APPENDIX A: ECONOMICS AND INTEREST RATES

1. Economic Update

- The Monetary Policy Committee (MPC) voted unanimously to leave Bank Rate unchanged at 0.10% and made no changes to its programme of quantitative easing purchases due to finish by the end of this year at a total of £895bn; only one MPC member voted to stop these purchases now to leave total purchases £45bn short of the total target.
- While that was all very much unchanged from previous MPC decisions over the last year, there was a major shift from indicating no expected tightening any time soon to now flagging up that interest rate increases were now on the horizon. There was disagreement among MPC members, some of whom felt that the forward guidance that the MPC won't tighten policy until inflation "is achieving the 2% inflation target sustainably", had already been met. Although other MPC members did not agree with them, they did all agree that "some modest tightening of monetary policy over the forecast period was likely to be necessary to be consistent with meeting the inflation target sustainably in the medium term".
- The MPC was more upbeat in its new 2-3 year forecasts so whereas they had expected unemployment to peak at 5.4% in Q3, the MPC now thought that the peak had already passed. (It is to be noted though, that the recent spread of the Delta variant has damaged growth over the last couple of months and has set back recovery to the pre-pandemic level of economic activity till probably late 2021.)
- We have been waiting for the MPC to conclude a **review of its monetary policy** as to whether it should raise Bank Rate first before reducing its balance sheet (quantitative easing) holdings of bonds. This review has now been completed so we learnt that it will start to tighten monetary policy by: -
 - 1. Placing the focus on raising Bank Rate as "the active instrument in most circumstances".
 - 2. Raising Bank Rate to 0.50% (1.50% previously), before starting on reducing its holdings.
 - 3. Once Bank Rate is at 0.50% it would stop reinvesting maturing gilts.
 - 4. Once Bank Rate had risen to at least 1%, it would start selling its holdings.
- What the MPC did not give us was any indication on when it would start raising Bank Rate. Inflation is currently expected to peak at over 4% during 2021. The key issue then is whether this is just going to be transitory inflation or whether it will morph into inflation which will exceed the MPC's 2% target on an ongoing basis. In his press conference, Governor Andrew Bailey said, "the challenge of avoiding a steep rise in unemployment has been replaced by that of ensuring a flow of labour into jobs" and that "the Committee will be monitoring closely the incoming evidence regarding developments in the labour market, and particularly unemployment, wider measures of slack, and underlying wage pressures." In other words, it's worried that labour shortages will push up wage growth by more than it expects and that, as a result, CPI inflation will stay above the 2% target for longer. Which then raises an interesting question as to whether the million or so workers who left the UK during the pandemic, will come back to the UK and help to relieve wage inflation pressures. We also have an unknown as to how trade with the EU will evolve once the

pandemic distortions have dissipated now that the UK no longer has tariff free access to EU markets.

At the current time, the MPC's forecasts are showing inflation close to, but just below, its 2% target in 2 to 3 years' time. The initial surge in inflation in 2021 and 2022 is due to a combination of base effects, one off energy price increases and a release of pent-up demand, particularly from consumers who have accumulated massive savings during the pandemic, hitting supply constraints. However, these effects will gradually subside or fall out of the calculation of inflation. The issue for the MPC will, therefore, turn into a question of when the elimination of spare capacity in the economy takes over as being the main driver to push inflation upwards and this could then mean that the MPC will not start tightening policy until 2023. Remember, the MPC has sets its policy as being wanting to see inflation coming in sustainably over 2% to counteract periods when inflation was below 2%. While financial markets have been pricing in a hike in Bank Rate to 0.25% by mid-2022, and to 0.50% by the end of 2022, they appear to be getting ahead of themselves. The first increase to 0.25% is more likely to come later; our forecast shows the first increase in Q1 of 23/24 and the second to 0.50% in Q4 of 23/24. The second increase would then open the way for the Bank to cease reinvesting maturing bonds sometime during 2024.

