

### Treasury Management Strategy Statement 2019/20

#### 1. Introduction

- 1.1 Treasury management is the management of the Council's cash flows, borrowing and investments, and the associated risks. The Council has borrowed and invested substantial sums of money and is therefore exposed to financial risks including the loss of invested funds and the revenue effect of changing interest rates. The successful identification, monitoring and control of financial risk are therefore central to the Council's prudent financial management.
- 1.2 Treasury risk management at the Council is conducted within the framework of the Chartered Institute of Public Finance and Accountancy's *Treasury Management in the Public Services: Code of Practice 2017 Edition* (the CIPFA Code) which requires the Council to approve a treasury management strategy before the start of each financial year. In addition, the Welsh Government (WG) issued revised Guidance on Local Authority Investments in March 2010 that requires the Council to approve an investment strategy before the start of each financial year. This report fulfils the Council's legal obligation under the *Local Government Act 2003* to have regard to both the CIPFA Code and the WG Guidance.
- 1.3 In accordance with the WG Guidance, the Council will be asked to approve a revised Treasury Management Strategy Statement should the assumptions on which this report is based change significantly. Such circumstances would include, for example, a large unexpected change in interest rates, in the Council's capital programme or in the level of its investment balance.

#### 2. External Context

##### 2.1 Economic background

The UK's progress negotiating its exit from the European Union, together with its future trading arrangements, will continue to be a major influence on the Council's treasury management strategy for 2019/20.

UK Consumer Price Inflation (CPI) for October was up 2.4% year/year, slightly below the consensus forecast and broadly in line with the Bank of England's November Inflation Report. The most recent labour market data for October 2018 showed the unemployment rate edged up slightly to 4.1% while the employment rate of 75.7% was the joint highest on record. The 3-month average annual growth rate for pay excluding bonuses was 3.3% as wages continue to rise steadily and provide some pull on general inflation. Adjusted for inflation, real wages grew by 1.0%, a level still likely to have little effect on consumer spending.

The rise in quarterly GDP growth to 0.6% in Q3 from 0.4% in the previous quarter was due to weather-related factors boosting overall household consumption and construction activity over the summer following the weather-related weakness in Q1. At 1.5%, annual GDP growth continues to remain below trend. Looking ahead, the BoE, in its November Inflation Report, expects GDP growth to average around 1.75% over the forecast horizon, providing the UK's exit from the EU is relatively smooth.

Following the Bank of England's decision to increase Bank Rate to 0.75% in August, no changes to monetary policy has been made since. However, the Bank expects that should the economy continue to evolve in line with its November forecast, further increases in Bank Rate will be required to return inflation to the 2% target. The Monetary Policy Committee continues to reiterate that any further increases will be at a gradual pace and limited in extent.

While US growth has slowed over 2018, the economy continues to perform robustly. The US Federal Reserve continued its tightening bias throughout 2018, pushing rates to the current 2% - 2.25% in September. Markets continue to expect one more rate rise in December, but expectations are fading that the further hikes previously expected in 2019 will materialise as concerns over trade wars drag on economic activity.

## **2.2 Credit outlook**

The big four UK banking groups have now divided their retail and investment banking divisions into separate legal entities under ring fencing legislation. Bank of Scotland, Barclays Bank UK, HSBC UK Bank, Lloyds Bank, National Westminster Bank, Royal Bank of Scotland and Ulster Bank are the ring fenced banks that now only conduct lower risk retail banking activities. Barclays Bank, HSBC Bank, Lloyds Bank Corporate Markets and NatWest Markets are the investment banks. Credit rating agencies have adjusted the ratings of some of these banks with the ring-fenced banks generally being better rated than their non-ring-fenced counterparts.

The Bank of England released its latest report on bank stress testing, illustrating that all entities included in the analysis were deemed to have passed the test once the levels of capital and potential mitigating actions presumed to be taken by management were factored in. The BoE did not require any bank to raise additional capital.

