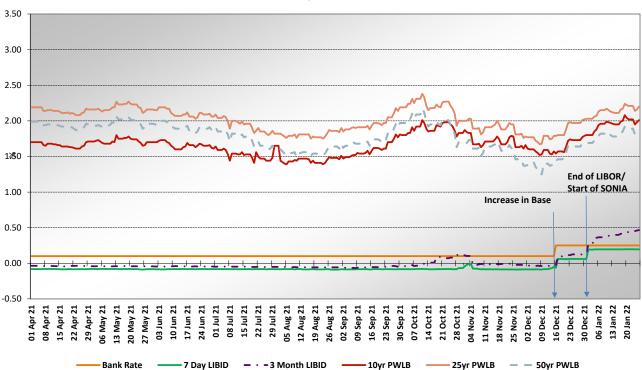
Appendix A



Movement of Key Interest Rates to Date

Interest Rate Forecast – Link Asset Services Ltd (20th December 2021)

The latest forecast on 20th December is compared below to the last forecast (29th September) in the previous quarter. A comparison of these forecasts shows that PWLB rates have fallen, more so in the longer maturities, and show a speed up in the rate of increase in Bank Rate as inflation is now posing a greater risk. Some of the fall in PWLB rates during December was probably due to window dressing by pension and investment funds preparing their finances for the year and quarter end position for 2021 on 31st December: it was therefore expected that part of those falls would be unwound in the new year.

Link Group Interest Rate View		20.12.21												
	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25
BANK RATE	0.25	0.25	0.50	0.50	0.50	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.25
3 month ave earnings	0.20	0.30	0.50	0.50	0.60	0.70	0.80	0.90	0.90	1.00	1.00	1.00	1.00	1.00
6 month ave earnings	0.40	0.50	0.60	0.60	0.70	0.80	0.90	1.00	1.00	1.10	1.10	1.10	1.10	1.10
12 month ave earnings	0.70	0.70	0.70	0.70	0.80	0.90	1.00	1.10	1.10	1.20	1.20	1.20	1.20	1.20
5yr PWLB	1.40	1.50	1.50	1.60	1.60	1.70	1.80	1.80	1.80	1.90	1.90	1.90	2.00	2.00
10 yr PWLB	1.60	1.70	1.80	1.80	1.90	1.90	2.00	2.00	2.00	2.10	2.10	2.10	2.20	2.30
25 yr PWLB	1.80	1.90	2.00	2.10	2.10	2.20	2.20	2.20	2.30	2.30	2.40	2.40	2.50	2.50
50 yr PWLB	1.50	1.70	1.80	1.90	1.90	2.00	2.00	2.00	2.10	2.10	2.20	2.20	2.30	2.30

Link Group Interest Ra	29.9.21									
	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	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.75
3 month ave earnings	0.10	0.10	0.20	0.20	0.30	0.40	0.50	0.50	0.60	0.70
6 month ave earnings	0.20	0.20	0.30	0.30	0.40	0.50	0.60	0.60	0.70	0.80
12 month ave earnings	0.30	0.40	0.50	0.50	0.50	0.60	0.70	0.80	0.90	1.00
5 yr PWLB	1.40	1.40	1.50	1.50	1.60	1.60	1.60	1.70	1.70	1.70
10 yr PWLB	1.80	1.80	1.90	1.90	2.00	2.00	2.00	2.10	2.10	2.10
25 yr PWLB	2.20	2.20	2.30	2.30	2.40	2.40	2.40	2.50	2.50	2.60
50 yr PWLB	2.00	2.00	2.10	2.20	2.20	2.20	2.20	2.30	2.30	2.40

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.

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 until it raised it from 0.10% to 0.25% at the MPC meeting of 16th December 2021.

A summary overview of the future path of Bank Rate

- In December 2021, 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.
- The next increase in Bank Rate could be in February or May, dependent on how severe an impact there is from Omicron.
- 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.
- With inflation expected to peak between 5 and 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.
- However, rising gas and electricity prices last 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 inflationary pressures.
- On the other hand, consumers are sitting on around £160bn of excess savings left over from the pandemic so when will they spend this sum, in part or in total?

