

APPENDIX A

TREASURY MANAGEMENT STRATEGY STATEMENT 2020/21

Introduction

The Council is required to operate a balanced budget, which broadly means that cash raised during the year will meet cash expenditure. Part of the treasury management operation is to ensure that this cash flow is adequately planned, with cash being available when it is needed. Surplus monies are invested in low risk counterparties or instruments commensurate with the Council's low risk appetite, providing adequate liquidity initially before considering investment return.

The second main function of the treasury management service is the funding of the Council's capital plans. These capital plans provide a guide to the borrowing need of the Council, essentially the longer-term cash flow planning, to ensure that the Council can meet its capital spending obligations. This management of longer-term cash may involve arranging long or short-term loans, or using longer-term cash flow surpluses. On occasion, when it is prudent and economic, any debt previously drawn may be restructured to meet Council risk or cost objectives.

The contribution the treasury management function makes to the Council is critical, as the balance of debt and investment operations ensure liquidity or the ability to meet spending commitments as they fall due, either on day-to-day revenue or for larger capital projects. The treasury operations will see a balance of the interest costs of debt and the investment income arising from cash deposits affecting the available budget. Since cash balances generally result from reserves and balances, it is paramount to ensure adequate security of the sums invested, as a loss of principal will in effect result in a loss to the General Fund Balance.

CIPFA defines treasury management as:

“The management of the local authority’s borrowing, investments and cash flows, its banking, money market and capital market transactions; the effective control of the risks associated with those activities; and the pursuit of optimum performance consistent with those risks.”

This strategy covers the requirements of the Local Government Act 2003, the CIPFA Prudential Code, MHCLG MRP Guidance, the CIPFA Treasury Management Code and MHCLG Investment Guidance.

Investments held for service purposes or for commercial profit are considered in a different report, the Investment Strategy.

Treasury Management Reporting

The Council is currently required to receive and approve, as a minimum, three main treasury reports each year, which incorporate a variety of policies, estimates and actuals.

- a. **Prudential and treasury indicators and treasury strategy** (this report) - The first, and most important report is forward looking and covers:
 - the capital forecast summary;

- the treasury management strategy, (how the investments and borrowings are to be organised), including treasury indicators; and
 - an investment strategy, (the parameters on how treasury investments are to be managed).
- b. **A mid-year treasury management report** – This is primarily a progress report and will update members on the treasury position, amending prudential indicators as necessary, and whether any policies require revision.
- c. **An annual treasury report** – This is a backward looking review document and provides details of a selection of actual prudential and treasury indicators and actual treasury operations compared to the estimates within the strategy.

Scrutiny

The above reports and strategies are required to be adequately scrutinised before being recommended to the Council. This role is undertaken by the Audit and Accounts Committee.

Training

The CIPFA Code requires the responsible officer to ensure that members with responsibility for treasury management receive adequate training in treasury management. This especially applies to members responsible for scrutiny. The following training has been undertaken by members on 13th November 2019 and further training will be arranged as required.

The training needs of treasury management officers are periodically reviewed.

Treasury Management Consultants

The Council uses Link Asset Services, Treasury solutions as its external treasury management advisors.

The Council recognises that responsibility for treasury management decisions remains with the organisation at all times and will ensure that undue reliance is not placed upon the services of our external service providers. All decisions will be undertaken with regards to all available information, including, but not solely, our treasury advisers.

It also recognises that there is value in employing external providers of treasury management services in order to acquire access to specialist skills and resources. The Council will ensure that the terms of their appointment and the methods by which their value will be assessed are properly agreed and documented, and subjected to regular review.

Capital Summary and Liability Benchmark

On 31st December 2019, the Council held £93m of borrowing and £58m of investments. Forecast changes in these sums are shown in the balance sheet analysis table below.

Capital summary and forecast

	31.3.19 Actual £'000	31.3.20 Forecast £'000	31.3.21 Forecast £'000	31.3.22 Forecast £'000	31.3.23 Forecast £'000
General Fund CFR	24,815	27,151	48,169	47,967	50,195
HRA CFR	105,006	104,835	108,322	112,547	112,368
Total CFR	129,821	131,986	156,491	160,514	162,563
Less: Other debt liabilities	-224	-224	-224	-224	-224
Loans CFR	129,597	131,762	156,267	160,290	162,339
Less: External borrowing	-90,080	-88,056	-84,030	-81,001	-74,469
Internal (over) borrowing	39,517	43,706	72,237	79,289	87,870
Less: Usable reserves	-53,461	-40,808	-21,814	-20,748	-18,803
Less: Working capital	-22,484	-14,500	-14,500	-14,500	-14,500
Investments (or New borrowing)	36,428	11,602	-35,923	-44,041	-54,567

The underlying need to borrow for capital purposes is measured by the Capital Financing Requirement (CFR), while usable reserves and working capital are the underlying resources available for investment. The Council's current strategy is to maintain borrowing and investments below their underlying levels, sometimes known as internal borrowing.

The Council has an increasing CFR due to the capital programme, but minimal investments and will therefore be required to borrow up to a minimum of £54m over the forecast period.

CIPFA's *Prudential Code for Capital Finance in Local Authorities* recommends that the Council's total debt should be lower than its highest forecast CFR over the next three years. The table above shows that the Council expects to comply with this recommendation during 2020/21.

Liability benchmark: To compare the Council's actual borrowing against an alternative strategy, a liability benchmark has been calculated showing the lowest risk level of borrowing. This assumes the same forecasts as the table above, but that cash and investment balances are kept to a minimum level of £10m, as per MiFID II, at each year-end to maintain sufficient liquidity but minimise credit risk.