European banks are considering their approach to Brexit, with some looking to create new UK subsidiaries to ensure they can continue trading here. The credit strength of these new banks remains unknown, although the chance of parental support is assumed to be very high if ever needed. The uncertainty caused by protracted negotiations between the UK and EU is weighing on the creditworthiness of both UK and European banks with substantial operations in both jurisdictions.

## 2.3 Interest rate forecast

Following the increase in Bank Rate to 0.75% in August 2018, the Council's treasury management adviser Arlingclose is forecasting two more 0.25% hikes during 2019 to take official UK interest rates to 1.25%. The Bank of England's MPC has maintained expectations for slow and steady rate rises over the forecast horizon. The MPC continues to have a bias towards tighter monetary policy but is reluctant to push interest rate expectations too strongly. Arlingclose believes that MPC members consider both that ultra-low interest rates result in other economic problems, and that higher Bank Rate will be a more effective policy weapon should downside Brexit risks crystallise when rate cuts will be required.

The UK economic environment remains relatively soft, despite seemingly strong labour market data. Arlingclose's view is that the economy still faces a challenging outlook as it exits the European Union and Eurozone growth softens. Whilst assumptions are that a Brexit deal is struck and some agreement reached on transition and future trading arrangements before the UK leaves the EU, the possibility of a "no deal" Brexit still hangs over economic activity (at the time of writing this commentary in mid December). As such, the risks to the interest rate forecast are considered firmly to the downside.

Gilt yields and hence long-term borrowing rates have remained at low levels but some upward movement from current levels is expected based on Arlingclose's interest rate projections, due to the strength of the US economy and the ECB's forward guidance on higher rates. 10-year and 20-year gilt yields are forecast to remain around 1.5% and 2% respectively over the interest rate forecast horizon, however volatility arising from both economic and political events are likely to continue to offer borrowing opportunities.

A more detailed economic and interest rate forecast provided by Arlingclose is attached at **Appendix 1**.

- 2.4 For the purpose of setting the budget, it has been assumed that new investments will be made at an average rate of 0.88%, and that the Council will not need any new long-term loans will be required in 2019/20

**3. Local Context (Net Borrowing Position) – Not applicable to the Pension Fund**

**4. Liability benchmark – Not applicable to the Pension Fund**

**5. Borrowing Strategy – Not applicable to the Pension Fund**

**6. Investment Strategy**

**6.1** The Council holds invested funds, representing income received in advance of expenditure plus balances and reserves held. In the past 12 months, the Council's investment balance has ranged between £79.4 and £17.6 million, and similar levels are expected to be maintained in the forthcoming year.

This includes the cash balances of Gwynedd Pension Fund which are pooled with the Council's funds for investment purposes. The Pension Fund requests this annually as the returns received are improved and the risks reduced by combining the cash with the Council's funds. The Pensions Committee will approve the relevant elements of this Strategy Statement and request the continuation of the pooling arrangements for 2019/20 at its meeting on 14 March 2019.

**6.2 Objectives**

Both the CIPFA Code and the WG Guidance require 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.

**6.3 Negative interest rates**

If the UK enters into a recession in 2019/20, 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.

**6.4 Strategy**

Given the increasing risk and very low returns from short-term unsecured bank investments, the Council aims to further diversify into more secure and/or higher yielding asset classes during 2019/20. This is especially the case for the estimated £10m that is available for longer-term investment. The majority of the Council's surplus cash is currently invested in short-term unsecured bank deposits, certificates of deposit and money market funds. This diversification will represent a continuation of the strategy adopted in 2015/16.

## 6.5 Business models

Under the IFRS 9 standard, the accounting for certain investments depends on the Council's "business model" for managing them. The Council aims to achieve value from its internally managed treasury investments by a business model of collecting the contractual cash flows and therefore, where other criteria are also met, these investments will continue to be accounted for at amortised cost.

