

Item: 5

Investments Sub-committee: 16 February 2023.

Temporary Loans.

Report by Head of Finance.

1. Purpose of Report

To advise of the status of the temporary loan portfolio as at 31 December 2022.

2. Recommendation

The Sub-committee is invited to note:

2.1.

The status of the temporary loan portfolio as at 31 December 2022, as detailed in section 3 of this report.

2.2.

That, for the period 1 April to 31 December 2022, the temporary loans portfolio made a return of £168,268.62 at an average interest rate of 1.30%.

The Sub-committee is invited to scrutinise:

2.3.

The temporary loans portfolio, detailed in sections 3 and 4 of this report, in order to obtain assurance that the Treasury Management Strategy is being adhered to by the Finance Service and the temporary loans portfolio is producing an acceptable rate of return.

3. Temporary Loan Portfolio

3.1.

The temporary loan portfolio as at 31 December 2022 totalled £11,230,111.16. Further details are provided in the Monthly Investment Analysis Review prepared by Link Asset Services, attached as Appendix 1 to this report.

3.2.

The following transactions have taken place since 31 December 2022:

- £3,000,000 invested with Insight Liquidity Fund, with an average net yield of 3.33%.
- £800,000 recalled from Insight Liquidity Fund.

- £900,000 invested with Aberdeen Standard Investments Liquidity Fund, with an average net yield of 3.39%.
- £900,000 recalled from Aberdeen Standard Investments Liquidity Fund.
- £700,000 invested with BlackRock Institutional Sterling Liquidity Fund, with an average net yield of 3.29%.
- £2,000,000 deposited to the Santander Business Reserve Account at a rate of 2.38%.
- £2,000,000 withdrawn from the Santander Business Reserve Account.
- £900,000 recalled from BlackRock Institutional Sterling Liquidity Fund.
- £1,000,000 Santander CD matured.
- £3,000,000 National Westminster CD matured.
- £2,000,000 3-month Santander Certificate of Deposit purchased, with a net yield of 3.86%.

3.3.

The value of the temporary loans stood at £8,722,204 as at 31 January 2023.

4. Rate of Return

4.1.

For the period 1 April to 31 December 2022, the temporary loans returned an average interest rate of 1.30%, which equates to a return of £168,268.62.

4.2.

By comparison, the equivalent 90-day London Inter-Bank Offered Rate of 0.26% is considered to be the target.

4.3.

With inflation quoted at 10.5% for December 2022 based on Consumer Price Index (13.4% Retail Price Index), the return on temporary loans equates to a relative loss in value of 9.20% in real terms.

4.4.

The Council is part of an Investment Portfolio Benchmarking Group overseen by its Treasury Advisers, Link Asset Services, and comprising seven other Scottish Local Authorities, as follows:

- Aberdeen City Council.
- Aberdeenshire Council.
- Angus Council.
- Clackmannanshire Council.
- Midlothian Council.
- Perth and Kinross Council.
- Highland Council.

4.5.

An extract from the analysis report for the benchmarking group as at 31 December 2022, attached as Appendix 2 to this report, indicates that the Council is performing behind the weighted average rate of return of both the benchmarking group and the Scottish Unitary Authorities. This can be attributed in part to the liquidity profile of the Council's temporary loan's portfolio. As balances are being run down there are less opportunities to place funds for longer periods of time to take advantage of the higher interest rates on offer.

5. Cash Balances

5.1.

The cash held in the temporary loans portfolio is for cashflow purposes and the key considerations are security of the funds, liquidity and then finally the rate of return.

5.2.

The Council operates a consolidated Loans Fund approach to manage its cash balances across all its Service. The main components of this include:

- The day-to-day flow of cash through the Council's bank accounts.
- The actual level of reserves and earmarked balances that the Council holds.
- The capital financing activities of the Council.

5.3.

Steps have been taken to improve delivery of the capital programme, including programme oversight, development of a project management approach and an updated Capital Project Appraisal process, implemented in January 2018, which sits in front of the capital programme. Work to improve monitoring and reporting procedures also remains ongoing. However, in the current financial year, spend as at 31 December 2022 is only £17.695M against an approved annual budget of £39.999M.

5.4.

It should be noted that the cash balances have been reduced to very low levels to address the limited returns currently available on short term investments. However, it is likely that in order to retain sufficient cash levels to cashflow the monthly spend incurred by the Council on staff payroll and payment for all other costs incurred, action will require to be taken to top-up the cash balances by drawing down funds from the Strategic Reserve Fund or borrowing from the Public Works Loan Board to fund expenditure on the capital programme.

6. Corporate Governance

This report relates to the Council complying with its treasury management policies and procedures and therefore does not directly support and contribute to improved outcomes for communities as outlined in the Council Plan and the Local Outcomes Improvement Plan.

7. Financial Implications

7.1.

The Treasury Policy Statement is being adhered to by the Finance Service and is producing an acceptable rate of return.

7.2.

The effective management and control of risk are prime objectives of the Council's treasury management activities, with priority given to security and liquidity when investing funds.