	31.3.19 Actual £'000	31.3.20 Forecast £'000	31.3.21 Forecast £'000	31.3.22 Forecast £'000	31.3.23 Forecast £'000
Loans CFR	129,597	131,762	156,267	160,290	162,339
Less: Usable reserves	-53,461	-40,808	-21,814	-20,748	-18,803
Less: Working capital	-22,484	-14,500	-14,500	-14,500	-14,500
Plus: Minimum investments	10,000	10,000	10,000	10,000	10,000
Liability Benchmark	63,652	86,454	129,953	135,042	139,036

Borrowing Strategy

The treasury management function ensures that the Council's cash is organised in accordance with the relevant professional codes, so that sufficient cash is available to meet this service activity and the Council's capital strategy. This will involve both the organisation of the cash flow and, where capital plans require, the organisation of appropriate borrowing facilities. The strategy covers the relevant treasury / prudential indicators, the current and projected debt positions.

Objectives: The Council's chief objective when borrowing money is to strike an appropriately low risk balance between securing low interest costs and achieving certainty of those costs over the period for which funds are required. The flexibility to renegotiate loans should the Council's long-term plans change is a secondary objective.

Current Borrowing portfolio position

The Council's treasury portfolio position at 31 March 2019, with forward projections are summarised below. The table shows the actual external debt (the treasury management operations), against the underlying capital borrowing need (the Capital Financing Requirement - CFR), highlighting any over or under borrowing.

	31.3.19 Actual £'000	31.3.20 Forecast £'000	31.3.21 Forecast £'000	31.3.22 Forecast £'000	31.3.23 Forecast £'000
External Debt					
Debt at 1 April	86,101	90,304	88,280	84,254	81,225
Expected change in Debt	3,979	-2,248	-4,250	-3,253	-6,756
Other long-term liabilities	224	224	224	224	224
Actual gross debt at 31 March	90,304	88,280	84,254	81,225	74,693
The Capital Financing Requirement	129,821	131,986	156,491	160,514	162,563

Within the prudential indicators there are a number of key indicators to ensure that the Council operates its activities within well-defined limits. One of these is that the Council needs to ensure that its gross debt does not, except in the short term, exceed the total of the CFR in the preceding year plus the estimates of any additional CFR for 2020/21 and the following two financial years. This allows some flexibility for limited early borrowing for future years, but ensures that borrowing is not undertaken for revenue purposes.

Treasury Indicators: limits to borrowing activity

Operational Boundary for External Debt: The operational boundary is based on the Council's estimate of most likely (i.e. prudent but not worst case) scenario for external debt. It links directly to the Council's estimates of capital expenditure, the capital financing requirement and cash flow requirements, and is a key management tool for in-year monitoring. Other long-term liabilities comprise finance lease, Private Finance Initiative and other liabilities that are not borrowing but form part of the Council's debt.

Operational Boundary	2019/20 Revised £'000	2020/21 Estimate £'000	2021/22 Estimate £'000	2022/23 Estimate £'000
Borrowing	136,986	161,491	165,514	167,563
Other long-term liabilities	400	400	400	400
Total Debt	137,386	161,891	165,914	167,963

Authorised Limit for External Debt: The authorised limit is the affordable borrowing limit determined in compliance with the Local Government Act 2003. It is the maximum amount of debt that the Council can legally owe. The authorised limit provides headroom over and above the operational boundary for unusual cash movements.

Authorised Limit	2019/20 Limit £'000	2020/21 Limit £'000	2021/22 Limit £'000	2022/23 Limit £'000
Borrowing	143,986	168,491	172,514	174,563
Other long-term liabilities	600	600	600	600
Total Debt	144,586	169,091	173,114	175,163

Separately, the Council has previously been limited to a maximum HRA CFR through the HRA self-financing regime and the Government set HRA Debt cap, however on 30 October 2018 the Government removed the HRA Debt cap. Therefore the limit below is just for guidance purposes:

HRA Debt Limit	2019/20 Estimate £'000	2020/21 Estimate £'000	2021/22 Estimate £'000	2022/23 Estimate £'000
Previous HRA Debt Cap	112,475	112,475	112,475	112,475
HRA CFR	104,835	108,322	112,547	112,368
HRA Headroom	7,640	4,153	-72	107

Maturity structure of borrowing: This indicator is set to control the Council's exposure to refinancing risk. The upper and lower limits on the maturity structure of fixed and variable rate borrowing will be:

	Upper	Lower
Under 12 months	15%	0%
12 months and within 24 months	15%	0%
24 months and within 5 years	30%	0%
5 years and within 10 years	100%	0%
10 years and above	100%	0%

Time periods start on the first day of each financial year. The maturity date of borrowing is the earliest date on which the lender can demand repayment.

Strategy: The Council is currently maintaining an under-borrowed position. This means that the capital borrowing need (the Capital Financing Requirement), has not been fully funded with loan debt as cash supporting the Council's reserves, balances and cash flow has been used as a temporary measure. This strategy is prudent as investment returns are low and counterparty risk is still an issue that needs to be considered.

Against this background and the risks within the economic forecast, caution will be adopted with the 2020/21 treasury operations. The Director of Resources will monitor interest rates in financial markets and adopt a pragmatic approach to changing circumstances.

The benefits of internal or short-term borrowing will be monitored regularly against the potential for incurring additional costs by deferring borrowing into future years when long-term borrowing rates are forecast to rise modestly. Link will assist the Council with this 'cost of carry' and breakeven analysis. Its output may determine whether the Council borrows additional sums at long-term fixed rates in 2020/21 with a view to keeping future interest costs low, even if this causes additional cost in the short-term.