## 6.6 Approved counterparties

The Council may invest its surplus funds with any of the counterparty types in table 3 below, subject to the cash limits (per counterparty) and the time limits shown.

**Table 3: Approved investment counterparties and limits**

<b>Credit rating</b>	<b>Banks unsecured</b>	<b>Banks secured</b>	<b>Government</b>	<b>Corporates</b>	<b>Registered Providers</b>
UK Govt	n/a	n/a	£ Unlimited 50 years	n/a	n/a
AAA	5% / £4m 5 years	10% / £8m 20 years	10% / £8m 50 years	5% / £4m 20 years	5% / £4m 20 years
AA+	5% / £4m 5 years	10% / £8m 10 years	10% / £8m 25 years	5% / £4m 10 years	5% / £4m 10 years
AA	5% / £4m 4 years	10% / £8m 5 years	10% / £8m 15 years	5% / £4m 5 years	5% / £4m 10 years
AA-	5% / £4m 3 years	10% / £8m 4 years	10% / £8m 10 years	5% / £4m 4 years	5% / £4m 10 years
A+	5% / £4m 2 years	10% / £8m 3 years	10% / £8m 5 years	5% / £4m 3 years	5% / £4m 5 years
A	5% / £4m 13 months	10% / £8m 2 years	10% / £8m 5 years	5% / £4m 2 years	5% / £4m 5 years
A-	5% / £4m 6 months	10% / £8m 13 months	10% / £8m 5 years	5% / £4m 13 months	5% / £4m 5 years
None	£1m 6 months	n/a	10% / £8m 25 years	£0.5m 5 years	5% / £4m 5 years
<b>Pooled funds and real estate investment trusts</b>	10% / £8m per fund or trust				

This table must be read in conjunction with the notes below.

## **6.7 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.

## **6.8 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.

## **6.9 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.

## **6.10 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.

## **6.11 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 either following an external credit assessment or to a maximum of £1 million per company as part of a diversified pool in order to spread the risk widely.

## **6.12 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.

## **6.13 Pooled funds**

Shares or units in diversified investment vehicles consisting of the 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.

## **6.14 Operational bank accounts**

The Council may incur operational exposures, for example through current accounts, collection accounts and merchant acquiring services, to any UK bank with credit ratings no lower than BBB- and with assets greater than £25 billion. 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 £900,000 per 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.

## **6.15 Risk assessment and credit ratings**

Credit ratings are obtained and monitored by the Council's treasury advisers, who will notify changes in ratings as they occur. Where an entity has its credit rating downgraded so that it fails to meet the approved investment criteria then:

- no new investments will be made,
- any existing investments that can be recalled or sold at no cost will be, and
- full consideration will be given to the recall or sale of all other existing investments with the affected counterparty.

Where a credit rating agency announces that a credit rating is on review for possible downgrade (also known as "rating watch negative" or "credit watch negative") so that it may fall below the approved rating criteria, then only investments that can be withdrawn on the next working day will be made with that organisation until the outcome of the review is announced. This policy will not apply to negative outlooks, which indicate a long-term direction of travel rather than an imminent change of rating.

## **6.16 Other information on the security of investments**

The Council understands that credit ratings are good, but not perfect, predictors of investment default. Full regard will therefore be given to other available information on the credit quality of the organisations in which it invests, including credit default swap prices, financial statements, information on potential government support, reports in the quality financial press and analysis and advice from the Council's treasury management adviser. No investments will be made with an organisation if there are substantive doubts about its credit quality, even though it may otherwise meet the above criteria.

When deteriorating financial market conditions affect the creditworthiness of all organisations, as happened in 2008 and 2011, this is not generally reflected in credit ratings, but can be seen in other market measures. In these circumstances, the Council will restrict its investments to those organisations of higher credit quality and reduce the maximum duration of its investments to maintain the required level of security. The extent of these restrictions will be in line with prevailing financial market conditions. If these restrictions mean that insufficient commercial organisations of high credit quality are available to invest the Council's cash balances, then the surplus will be deposited with the UK Government via the Debt Management Office or invested in government treasury bills for example, or with other local authorities. This will cause a reduction in the level of investment income earned, but will protect the principal sum invested.