Gilt and treasury yields

Since the start of 2021, we have seen a lot of volatility in gilt yields, and hence PWLB rates. During the first part of the year, US President Biden's, and the Democratic party's determination to push through a \$1.9trn (equivalent to 8.8% of GDP) fiscal boost for the US economy as a recovery package from the Covid pandemic was what unsettled financial markets. However, this was in addition to the \$900bn support package already passed in December 2020 under President Trump. This was then followed by additional Democratic ambition to spend further huge sums on infrastructure and an American families plan over the next decade which are caught up in Democrat / Republican haggling. Financial markets were alarmed that all this stimulus, which is much bigger than in other western economies, was happening at a time in the US when: -

- 1. A fast vaccination programme has enabled a rapid opening up of the economy.
- 2. The economy had already been growing strongly during 2021.
- It started from a position of little spare capacity due to less severe lockdown measures than in many other countries. A combination of shortage of labour and supply bottle necks is likely to stoke inflationary pressures more in the US than in other countries.
- 4. And the Fed was still providing monetary stimulus through monthly QE purchases.

These factors could cause an excess of demand in the economy which could then unleash stronger and more sustained inflationary pressures in the US than in other western countries. This could then force the Fed to take much earlier action to start tapering monthly QE purchases and/or increasing the Fed rate from near zero, despite their stated policy being to target average inflation. It is notable that some Fed members have moved forward their expectation of when the first increases in the Fed rate will occur in recent Fed meetings. In addition, more recently, shortages of workers appear to be stoking underlying wage inflationary pressures which are likely to feed through into CPI inflation. A run of strong monthly jobs growth figures could be enough to meet the threshold set by the Fed of "substantial further progress towards the goal of reaching full employment". However, the weak growth in August, (announced 3.9.21), has spiked

anticipation that tapering of monthly QE purchases could start by the end of 2021. These purchases are currently acting as downward pressure on treasury yields. As the US financial markets are, by far, the biggest financial markets in the world, any trend upwards in the US will invariably impact and influence financial markets in other countries. However, during June and July, longer term yields fell sharply; even the large non-farm payroll increase in the first week of August seemed to cause the markets little concern, which is somewhat puzzling, particularly in the context of the concerns of many commentators that inflation may not be as transitory as the Fed is expecting it to be. Indeed, inflation pressures and erosion of surplus economic capacity look much stronger in the US than in the UK. As an average since 2011, there has been a 75% correlation between movements in 10 year treasury yields and 10 year gilt yields. This is a significant UPWARD RISK exposure to our forecasts for longer term PWLB rates. However, gilt yields and treasury yields do not always move in unison.

There are also possible **DOWNSIDE RISKS** from the huge sums of cash that the UK populace have saved during the pandemic; when savings accounts earn little interest, it is likely that some of this cash mountain could end up being invested in bonds and so push up demand for bonds and support their prices i.e., this would help to keep their yields down. How this will interplay with the Bank of England eventually getting round to not reinvesting maturing gilts and then later selling gilts, will be interesting to keep an eye on.

A new era – a fundamental shift in central bank monetary policy

One of the key results of the pandemic has been a fundamental rethinking and shift in monetary policy by major central banks like the Fed, the Bank of England and the ECB, to tolerate a higher level of inflation than in the previous two decades when inflation was the prime target to bear down on so as to stop it going above a target rate. There is now also a greater emphasis on other targets for monetary policy than just inflation, especially on 'achieving broad and inclusive "maximum" employment in its entirety' in the US before consideration would be given to increasing rates. Although there are nuances between the monetary policy of all three banks, the overall common ground is allowing the inflation target to be symmetrical so that inflation averages out the dips down and surges above the target rate, over an unspecified period of time. For local authorities, this means that interest rates will not be rising as quickly or as high as in previous decades when the economy recovers from a downturn and the recovery eventually runs out of spare capacity to fuel continuing expansion. Labour market liberalisation since the 1970s has helped to break the wage-price spirals that fuelled high levels of inflation and has now set inflation on a lower path which makes this shift in monetary policy practicable. In addition, recent changes in flexible employment practices, the rise of the gig economy and technological changes, will all help to lower inflationary pressures. Governments will also be concerned to see interest rates stay lower as every rise in central rates will add to the cost of vastly expanded levels of national debt; (in the UK this is £21bn for each 1% rise in rates). On the other hand, higher levels of inflation will help to erode the real value of total public debt.

