

Economic Background provided by Link Group

1. COVID-19 vaccines. These were the game changer during 2021 which raised high hopes that life in the UK would be able to largely return to normal in the second half of the year. However, the bursting onto the scene of the Omicron mutation at the end of November, rendered the initial two doses of all vaccines largely ineffective in preventing infection. This has dashed such hopes and raises the spectre again that a fourth wave of the virus could overwhelm hospitals in early 2022. What we now know is that this mutation is very fast spreading with the potential for total case numbers to double every two to three days, although it possibly may not cause so much severe illness as previous mutations. Rather than go for full lockdowns which heavily damage the economy, the government strategy this time is focusing on getting as many people as possible to have a third (booster) vaccination after three months from the previous last injection, as a booster has been shown to restore a high percentage of immunity to Omicron to those who have had two vaccinations. There is now a race on between how quickly boosters can be given to limit the spread of Omicron, and how quickly will hospitals fill up and potentially be unable to cope. In the meantime, workers have been requested to work from home and restrictions have been placed on large indoor gatherings and hospitality venues. With the household saving rate having been exceptionally high since the first lockdown in March 2020, there is plenty of pent-up demand and purchasing power stored up for services in sectors like restaurants, travel, tourism and hotels which had been hit hard during 2021, but could now be hit hard again by either, or both, of government restrictions and/or consumer reluctance to leave home. Growth will also be lower due to people being ill and not working, similar to the pingdemic in July. The economy, therefore, faces significant headwinds although some sectors have learned how to cope well with Covid. However, the biggest impact on growth would come from another lockdown if that happened. The big question still remains as to whether any further mutations of this virus could develop which render all current vaccines ineffective, as opposed to how quickly vaccines can be modified to deal with them and enhanced testing programmes be implemented to contain their spread until tweaked vaccines become widely available.

A Summary Overview of the Future Path of Bank Rate

2. In December, the Bank of England became the first major western central bank to put interest rates up in this upswing in the current business cycle in western economies as recovery progresses from the Covid recession of 2020.
3. The next increase in Bank Rate could be in February or May, dependent on how severe an impact there is from Omicron.
4. If there are lockdowns in January, this could pose a barrier for the MPC to putting Bank Rate up again as early as 3rd February.
5. With inflation expected to peak at around 6% in April, the MPC may want to be seen to be active in taking action to counter inflation on 5th May, the release date for its Quarterly Monetary Policy Report.
6. The December 2021 MPC meeting was more concerned with combating inflation over the medium term than supporting economic growth in the short term.

7. Bank Rate increases beyond May are difficult to forecast as inflation is likely to drop sharply in the second half of 2022.
8. However, the MPC will want to normalise Bank Rate over the next three years so that it has its main monetary policy tool ready to use in time for the next down-turn; all rates under 2% are providing stimulus to economic growth.
9. We have put year end 0.25% increases into Q1 of each financial year from 2023 to recognise this upward bias in Bank Rate - but the actual timing in each year is difficult to predict.
10. Covid remains a major potential downside threat in all three years as we ARE likely to get further mutations.
11. How quickly can science come up with a mutation proof vaccine, or other treatment, – and for them to be widely administered around the world?
12. Purchases of gilts under QE ended in December. Note that when Bank Rate reaches 0.50%, the MPC has said it will start running down its stock of QE.

MPC meeting 16 December 2021

13. The Monetary Policy Committee (MPC) voted 8-1 to raise Bank Rate by 0.15% from 0.10% to 0.25% and unanimously decided to make no changes to its programme of quantitative easing purchases due to finish in December 2021 at a total of £895bn.
14. The MPC disappointed financial markets by not raising Bank Rate at its November meeting. Until Omicron burst on the scene, most forecasters, therefore, viewed a Bank Rate increase as being near certain at this December meeting due to the way that inflationary pressures have been comprehensively building in both producer and consumer prices, and in wage rates. However, at the November meeting, the MPC decided it wanted to have assurance that the labour market would get over the end of the furlough scheme on 30 September without unemployment increasing sharply; their decision was, therefore, to wait until statistics were available to show how the economy had fared at this time.
15. On 10 December we learnt of the disappointing 0.1% m/m rise in GDP in October which suggested that economic growth had already slowed to a crawl even before the Omicron variant was discovered in late November. Early evidence suggests growth in November might have been marginally better. Nonetheless, at such low rates of growth, the government's "Plan B" COVID-19 restrictions could cause the economy to contract in December.
16. On 14 December, the labour market statistics for the three months to October and the single month of October were released. The fallout after the furlough scheme was smaller and shorter than the Bank of England had feared. The single-month data were more informative and showed that LFS employment fell by 240,000, unemployment increased by 75,000 and the unemployment rate rose from 3.9% in September to 4.2%. However, the weekly data suggested this didn't last long as unemployment was falling

