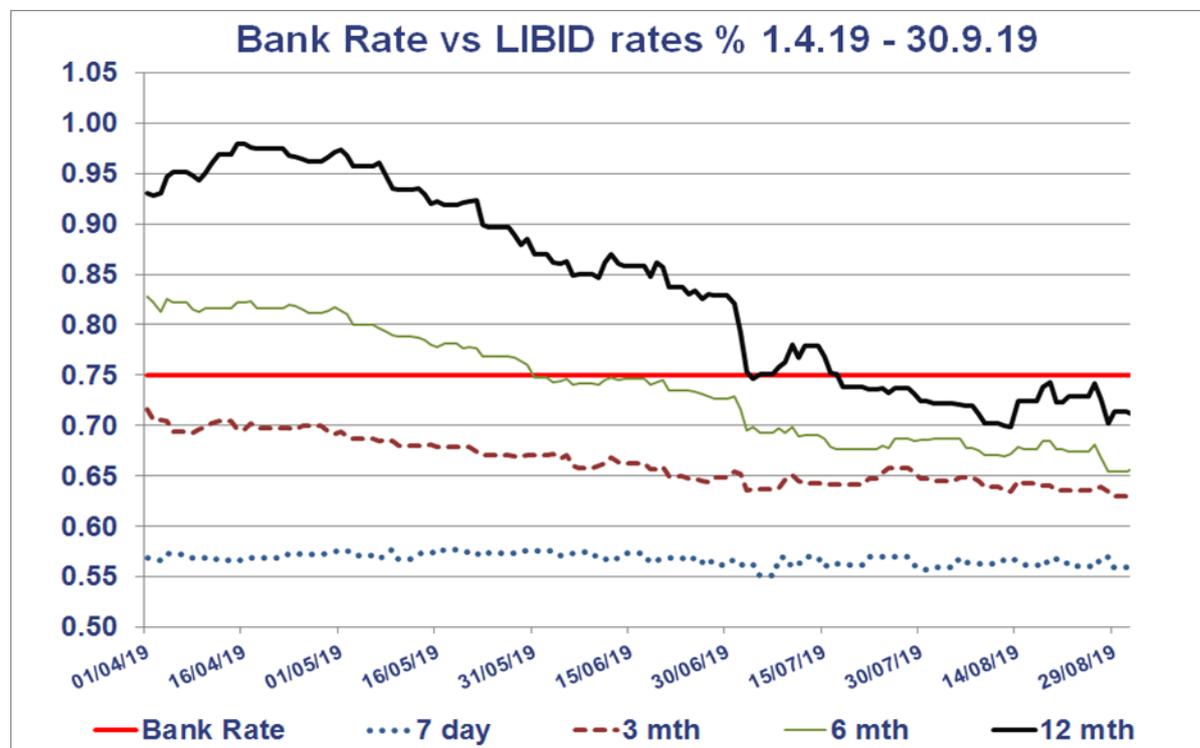


Money Market Data, PWLB Rates and Forecast Rates

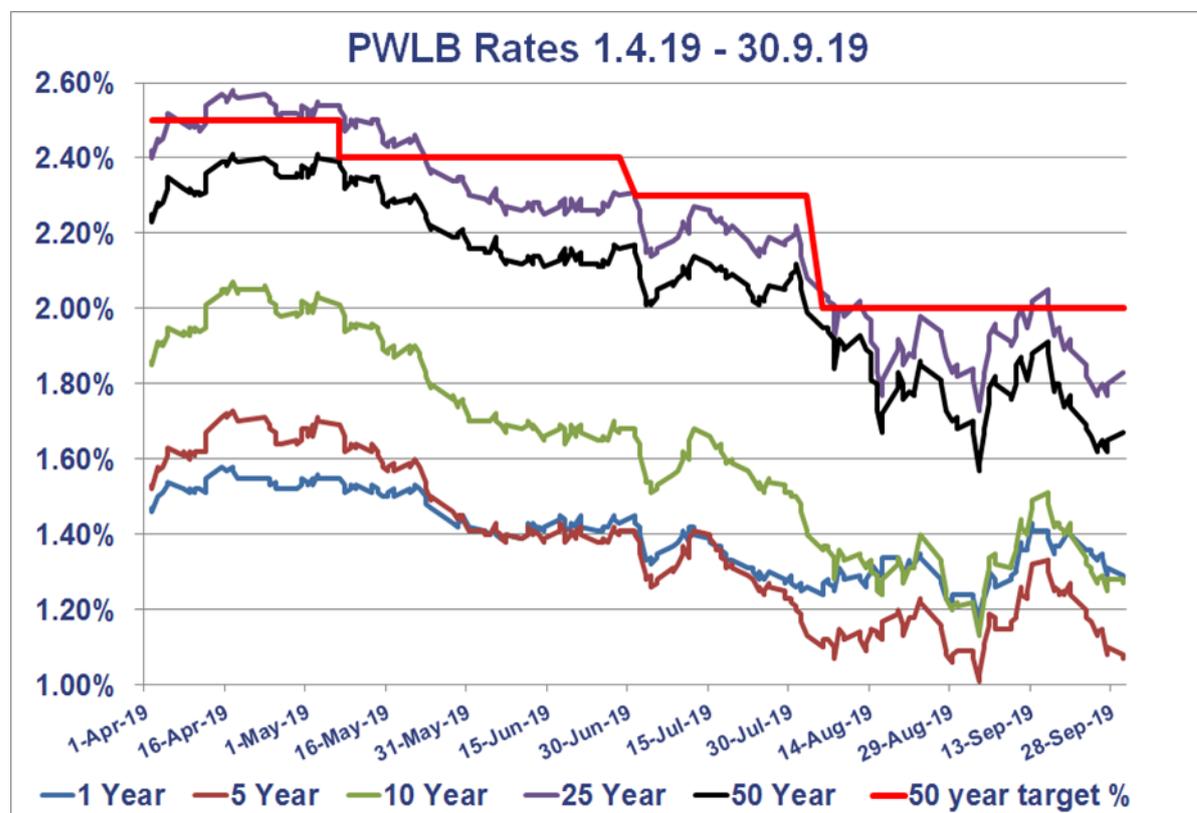
The table and graph below shows the UK Bank of England Bank Rate and benchmark rates within the short term money markets for the last 6 months.



	Bank Rate	7 day	1 mth	3 mth	6 mth	12 mth
High	0.75	0.58	0.61	0.72	0.83	0.98
High Date	01/04/2019	09/05/2019	15/04/2019	01/04/2019	01/04/2019	15/04/2019
Low	0.75	0.55	0.58	0.63	0.65	0.69
Low Date	01/04/2019	05/07/2019	08/08/2019	29/08/2019	04/09/2019	04/09/2019
Average	0.75	0.57	0.60	0.66	0.73	0.83
Spread	0.00	0.03	0.03	0.09	0.18	0.29

PWLB certainty rates 1 April 2019 to 30 September 2019

The graph and table below show the movement in PWLB certainty rates for the first six months of the year to date:



	1 Year	5 Year	10 Year	25 Year	50 Year
Low	1.17%	1.01%	1.13%	1.73%	1.57%
Date	03/09/2019	03/09/2019	03/09/2019	03/09/2019	03/09/2019
High	1.58%	1.73%	2.07%	2.58%	2.41%
Date	15/04/2019	17/04/2019	17/04/2019	17/04/2019	17/04/2019
Average	1.40%	1.37%	1.62%	2.20%	2.07%

Note: The PWLB increased the new standard loan rate to 200 basis points over Gilts effective as of 9th October 2019 (from 100 or 1% over Gilts).

Forecast Interest rates

The Council's treasury advisor, Link Asset Services, has provided the following forecast.

This forecast includes the increase in margin over gilt yields of 100bps (1%) introduced on 9.10.19.