Alternatively, the Council may arrange forward starting loans during 2020/21, where the interest rate is fixed in advance, but the cash is received in later years. This would enable certainty of cost to be achieved without suffering a cost of carry in the intervening period.

In addition, the Council may borrow (normally for up to one month) short-term loans to cover unplanned cash flow shortages.

Sources of borrowing: The Council has previously raised the majority of its long-term borrowing from the PWLB but following the decision by the PWLB on 9 October 2019 to increase their margin over gilt yields by 100 bps to 180 basis points on loans lent to local authorities, consideration will also need to be given to sourcing funding at cheaper rates. The degree which any of the following options proves cheaper than PWLB Certainty Rate is still evolving at the time of writing but our advisors will keep us informed.

The approved sources of long-term and short-term borrowing are:

- Public Works Loan Board (PWLB) and any successor body
- any institution approved for investments (see below)
- any other bank or building society authorised to operate in the UK
- any other UK public sector body
- UK public and private sector pension funds
- capital market bond investors
- UK Municipal Bonds Agency plc (no issuance at present but there is potential)

LOBOs: The Council holds £3.5m of LOBO (Lender's Option Borrower's Option) loans where the lender has the option to propose an increase in the interest rate at set dates, following which the Council has the option to either accept the new rate or to repay the loan at no additional cost. £3.5m of these LOBOs have options during 2020/21, and although the Council understands that lenders are unlikely to

exercise their options in the current low interest rate environment, there remains an element of refinancing risk. The Council will take the option to repay LOBO loans at no cost if it has the opportunity to do so. Total borrowing via LOBO loans will be limited to £0m.

Short-term and variable rate loans: These loans leave the Council exposed to the risk of short-term interest rate rises and are therefore subject to the interest rate exposure limits in the treasury management indicators below.

Debt rescheduling: The PWLB allows authorities to repay loans before maturity and either pay a premium or receive a discount according to a set formula based on current interest rates. Other lenders may also be prepared to negotiate premature redemption terms. Rescheduling of current borrowing in our debt portfolio is unlikely to occur as the 100 bps increase in PWLB rates only applied to new borrowing rates and not to premature debt repayment rates. If rescheduling was done, it will be reported to Council, at the earliest meeting following its action.

Policy on borrowing in advance of need: The Council will not borrow more than or in advance of its needs purely in order to profit from the investment of the extra sums borrowed. Any decision to borrow in advance will be within forward approved Capital Financing Requirement estimates, and will be considered carefully to ensure that value for money can be demonstrated and that the Council can ensure the security of such funds.

Policy on internal borrowing interest to the HRA: On 1st April 2012, the Council notionally split each of its existing long-term loans into General Fund and HRA pools. In the future, new long-term loans borrowed will be assigned in their entirety to one pool or the other.

Interest payable and other costs/income arising from long-term loans (e.g. premiums and discounts on early redemption) will be charged/ credited to the respective revenue account. Differences between the value of the HRA loans pool and the HRA's underlying need to borrow (capital financing requirement) will result in an internal borrowing situation. The internal borrowing on the HRA will charged at the 25 year fixed maturity interest rate for PWLB for the 31st March for the relevant financial year with the credit going to the General Fund balance.

Investment Strategy

Management of Risk

The Council's investment policy has regard to the following: -

- MHCLG's Guidance on Local Government Investments ("the Guidance")
- CIPFA Treasury Management in Public Services Code of Practice and Cross Sectoral Guidance Notes 2017 ("the Code")
- CIPFA Treasury Management Guidance Notes 2018

The Council's investment priorities will be security first, portfolio liquidity second and then yield, (return).

The above guidance from the MHCLG and CIPFA place a high priority on the management of risk. The Council has adopted a prudent approach to managing risk.

The Council holds invested funds, representing income received in advance of expenditure plus balances and reserves held. In the past 9 months, the Council's investment balance has ranged between £37 and £59 million. Levels available for investment are affected by capital expenditure and use of reserves, both will continue to be monitored throughout the financial year.

Objectives: As the CIPFA Code requires the Council to invest its funds prudently, and to have regard to the security and liquidity of its investments before seeking the highest rate of return, or yield. The Council's objective when investing money is to strike an appropriate balance between risk and return, minimising the risk of incurring losses from defaults and the risk of receiving unsuitably low investment income. Where balances are expected to be invested for more than one year, the Council will aim to achieve a total return that is equal or higher than the prevailing rate of inflation, in order to maintain the spending power of the sum invested.

Negative interest rates: If the UK enters into a recession in 2020/21, there is a small chance that the Bank of England could set its Bank Rate at or below zero, which is likely to feed through to negative interest rates on all low risk, short-term investment options. This situation already exists in many other European countries. In this event, security will be measured as receiving the contractually agreed amount at maturity, even though this may be less than the amount originally invested.

Strategy: Given the increasing risk and very low returns from short-term unsecured bank investments, the Council aims to diversify into more secure and/or higher yielding asset classes during 2020/21. This is especially the case for the estimated £15m that is potentially available for longer-term investment. The majority of the Council's surplus cash is currently invested in short-term unsecured bank deposits and money market funds.

Business models: As a result of the change in accounting standards for 2019/20 under IFRS 9, the Council will consider the implications of investment instruments which could result in an adverse movement in the value of the amount invested and resultant charges at the end of the year to the General Fund. (In November 2018, the Ministry of Housing, Communities and Local Government, [MHCLG], concluded a consultation for a temporary override to allow English local authorities time to

adjust their portfolio of all pooled investments by announcing a statutory override to delay implementation of IFRS 9 for five years commencing from 1.4.18.)