## **6.17 Specified investments**

The Welsh Government Guidance defines specified investments as those:

- denominated in pound sterling,
- due to be repaid within 12 months of arrangement,
- not defined as capital expenditure by legislation, and
- invested with one of:
  - the UK Government,
  - a UK local authority, parish council or community council, or
  - a body or investment scheme of "high credit quality".

The Council defines "high credit quality" organisations and securities as those having a credit rating of A- or higher that are domiciled in the UK or a foreign country with a sovereign rating of AA+ or higher. For money market funds and other pooled funds "high credit quality" is defined as those having a credit rating of A- or higher.

## **6.18 Non-specified investments**

Any investment not meeting the definition of a specified investment is classed as non-specified. The Council does not intend to make any investments denominated in foreign currencies nor any defined as capital expenditure. Non-specified investments will therefore be limited to long-term investments, i.e. those that are due to mature 12 months or longer from the date of arrangement and investments with bodies and schemes not meeting the definition on high credit quality. Limits on non-specified investments are shown in table 3 below.

**Table 3: Non-specified investment limits**

	<b>Cash limit</b>
Total long-term investments	£30m
Total investments without credit ratings or rated below A- (except the UK Government and UK local authorities)	£8m
Total investments (except pooled funds) with institutions domiciled in foreign countries rated below AA+	£4m
Total non-specified investments	£24m

**6.19 Investment limits**

The Council's revenue reserves available to cover investment losses are forecast to be £41 million on 31<sup>st</sup> March 2019. In order that no more than 20% of available reserves will be 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 £8 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.

**Table 4: Investment limits**

	<b>Cash limit</b>
Any single organisation, except the UK Central Government	£8m each
UK Central Government	unlimited
Any group of organisations under the same ownership	£8m per group
Any group of pooled funds under the same management	£20m per manager
Negotiable instruments held in a broker's nominee account	£40m per broker
Foreign countries	£8m per country
Registered providers and registered social landlords	£20m in total
Unsecured investments with building societies	£8m in total
Loans to unrated corporates	£8m in total
Money market funds	£40m in total
Real estate investment trusts	£20m in total

## **6.20 Liquidity management**

The Council uses prudent cash flow forecasting techniques to determine the maximum period for which funds may prudently be committed. The forecast is compiled on the basis that short-term borrowing is used to cover its financial commitments if required. Limits on long-term investments are set by reference to the Council's medium-term financial plan and cash flow forecast.

## **7. Treasury Management Indicators – Not applicable to the Pension Fund**

## **8. Related Matters**

**8.1** The CIPFA Code requires the Council to include the following in its Treasury Management Strategy.

### **8.2 Financial Derivatives**

In the absence of any explicit legal power to do so, the Council will not use standalone financial derivatives (such as swaps, forwards, futures and options). Derivatives embedded into loans and investments, including pooled funds and forward starting transactions, may be used, and the risks that they present will be managed in line with the overall treasury risk management strategy.

### **8.3 Markets in Financial Instruments Directive**

The Council has opted up to professional client status with its providers of financial services, including advisers, banks, brokers and fund managers, allowing it access to a greater range of services but without the greater regulatory protections afforded to individuals and small companies. Given the size and range of the Council's treasury management activities, the Head of Finance believes this to be the most appropriate status.

## **9. Welsh Government Guidance**

### **9.1 Investment training**

The needs of the Council's treasury management staff for training in investment management are assessed every year as part of the staff appraisal process, and additionally when the responsibilities of individual members of staff change.

Staff regularly attend training courses, seminars and conferences provided by Arlingclose and CIPFA. Relevant staff are also encouraged to study professional qualifications from CIPFA, the Association of Corporate Treasurers and other appropriate organisations.