Link Asset Services Interest Rate View										
	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22
Bank Rate View	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.25
3 Month LIBID	0.70	0.70	0.70	0.80	0.90	1.00	1.00	1.00	1.10	1.20
6 Month LIBID	0.80	0.80	0.80	0.90	1.00	1.10	1.10	1.20	1.30	1.40
12 Month LIBID	1.00	1.00	1.00	1.10	1.20	1.30	1.30	1.40	1.50	1.60
5yr PWLB Rate	2.30	2.50	2.60	2.70	2.70	2.80	2.90	3.00	3.00	3.10
10yr PWLB Rate	2.60	2.80	2.90	3.00	3.00	3.10	3.20	3.30	3.30	3.40
25yr PWLB Rate	3.30	3.40	3.50	3.60	3.70	3.70	3.80	3.90	4.00	4.00
50yr PWLB Rate	3.20	3.30	3.40	3.50	3.60	3.60	3.70	3.80	3.90	3.90

The above forecasts have been based on an assumption that there is some sort of muddle through to an agreed deal on Brexit at some point in time. Given the current level of uncertainties, this is a huge assumption and so forecasts may need to be materially reassessed in the light of events over the next few weeks or months.

It has been little surprise that the Monetary Policy Committee (MPC) has left Bank Rate unchanged at 0.75% so far in 2019 due to the ongoing uncertainty over Brexit. In its meeting on 1 August, the MPC became more dovish as it was more concerned about the outlook for both the global and domestic economies. That's shown in the policy statement, based on an assumption that there is an agreed deal on Brexit, where the suggestion that rates would need to rise at a "gradual pace and to a limited extent" is now also conditional on "some recovery in global growth". Brexit uncertainty has had a dampening effect on UK GDP growth in 2019, especially around mid-year. If there were a no deal Brexit, then it is likely that there will be a cut or cuts in Bank Rate to help support economic growth. The September MPC meeting sounded even more concern about world growth and the effect that prolonged Brexit uncertainty is likely to have on growth.

Bond yields / PWLB rates. There has been much speculation recently that we are currently in a bond market bubble. However, given the context that there are heightened expectations that the US could be heading for a recession, and a general background of a downturn in world economic growth, together with inflation generally at low levels in most countries and expected to remain subdued, conditions are ripe for low bond yields. While inflation targeting by the major central banks has been successful over the last thirty years in lowering inflation expectations, the real equilibrium rate for central rates has fallen considerably due to the high level of borrowing by consumers: this means that central banks do not need to raise rates as much now to have a major impact on consumer spending, inflation, etc. This has pulled down the overall level of interest rates and bond yields in financial markets over the last thirty years. We have therefore seen over the last year, many bond yields up to ten years in the Eurozone actually turn negative. In addition, there has, at times, been an inversion of bond yields in the US whereby ten year yields have fallen below shorter term yields. In the past, this has been a precursor of a recession. The other side of this coin is that bond prices are elevated as investors would be expected to be moving out of riskier assets i.e. shares, in anticipation of a downturn in corporate earnings and so selling out of equities. However, stock markets are also currently at high levels as some investors have focused on chasing returns in the context of dismal ultra-low interest rates on cash deposits.

What we saw during the last half year up to 30 September is a near halving of longer term PWLB rates to completely unprecedented historic low levels. (See section 4.10 on the PWLB increase in margin over gilt yields of 100bps introduced on 9.10.19.) There is though, an expectation that financial markets have gone too far in their fears about the degree of the downturn in US and world growth. If, as expected, the US only suffers a mild downturn in growth, bond markets in the US are likely to sell off and that would be expected to put upward pressure on bond yields, not only in the US,

but due to a correlation between US treasuries and UK gilts, which at various times has been strong but at other times weaker, in the UK. However, forecasting the timing of this and how strong the correlation is likely to be, is very difficult to forecast with any degree of confidence.

One potential danger that may be lurking in investor minds is that Japan has become mired in a twenty year bog of failing to get economic growth and inflation up off the floor, despite a combination of massive monetary and fiscal stimulus by both the central bank and government. Investors could be fretting that this condition might become contagious.