again by the end of October. What's more, the 49,700 fall in the claimant count and the 257,000 rise in the PAYE measure of company payrolls suggests that the labour market strengthened again in November. The other side of the coin was a further rise in the number of vacancies from 1.182m to a record 1.219m in the three months to November which suggests that the supply of labour is struggling to keep up with demand, although the single-month figure for November fell for the first time since February, from 1.307m to 1.227m.

17. These figures by themselves, would probably have been enough to give the MPC the assurance that it could press ahead to raise Bank Rate at this December meeting. However, the advent of Omicron potentially threw a spanner into the works as it poses a major headwind to the economy which, of itself, will help to cool the economy. The financial markets, therefore, swung round to expecting no change in Bank Rate.
18. On 15 December we had the CPI inflation figure for November which spiked up further from 4.2% to 5.1%, confirming again how inflationary pressures have been building sharply. However, Omicron also caused a sharp fall in world oil and other commodity prices; (gas and electricity inflation has generally accounted on average for about 60% of the increase in inflation in advanced western economies).
19. Other elements of inflation are also transitory e.g., prices of goods being forced up by supply shortages, and shortages of shipping containers due to ports being clogged have caused huge increases in shipping costs. But these issues are likely to clear during 2022, and then prices will subside back to more normal levels. Gas prices and electricity prices will also fall back once winter is passed and demand for these falls away.
20. Although it is possible that the Government could step in with some fiscal support for the economy, the huge cost of such support to date is likely to pose a barrier to incurring further major expenditure unless it was very limited and targeted on narrow sectors like hospitality. The Government may well, therefore, effectively leave it to the MPC, and to monetary policy, to support economic growth – but at a time when the threat posed by rising inflation is near to peaking!
21. This is the adverse set of factors against which the MPC had to decide on Bank Rate. For the second month in a row, the MPC blind-sided financial markets, this time with a surprise increase in Bank Rate from 0.10% to 0.25%. What's more, the hawkish tone of comments indicated that the MPC is now concerned that inflationary pressures are indeed building and need concerted action by the MPC to counter. This indicates that there will be more increases to come with financial markets predicting 1% by the end of 2022. The 8-1 vote to raise the rate shows that there is firm agreement that inflation now poses a threat, especially after the CPI figure hit a 10-year high this week. The MPC commented that “there has been significant upside news” and that “there were some signs of greater persistence in domestic costs and price pressures”.
22. On the other hand, it did also comment that “the Omicron variant is likely to weigh on near-term activity”. But it stressed that at the November meeting it had said it would raise rates if the economy evolved as it expected and that now “these conditions had been met”. It also appeared more worried about the possible boost to inflation from Omicron itself. It said that “the current position of the global and UK economies was materially different compared with prior to the onset of the pandemic, including elevated

levels of consumer price inflation". It also noted the possibility that renewed social distancing would boost demand for goods again, (as demand for services would fall), meaning "global price pressures might persist for longer". (Recent news is that the largest port in the world in China has come down with an Omicron outbreak which is not only affecting the port but also factories in the region.)