### **9.2 Investment advisers**

The Council has appointed Arlingclose Limited as treasury management advisers and receives specific advice on investment, debt and capital finance issues. The

quality of this service is monitored by the Head of Finance and the Investment Manager on a regular basis.

### **9.3 Investment of money borrowed in advance of need**

The Council may, from time to time, borrow in advance of need, where this is expected to provide the best long-term value for money. Since amounts borrowed will be invested until spent, the Council is aware that it will be exposed to the risk of loss of the borrowed sums, and the risk that investment and borrowing interest rates may change in the intervening period. These risks will be managed as part of the Council's overall management of its treasury risks.

The total amount borrowed will not exceed the authorised borrowing limit of £190 million. The maximum period between borrowing and expenditure is expected to be two years, although the Council is not required to link particular loans with particular items of expenditure.

## **10. Financial Implications**

- 10.1** The budget for investment income in 2019/20 is £0.2 million based on an average investment portfolio of £22 million at an interest rate of 0.88%. The budget for debt interest paid in 2019/20 is £6.0 million, based on an average debt portfolio of £106.6 million at an average interest rate of 5.62%. If actual levels of investments and borrowing, or actual interest rates, differ from those forecast, performance against budget will be correspondingly different.

The Pension Fund receives interest on the percentage of cash it has invested each day.

## 11. Other Options Considered

11.1 The WG Guidance and the CIPFA Code do not prescribe any particular treasury management strategy for local authorities to adopt. The Head of Finance, having consulted the Cabinet Member for Finance, believes that the above strategy represents an appropriate balance between risk management and cost effectiveness. Some alternative strategies, with their financial and risk management implications, are listed below.

<b>Alternative</b>	<b>Impact on income and expenditure</b>	<b>Impact on risk management</b>
Invest in a narrower range of counterparties and/or for shorter times	Interest income will be lower	Lower chance of losses from credit related defaults, but any such losses may be greater
Invest in a wider range of counterparties and/or for longer times	Interest income will be higher	Increased risk of losses from credit related defaults, but any such losses may be smaller
Borrow additional sums at long-term fixed interest rates	Debt interest costs will rise; this is unlikely to be offset by higher investment income	Higher investment balance leading to a higher impact in the event of a default; however long-term interest costs may be more certain
Borrow short-term or variable loans instead of long-term fixed rates	Debt interest costs will initially be lower	Increases in debt interest costs will be broadly offset by rising investment income in the medium term, but long-term costs may be less certain
Reduce level of borrowing	Saving on debt interest is likely to exceed lost investment income	Reduced investment balance leading to a lower impact in the event of a default; however long-term interest costs may be less certain

## Appendix 1 – Arlingclose Economic & Interest Rate Forecast December 2018

### Underlying assumptions

- Our central interest rate forecasts are predicated on there being a transitional period following the UK's official exit from the EU.
- The MPC has a bias towards tighter monetary policy but is reluctant to push interest rate expectations too strongly. We believe that MPC members consider that: 1) tight labour markets will prompt inflationary pressure in the future, 2) ultra-low interest rates result in other economic problems, and 3) higher Bank Rate will be a more effective policy weapon if downside risks to growth crystallise.
- Both our projected outlook and the increase in the magnitude of political and economic risks facing the UK economy means we maintain the significant downside risks to our forecasts, despite the potential for slightly stronger growth next year as business investment rebounds should the EU Withdrawal Agreement be approved. The potential for severe economic outcomes has increased following the poor reception of the Withdrawal Agreement by MPs. We expect the Bank of England to hold at or reduce interest rates from current levels if Brexit risks materialise.
- The UK economic environment is relatively soft, despite seemingly strong labour market data. GDP growth recovered somewhat in the middle quarters of 2018, but more recent data suggests the economy slowed markedly in Q4. Our view is that the UK economy still faces a challenging outlook as the country exits the European Union and Eurozone economic growth softens.
- Cost pressures are easing but inflation is forecast to remain above the Bank's 2% target through most of the forecast period. Lower oil prices have reduced inflationary pressure, but the tight labour market and decline in the value of sterling means inflation may remain above target for longer than expected.
- Global economic growth is slowing. Despite slower growth, the European Central Bank is conditioning markets for the end of QE, the timing of the first rate hike (2019) and their path thereafter. More recent US data has placed pressure on the Federal Reserve to reduce the pace of monetary tightening – previous hikes and heightened expectations will, however, slow economic growth.
- Central bank actions and geopolitical risks have and will continue to produce significant volatility in financial markets, including bond markets.