Creditworthiness Policy; The primary principle governing the Council's investment criteria is the security of its investments, although the yield or return on the investment is also a key consideration. After this main principle, the Council will ensure that:

- It maintains a policy covering both the categories of investment types it will invest in, criteria for choosing investment counterparties with adequate security, and monitoring their security; and
- It has sufficient liquidity in its investments. For this purpose, it will set out procedures for determining the maximum periods for which funds may prudently be committed. These procedures also apply to the Council's prudential indicators covering the maximum principal sums invested.

The Director of Resources will maintain a counterparty list in compliance with the following criteria and will revise the criteria and submit them to Council for approval as necessary.

Credit rating information is supplied by Link Asset Services, our treasury advisors, on all active counterparties that comply with the criteria below. Any counterparty failing to meet the criteria would be omitted from the counterparty (dealing) list. Any rating changes, rating Watches (notification of a likely change), rating Outlooks (notification of the longer-term bias outside the central rating view) are provided to officers almost immediately after they occur and this information is considered before dealing. For instance, a negative rating Watch applying to counterparty at the minimum Council criteria will be suspended from use, with all others being reviewed in light of market conditions.

Use of additional information other than credit ratings. Additional requirements under the Code require the Council to supplement credit rating information. Whilst the below criteria relies primarily on the application of credit ratings to provide a pool of appropriate counterparties for officers to use, additional operational market information will be applied before making any investment decision from the agreed pool of counterparties. This additional market information (for example Credit Default Swaps, rating Watches/Outlooks) will be applied to compare the relative security of differing investment opportunities.

Time and monetary limits applying to investments. The time and monetary limits for institutions on the Council's counterparty list are as follows:

Credit rating	Banks unsecured	Banks secured	Government	Corporates	Registered Providers
UK Govt	n/a	n/a	£ Unlimited 50 years	n/a	n/a
AAA	£8m 5 years	£10m 20 years	£20m 50 years	£5m 20 years	£5m 20 years
AA+	£6m 5 years	£10m 10 years	£10m 25 years	£5m 10 years	£5m 10 years
AA	£6m 4 years	£10m 5 years	£10m 15 years	£5m 5 years	£5m 10 years

AA-	£6m 3 years	£10m 4 years		£5m 4 years	£5m 10 years
A+	£6m 2 years	£10m 3 years		£5m 3 years	£5m 5 years
A	£6m 13 months	£10m 2 years		£5m 2 years	£5m 5 years
A-	£5m 6 months	£10m 13 months		£5m 13 months	£5m 5 years
None		n/a			£5m 5 years
Pooled funds and real estate investment trusts		£15m per fund or trust			

This table must be read in conjunction with the notes below

Credit rating: Investment limits are set by reference to the lowest published long-term credit rating from a selection of external rating agencies. Where available, the credit rating relevant to the specific investment or class of investment is used, otherwise the counterparty credit rating is used. However, investment decisions are never made solely based on credit ratings, and all other relevant factors including external advice will be taken into account.

Banks unsecured: Accounts, deposits, certificates of deposit and senior unsecured bonds with banks and building societies, other than multilateral development banks. These investments are subject to the risk of credit loss via a bail-in should the regulator determine that the bank is failing or likely to fail. See below for arrangements relating to operational bank accounts.

Banks secured: Covered bonds, reverse repurchase agreements and other collateralised arrangements with banks and building societies. These investments are secured on the bank's assets, which limits the potential losses in the unlikely event of insolvency, and means that they are exempt from bail-in. Where there is no investment specific credit rating, but the collateral upon which the investment is secured has a credit rating, the higher of the collateral credit rating and the counterparty credit rating will be used to determine cash and time limits. The combined secured and unsecured investments in any one bank will not exceed the cash limit for secured investments.

Government: Loans, bonds and bills issued or guaranteed by national governments, regional and local authorities and multilateral development banks. These investments are not subject to bail-in, and there is generally a lower risk of insolvency, although they are not zero risk. Investments with the UK Central Government may be made in unlimited amounts for up to 50 years.

Corporates: Loans, bonds and commercial paper issued by companies other than banks and registered providers. These investments are not subject to bail-in, but are exposed to the risk of the company going insolvent. Loans to unrated companies will only be made as part of a diversified pool in order to spread the risk widely.

Registered providers: Loans and bonds issued by, guaranteed by or secured on the assets of registered providers of social housing and registered social landlords, formerly known as housing associations. These bodies are tightly regulated by the Regulator of Social Housing (in England), the Scottish Housing

Regulator, the Welsh Government and the Department for Communities (in Northern Ireland). As providers of public services, they retain the likelihood of receiving government support if needed.

Pooled funds: Shares or units in diversified investment vehicles consisting of any of the above investment types, plus equity shares and property. These funds have the advantage of providing wide diversification of investment risks, coupled with the services of a professional fund manager in return for a fee. Short-term Money Market Funds that offer same-day liquidity and very low or no volatility will be used as an alternative to instant access bank accounts, while pooled funds whose value changes with market prices and/or have a notice period will be used for longer investment periods.

Bond, equity and property funds offer enhanced returns over the longer term, but are more volatile in the short term. These allow the Council to diversify into asset classes other than cash without the need to own and manage the underlying investments. Because these funds have no defined maturity date, but are available for withdrawal after a notice period, their performance and continued suitability in meeting the Council's investment objectives will be monitored regularly.

