APPENDIX A: ECONOMICS AND INTEREST RATES

1) Economic Update

UK. This first half year has been a time of upheaval on the political front as Theresa May resigned as Prime Minister to be replaced by Boris Johnson on a platform of the UK leaving the EU on or 31 October, with or without a deal. However, in September, his proroquing of Parliament was overturned by the Supreme Court and Parliament carried a bill to delay Brexit until 31 January 2020 if there is no deal by 31 October. MPs also voted down holding a general election before 31 October, though one is likely before the end of 2019. So far, there has been no majority of MPs for any one option to move forward on enabling Brexit to be implemented. At the time of writing, (first week in October), the whole Brexit situation is highly fluid and could change radically by the day. Given these circumstances and the likelihood of an imminent general election, any interest rate forecasts are subject to material change as the situation evolves. If the UK does soon achieve a deal on Brexit agreed with the EU, including some additional clarification wording on the Irish border backstop, then it is possible that growth could recover relatively quickly. The MPC could then need to address the issue of whether to raise Bank Rate when there is very little slack left in the labour market: this could cause wage inflation to accelerate which would then feed through into general inflation. On the other hand, if there was a no deal Brexit and there was a significant level of disruption to the economy, then growth could weaken even further than currently and the MPC would be likely to cut Bank Rate in order to support growth. However, with Bank Rate still only at 0.75%, it has relatively little room to make a big impact and the MPC would probably suggest that it would be up to the Chancellor to provide help to support growth by way of a fiscal boost by e.g. tax cuts, increases in government departments and services annual expenditure budgets and expenditure on infrastructure projects, to boost the economy.

The first half of 2019/20 has seen UK **economic growth** fall as Brexit uncertainty took a toll. In its Inflation Report of 1 August, the Bank of England was notably downbeat about the outlook for both the UK and major world economies. The MPC meeting of 19 September reemphasised their concern about the downturn in world growth and also expressed concern that the prolonged Brexit uncertainty would contribute to a build-up of spare capacity in the UK economy, especially in the context of a downturn in world growth. This mirrored investor concerns around the world which are now expecting a significant downturn or possibly even a recession in some major developed economies. It was therefore no surprise that the Monetary Policy Committee (MPC) left Bank Rate unchanged at 0.75% throughout 2019, so far, and is expected to hold off on changes until there is some clarity on what is going to happen over Brexit. However, it is also worth noting that the new Prime Minister is making some significant promises on various spending commitments and a relaxation in the austerity programme. This will provide some support to the economy and, conversely, take some pressure off the MPC to cut Bank Rate to support growth.

As for **inflation** itself, CPI has been hovering around the Bank of England's target of 2% during 2019, but fell to 1.7% in August. It is likely to remain close to 2% over the next two years and so it does not pose any immediate concern to the MPC at the current time. However, if there was a no deal Brexit, inflation could rise towards 4%, primarily as a result of imported inflation on the back of a weakening pound.

With regard to the **labour market**, despite the contraction in quarterly GDP growth of - 0.2%q/q, (+1.3% y/y), in quarter 2, employment continued to rise, but at only a muted rate

of 31,000 in the three months to July after having risen by no less than 115,000 in quarter 2 itself: the latter figure, in particular, suggests that firms are preparing to expand output and suggests there could be a return to positive growth in guarter 3. Unemployment continued at a 44 year low of 3.8% on the Independent Labour Organisation measure in July and the participation rate of 76.1% achieved a new all-time high. Job vacancies fell for a seventh consecutive month after having previously hit record levels. However, with unemployment continuing to fall, this month by 11,000, employers will still be having difficulty filling job vacancies with suitable staff. It was therefore unsurprising that wage inflation picked up to a high point of 3.9% in June before easing back slightly to 3.8% in July, (3 month average regular pay, excluding bonuses). This meant that in real terms, (i.e. wage rates higher than CPI inflation), earnings grew by about 2.1%. As the UK economy is very much services sector driven, an increase in household spending power is likely to feed through into providing some support to the overall rate of economic growth in the coming months. The latest GDP statistics also included a revision of the savings ratio from 4.1% to 6.4% which provides reassurance that consumers' balance sheets are not over stretched and so will be able to support growth going forward. This would then mean that the MPC will need to consider carefully at what point to take action to raise Bank Rate if there is an agreed Brexit deal, as the recent pick-up in wage costs is consistent with a rise in core services inflation to more than 4% in 2020.

In the **political arena**, if there is a general election soon, this could result in a potential loosening of monetary policy and therefore medium to longer dated gilt yields could rise on the expectation of a weak pound and concerns around inflation picking up although, conversely, a weak international backdrop could provide further support for low yielding government bonds and gilts.

USA. President Trump's massive easing of fiscal policy in 2018 fuelled a temporary boost in consumption in that year which generated an upturn in the rate of strong growth to 2.9% y/y. Growth in 2019 has been falling back after a strong start in quarter 1 at 3.1%, (annualised rate), to 2.0% in guarter 2. Quarter 3 is expected to fall further. The strong growth in employment numbers during 2018 has reversed into a falling trend during 2019, indicating that the economy is cooling, while inflationary pressures are also weakening The Fed finished its series of increases in rates to 2.25 – 2.50% in December 2018. In July 2019, it cut rates by 0.25% as a 'midterm adjustment' but flagged up that this was not to be seen as the start of a series of cuts to ward off a downturn in growth. It also ended its programme of quantitative tightening in August, (reducing its holdings of treasuries etc). It then cut rates again in September to 1.75% - 2.00% and is thought likely to cut another 25 bps in December. Investor confidence has been badly rattled by the progressive ramping up of increases in tariffs President Trump has made on Chinese imports and China has responded with increases in tariffs on American imports. This trade war is seen as depressing US, Chinese and world growth. In the EU, it is also particularly impacting Germany as exports of goods and services are equivalent to 46% of total GDP. It will also impact developing countries dependent on exporting commodities to China.