8. Legal Aspects

Section 69 of the Local Government (Scotland) Act 1973 empowers a local authority to lend and invest surplus funds on a temporary basis where it is calculated to facilitate or is conducive or incidental to the discharge of any of their functions.

9. Contact Officers

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10. Appendices

Appendix 1: Link Asset Services Monthly Investment Analysis Review for December 2022.

Appendix 2: Link Asset Services Investment Portfolio Benchmarking Analysis for December 2022.



Orkney Islands Council

Monthly Investment Analysis Review

December 2022

Monthly Economic Summary

General Economy

The UK Manufacturing PMI declined to 44.7 in December 2022, from 46.5 in November. It was the lowest reading since May 2020. New business volumes continued to decline while contributing to a deterioration in order books, with exports also falling further. Regarding employment numbers, manufacturing companies shed the most jobs since October 2020 amid a deteriorating outlook for growth. In contrast, the UK Services PMI rose to 50.0 in December 2022, up from 48.8 in the previous month. The latest reading pointed to a stabilisation of activity, following two months of decline, helped by a smaller decline in inflows of new business. This result helped the UK Composite PMI rise to 49.0 in December 2022, up from 48.2 in the previous month and above market expectations of no change. Still, the latest reading pointed to the fifth consecutive month of contraction in private sector business activity, but at a rate that was the softest for three months. Elsewhere, the UK Construction PMI, which lags by a month, fell to a three-month low of 50.4 in November of 2022 from 53.2 in October, signalling a slowdown in construction activity, amid subdued demand and reduced risk appetite among clients. Higher borrowing costs and worries about the economic outlook also weighed. The UK GDP shrank 0.3% on quarter in the three months to September of 2022, slightly more than a preliminary estimate of a 0.2% drop. Household expenditure dropped 1.1%, while business investment went down 2.5% and inventories fell by £5.2 billion, mainly driven by reductions for retail and manufacturing. On the other hand, government expenditure went up 0.5% and government investment surged 17.3%, while exports jumped 8.9% compared to a 3.6% decline for imports. Nevertheless, The UK monthly GDP grew by 0.5% in October from September, the biggest increase in nearly a year and above forecasts of 0.4%

The UK trade deficit shrank to £1.8 billion in October from £3.1 billion in the previous month. It was the narrowest trade gap since November of 2021, as natural gas prices retreated from their peaks of the previous month and deflated the price of foreign energy purchases, driving imports to drop by 2.6%.

UK employment rose by 27K in the three months to October, beating market estimates of a 17K decline and following a 53K drop in the previous month's reading. The unemployment rate in the UK edged higher to 3.7% in October from 3.6% in the previous period, matching market forecasts. The employment rate also went up to 75.6% from 75.4%, with the timeliest figures for payrolled employees rising by 107K in November to a record of 29.9 million. Job vacancies however, fell by 65K to 1,187,000, a fifth consecutive decline, and reflecting uncertainty across industries, as economic pressures hold back on recruitment. Average weekly earnings including bonuses in the UK increased by 6.1% y/y in the three months to October, above a 6.0% gain in the three months to September but less than market forecasts of 6.2%. Meanwhile, regular pay which excludes bonus payment also went up 6.1%, the most since July 2021, exceeding forecasts of 5.9%. Adjusted for inflation, total pay fell 2.7%, and regular pay also dropped 2.7%, underlining the squeeze on households. In addition, retail sales unexpectedly declined 0.4% m/m in November, after an upwardly revised 0.9% in the previous month when there was a bounce back from the impact of the additional Bank Holiday in September for the State Funeral. The annual consumer-level inflation rate in the UK eased to 10.7% in November from 11.1% in October which had been the highest since October 1981. The figure was below market forecasts of 10.9% with the largest downward contribution made by transport, particularly motor fuels and second-hand cars. Elsewhere, the GfK Consumer Confidence indicator rose slightly to -42 in December, improving for the third straight month but remaining near a record low of -49 reached in September as high inflation and rising borrowing rates continued to erode household incomes. In November 2022, the public sector spent more than it received in taxes and other income, requiring it to borrow (public sector net borrowing excluding public sector banks (PSNB ex)) £22.0 billion, which was £13.9 billion more than in November 2021, and the highest November borrowing since monthly records began in 1993 as various new government support schemes came on stream. The Bank of England's Monetary Policy Committee voted by a majority of 6-3 to raise interest rates by 50 basis points to 3.5% during its December meeting, pushing the cost of borrowing to the highest level since late-2008, as policymakers try to balance containing inflation amid rising concerns of a looming economic recession.