Real estate investment trusts: Shares in companies that invest mainly in real estate and pay the majority of their rental income to investors in a similar manner to pooled property funds. As with property funds, REITs offer enhanced returns over the longer term, but are more volatile especially as the share price reflects changing demand for the shares as well as changes in the value of the underlying properties.

Operational bank accounts: The Council will incur operational exposures through their current accounts, with Lloyds Bank. These are not classed as investments, but are still subject to the risk of a bank bail-in, and balances will therefore be kept below £750,000 net in the bank. The Bank of England has stated that in the event of failure, banks with assets greater than £25 billion are more likely to be bailed-in than made insolvent, increasing the chance of the Council maintaining operational continuity.

Country and sector limits: Due care will be taken to consider the country, group and sector exposure of the Council's investments.

The Council has determined that it will only use approved counterparties from countries with a minimum sovereign credit rating of AA (excluding UK) from Fitch (or equivalent). This list will be added to, or deducted from by officers should ratings change in accordance with this policy.

Investment limits: The Council's revenue reserves available to cover investment losses are forecast to be £17 million on 31st March 2021. In order to limit the amount of reserves will be potentially put at risk in the case of a single default, the maximum that will be lent to any one organisation (other than the UK Government) will be £15 million. A group of banks under the same ownership will be treated as a single organisation for limit purposes. Limits will also be placed on fund managers, investments in brokers' nominee accounts, foreign countries and industry sectors as below. Investments in pooled funds and multilateral development banks do not count against the limit for any single foreign country, since the risk is diversified over many countries.

Investment limits

	Cash limit
Any single organisation, except the UK Central Government	£15m each
UK Central Government	unlimited
Any group of organisations under the same ownership	£15m per group
Any group of pooled funds under the same management	£15m per manager
Negotiable instruments held in a broker's nominee account	£10m per broker
Foreign countries	£10m per country
Registered providers and registered social landlords	£10m in total
Unsecured investments with building societies	£10m in total
Loans to unrated corporates	£15m in total
Local Authorities	£15m each
Money market funds	£12m each
Real estate investment trusts	£10m in total

Liquidity management: This diversification will represent a substantial change in strategy over the coming year, in line with the Council's approved Investment Plan and Commercialisation Strategy. The forecast is compiled on a prudent basis to minimise the risk of the Council being forced to borrow on unfavourable terms to meet its financial commitments. Limits on long-term investments are set by reference to the Council's medium-term financial plan and cash flow forecast.

Policy on internal investment interest to the HRA: On 1st April 2012, the Council notionally split each of its existing long-term loans into General Fund and HRA pools. Interest receivable for HRA balance sheet resources available for investment will result in a notional cash balance. This balance will be measured at the end of the financial year and interest transferred from the General Fund to the HRA at the average investment rate for a DMO investment for the financial year due to the General Fund carrying all the credit risk per investment.

Investment returns expectations: On the assumption that the UK and EU agree a Brexit deal including the terms of trade by the end of 2020 or soon after, then Bank Rate is forecast to increase only slowly over the next few years to reach 1.00% by quarter 1 2023. Bank Rate forecasts for financial year ends (March) are:

- Q1 2021 0.75%
- Q1 2022 1.00%
- Q1 2023 1.25%

The suggested budgeted investment earnings rates for returns on investments placed for periods up to about three months during each financial year are as follows:

2020/21	0.75%
2021/22	1.00%
2022/23	1.25%
2023/24	1.50%

Treasury Indicators: limits to investing activity

The Council measures and manages its exposures to treasury management risks using the following indicators.

Security: The Council has adopted a voluntary measure of its exposure to credit risk by monitoring the value-weighted average credit rating of its investment portfolio. This is calculated by applying a score to each investment (AAA=1, AA+=2, etc.) and taking the arithmetic average, weighted by the size of each investment. Unrated investments are assigned a score based on their perceived risk.

Credit risk indicator	Target
Portfolio average credit rating	A

Liquidity: The Council has adopted a voluntary measure of its exposure to liquidity risk by monitoring the amount of cash available to meet unexpected payments within a banding period, without additional borrowing.

Liquidity risk indicator	Target	Limit
Total cash available within;		
3 months	30%	100%
3 – 12 months	50%	80%
Over 12 months	20%	40%

Interest rate exposures: This indicator is set to control the Council's exposure to interest rate risk. The upper limits on the one-year revenue impact of a 1% rise or fall in interest rates will be:

Interest rate risk indicator	Limit
Upper limit on one-year revenue impact of a 1% <u>rise</u> in interest rates	£200,000
Upper limit on one-year revenue impact of a 1% <u>fall</u> in interest rates	£200,000

The impact of a change in interest rates is calculated on the assumption that maturing loans and investments will be replaced at current rates.

Principal sums invested for periods longer than a year: The purpose of this indicator is to control the Council's exposure to the risk of incurring losses by seeking early repayment of its investments. The limits on the long-term principal sum invested to final maturities beyond the period end will be:

Price risk indicator	2020/21	2021/22	2022/23
Limit on principal invested beyond year end	£15m	£15m	£15m

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

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.

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 and will apply its principles to all investment activity. In accordance with the Code, the Director of Resources has produced its treasury management practices (TMPs). This part, TMP 1, covering investment counterparty policy requires approval each year.

Annual investment strategy - 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 following:

- The strategy guidelines for choosing and placing investments.
- The principles to be used to determine the maximum periods for which funds can be committed.

Strategy guidelines – The main strategy guidelines are contained in the body of the treasury strategy statement 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 institutions.