- The December 2021 MPC meeting was more concerned with combating inflation over the medium term than supporting economic growth in the short term.
- Bank Rate increases beyond May are difficult to forecast as inflation is likely to drop sharply in the second half of 2022.
- 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 downturn; all rates under 2% are providing stimulus to economic growth.
- 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.
- Covid mutations remain a major potential downside threat in all three years as we ARE likely to get further mutations. How quickly can science come up with a mutation proof vaccine, or other treatment, and for them to be widely administered around the world?
- Purchases of gilts under QE ended in December 2021. Note that when Bank Rate reaches 0.50%, the MPC has said it will start running down its stock of QE.

In summary, with the high level of uncertainty prevailing on several different fronts, it is likely that these forecasts will need to be revised again soon - in line with whatever the new news is.

Economic Update – Link Asset Services Ltd - 31st December 2021

MPC meeting 16th December 2021

- 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.
- 2. 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**th **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.
- 3. On 10th 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.
- 4. **On 14th 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 ended on 30th September, (about one million people were still on furlough), was smaller and shorter than the Bank of England had feared: unemployment did not increase hugely in October. Indeed, vacancies rose to a record 1.219m in the three months to November showing there were acute shortages of labour.

- 5. 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 in late November 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.
- 6. **On 15th 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).
- 7. 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 have reduced during the second half of 2021 and are likely to clear during 2022 when prices would be expected to 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.
- 8. The Government has stepped in with some **fiscal support for the economy**, targeted mainly at the hospitality sector. Due to the huge cost of such support to date, it is likely to remain being limited and targeted on narrow sectors. 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!
- 9. 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. 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".
- 10. 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 <u>would</u> 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 form 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.)
- 11. On top of that, there were no references in December 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.
- 12. 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 <u>raising interest rates two or three times in 2022</u> to 0.75% or 1.00%.

- 13. In as much 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.
- 14. 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 3rd 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).
- 15. The MPC's forward guidance on its intended monetary policy on raising Bank Rate versus selling (quantitative easing) holdings of bonds is as follows: -
 - 1. Placing the focus on raising Bank Rate as "the active instrument in most circumstances".
 - 2. Raising Bank Rate to 0.50% 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.

COVID-19 vaccines. These have been the game changer which had enormously boosted confidence that **life in the UK could largely return to normal during the second half of 2021** after a third wave of the virus threatened to overwhelm hospitals in the spring. The bursting onto the scene of **the Omicron mutation** at the end of November had threatened to cancel the Christmas holidays, but the Government decided not to impose more severe restrictions in the hope that this mild, but highly contagious variant, would not overwhelm hospitals. The big question is whether further mutations of the virus could develop which render 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.

US. During 2020, US President Biden and the Democratic party pushed through a huge programme of fiscal stimulus and are still trying to get another major package approved – the American Families Plan; this is still caught up in political haggling. Financial markets were alarmed that all this stimulus was happening at a time when:-

- 1. A fast vaccination programme had enabled a rapid opening up of the economy during 2021.
- 2. The economy was growing strongly during the first half of 2021 although it has weakened overall during the second half.
- 3. It started from a position of little spare capacity due to less severe lockdown measures than in many other countries.
- 4. And the Fed was still providing substantial stimulus through monthly QE purchases during 2021.

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 recent December meeting with an aggressive response to damp inflation down during 2022 and 2023.

EU. The ECB joined with the Fed by also announcing on 16th 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 during the first half of 2022. Although headline inflation reached 4.9% in November, over half of that was due to energy but oil and gas prices are expected to fall sharply after the winter. As overall inflation will fall back sharply during 2022, it is likely that the ECB 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 its target rate of 2% despite all the ECB's major programmes of monetary easing by cutting rates into negative territory and providing QE support.

China. The pace of economic growth has now fallen back after the initial surge of recovery from the pandemic and China has been struggling to contain the spread of the Delta variant through using sharp local lockdowns - which depress economic growth. 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; this strategy poses a potential renewed threat to world supply chains. The People's Bank of China made a start in December 2021 on cutting its key interest rate to encourage flagging economic growth.

Japan. 2021 has been a patchy year in combating Covid. However, recent business surveys indicate that the economy is rebounding rapidly now that the bulk of the population is fully vaccinated, and new virus cases have plunged. However, Omicron could reverse the success of 2021 in combating Covid. 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.

World growth. World growth was in recession in 2020 but recovered during 2021 until starting to lose momentum more recently. Inflation has been rising due to increases in gas and electricity prices, shipping costs and supply shortages, although these should subside during 2022. 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.