The unemployment rate in the US was unchanged at 3.7% in November 2022, matching market expectations while non-farm payrolls rose by a larger than forecast 263k. The number of unemployed persons fell from 6.059m to 6.011m in November, while the number of employed decreased by 138k to 158.5m. The labour force participation rate edged down to a four-month low of 62.1% in November from 62.2% in the previous month. The US economy grew an annualised 3.2% on quarter in Q3 2022, better than 2.9% in the second estimate, and rebounding from two straight quarters of contraction. Consumer spending rose more than anticipated as growth in health care and "other" services partially offset a decrease in spending on goods, namely motor vehicles and food and beverages. The biggest positive contribution to growth came from net trade, although exports rose slightly less than reported in the second estimate while imports were unrevised. Meanwhile, annual inflation rate in the US slowed for a fifth straight month to 7.1% in November, the lowest since December last year, and below forecasts of 7.3%. Finally, the Federal Reserve raised the Fed Funds Rate by 50bps to 4.25%-4.5% during its last monetary policy meeting of 2022, pushing borrowing costs to the highest level since 2007. It was a seventh consecutive rate hike, following four straight three-quarter point increases.

The Eurozone economy quarterly growth was revised slightly higher to 0.3% in the third quarter of 2022 from preliminary estimates of 0.2%. Fixed investment was the main driver of growth, rising by 3.6% during the quarter. The ECB raised interest rates by 50 bps during its last monetary policy meeting of 2022, marking a fourth rate increase, following two consecutive 75bps hikes. In addition, household consumption advanced 0.9% and government spending increased slightly by 0.1%. Among the biggest economies, Italy and Germany's GDP grew fastest while France and Spain's GDP showed slight growth and Netherlands contracted. Meanwhile, the annual inflation in the Euro Area was revised to 10.1% in November, slightly up from a preliminary estimate of 10.0%. Energy prices rose at a softer rate compared to last month but remained the largest contributor to the overall price increase.

Housing

The Nationwide House Price Index in the UK increased by 2.8% y/y in December of 2022, much less than 4.4% in November but still modestly ahead of market expectations for 2.3%. Compared to the previous month, prices edged 0.1% lower, the fourth consecutive fall. It was also the worst run since 2008, leaving prices 2.5% lower from their August peak. The Halifax house price index increased 4.7% y/y in November, the least since July of 2020, following an 8.2% rise in October.

Currency

Sterling depreciated slightly against the US dollar and Euro across December amid the ongoing conflict in Ukraine and surging commodity prices.

December	Start	End	High	Low
GBP/USD	\$1.2267	\$1.2029	\$1.2406	\$1.2018
GBP/EUR	€1.1698	€1.1271	€1.1698	€1.1271

Forecast

The Bank Rate was raised to 3.50% at the Monetary Policy Committee's meeting in December, with Capital Economics pencilling in rates to peak at 4.50% by Q2 2023.

Bank Rate	Now	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25
Link Group	3.50%	4.25%	4.50%	4.50%	4.50%	4.00%	3.75%	3.50%	3.25%	3.00%	2.75%	2.50%	2.50%
Capital Economics	3.50%	4.50%	4.50%	4.50%	4.50%	4.25%	4.00%	3.50%	3.00%	-	-	-	-

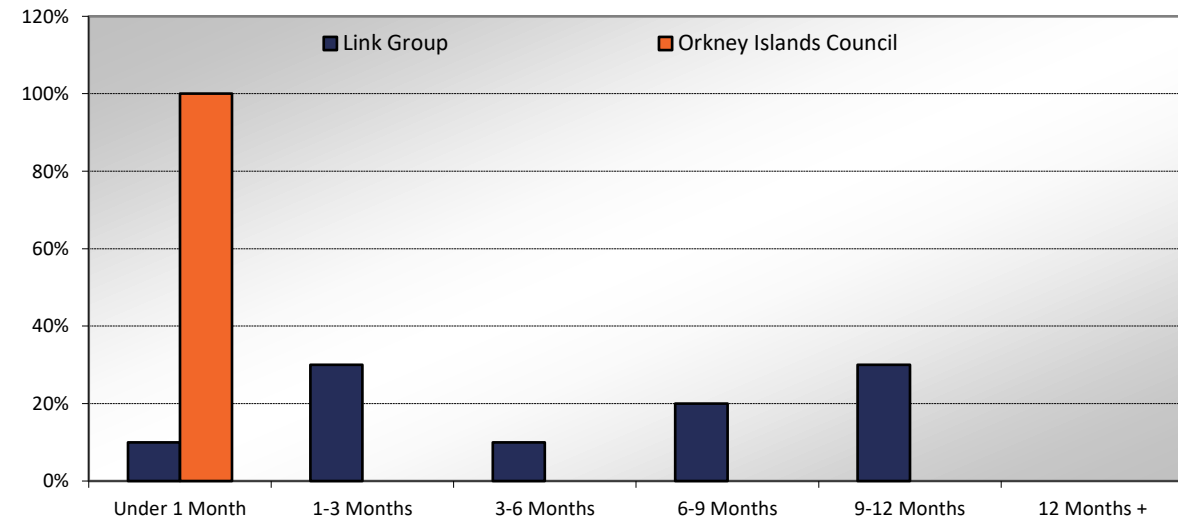
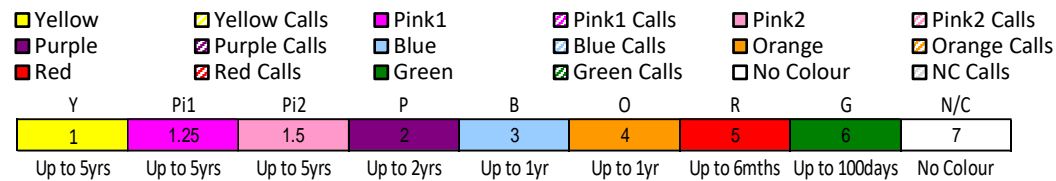
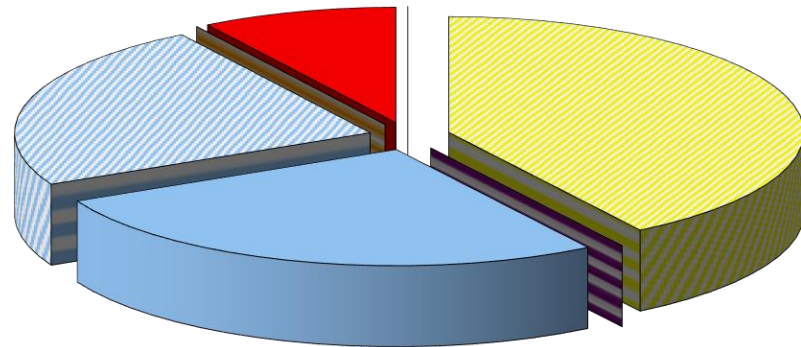
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Current Investment List