23. On top of that, there were no references this month to inflation being expected to be below the 2% target in two years' time, which at November's meeting the MPC referenced to suggest the markets had gone too far in expecting interest rates to rise to over 1.00% by the end of the year.
24. These comments indicate that there has been a material reappraisal by the MPC of the inflationary pressures since their last meeting and the Bank also increased its forecast for inflation to peak at 6% next April, rather than at 5% as of a month ago. However, as the Bank retained its guidance that only a "modest tightening" in policy will be required, it cannot be thinking that it will need to increase interest rates that much more. A typical policy tightening cycle has usually involved rates rising by 0.25% four times in a year. "Modest" seems slower than that. As such, the Bank could be thinking about raising interest rates two or three times next year to 0.75% or 1.00%.
25. Inasmuch as a considerable part of the inflationary pressures at the current time are indeed transitory, and will naturally subside, and since economic growth is likely to be weak over the next few months, this would appear to indicate that this tightening cycle is likely to be comparatively short.
26. As for the timing of the next increase in Bank Rate, the MPC dropped the comment from November's statement that Bank Rate would be raised "in the coming months". That may imply another rise is unlikely at the next meeting in February and that May is more likely. However, much could depend on how adversely, or not, the economy is affected by Omicron in the run up to the next meeting on 3 February. Once 0.50% is reached, the Bank would act to start shrinking its stock of QE, (gilts purchased by the Bank would not be replaced when they mature).
27. The MPC's forward guidance on its intended monetary policy on raising Bank Rate versus selling (quantitative easing) holdings of bonds is as follows:
 - (a) Raising Bank Rate as "the active instrument in most circumstances".
 - (b) Raising Bank Rate to 0.50% before starting on reducing its holdings.
 - (c) Once Bank Rate is at 0.50% it would stop reinvesting maturing gilts.
 - (d) Once Bank Rate had risen to at least 1%, it would start selling its holdings.
28. US. Shortages of goods and intermediate goods like semi-conductors, have been fuelling increases in prices and reducing economic growth potential. In November, CPI inflation hit a near 40-year record level of 6.8% but with energy prices then falling sharply, this is probably the peak. The biggest problem for the Fed is the mounting evidence of a strong pick-up in cyclical price pressures e.g., in rent which has hit a decades high.
29. Shortages of labour have also been driving up wage rates sharply; this also poses a considerable threat to feeding back into producer prices and then into consumer prices inflation. It now also appears that there has been a sustained drop in the labour force

which suggests the pandemic has had a longer-term scarring effect in reducing potential GDP. Economic growth may therefore be reduced to between 2 and 3% in 2022 and 2023 while core inflation is likely to remain elevated at around 3% in both years instead of declining back to the Fed's 2% central target.

30. Inflation hitting 6.8% and the feed through into second round effects, meant that it was near certain that the Fed's meeting of 15 December would take aggressive action against inflation. Accordingly, the rate of tapering of monthly \$120bn QE purchases announced at its 3 November meeting was doubled so that all purchases would now finish in February 2022. In addition, Fed officials had started discussions on running down the stock of QE held by the Fed. Fed officials also expected three rate rises in 2022 of 0.25% from near zero currently, followed by three in 2023 and two in 2024, taking rates back above 2% to a neutral level for monetary policy. The first increase could come as soon as March 2022 as the chairman of the Fed stated his view that the economy had made rapid progress to achieving the other goal of the Fed – "maximum employment". The Fed forecast that inflation would fall from an average of 5.3% in 2021 to 2.6% in 2023, still above its target of 2% and both figures significantly up from previous forecasts. What was also significant was that this month the Fed dropped its description of the current level of inflation as being "transitory" and instead referred to "elevated levels" of inflation: the statement also dropped most of the language around the flexible average inflation target, with inflation now described as having exceeded 2 percent "for some time". It did not see Omicron as being a major impediment to the need to take action now to curtail the level of inflationary pressures that have built up, although Fed officials did note that it has the potential to exacerbate supply chain problems and add to price pressures.
31. EU. The slow roll out of vaccines initially delayed economic recovery in early 2021 but the vaccination rate then picked up sharply. After a contraction of -0.3% in Q1, Q2 came in with strong growth of 2%. With Q3 at 2.2%, the EU recovery was then within 0.5% of its pre Covid size. However, the arrival of Omicron is now a major headwind to growth in quarter 4 and the expected downturn into weak growth could well turn negative, with the outlook for the first two months of 2022 expected to continue to be very weak.
32. November's inflation figures breakdown shows that the increase in price pressures is not just due to high energy costs and global demand-supply imbalances for durable goods as services inflation also rose. Headline inflation reached 4.9% in November, with over half of that due to energy. However, oil and gas prices are expected to fall after the winter and so energy inflation is expected to plummet in 2022. Core goods inflation rose to 2.4% in November, its second highest ever level, and is likely to remain high for some time as it will take a long time for the inflationary impact of global imbalances in the demand and supply of durable goods to disappear. Price pressures also increased in the services sector, but wage growth remains subdued and there are no signs of a trend of faster wage growth which might lead to persistently higher services inflation - which would get the ECB concerned. The upshot is that the euro-zone is set for a prolonged period of inflation being above the ECB's target of 2% and it is likely to average 3% in 2022, in line with the ECB's latest projection.
33. ECB tapering. The ECB has joined with the Fed by also announcing at its meeting on 16 December that it will be reducing its QE purchases - by half from October 2022, i.e., it will still be providing significant stimulus via QE purchases for over half of next year.