Globally, our views on economies are as follows: -

• **EU.** The slow role out of vaccines initially delayed economic recovery in early 2021 but the vaccination rate has picked up sharply since then. After a contraction of -0.3% in Q1, Q2 came in with strong growth of 2.2% which is likely to continue into Q3, though some countries more dependent on tourism may struggle. There is little

sign that underlying inflationary pressures are building to cause the ECB any concern.

- China. After a concerted effort to get on top of the virus outbreak in Q1 2020, economic recovery was strong in the rest of the year; this enabled China to recover all the initial contraction. Policy makers both quashed the virus and implemented a programme of monetary and fiscal support that was particularly effective at stimulating short-term growth. At the same time, China's economy benefited from the shift towards online spending by consumers in developed markets. These factors helped to explain its comparative outperformance compared to western economies during 2021. However, the pace of economic growth will fall back after this initial surge of recovery from the pandemic. China is also now struggling to contain the spread of the Delta variant through sharp local lockdowns which will damage economic growth. There are also questions as to how effective Chinese vaccines are proving.
- Japan. After declaring a second state of emergency on 7th January, which
 depressed growth in Q1 2021, the economy was expected to make a strong
 recovery to pre-pandemic GDP levels in the rest of the year as the slow role out of
 vaccines eventually gathers momentum. However, the Delta variant has now raised
 questions as to whether lockdowns will be needed to contain it and to protect the
 health service from being overwhelmed.
- World growth. Further progress on vaccine rollouts, continued policy support, and the re-opening of most major economies should mean that global GDP growth in 2021 will grow at its fastest rate since 1973. The spread of the Delta variant poses the greatest risk to this view, particularly in large parts of the emerging world where vaccination coverage is typically lower than in advanced economies. Continued strong recovery will be accompanied by higher inflation. While most of the arithmetic and commodity price effects boosting inflation in recent months are behind us, goods shortages will last well into 2022 as order backlogs are worked through and inventories are replenished. What's more there is mounting evidence that rapid reopening of economies generates labour shortages, which could exert further upward pressure on firms' costs. So, global inflation is unlikely to drop back until next year.

2) Interest rate forecasts

The Council's treasury advisor, Link Group, provided the following forecasts on 10th August 2021 (PWLB rates are certainty rates, gilt yields plus 80bps):

Link Group Interest Rate View		10.8.21									
	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
BANK RATE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.25	0.25	0.25	0.50
3 month ave earnings	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.30	0.30	0.30	0.50
6 month ave earnings	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.30	0.40	0.50	0.50
12 month ave earnings	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.40	0.50	0.60	0.70
5 yr PWLB	1.20	1.20	1.20	1.30	1.30	1.30	1.40	1.40	1.40	1.50	1.50
10 yr PWLB	1.60	1.60	1.70	1.70	1.80	1.80	1.90	1.90	1.90	2.00	2.00
25 yr PWLB	1.90	2.00	2.10	2.20	2.30	2.30	2.30	2.40	2.40	2.40	2.50
50 yr PWLB	1.70	1.80	1.90	2.00	2.10	2.10	2.10	2.20	2.20	2.20	2.30

Additional notes by Link on this forecast table: -

- LIBOR and LIBID rates will cease from the end of 2021. Work is currently progressing to replace LIBOR with a rate based on SONIA (Sterling Overnight Index Average). In the meantime, our forecasts are based on expected average earnings by local authorities for 3 to 12 months.
- Our forecasts for average earnings are averages i.e., rates offered by individual banks may differ significantly from these averages, reflecting their different needs for borrowing short term cash at any one point in time.
- We will maintain continuity by providing clients with LIBID investment benchmark rates on the current basis.