Borrower	Principal (£)	Interest Rate	Start Date	Maturity Date	Lowest LT / Fund Rating	Historic Risk of Default
The Royal Bank of Scotland Plc (RFB)	2,630,111	0.80%		Call	A	0.000%
MMF Aberdeen Standard Investments	2,300,000	3.19%		MMF	AAAm	
MMF BlackRock	2,200,000	3.13%		MMF	AAAm	
MMF Insight	100,000	3.11%		MMF	AAAm	
Santander UK PLC	1,000,000	3.12%	05/10/2022	05/01/2023	A	0.001%
National Westminster Bank Plc (RFB)	3,000,000	0.82%	14/01/2022	13/01/2023	A	0.002%
Total Investments	£11,230,111	1.98%				0.001%

Note: An historic risk of default is only provided if a counterparty has a counterparty credit rating and is not provided for an MMF or USDBF, for which the rating agencies provide a fund rating. The portfolio's historic risk of default therefore measures the historic risk of default attached only to those investments for which a counterparty has a counterparty credit rating and also does not include investments which are not rated.

Portfolio Composition by Link Group's Suggested Lending Criteria



Portfolios weighted average risk number = **2.36**

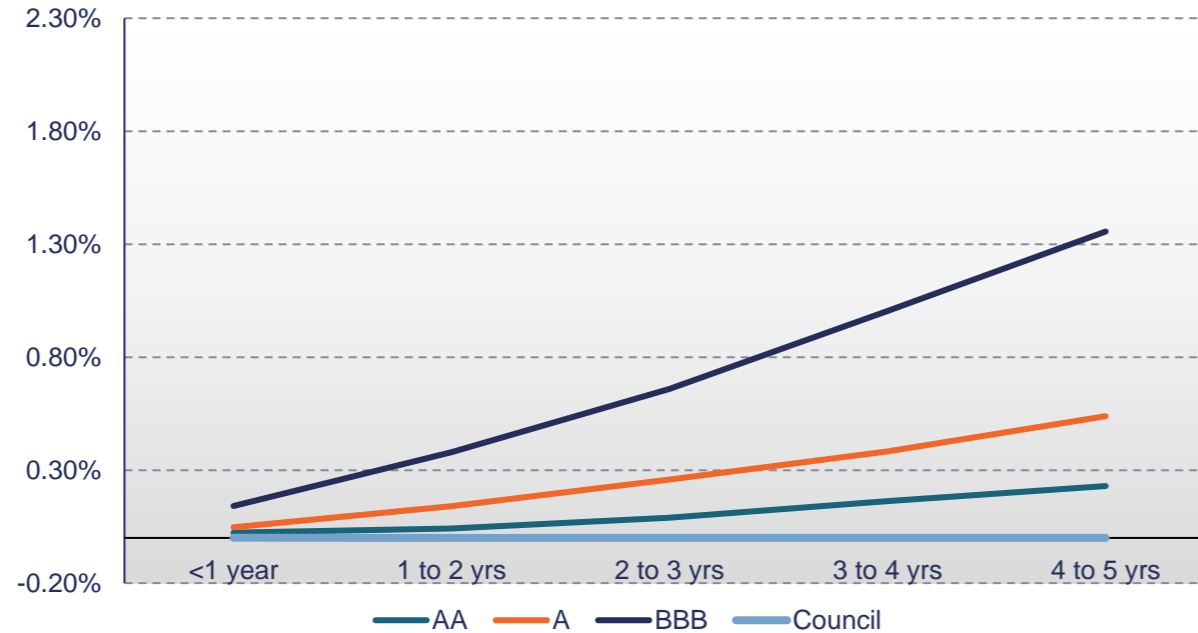
WARoR = Weighted Average Rate of Return
WAM = Weighted Average Time to Maturity