However, as inflation will fall back sharply during 2022, it is likely that it will leave its central rate below zero, (currently -0.50%), over the next two years. The main struggle that the ECB has had in recent years is that inflation has been doggedly anaemic in sticking below the ECB's target rate despite all its major programmes of monetary easing by cutting rates into negative territory and providing QE support.

34. The ECB will now also need to consider the impact of Omicron on the economy, and it stated at its December meeting that it is prepared to provide further QE support if the pandemic causes bond yield spreads of peripheral countries, (compared to the yields of northern EU countries), to rise. However, that is the only reason it will support peripheral yields, so this support is limited in its scope.
35. The EU has entered into a period of political uncertainty where a new German government formed of a coalition of three parties with Olaf Scholz replacing Angela Merkel as Chancellor in December 2021, will need to find its feet both within the EU and in the three parties successfully working together. In France there is a presidential election coming up in April 2022 followed by the legislative election in June. In addition, Italy needs to elect a new president in January with Prime Minister Draghi being a favourite due to having suitable gravitas for this post. However, if he switched office, there is a significant risk that the current government coalition could collapse. That could then cause differentials between Italian and German bonds to widen when 2022 will also see a gradual running down of ECB support for the bonds of weaker countries within the EU. These political uncertainties could have repercussions on economies and on Brexit issues.
36. CHINA. After a concerted effort to get on top of the virus outbreak in Q1 2020, economic recovery was strong in the rest of 2020; this enabled China to recover all the initial contraction. During 2020, 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 2020 and earlier in 2021.
37. However, the pace of economic growth has now fallen back in 2021 after this initial surge of recovery from the pandemic and looks likely to be particularly weak in 2022. China has been struggling to contain the spread of the Delta variant through using sharp local lockdowns - which depress economic growth. Chinese consumers are also being very wary about leaving home and so spending money on services. However, with Omicron having now spread to China, and being much more easily transmissible, this strategy of sharp local lockdowns to stop the virus may not prove so successful in future. In addition, the current pace of providing boosters at 100 billion per month will leave much of the 1.4 billion population exposed to Omicron, and any further mutations, for a considerable time. The People's Bank of China made a start in December 2021 on cutting its key interest rate marginally so as to stimulate economic growth. However, after credit has already expanded by around 25% in just the last two years, it will probably leave the heavy lifting in supporting growth to fiscal stimulus by central and local government.
38. Supply shortages, especially of coal for power generation, were causing widespread power cuts to industry during the second half of 2021 and so a sharp disruptive impact on

some sectors of the economy. In addition, recent regulatory actions motivated by a political agenda to channel activities into officially approved directions, are also likely to reduce the dynamism and long-term growth of the Chinese economy.

39. JAPAN. 2021 has been a patchy year in combating Covid. However, recent business surveys indicate that the economy has been rebounding rapidly in 2021 once the bulk of the population had been double vaccinated and new virus cases had plunged. However, Omicron could reverse this initial success in combating Covid.
40. The Bank of Japan is continuing its very loose monetary policy but with little prospect of getting inflation back above 1% towards its target of 2%, any time soon: indeed, inflation was actually negative in July. New Prime Minister Kishida, having won the November general election, brought in a supplementary budget to boost growth, but it is unlikely to have a major effect.
41. WORLD GROWTH. World growth was in recession in 2020 but recovered during 2021 until starting to lose momentum in the second half of the year, though overall growth for the year is expected to be about 6% and to be around 4-5% in 2022. Inflation has been rising due to increases in gas and electricity prices, shipping costs and supply shortages, although these should subside during 2022. While headline inflation will fall sharply, core inflation will probably not fall as quickly as central bankers would hope. It is likely that we are heading into a period where there will be a reversal of world globalisation and a decoupling of western countries from dependence on China to supply products, and vice versa. This is likely to reduce world growth rates from those in prior decades.
42. SUPPLY SHORTAGES. The pandemic and extreme weather events, followed by a major surge in demand after lockdowns ended, have been highly disruptive of extended worldwide supply chains. Major queues of ships unable to unload their goods at ports in New York, California and China built up rapidly during quarters 2 and 3 of 2021 but then halved during quarter 4. Such issues have led to a misdistribution of shipping containers around the world and have contributed to a huge increase in the cost of shipping. Combined with a shortage of semi-conductors, these issues have had a disruptive impact on production in many countries. The latest additional disruption has been a shortage of coal in China leading to power cuts focused primarily on producers (rather than consumers), i.e., this will further aggravate shortages in meeting demand for goods. Many western countries are also hitting up against a difficulty in filling job vacancies. It is expected that these issues will be gradually sorted out, but they are currently contributing to a spike upwards in inflation and shortages of materials and goods available to purchase.