## Forecast

- The MPC has maintained expectations of a slow rise in interest rates over the forecast horizon, but recent events around Brexit have dampened interest rate expectations. Our central case is for Bank Rate to rise twice in 2019, after the UK exits the EU. The risks are weighted to the downside.
- Gilt yields have remained at low levels. We expect some upward movement from current levels based on our central case that the UK will enter a transitional period following its EU exit in March 2019. However, our projected weak economic outlook and volatility arising from both economic and political events will continue to offer borrowing opportunities.

	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Average
<b>Official Bank Rate</b>														
Upside risk	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.17
<b>Arlingclose Central Case</b>	<b>0.75</b>	<b>1.00</b>	<b>1.00</b>	<b>1.25</b>	<b>1.17</b>									
Downside risk	0.00	0.50	0.50	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.65
<b>3-mth money market rate</b>														
Upside risk	0.10	0.10	0.10	0.10	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.17
<b>Arlingclose Central Case</b>	<b>0.80</b>	<b>1.00</b>	<b>1.10</b>	<b>1.20</b>	<b>1.30</b>	<b>1.30</b>	<b>1.25</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.17</b>
Downside risk	0.20	0.50	0.60	0.70	0.80	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.68
<b>1-yr money market rate</b>														
Upside risk	0.20	0.30	0.30	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.33
<b>Arlingclose Central Case</b>	<b>1.05</b>	<b>1.25</b>	<b>1.35</b>	<b>1.40</b>	<b>1.50</b>	<b>1.45</b>	<b>1.40</b>	<b>1.37</b>						
Downside risk	0.35	0.50	0.60	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.69
<b>5-yr gilt yield</b>														
Upside risk	0.15	0.20	0.25	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.32
<b>Arlingclose Central Case</b>	<b>1.15</b>	<b>1.20</b>	<b>1.25</b>	<b>1.35</b>	<b>1.40</b>	<b>1.40</b>	<b>1.35</b>	<b>1.35</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>
Downside risk	0.30	0.35	0.45	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.54
<b>10-yr gilt yield</b>														
Upside risk	0.20	0.25	0.25	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.32
<b>Arlingclose Central Case</b>	<b>1.60</b>	<b>1.65</b>	<b>1.65</b>	<b>1.70</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>1.70</b>						
Downside risk	0.30	0.45	0.50	0.55	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.55
<b>20-yr gilt yield</b>														
Upside risk	0.20	0.25	0.25	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.32
<b>Arlingclose Central Case</b>	<b>1.90</b>	<b>1.95</b>	<b>1.95</b>	<b>2.00</b>	<b>1.98</b>									
Downside risk	0.30	0.40	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.43
<b>50-yr gilt yield</b>														
Upside risk	0.20	0.25	0.25	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.32
<b>Arlingclose Central Case</b>	<b>1.80</b>	<b>1.85</b>	<b>1.85</b>	<b>1.90</b>	<b>1.88</b>									
Downside risk	0.30	0.40	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.43

PWLB Certainty Rate (Maturity Loans) = Gilt yield + 0.80%

PWLB Local Infrastructure Rate (Maturity Loans) = Gilt yield + 0.60%