	% of Portfolio	Amount	% of Colour in Calls	Amount of Colour in Calls	% of Call in Portfolio	WARoR	WAM	WAM at Execution	Excluding Calls/MMFs/USDBFs	
									WAM	WAM at Execution
Yellow	40.96%	£4,600,000	100.00%	£4,600,000	40.96%	3.16%	0	0	0	0
Pink1	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Pink2	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Purple	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Blue	50.13%	£5,630,111	46.72%	£2,630,111	23.42%	0.81%	7	194	13	364
Orange	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Red	8.90%	£1,000,000	0.00%	£0	0.00%	3.12%	5	92	5	92
Green	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
No Colour	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Total	100.00%	£11,230,111	64.38%	£7,230,111	64.38%	1.98%	4	105	11	296

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Investment Risk and Rating Exposure

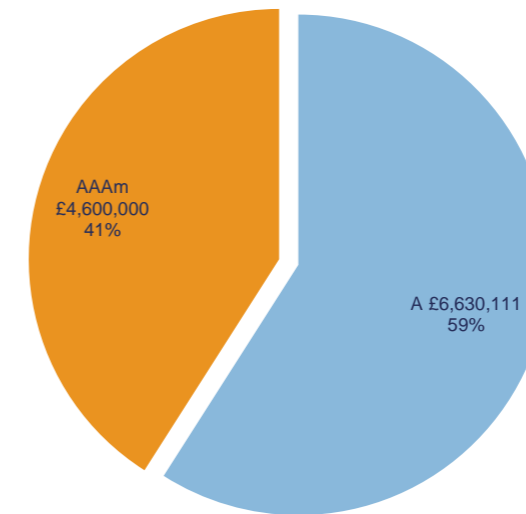
Investment Risk Vs. Rating Categories



Historic Risk of Default

Rating/Years	<1 year	1 to 2 yrs	2 to 3 yrs	3 to 4 yrs	4 to 5 yrs
AA	0.02%	0.04%	0.09%	0.16%	0.23%
A	0.05%	0.14%	0.26%	0.38%	0.54%
BBB	0.14%	0.38%	0.66%	1.01%	1.36%
Council	0.00%	0.00%	0.00%	0.00%	0.00%

Rating Exposure



Historic Risk of Default

This is a proxy for the average % risk for each investment based on over 30 years of data provided by Fitch, Moody's and S&P. It simply provides a calculation of the possibility of average default against the historical default rates, adjusted for the time period within each year according to the maturity of the investment.

Chart Relative Risk

This is the authority's risk weightings compared to the average % risk of default for "AA", "A" and "BBB" rated investments.

Rating Exposures

This pie chart provides a clear view of your investment exposures to particular ratings.

Note: An historic risk of default is only provided if a counterparty has a counterparty credit rating and is not provided for an MMF or USDBF, for which the rating agencies provide a fund rating. The portfolio's historic risk of default therefore measures the historic risk of default attached only to those investments for which a counterparty has a counterparty credit rating and also does not include investments which are not rated.

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Monthly Credit Rating Changes MOODY'S

Date	Update Number	Institution	Country	Rating Action
05/12/2022	1946	The Co-operative Bank plc	United Kingdom	The Long Term Rating was upgraded to 'Ba1' from 'Ba2'. At the same the Outlook on the Long Term Rating changed to Positive from Stable.

Orkney Islands Council

Monthly Credit Rating Changes FITCH

Date	Update Number	Institution	Country	Rating Action
08/12/2022	1948	SMBC Bank International Plc	United Kingdom	The Long Term Rating was downgraded to 'A-' from 'A'. At the same the Outlook on the Long Term Rating was changed to Stable from Negative

Orkney Islands Council

Monthly Credit Rating Changes S&P

Date	Update Number	Institution	Country	Rating Action
05/12/2022	1947	France (Sovereign Rating)	France	The Outlook on the Sovereign Rating of France was changed to Negative from Stable. At the same time the Sovereign Rating was affirmed at 'AA'.

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Investment Portfolio Benchmarking Analysis

December 2022

Group Members:

Aberdeen City Council

Aberdeenshire Council

Angus Council

Clackmannanshire Council

Midlothian Council

Orkney Islands Council

Perth & Kinross Council

The Highland Council

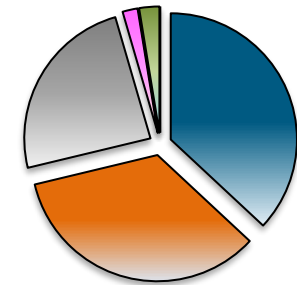
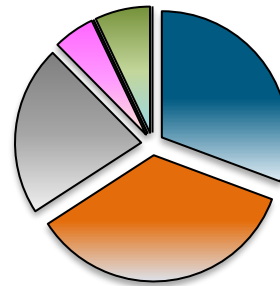
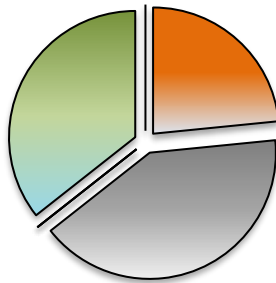
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Summary Sheet