The coronavirus outbreak has done huge economic damage to the UK and to economies around the world. After the Bank of England took emergency action in March 2020 to cut Bank Rate to 0.10%, it left Bank Rate unchanged at its subsequent meetings, although some forecasters had suggested that a cut into negative territory could have happened prior to more recent months when strong recovery started kicking in. However, the minutes of the Monetary Policy Committee in February 2021 made it clear that commercial banks could not implement negative rates within six months; by that time the economy would be expected to be recovering strongly and so there would be no requirement for negative rates. As shown in the forecast table above, one increase in Bank Rate from 0.10% to 0.25% has now been included in quarter 1 of 2023/24 and another increase to 0.50% in quarter 4 of 23/24, as an indication that the Bank of England will be starting monetary tightening during this year.

PWLB RATES. There was much speculation during the second half of 2019 that bond markets were in a bubble which was driving bond prices up and yields down to historically very low levels. The context for that was heightened expectations that the US could have been heading for a recession in 2020. In addition, there were growing expectations of a downturn in world economic growth, especially due to fears around the impact of the trade war between the US and China, together with inflation generally at low levels in most countries and expected to remain subdued. Combined, these conditions were conducive to very low bond yields. While inflation targeting by the major central banks has been successful over the last 30 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. The consequence of this has been the gradual lowering of the overall level of interest rates and bond yields in financial markets. Over the year prior to the coronavirus crisis, this resulted in many bond yields up to 10 years turning negative in the Eurozone. In addition, there was, at times, an inversion of bond yields in the US whereby 10 year yields fell below shorter-term yields. In the past, this has been a precursor of a recession.

Gilt yields had, therefore, already been on a generally falling trend up until the coronavirus crisis hit western economies during March 2020 which caused gilt yields to spike up. However, yields then fell sharply in response to major western central banks taking rapid policy action to deal with excessive stress in financial markets during March and starting massive quantitative easing driven purchases of government bonds: these actions also acted to put downward pressure on government bond yields at a time when there was a huge and quick expansion of government expenditure financed by issuing government bonds. Such unprecedented levels of issuance in "normal" times would have caused bond yields to rise sharply.

At the start of January 2021, all gilt yields from 1 to 8 years were negative: however, since then all gilt yields have become positive and rose sharply, especially in medium and longer-term periods, until starting a significant decline since May. The main driver of the increases was investors becoming progressively more concerned at the way that inflation was expected to rise sharply in major western economies during 2021 and 2022. However, repeated assurances by the Fed in the US, and by other major world central banks, that inflation would spike up after Covid restrictions were abolished, but would only be transitory, have eventually allayed those investor fears. However, there is an alternative view that the US Fed is taking a too laid-back view that inflation pressures in the US are purely transitory and that they will subside without the need for the Fed to take any action to tighten monetary policy. This could mean that US rates will end up rising faster and sharper if inflationary pressures were to escalate; the consequent increases in treasury yields could well spill over to cause (lesser) increases in gilt yields.

As the interest forecast table for PWLB certainty rates, (gilts plus 80bps), above shows, there is likely to be an unwinding of the currently depressed levels of PWLB rates and a steady rise over the forecast period, with some degree of uplift due to rising treasury yields in the US.

There is likely to be exceptional volatility and unpredictability in respect of gilt yields and PWLB rates due to the following factors: -

- How strongly will changes in gilt yields be correlated to changes in US treasury yields?
- Will the Fed take action to counter increasing treasury yields if they rise beyond a vet unspecified level?
- Would the MPC act to counter increasing gilt yields if they rise beyond a yet unspecified level?
- How strong will inflationary pressures turn out to be in both the US and the UK and so impact treasury and gilt yields?
- How will central banks implement their new average or sustainable level inflation monetary policies?
- How well will central banks manage the withdrawal of QE purchases of their national bonds i.e., without causing a panic reaction in financial markets as happened in the "taper tantrums" in the US in 2013?
- Will exceptional volatility be focused on the short or long-end of the yield curve, or both?

