UK's structural weakness to its limit, particularly if policymakers misdiagnose problems or miscalculate their response, there is a risk that real yields reverse direction, potentially in a dramatic fashion.

For example, if a UK government were to announce a big fiscal stimulus programme then it would probably boost hopes of higher growth and inflation in future years. This, combined with more gilt supply to pay for these initiatives, may initially put upward pressure on real yields. However, a move higher in real yields may not last for long as the structural downward forces could soon begin to dominate again.

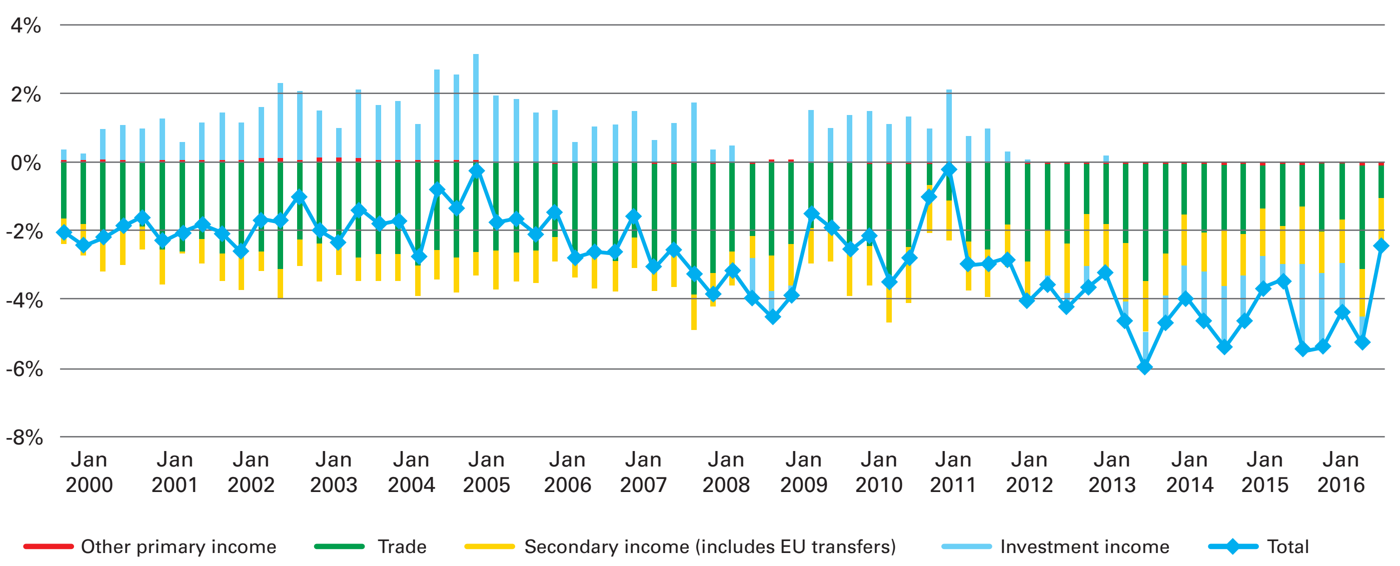
But this could prompt questions over the sustainability of the UK's deficits. By running a large trade deficit as well as a substantial government fiscal deficit, the UK relies on private sector investment as well as foreign capital flows to balance the books. Should the private sector's confidence in the sustainability of UK growth fall, then the economy could regress into the type of deflationary spiral that has afflicted Japan for many years now. With nominal interest rates already very low, the Bank of England would struggle to react to such a scenario, and real yields could head higher.

Even more worrying would be a loss of confidence from overseas investors. This has not been a major concern for Japan thanks to its persistent trade surplus, but the UK does not have this luxury. Should economic concerns start to mount as described above, or perhaps if Brexit negotiations proceed very badly, then we could see a broader loss of confidence in the UK. Importantly, if foreign investors start to pull out of UK assets then this could put downward pressure on sterling.

Compounding the problem, to respond to a sharp fall in the currency, the Bank of England could be forced to increase interest rates. The fact that three members of the MPC voted for higher interest rates in the June meeting suggests that there is increasingly little appetite for domestic inflation caused by a weak currency, and that policy could be tightened if sterling fell more aggressively. Indeed, the aim here would be to increase real yields in order to attract foreign capital and steady the ship.

Separately, but also worth considering, is a potential loosening of the regulation on pension schemes, which might result in a reduction in demand for long-dated inflation-linked gilts. This would then start to even up the supply-demand mismatch, and enable real yields to rise.

**Figure 6. UK current account % of GDP**




Source: Macrobond

## DB SCHEMES: CAUTIOUS HEDGING

We think that DB schemes waiting to hedge their real rates exposure, hoping for economic growth to improve and for rates to normalise, will remain frustrated.

- While reluctance to hedge is understandable given current low levels, our base case is that UK real yields stay suppressed
- In addition, if real yields do rise, we think structural weaknesses described earlier will have been the driver, leading to offsetting losses from weaker growth assets

With the intense scrutiny on pension deficits unlikely to abate any time soon, we therefore think scheme sponsors will remain under pressure to inject cash in order to plug deficits, encouraging pension schemes to find the most efficient ways to hedge (e.g. with an increased focus on return-seeking strategies).

For those DB schemes who are already implementing an LDI approach, there is a strong argument for moving away from yield-based triggers towards time-based, or a combination of both. For instance, schemes may wish to use a strategy where they are increasing their hedge by a steady amount over a period of time, but there is the additional flexibility to accelerate hedging if there is a rise in yields.

For those clients who see a significant chance that real yields move higher, they may be considering whether it might be worthwhile for them to sell some existing holdings of inflation-linked gilts with a view to then buying them back at a cheaper level. But, unless they have a good hedging level to start with – given the material risk that yields stay low – we would argue against doing this. Instead, they may want to consider the implications for their growth assets.

## DC SCHEMES: FOCUS ON GROWTH ASSET ALLOCATION

Many DC schemes expect their default lifestyles to evolve following the 2014 'Freedom and choice' pension reforms. Some have already chosen to target income drawdown or a 'blended' outcome, but many opted for targeting cash or decided for now not to change their investment strategy.

What do negative real rates mean for DC members nearing retirement? Those in cash-targeting lifestyles are expected to see their savings decline in real terms. This is particularly worrying given that there is significant uncertainty around actual retirement ages, and some of those in cash lifestyles might end up being de-risked too early[2].

One way to mitigate these effects will be to consider higher allocation to growth assets at retirement, or to delay de-risking altogether until individuals' retirement plans become clearer. This could provide better outcomes for members by increasing chances of pension pots growing more than inflation. That said, as discussed earlier, one reason that real yields are subdued is the prospect of weak economic growth. This should also factor into expectations for growth asset returns.

For those who are still keen to retain some inflation protection as part of a diversified multi-asset portfolio, they may instead wish to consider effective substitutes such as US Treasury Inflation-Protected Securities (TIPS). At LGIM, we are currently inclined to diversify our multi-asset growth portfolios, including those for both DC and non-pension savers, away from UK long-dated inflation-linked bonds in order to avoid being reliant on a crowded market.

2. please see "DC Dynamics – November 2016 -De-risking Dilemmas: Part 3" for our detailed analysis of retirement timing risk.
http://www.lgim.com/library/knowledge/thought-leadership-content/dc-dynamics/DC_Dynamics_derisking_dilemmas_P

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