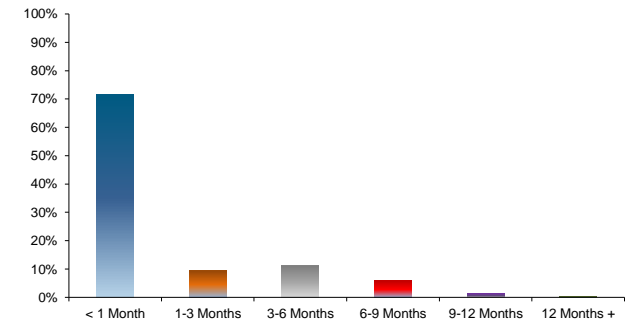
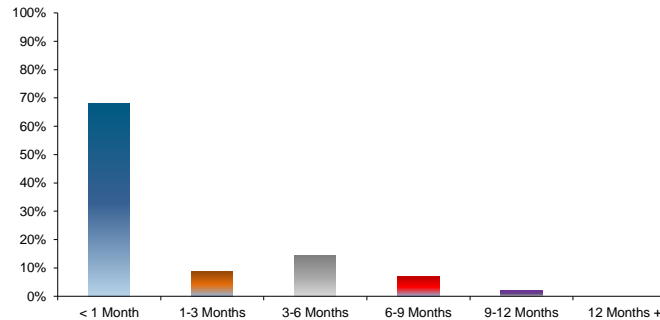
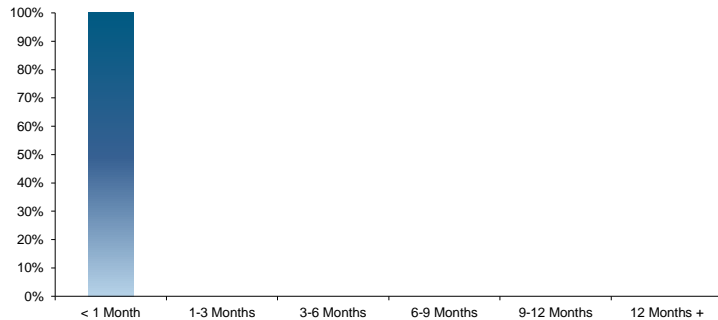
Orkney Islands Council	Benchmark Group 6 (8) Basic Portfolio Characteristics	Scottish Unitary Authorities (22)
WARoR	1.98%	2.75%
WAM	4	52
WATT	105	129
WA Credit Risk	2.36	3.71
Model WARoR	2.69%	2.87%
Difference	-0.71%	-0.12%
Model Band	2.48% - 2.89%	2.67% - 3.07%
Performance	Below	Inline

Asset Breakdown

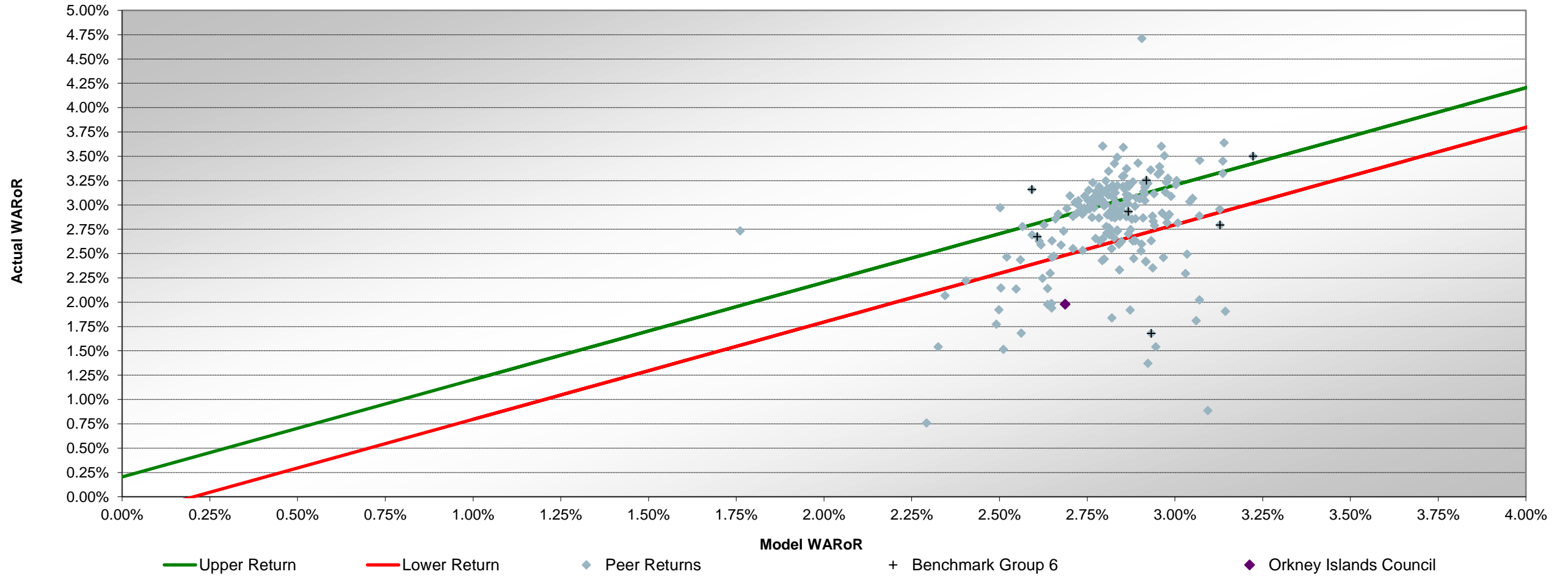
- Fixed Deposits
- Calls & O/N
- MMFs
- USDBFs
- Struct. Prods.
- Bonds
- CDs