EUROZONE. Growth has been slowing from +1.8 % during 2018 to around half of that in 2019. Growth was +0.4% q/q (+1.2% y/y) in quarter 1 and then fell to +0.2% q/q (+1.0% y/y) in quarter 2; there appears to be little upside potential to the growth rate in the rest of 2019. German GDP growth fell to -0.1% in quarter 2; industrial production was down 4% y/y in June with car production down 10% y/y. Germany would be particularly vulnerable to a no deal Brexit depressing exports further and if President Trump imposes tariffs on EU produced cars. The European Central Bank (ECB) ended its programme of quantitative easing purchases of debt in December 2018, which meant that the central banks in the US, UK and EU had all ended the phase of post financial crisis expansion of liquidity

supporting world financial markets by purchases of debt. However, the downturn in EZ growth in the second half of 2018 and into 2019, together with inflation falling well under the upper limit of its target range of 0 to 2%, (but it aims to keep it near to 2%), has prompted the ECB to take new measures to stimulate growth. At its March meeting it said that it expected to leave interest rates at their present levels "at least through the end of 2019", but that was of little help to boosting growth in the near term. Consequently, it announced a third round of TLTROs; this provides banks with cheap borrowing every three months from September 2019 until March 2021 which means that, although they will have only a two-year maturity, the Bank is making funds available until 2023, two years later than under its previous policy. As with the last round, the new TLTROs will include an incentive to encourage bank lending, and they will be capped at 30% of a bank's eligible loans. However, since then, the downturn in EZ and world growth has gathered momentum so at its meeting on 12 September, it cut its deposit rate further into negative territory, from -0.4% to -0.5%, and announced a resumption of quantitative easing purchases of debt. It also increased the maturity of the third round of TLTROs from two to three years. However, it is doubtful whether this loosening of monetary policy will have much impact on growth and unsurprisingly, the ECB stated that governments will need to help stimulate growth by fiscal policy. On the political front, Austria, Spain and Italy are in the throes of forming coalition governments with some unlikely combinations of parties i.e. this raises questions around their likely endurance. The recent results of two German state elections will put further pressure on the frail German CDU/SDP coalition government.

CHINA. Economic growth has been weakening over successive years, despite repeated rounds of central bank stimulus; medium term risks are increasing. Major progress still needs to be made to eliminate excess industrial capacity and the stock of unsold property, and to address the level of non-performing loans in the banking and credit systems. Progress also still needs to be made to eliminate excess industrial capacity and to switch investment from property construction and infrastructure to consumer goods production. The trade war with the US does not appear currently to have had a significant effect on GDP growth as some of the impact of tariffs has been offset by falls in the exchange rate and by transhipping exports through other countries, rather than directly to the US.

JAPAN - has been struggling to stimulate consistent significant GDP growth and to get inflation up to its target of 2%, despite huge monetary and fiscal stimulus. It is also making little progress on fundamental reform of the economy.

WORLD GROWTH. The trade war between the US and China is a major concern to financial markets and is depressing worldwide growth, as any downturn in China will spill over into impacting countries supplying raw materials to China. Concerns are focused on the synchronised general weakening of growth in the major economies of the world compounded by fears that there could even be a recession looming up in the US, though this is probably overblown. These concerns have resulted in government bond yields in the developed world falling significantly during 2019. If there were a major worldwide downturn in growth, central banks in most of the major economies will have limited ammunition available, in terms of monetary policy measures, when rates are already very low in most countries, (apart from the US), and there are concerns about how much distortion of financial markets has already occurred with the current levels of quantitative easing purchases of debt by central banks. The latest PMI survey statistics of economic health for the US, UK, EU and China have all been sub 50 which gives a forward indication of a downturn in growth; this confirms investor sentiment that the outlook for growth during the rest of this financial year is weak.

2) Interest rate forecasts

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

Link Asset Services Interest Rate View											
	Sep-19	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	0.75	1.00	1.00	1.00	1.00	1.00	1.25
3 Month LIBID	0.70	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	0.80	0.90	1.00	1.10	1.10	1.20	1.30	1.40
12 Month LIBID	1.00	1.00	1.00	1.00	1.10	1.20	1.30	1.30	1.40	1.50	1.60
5yr PWLB Rate	2.20	2.30	2.50	2.60	2.70	2.70	2.80	2.90	3.00	3.00	3.10
10yr PWLB Rate	2.50	2.60	2.80	2.90	3.00	3.00	3.10	3.20	3.30	3.30	3.40
25yr PWLB Rate	3.10	3.30	3.40	3.50	3.60	3.70	3.70	3.80	3.90	4.00	4.00
50yr PWLB Rate	3.00	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 have seen during the last half year is a near halving of longer term PWLB rates to completely unprecedented historic low levels. 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 antiimmigration 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.