Another danger is that unconventional monetary policy post 2008, (ultra-low interest rates plus quantitative easing), may end up doing more harm than good through prolonged use. Low interest rates have encouraged a debt fuelled boom which now makes it harder for economies to raise interest rates. Negative interest rates could damage the profitability of commercial banks and so impair their ability to lend and / or push them into riskier lending. Banks could also end up holding large amounts of their government's bonds and so create a potential doom loop. (A doom loop would occur where the credit rating of the debt of a nation was downgraded which would cause bond prices to fall, causing losses on debt portfolios held by banks and insurers, so reducing their capital and forcing them to sell bonds – which, in turn, would cause further falls in their prices etc.). In addition, the financial viability of pension funds could be damaged by low yields on holdings of bonds.

The balance of risks to the UK

- The overall balance of risks to economic growth in the UK is probably to the downside due to the weight of all the uncertainties over Brexit, as well as a softening global economic picture.
- The balance of risks to increases in Bank Rate and shorter term PWLB rates are broadly similarly to the downside.

One risk that is both an upside and downside risk is that all central banks are now working in very different economic conditions than before the 2008 financial crash. There has been a major increase in consumer and other debt due to the exceptionally low levels of borrowing rates that have prevailed for eleven years since 2008. This means that the neutral rate of interest in an economy, (i.e. the rate that is neither expansionary nor deflationary), is difficult to determine definitively in this new environment, although central banks have made statements that they expect it to be much lower than before 2008. Central banks could, therefore, over or under-do increases in central interest rates.

Downside risks to current forecasts for UK gilt yields and PWLB rates currently include:

- **Brexit** – if it were to cause significant economic disruption and a major downturn in the rate of growth.
- **Bank of England** takes action too quickly, or too far, over the next three years to raise Bank Rate and causes UK economic growth, and increases in inflation, to be weaker than we currently anticipate.
- A resurgence of the **Eurozone sovereign debt crisis**. In 2018, Italy was a major concern due to having a populist coalition government which made a lot of anti-austerity and anti-EU noise. However, in September 2019 there was a major change in the coalition governing Italy which has brought to power a much more EU friendly government; this has eased the pressure on Italian bonds. Only time will tell whether this new unlikely alliance of two very different parties will endure.
- Weak capitalisation of some **European banks**, particularly Italian banks.
- **German minority government**. In the German general election of September 2017, Angela Merkel's CDU party was left in a vulnerable minority position dependent on the fractious support of the SPD party, as a result of the rise in popularity of the anti-immigration AfD party. Then in October 2018, the results of the Bavarian and Hesse state elections radically undermined the SPD party and showed a sharp fall in support for the CDU. As a result, the SPD had a major internal debate as to whether it could continue to support a coalition that is so damaging to its electoral popularity. After the result of the Hesse state election, Angela Merkel announced that she would not stand for re-election as CDU party leader at her party's

convention in December 2018. However, this makes little practical difference as she has continued as Chancellor, though more recently concerns have arisen over her health.

- **Other minority EU governments.** Austria, Sweden, Spain, Portugal, Netherlands and Belgium all have vulnerable minority governments dependent on coalitions which could prove fragile.
- **Italy, Austria, the Czech Republic and Hungary** now form a strongly anti-immigration bloc within the EU. There has also been rising anti-immigration sentiment in Germany and France.
- There are concerns around the level of **US corporate debt** which has swollen massively during the period of low borrowing rates in order to finance mergers and acquisitions. This has resulted in the debt of many large corporations being downgraded to a BBB credit rating, close to junk status. Indeed, 48% of total investment grade corporate debt is rated at BBB. If such corporations fail to generate profits and cash flow to reduce their debt levels as expected, this could tip their debt into junk ratings which will increase their cost of financing and further negatively impact profits and cash flow.
- **Geopolitical risks**, for example in North Korea, but also in Europe and the Middle East, which could lead to increasing safe haven flows.

Upside risks to current forecasts for UK gilt yields and PWLB rates

- **Brexit** – if agreement was reached all round that removed all threats of economic and political disruption between the EU and the UK.
- The **Bank of England is too slow** in its pace and strength of increases in Bank Rate and, therefore, allows inflationary pressures to build up too strongly within the UK economy, which then necessitates a later rapid series of increases in Bank Rate faster than we currently expect.
- **UK inflation**, whether domestically generated or imported, returning to sustained significantly higher levels causing an increase in the inflation premium inherent to gilt yields.