Maturity Profiles



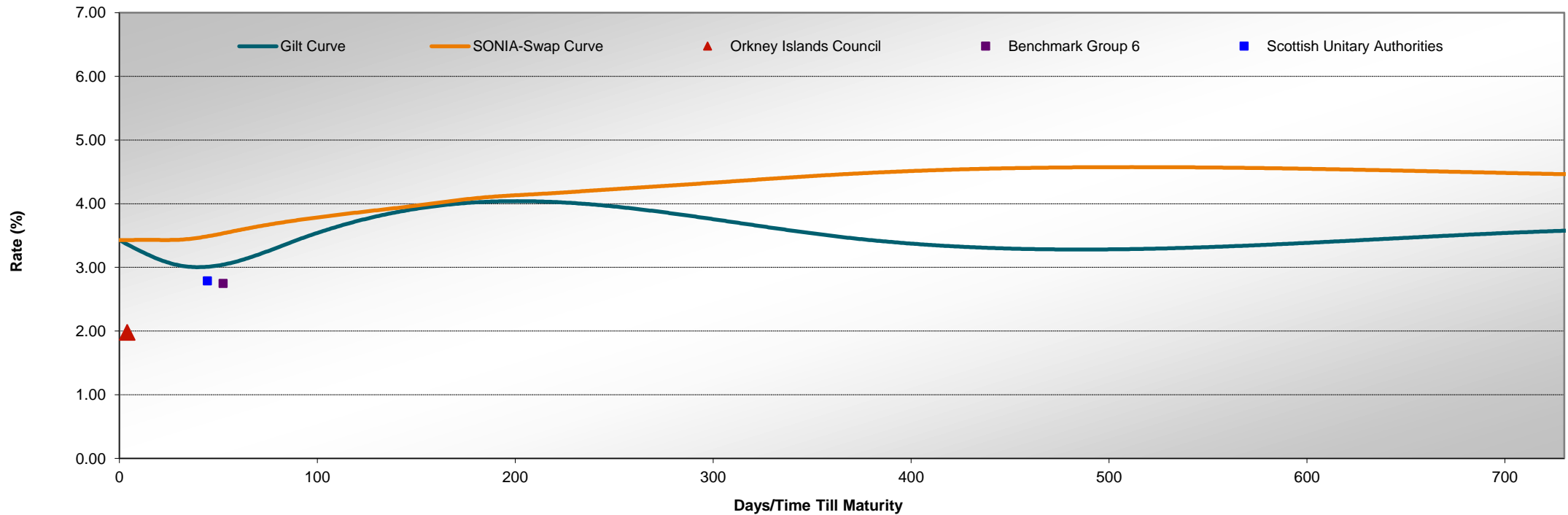
Population Returns against Model Returns



	Actual WARoR	Model WARoR	Difference	Lower Bound	Upper Bound	Performance
Orkney Islands Council	1.98%	2.69%	-0.71%	2.48%	2.89%	Below

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Returns Comparable Against the Risk-Free Rate and SONIA Swap Curve



	WARoR	WAM	WATT	WARisk	Gilt	SONIA-Swap	Difference		Model Bands	Performance
							Gilt	SONIA-Swap		
Orkney Islands Council	1.98%	4	105	2.36	3.36%	3.43%	-1.38%	-1.45%	2.48% - 2.89%	Below
Benchmark Group 6	2.75%	52	129	3.71	3.04%	3.53%	-0.29%	-0.79%	2.67% - 3.07%	Inline
Scottish Unitary Authorities	2.79%	44	98	3.33	3.01%	3.48%	-0.22%	-0.70%	2.68% - 3.09%	Inline