Significant Risks to both the Bank Rate and PWLB forecasts

1. **Labour and supply shortages** prove more enduring and disruptive and depress economic activity.
2. **Mutations** of the virus render current vaccines ineffective, and tweaked vaccines to combat these mutations are delayed, or cannot be administered fast enough to prevent further lockdowns. 25% of the population not being vaccinated is also a significant risk to the NHS being overwhelmed and lockdowns being the only remaining option.
3. **The Monetary Policy Committee** acts 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.
4. **The Monetary Policy Committee** tightens monetary policy too late to ward off building inflationary pressures.
5. **The Government** acts too quickly to cut expenditure to balance the national budget.
6. **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.
7. **Longer term US treasury yields** rise strongly and pull gilt yields up higher than forecast.
8. **Major stock markets** e.g., in the US, become increasingly judged as being over-valued 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.
9. **Geopolitical risks**, for example in Ukraine, Iran, North Korea, but also in Europe and Middle Eastern countries; on-going global power influence struggles between Russia/China/US. These could lead to increasing safe-haven flows.

The balance of risks to the UK economy

10. The overall balance of risks to economic growth in the UK is now to the downside, including residual risks from Covid and its variants - both domestically and their potential effects worldwide.

Forecasts for Bank Rate

11. It is not expected that Bank Rate will go up fast after the initial rate rise as the supply potential of the economy is not likely to have taken a major hit during the pandemic: it should, therefore, be able to cope well with meeting demand after supply shortages subside over the next year, without causing inflation to remain elevated in the medium-term, or to inhibit inflation from falling back towards the MPC's 2% target after the spike up to around 5%. The forecast includes four increases in Bank Rate over the three-year

forecast period to March 2025, ending at 1.25%. However, it is likely that these forecasts will need changing within a relatively short timeframe for the following reasons:

12. We do not know how severe an impact Omicron could have on the economy and whether there will be another lockdown or similar and, if there is, whether there would be significant fiscal support from the Government for businesses and jobs.
13. There were already increasing grounds for viewing the economic recovery as running out of steam during the autumn and now into the winter. Then along came Omicron to pose a significant downside threat to economic activity. This could lead into stagflation which would create a dilemma for the MPC as to whether to focus on combating inflation or supporting economic growth through keeping interest rates low.
14. Will some current key supply shortages spill over into causing economic activity in some sectors to take a significant hit?
15. Rising gas and electricity prices in October and next April and increases in other prices caused by supply shortages and increases in taxation next April, are already going to deflate consumer spending power without the MPC having to take any action on Bank Rate to cool inflation.
16. On the other hand, consumers are sitting on over £160bn of excess savings left over from the pandemic so when will they spend this sum, in part or in total?
17. It looks as if the economy coped well with the end of furlough at the end of September. It is estimated that there were around 1 million people who came off furlough then and there was not a huge spike up in unemployment. The other side of the coin is that vacancies have been hitting record levels so there is a continuing acute shortage of workers. This is a potential danger area if this shortage drives up wages which then feed through into producer prices and the prices of services i.e., a second-round effect that the MPC would have to act against if it looked like gaining significant momentum.
18. We also recognise there could be further nasty surprises on the Covid front beyond the Omicron mutation.
19. If the UK invokes article 16 of the Brexit deal over the dislocation in trading arrangements with Northern Ireland, this has the potential to end up in a no deal Brexit.
20. In summary, with the high level of uncertainty prevailing on several different fronts, we expect to have to revise these forecasts again over the next few months - in line with what the new news is.
21. It should also be borne in mind that Bank Rate being cut to 0.25% and then to 0.10% were emergency measures to deal with the Covid crisis hitting the UK in March 2020. At any time, the MPC could decide to simply take away such emergency cuts on no other grounds than they are no longer being warranted and as a step forward in the return to normalisation. In addition, any Bank Rate under 1% is both highly unusual and highly supportive of economic growth.