The monitoring of investment counterparties - 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 Director of Resources, and if required new counterparties which meet the criteria will be added to the list.

Treasury Management Scheme of Delegation

(i) Full Council

- receiving and reviewing reports on treasury management policies, practices and activities;
- approval of annual strategy.
- approval of/amendments to the organisation's adopted clauses, treasury management policy statement and treasury management practices;
- budget consideration and approval;
- approval of the division of responsibilities;

(ii) Audit and Accounts Committee

- reviewing the treasury management policy and procedures and making recommendations to the responsible body;
- receiving and reviewing regular monitoring reports and acting on recommendations; and
- approving the selection of external service providers and agreeing terms of appointment.

The Treasury Management Role of the Section 151 Officer

The S151 (responsible) officer

- recommending clauses, treasury management policy/practices for approval, reviewing the same regularly, and monitoring compliance;
- submitting regular treasury management policy reports;
- submitting budgets and budget variations;
- receiving and reviewing management information reports;
- reviewing the performance of the treasury management function;
- ensuring the adequacy of treasury management resources and skills, and the effective division of responsibilities within the treasury management function;
- ensuring the adequacy of internal audit, and liaising with external audit; and
- recommending the appointment of external service providers.
- preparation of a capital strategy to include capital expenditure, capital financing, and treasury management, with a long term timeframe.
- ensuring that the capital strategy is prudent, sustainable, affordable and prudent in the long term and provides value for money
- ensuring that due diligence has been carried out on all treasury is in accordance with the risk appetite of the authority

Economic Background and Interest Rate Forecast

UK. Brexit. 2019 has been a year 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 31 October 2019, with or without a deal. However, MPs blocked leaving on that date and the EU agreed an extension to 31 January 2020. In late October, MPs approved an outline of a Brexit deal to enable the UK to leave the EU on 31 January. Now that the Conservative Government has gained a large overall majority in the general election on 12 December, this outline deal will be passed by Parliament by that date. However, there will still be much uncertainty as the detail of a trade deal will need to be negotiated by the current end of the transition period in December 2020, which the Prime Minister has pledged he will not extend. This could prove to be an unrealistically short timetable for such major negotiations that leaves open two possibilities; one, the need for an extension of negotiations, probably two years, or, a no deal Brexit in December 2020.

GDP growth has taken a hit from Brexit uncertainty during 2019; quarter three 2019 surprised on the upside by coming in at +0.4% q/q, +1.1% y/y. However, the peak of Brexit uncertainty during the final quarter appears to have suppressed quarterly growth to probably around zero. The economy is likely to tread water in 2020, with tepid growth around about 1% until there is more certainty after the trade deal deadline is passed.

While the Bank of England went through the routine of producing another quarterly Inflation Report, (now renamed the Monetary Policy Report), on 7 November, it is very questionable how much all the writing and numbers were worth when faced with the uncertainties of where the UK will be after the general election. The Bank made a change in their Brexit assumptions to now include a deal being eventually passed. Possibly the biggest message that was worth taking note of from the Monetary Policy Report, was an increase in concerns among MPC members around weak global economic growth and the potential for Brexit uncertainties to become entrenched and so delay UK economic recovery. Consequently, the MPC voted 7-2 to maintain Bank Rate at 0.75% but two members were sufficiently concerned to vote for an immediate Bank Rate cut to 0.5%. The MPC warned that if global growth does not pick up or Brexit uncertainties intensify, then a rate cut was now more likely. Conversely, if risks do recede, then a more rapid recovery of growth will require gradual and limited rate rises. The speed of recovery will depend on the extent to which uncertainty dissipates over the final terms for trade between the UK and EU and by how much global growth rates pick up. The Bank revised its inflation forecasts down – to 1.25% in 2019, 1.5% in 2020, and 2.0% in 2021; hence, the MPC views inflation as causing little concern in the near future.

The MPC meeting of 19 December repeated the previous month's vote of 7-2 to keep Bank Rate on hold. Their key view was that there was currently 'no evidence about the extent to which policy uncertainties among companies and households had declined' i.e. they were going to sit on their hands and see how the economy goes in the next few months. The two members who voted for a cut were concerned that the labour market was faltering. On the other hand, there was a clear warning in the minutes that the MPC were concerned that "domestic unit labour costs have continued to grow at rates above those consistent with meeting the inflation target in the medium term".

If economic growth were to weaken considerably, the MPC has relatively little room to make a big impact with Bank Rate still only at 0.75%. It would therefore, 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 the annual expenditure budgets of government departments and services and expenditure on

infrastructure projects, to boost the economy. The Government has already made moves in this direction and it made significant promises in its election manifesto to increase government spending by up to £20bn p.a., (this would add about 1% to GDP growth rates), by investing primarily in infrastructure. This is likely to be announced in the next Budget, probably in February 2020. The Chancellor has also amended the fiscal rules in November to allow for an increase in government expenditure.

As for inflation itself, CPI has been hovering around the Bank of England's target of 2% during 2019, but fell again in both October and November to a three-year low of 1.5%. It is likely to remain close to or under 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 hard or no deal Brexit, inflation could rise towards 4%, primarily because of imported inflation on the back of a weakening pound.

With regard to the labour market, growth in numbers employed has been quite resilient through 2019 until the three months to September where it fell by 58,000. However, there was an encouraging pick up again in the three months to October to growth of 24,000, which showed that the labour market was not about to head into a major downturn. The unemployment rate held steady at a 44-year low of 3.8% on the Independent Labour Organisation measure in October. Wage inflation has been steadily falling from a high point of 3.9% in July to 3.5% in October (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 2.0%. 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 other message from the fall in wage growth is that employers are beginning to find it easier to hire suitable staff, indicating that supply pressure in the labour market is easing.