The forecasts are also predicated on an assumption that there is no break-up of the Eurozone or EU within our forecasting period, despite the major challenges that are looming up, and that there are no major ructions in international relations, especially between the US and China / North Korea and Iran, which have a major impact on international trade and world GDP growth.

The balance of risks to the UK

- The overall balance of risks to economic growth in the UK is now to the upside though there are still residual risks from Covid variants - both domestically and their potential effects worldwide, and from various shortages.
- There is relatively little domestic risk of increases in Bank Rate exceeding 0.50% in the next two to three years and, therefore, in shorter-term PWLB rates.

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

- Mutations of the virus render current vaccines ineffective, and tweaked vaccines to combat these mutations are delayed, resulting in further national lockdowns or severe regional restrictions.
- MPC acts too quickly in unwinding QE or increasing Bank Rate and causes UK economic growth, and increases in inflation, to be weaker than we currently anticipate.
- The Government implements an **austerity programme** that supresses GDP growth.
- Labour and material shortages do not ease over the next few months and further stifle economic recovery.
- The lockdowns cause major long-term scarring of the economy.
- UK / EU trade arrangements if there was a major impact on trade flows and financial services due to complications or lack of co-operation in sorting out significant remaining issues.
- A resurgence of the Eurozone sovereign debt crisis. The ECB has taken monetary policy action to support the bonds of EU states, with the positive impact most likely for "weaker" countries. In addition, the EU agreed a €750bn fiscal support package which has still to be disbursed. These actions will help shield weaker economic regions in the near-term. However, in the case of Italy, the cost of the virus crisis has added to its already huge debt mountain and its slow economic growth will leave it vulnerable to markets returning to taking the view that its level of debt is unsupportable. There remains a sharp divide between northern EU countries favouring low debt to GDP and annual balanced budgets and southern countries who want to see jointly issued Eurobonds to finance economic recovery. This divide could undermine the unity of the EU in time to come.
- Weak capitalisation of some European banks, which could be undermined further depending on the extent of credit losses resulting from the pandemic.
- German minority government & general election in September 2021. 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,
 because of the rise in popularity of the anti-immigration AfD party. Subsequently, the
 CDU has done badly in state elections, but the SPD has done even worse. Angela
 Merkel has stepped down from being the CDU party leader but remains as Chancellor

until the general election in 2021. Her appointed successor has not attracted wide support from voters and the result of the general election could well lead to some form of coalition government, though there could be a question as to whether the CDU will be part of it which, in turn, could then raise an issue over the tenure of her successor. This then leaves a question mark over who the major guiding hand and driver of EU unity will be.

- Other minority EU governments. Austria, Sweden, Spain, Portugal, Netherlands, Ireland and Belgium also have vulnerable minority governments dependent on coalitions which could prove fragile and, therein, impact market confidence/economic prospects and lead to increasing safe-haven flows.
- Major stock markets e.g., in the US, become increasingly judged as being overvalued and susceptible to major price corrections. Central banks become increasingly exposed to the "moral hazard" risks of having to buy shares and corporate bonds to reduce the impact of major financial market selloffs on the general economy.
- **Geopolitical risks,** for example in China, Iran or North Korea, but also in Europe and other Middle Eastern countries, which could lead to increasing safe-haven flows.

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

- Longer term US treasury yields rise strongly and pull UK gilt yields up higher than forecast.
- Vaccinations are even more successful than expected and eradicate hesitancy around a full return to normal life, which leads into a stronger than currently expected recovery in UK and/or other major developed economies.
- 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.