Forecasts for PWLB rates and gilt and treasury yields

22. Since the start of 2021, we have seen a lot of volatility in gilt yields, and hence PWLB rates. As the interest forecast table for PWLB certainty rates above shows, there is forecast to be a steady, but slow, rise in both Bank Rate and gilt yields during the forecast period to March 2025, though there will doubtless be a lot of unpredictable volatility during this forecast period.
23. While monetary policy in the UK will have a major impact on gilt yields, there is also a need to consider the potential impact that rising treasury yields in America could have on our gilt yields. As an average since 2011, there has been a 75% correlation between movements in US 10-year treasury yields and UK 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.
24. US treasury yields. During the first part of 2021, 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. This was then followed by additional Democratic ambition to spend \$1trn on infrastructure, (which was eventually passed by both houses later in 2021), and an even larger sum on an American families plan over the next decade; this is still caught up in Democrat / Republican haggling. Financial markets were alarmed that all this stimulus was happening at a time when:
 - (a) A fast vaccination programme had enabled a rapid opening up of the economy during 2021.
 - (b) The economy was growing strongly during the first half of 2021 although it has weakened overall during the second half.
 - (c) It started from a position of little spare capacity due to less severe lockdown measures than in many other countries.
 - (d) And the Fed was still providing substantial stimulus through monthly QE purchases during 2021.
25. It was not much of a surprise that a combination of these factors would eventually cause an excess of demand in the economy which generated strong inflationary pressures. This has eventually been recognised by the Fed at its December meeting with an aggressive response to damp inflation down during 2022 and 2023.
26. At its 3 November Fed meeting, the Fed decided to make a start on tapering its \$120bn per month of QE purchases so that they ended next June. However, at its 15 December meeting it doubled the pace of tapering so that they will end all purchases in February. These purchases are currently acting as downward pressure on treasury yields and so it would be expected that Treasury yields will rise over the taper period and after the taper ends, all other things being equal. The Fed also forecast that it expected there would be three rate rises in 2022 of 0.25% from near zero currently, followed by three in 2023 and two in 2024, taking rates back above 2% to a neutral level for monetary policy.

27. 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 monitor.
28. There is likely to be **exceptional volatility and unpredictability in respect of gilt yields and PWLB rates** due to the following factors:
- (a) How strongly will changes in gilt yields be correlated to changes in US treasury yields (see below). Over 10 years since 2011 there has been an average 75% correlation between movements in US treasury yields and gilt yields. However, from time to time these two yields can diverge. Lack of spare economic capacity and rising inflationary pressures are viewed as being much greater dangers in the US than in the UK. This could mean that central bank rates will end up rising earlier and higher in the US than in the UK if inflationary pressures were to escalate; the consequent increases in treasury yields could well spill over to cause (lesser) increases in gilt yields. There is, therefore, an upside risk to forecasts for gilt yields due to this correlation. The Link Group forecasts have included a risk of a 75% correlation between the two yields.
 - (b) Will the Fed take action to counter increasing treasury yields if they rise beyond a yet unspecified level?
 - (c) Would the MPC act to counter increasing gilt yields if they rise beyond a yet unspecified level?
 - (d) How strong will inflationary pressures actually turn out to be in both the US and the UK and so put upward pressure on treasury and gilt yields?
 - (e) How will central banks implement their new average or sustainable level inflation monetary policies?
 - (f) 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?
 - (g) Will exceptional volatility be focused on the short or long-end of the yield curve, or both?
29. As the US financial markets are, by far, the biggest financial markets in the world, any upward trend in treasury yields will invariably impact and influence financial markets in other countries. Inflationary pressures and erosion of surplus economic capacity look much stronger in the US compared to those in the UK, which would suggest that Fed rate increases eventually needed to suppress inflation, are likely to be faster and stronger than Bank Rate increases in the UK. This is likely to put upward pressure on treasury yields which could then spill over into putting upward pressure on UK gilt yields.

30. The forecasts are also predicated on an assumption that there is no break-up of the Eurozone or EU within the 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 Russia, China / North Korea and Iran, which have a major impact on international trade and world GDP growth.

The balance of risks to medium to long term PWLB rates:

31. There is a balance of upside risks to forecasts for medium to long term PWLB rates.

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

32. 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.
33. The Fed in America has gone furthest in adopting a monetary policy based on a clear goal of allowing the inflation target to be symmetrical, (rather than a ceiling to keep under), so that inflation averages out the dips down and surges above the target rate, over an unspecified period of time.
34. The Bank of England has also amended its target for monetary policy so that inflation should be 'sustainably over 2%' before starting on raising Bank Rate and the ECB now has a similar policy.
35. **For local authorities, this means that investment interest rates and very short term PWLB 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.**
36. 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.
37. 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.