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 growth to a robust 2.9% y/y. Growth in 2019 has been falling after a strong start in quarter 1 at 3.1%, (annualised rate), to 2.0% in quarter 2 and then 2.1% in quarter 3. The economy looks likely to have maintained a growth rate similar to quarter 3 into quarter 4; fears of a recession have largely dissipated. The strong growth in employment numbers during 2018 has weakened during 2019, indicating that the economy had been cooling, while inflationary pressures were also weakening. However, CPI inflation rose from 1.8% to 2.1% in November, a one year high, but this was singularly caused by a rise in gasoline prices.

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 intended 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 by 0.25% again in September and by another 0.25% in its October meeting to 1.50 – 1.75%. At its September meeting it also said it was going to start buying Treasuries again, although this was not to be seen as a resumption of quantitative easing but rather an exercise to relieve liquidity pressures in the repo market. Despite those protestations, this still means that the Fed is again expanding its balance sheet holdings of government debt. In the first month, it will buy \$60bn, whereas it had been reducing its balance sheet by \$50bn per month during 2019. As it will be buying only short-term (under 12 months) Treasury bills, it is technically correct that this is not quantitative easing (which is purchase of long term debt). The Fed left rates unchanged in December. However, the accompanying statement was more optimistic about the future course of the economy so this would indicate that further cuts are unlikely.

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.

However, in November / December, progress has been made on agreeing a phase one deal between the US and China to roll back some of the tariffs; this gives some hope of resolving this dispute.

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, +0.2% q/q (+1.2% y/y) in quarter 2 and then +0.2% q/q, +1.1% in quarter 3; there appears to be little upside potential in the near future. German GDP growth has been struggling to stay in positive territory in 2019 and fell by -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 then 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 quantitative easing 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 that means that, although they will have only a two-year maturity, the Bank was 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; 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 for an unlimited period. At its October meeting it said these purchases would start in November at €20bn per month - a relatively small amount compared to the previous buying programme. 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 would need to help stimulate growth by 'growth friendly' fiscal policy.

There were no policy changes in the December meeting, which was chaired for the first time by the new President of the ECB, Christine Lagarde. However, the outlook continued to be down beat about the economy; this makes it likely there will be further monetary policy stimulus to come in 2020. She did also announce a thorough review of how the ECB conducts monetary policy, including the price stability target. This review is likely to take all of 2020.

On the political front, Austria, Spain and Italy have been in the throes of forming coalition governments with some unlikely combinations of parties i.e. this raises questions around their likely endurance. The latest results of German state elections has put further pressure on the frail German CDU/SDP coalition government and on the current leadership of the CDU. The results of the Spanish general election in November have not helped the prospects of forming a stable coalition.

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 shadow banking systems. In addition, there still needs to be a greater switch from investment in industrial capacity, property construction and infrastructure to consumer goods production.

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. Until recent years, world growth has been boosted by increasing globalisation i.e. countries specialising in producing goods and commodities in which they have an economic advantage and which they then trade with the rest of the world. This has boosted worldwide productivity and growth, and, by lowering costs, has also depressed inflation. However, the rise of China as an economic superpower over the last thirty years, which now accounts for nearly 20% of total world GDP, has unbalanced the world economy. The Chinese government has targeted achieving major world positions in specific key sectors and products, especially high tech areas and production of rare earth minerals used in high tech products. It is achieving this by massive financial support, (i.e. subsidies), to state owned firms, government directions to other firms, technology theft, restrictions on market access by foreign firms and informal targets for the domestic market share of Chinese producers in the selected sectors. This is regarded as being unfair competition that is putting western firms at an unfair disadvantage or even putting some out of business. It is also regarded with suspicion on the political front as China is an authoritarian country that is not averse to using economic and military power for political advantage. The current trade war between the US and China therefore needs to be seen against that backdrop. It is, therefore, 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. This is likely to produce a backdrop in the coming years of weak global growth and so weak inflation. Central banks are, therefore, likely to come under more pressure to support growth by looser monetary policy measures and this will militate against central banks increasing interest rates.

The trade war between the US and China is a major concern to financial markets due to 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 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). There are also concerns about how much distortion of financial markets has already occurred with the current levels of quantitative easing purchases of debt by central banks and the use of negative central bank rates in some countries. The latest PMI survey statistics of economic health for the US, UK, EU and China have all been predicting a downturn in growth; this confirms investor sentiment that the outlook for growth during the year ahead is weak.

INTEREST RATE FORECASTS

The interest rate forecasts provided by Link Asset Services in paragraph 3.3 are predicated on an assumption of an agreement being reached on Brexit between the UK and the EU. On this basis, while GDP growth is likely to be subdued in 2019 and 2020 due to all the uncertainties around Brexit depressing consumer and business confidence, an agreement on the detailed terms of a trade deal is

likely to lead to a boost to the rate of growth in subsequent years. This could, in turn, increase inflationary pressures in the economy and so cause the Bank of England to resume a series of gentle increases in Bank Rate. Just how fast, and how far, those increases will occur and rise to, will be data dependent. The forecasts in this report assume a modest recovery in the rate and timing of stronger growth and in the corresponding response by the Bank in raising rates.