Treasury Management Practice (TMP1) – Credit and Counterparty Risk Management

1. The MHCLG issued Investment Guidance in 2018, and this forms the structure of the Council's policy below. These guidelines do not apply to either trust funds or pension funds which operate under a different regulatory regime.
2. The key intention of the Guidance is to maintain the current requirement for Councils to invest prudently, and that priority is given to security and liquidity before yield. In order to facilitate this objective the guidance requires this Council to have regard to the CIPFA publication Treasury Management in the Public Services: Code of Practice and Cross-Sectoral Guidance Notes. This Council adopted the Code on 21 March 2002 and will apply its principles to all investment activity. In accordance with the Code, the Assistant Director Resources has produced its Treasury Management Practices (TMPs). This part, TMP 1(1), covering investment counterparty policy requires approval each year.

Annual Investment Strategy

3. The key requirements of both the Code and the investment guidance are to set an annual investment strategy, as part of its annual treasury strategy for the following year, covering the identification and approval of the following:
 - (a) The strategy guidelines for choosing and placing investments, particularly non-specified investments.
 - (b) The principles to be used to determine the maximum periods for which funds can be committed.
 - (c) Specified investments that the Council will use. These are high security (i.e. high credit rating, although this is defined by the Council, and no guidelines are given), and high liquidity investments in sterling and with a maturity of no more than a year.
 - (d) Non-specified investments, clarifying the greater risk implications, identifying the general types of investment that may be used and a limit to the overall amount of various categories that can be held at any time.
4. The investment policy proposed for the Council is:

Strategy Guidelines

5. The main strategy guidelines are contained in the body of the treasury strategy statement.

All Investments

6. The criteria for providing a pool of high quality investment counterparties (both Specified and Non-specified investments) is:
 - (a) Banks 1 - good credit quality – the Council will only use banks which:
 - (i) Are UK banks; and have, as a minimum, the following Fitch, Moody's and Standard and Poors credit ratings (where rated):
 1. Fitch Short Term equivalent – F1
 2. Fitch Long term equivalent – A-
 - (b) Banks 2 Non UK banks based on the following very high quality criteria using a lowest common denominator approach and only where sovereign ratings are AAA.
 - (i) Fitch Short Term equivalent – F1+
 - (ii) Fitch Long Term equivalent – AA-
 - (c) Banks 3 – Part nationalised UK banks – Lloyds Bank Group and Royal Bank of Scotland. These banks can be included if they continue to be part nationalised or they meet the ratings in Banks 1 above.
 - (d) Banks 4 – The Council's own banker for transactional purposes if the bank falls below the above criteria, although in this case balances will be minimised in both monetary size and time.
 - (e) Building societies - The Council will use all societies which:
 - (i) meet the ratings for banks outlined above and have assets in excess of £1,000m
 - (f) Money Market Funds (CNAV, LVNAV & VNAV) AAA
 - (g) Ultra Short Dated Bond Funds AAA
 - (h) UK Government (including gilts Treasury Bills and the Debt Management Office)
 - (i) Local authorities, parish councils etc
 - (j) Supranational institutions
 - (k) Property Funds ,Corporate Bond Funds and Asset Backed Investment Products
7. A limit of £50M will be applied to the use of Non-Specified investments.

Specified Investments

8. These investments are sterling investments of not more than one-year maturity, or those which could be for a longer period but where the Council has the right to be repaid within 12 months if it wishes. These are considered low risk assets where the possibility of loss of principal or investment income is small. These would include sterling investments which would not be defined as capital expenditure with:
 - (a) The UK Government (such as the Debt Management Account deposit facility, UK Treasury Bills or a Gilt with less than one year to maturity).
 - (b) Supranational bonds of less than one year's duration.
 - (c) A local authority, housing association, parish council or community council.
 - (d) Pooled investment vehicles (such as money market funds) that have been awarded a high credit rating by a credit rating agency. For category (f) above, this covers pooled investment vehicles, such as money market funds, rated AAA by Standard and Poor's, Moody's and/or Fitch rating agencies.
 - (e) A body that is considered of a high credit quality (such as a bank or building society). For category a and b this covers bodies with a minimum short term rating of F1 (or the equivalent) as rated by Standard and Poor's, Moody's and/or Fitch rating agencies.