- In the event of an orderly non-agreement exit in December 2020, it is likely that the Bank of England would take action to cut Bank Rate from 0.75% in order to help economic growth deal with the adverse effects of this situation. This is also likely to cause short to medium term gilt yields to fall.
- If there were a disorderly Brexit, then any cut in Bank Rate would be likely to last for a longer period and also depress short and medium gilt yields correspondingly. Quantitative easing could also be restarted by the Bank of England. It is also possible that the government could act to protect economic growth by implementing fiscal stimulus.

The balance of risks to the UK

- The overall balance of risks to economic growth in the UK is probably even, but dependent on a successful outcome of negotiations on a trade deal.
- The balance of risks to increases in Bank Rate and shorter term PWLB rates are broadly similarly to the downside.
- In the event that a Brexit deal was agreed with the EU and approved by Parliament, the balance of risks to economic growth and to increases in Bank Rate is likely to change to the upside.

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 as there has been a major increase in consumer and other debt due to the exceptionally low levels of borrowing rates that have prevailed 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 either 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 coalition based on an 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. The CDU

has done badly in recent state elections but the SPD has done particularly badly and this has raised a major question mark over continuing to support the CDU. Angela Merkel has stepped down from being the CDU party leader but she intends to remain as Chancellor until 2021.

- Other minority EU governments. Austria, Finland, Sweden, Spain, Portugal, Netherlands and Belgium also have vulnerable minority governments dependent on coalitions which could prove fragile.
- Austria, the Czech Republic, Poland and Hungary now form a strongly anti-immigration bloc within the EU. There has also been rising anti-immigration sentiment in Germany and France.
- In October 2019, the IMF issued a report on the World Economic Outlook which flagged up a synchronised slowdown in world growth. However, it also flagged up that there was potential for a rerun of the 2008 financial crisis, but this time centred on the huge debt binge accumulated by corporations during the decade of low interest rates. This now means that there are corporates who would be unable to cover basic interest costs on some \$19trn of corporate debt in major western economies, if world growth was to dip further than just a minor cooling. This debt is mainly held by the shadow banking sector i.e. pension funds, insurers, hedge funds, asset managers etc., who, when there is \$15trn of corporate and government debt now yielding negative interest rates, have been searching for higher returns in riskier assets. Much of this debt is only marginally above investment grade so any rating downgrade could force some holders into a fire sale, which would then depress prices further and so set off a spiral down. The IMF's answer is to suggest imposing higher capital charges on lending to corporates and for central banks to regulate the investment operations of the shadow banking sector. In October 2019, the deputy Governor of the Bank of England also flagged up the dangers of banks and the shadow banking sector lending to corporates, especially highly leveraged corporates, which had risen back up to near pre-2008 levels.
- 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.

Interest Rate Forecasts 2020 – 2023

PWLB rates and forecast shown below have taken into account the 20 basis point certainty rate reduction effective as of the 1st November 2012.

Link Asset Services Interest Rate View													
	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23
Bank Rate View	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	1.25
3 Month LIBID	0.70	0.70	0.80	0.90	1.00	1.00	1.00	1.10	1.20	1.30	1.30	1.30	1.30
6 Month LIBID	0.80	0.80	0.90	1.00	1.10	1.10	1.20	1.30	1.40	1.50	1.50	1.50	1.50
12 Month LIBID	1.00	1.00	1.10	1.20	1.30	1.30	1.40	1.50	1.60	1.70	1.70	1.70	1.70
5yr PWLB Rate	2.40	2.40	2.50	2.50	2.60	2.70	2.80	2.90	2.90	3.00	3.10	3.20	3.20
10yr PWLB Rate	2.70	2.70	2.70	2.80	2.90	3.00	3.10	3.20	3.20	3.30	3.30	3.40	3.50
25yr PWLB Rate	3.30	3.40	3.40	3.50	3.60	3.70	3.70	3.80	3.90	4.00	4.00	4.10	4.10
50yr PWLB Rate	3.20	3.30	3.30	3.40	3.50	3.60	3.60	3.70	3.80	3.90	3.90	4.00	4.00
Bank Rate													
Link Asset Services	0.75%	0.75%	0.75%	0.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.25%	1.25%	1.25%	1.25%
Capital Economics	0.75%	0.75%	0.75%	0.75%	0.75%	1.00%	1.00%	1.00%	-	-	-	-	-
5yr PWLB Rate													
Link Asset Services	2.40%	2.40%	2.50%	2.50%	2.60%	2.70%	2.80%	2.90%	2.90%	3.00%	3.10%	3.20%	3.20%
Capital Economics	2.40%	2.50%	2.50%	2.60%	2.60%	2.80%	2.80%	2.90%	-	-	-	-	-
10yr PWLB Rate													
Link Asset Services	2.70%	2.70%	2.70%	2.80%	2.90%	3.00%	3.10%	3.20%	3.20%	3.30%	3.30%	3.40%	3.50%
Capital Economics	2.70%	2.70%	2.80%	2.80%	2.90%	3.00%	3.00%	3.10%	-	-	-	-	-
25yr PWLB Rate													
Link Asset Services	3.30%	3.40%	3.40%	3.50%	3.60%	3.70%	3.70%	3.80%	3.90%	4.00%	4.00%	4.10%	4.10%
Capital Economics	3.10%	3.10%	3.20%	3.20%	3.20%	3.30%	3.30%	3.40%	-	-	-	-	-
50yr PWLB Rate													
Link Asset Services	3.20%	3.30%	3.30%	3.40%	3.50%	3.60%	3.60%	3.70%	3.80%	3.90%	3.90%	4.00%	4.00%
Capital Economics	3.10%	3.10%	3.20%	3.20%	3.30%	3.40%	3.40%	3.50%	-	-	-	-	-