9. Within these bodies, and in accordance with the Code, the Council has set additional criteria to set the time and amount of monies which will be invested in these bodies. These criteria are:

	Fitch Long term Rating (or equivalent)	Money Limit	Time Limit
Banks 1 category high quality	AA-	£5M	Maximum of 2 years Suggested duration using Link Asset Services colour coding (CDS adjusted with manual override)
Banks 1 category medium quality	A	£4M	Maximum of 1 year Suggested duration using Link Asset Services colour coding (CDS adjusted with manual override)
Banks 1 category lower quality	A-	£3M	Maximum of 1 year Suggested duration using Link Asset Services colour coding (CDS adjusted with manual override)
Banks 2 Non UK (only where sovereign ratings are AAA)	AA-	£3M	Maximum of 1 year Suggested duration using Link Asset Services colour coding (CDS adjusted with manual override)
Banks 3 category – part nationalised	N/A	£5M	Maximum of 1 year
Banks 4 category – Council’s banker (not meeting Banks 1,2 and3)		£3M	1 day
DMADF (Debt Management Office)	AAA	unlimited	6 months
Local authorities	N/A	£5M per Local Authority	Up to 1 years
Money market Funds (CNAV, LVNAV & VNAV) and Ultra Short Dated Bond Funds	AAA	£5M per Fund	liquid

10. The Council will therefore use the following durational bands supplied by Link Asset Service’s creditworthiness service when applying time limits to investments

- (a) Yellow Maximum 2 years *This only relates to AAA rated government debt or its equivalent
- (b) Purple Maximum 2 years
- (c) Blue 1 year (only applies to nationalised or semi nationalised UK Banks)
- (d) Orange 1 year

- (e) Red 6 months
- (f) Green 3 months

Non-Specified Investments

11. Non-specified investments are any other type of investment (i.e. not defined as Specified above). The identification and rationale supporting the selection of these other investments and the maximum limits to be applied are set out below. Non specified investments would include any sterling investments with:

	Non Specified Investment Category	Limit (£ or %)
a.	<p>Supranational Bonds greater than 1 year to maturity</p> <p>(a) Multilateral development bank bonds - These are bonds defined as an international financial institution having as one of its objects economic development, either generally or in any region of the world (e.g. European Reconstruction and Development Bank etc.).</p> <p>(b) A financial institution that is guaranteed by the United Kingdom Government (e.g. National Rail, The Guaranteed Export Finance Company {GEFCO})</p> <p>The security of interest and principal on maturity is on a par with the Government and so very secure. These bonds usually provide returns above equivalent gilt edged securities. However the value of the bond may rise or fall before maturity and losses may accrue if the bond is sold before maturity.</p>	AAA long term ratings
b.	<p>Gilt edged securities with a maturity of greater than one year. These are Government bonds and so provide the highest security of interest and the repayment of principal on maturity. Similar to category (a) above, the value of the bond may rise or fall before maturity and losses may accrue if the bond is sold before maturity.</p>	
c.	<p>The Council's own banker if it fails to meet the basic credit criteria. In this instance balances will be minimised as far as is possible.</p>	£3m
d.	<p>Building societies not meeting the basic security requirements under the specified investments. The operation of some building societies does not require a credit rating, although in every other respect the security of the society would match similarly sized societies with ratings.</p>	£5m
e.	<p>Any bank or building society that has a minimum long term credit rating of AA-, for deposits with a maturity of greater than one year (including forward deals in excess of one year from inception to repayment).</p>	£5m
f.	<p>Local Authorities</p>	£5m per authority
g.	<p>Property Funds, Corporate Bond Funds and Other Asset backed Investment products</p> <p>The use of these instruments can be deemed to be capital expenditure, and as such will be an application (spending) of capital resources. This Authority will seek guidance on the status of any fund it may consider using</p>	£20m per Fund

12. Within categories c and d, and in accordance with the Code, the Council has developed additional criteria to set the overall amount of monies which will be invested in these bodies. Time limits will be applied to banks using the creditworthiness service provided by Link Asset Services. And for part-nationalised banks will be up to 2 years.
13. Time limits for Property Funds, Corporate Bond Funds and Asset Backed Investment Products will be up to 10 Years, Local Authorities up to 2 years.

The Monitoring of Investment Counterparties

14. The credit rating of counterparties will be monitored regularly. The Council receives credit rating information (changes, rating watches and rating outlooks) from Link Asset Services as and when ratings change, and counterparties are checked promptly. On occasion ratings may be downgraded when an investment has already been made. The criteria used are such that a minor downgrading should not affect the full receipt of the principal and interest. Any counterparty failing to meet the criteria will be removed from the list immediately by the Assistant Director Resources, and if required new counterparties which meet the criteria will be added to the list.