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Peer Comparison

	Orkney Islands Council	Benchmark Group 6 (8)		Scottish Unitary Authorities (22)		Population Average (229)	
Basic Characteristics							
Principal	£11,230,111	£78,287,245		£66,379,520		£108,685,449	
WARoR	1.98%	2.75%		2.79%		2.82%	
WAM	4	52		44		68	
WATT	105	129		98		144	
WA Credit Risk	2.36	3.71		3.33		2.97	
Portfolio Breakdown							
Fixed Deposits	0.00%	30.67%	5	36.94%	15	55.70%	207
Calls & O/N	23.42%	35.18%	8	34.31%	19	14.98%	171
MMFs	40.96%	21.76%	6	24.25%	14	24.46%	180
USDBFs	0.00%	5.31%	1	1.93%	1	0.93%	15
Struct. Prods.	0.00%	0.00%	0	0.00%	0	0.15%	4
Bonds	0.00%	0.00%	0	0.00%	0	0.90%	14
CDs	35.62%	7.08%	2	2.57%	2	2.88%	26
Institution Breakdown							
Banks	59.04%	68.33%	8	58.13%	19	46.78%	219
Building Socs.	0.00%	0.00%	0	1.60%	3	4.78%	74
Government	0.00%	4.60%	4	14.09%	10	22.65%	139
MMFs	40.96%	21.76%	6	24.25%	14	24.43%	180
USDBFs	0.00%	5.31%	1	1.93%	1	0.93%	15
MLDBs	0.00%	0.00%	0	0.00%	0	0.01%	1
Other	0.00%	0.00%	0	0.00%	0	0.42%	15
Domestic/Foreign Exposure							
Domestic	59.04%	62.29%	8	68.58%	21	64.75%	228
Foreign	0.00%	10.64%	3	5.25%	4	9.89%	90
MMFs	40.96%	21.76%	6	24.25%	14	24.43%	180
USDBFs	0.00%	5.31%	1	1.93%	1	0.93%	15
Maturity Structure							
< 1 Month	100.00%	67.89%		71.46%		53.90%	
1-3 Months	0.00%	8.76%		9.49%		20.35%	
3-6 Months	0.00%	14.47%		11.11%		15.25%	
6-9 Months	0.00%	6.84%		5.99%		5.51%	
9-12 Months	0.00%	2.04%		1.49%		3.99%	
12 Months +	0.00%	0.00%		0.46%		1.02%	

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Detailed Peer Comparison

	Orkney Islands Council				Benchmark Group 6 (8)					Scottish Unitary Authorities (22)						
	%	WARoR	WAM	WATT	%	WARoR	WAM	WATT	n	%	WARoR	WAM	WATT	n		
Asset Breakdown																
Fixed Deposits	0.00%	0.00%	0	0	30.67%	2.91%	70	177	5	36.94%	3.00%	64	141	15		
Calls	23.42%	0.80%	0	0	35.18%	1.97%	9	9	8	34.31%	2.27%	4	4	19		
Overnight	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
MMFs	40.96%	3.16%	0	0	21.76%	3.13%	0	0	6	24.25%	3.14%	0	0	14		
USDBFs	0.00%	0.00%	0	0	5.31%	0.65%	0	0	1	1.93%	0.65%	0	0	1		
Structured Prods.	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
Cert.of Deposit	35.62%	1.40%	11	296	7.08%	2.19%	22	78	2	2.57%	2.19%	8	28	2		
Gov. Bonds	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
Corp. Bonds	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
MLDB Bonds	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
Institutional Breakdown																
Banks	59.04%	1.16%	7	179	68.33%	2.80%	64	135	8	58.13%	2.72%	43	91	19		
Building Socs.	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	1.60%	2.44%	3	18	3		
Government	0.00%	0.00%	0	0	4.60%	1.98%	50	291	4	14.09%	2.43%	46	160	10		
MMFs	40.96%	3.16%	0	0	21.76%	3.13%	0	0	6	24.25%	3.14%	0	0	14		
USDBFs	0.00%	0.00%	0	0	5.31%	0.65%	0	0	1	1.93%	0.65%	0	0	1		
MLDBs	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
Other	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
Foreign Breakdown																
Domestic	59.04%	1.16%	7	179	62.29%	2.66%	58	161	8	68.58%	2.50%	50	118	21		
Foreign	0.00%	0.00%	0	0	10.64%	1.21%	69	126	3	5.25%	2.79%	33	61	4		
MMF	40.96%	3.16%	0	0	21.76%	3.13%	0	0	6	24.25%	3.14%	0	0	14		
USDBFs	0.00%	0.00%	0	0	5.31%	0.65%	0	0	1	1.93%	0.65%	0	0	1		
Sovereign State Breakdown																
UK	59.04%	1.16%	7	179	UK	62.29%	2.66%	58	161	8	UK	68.58%	2.50%	50	118	21
					AUS	3.54%	0.68%	34	80	2	AUS	1.75%	0.43%	20	42	3
					CAN	2.91%	0.94%	61	91	2	CAN	1.29%	0.58%	35	50	3
					SING	2.41%	0.38%	16	36	1	SING	0.88%	0.14%	6	13	1
					FIN	1.31%	0.21%	11	46	1	UAE	0.69%	0.09%	6	17	1
					GER	0.47%	0.56%	42	46	1	FIN	0.48%	0.08%	4	17	1
											GER	0.17%	0.20%	15	17	1
Sovereign Rating Breakdown																
AA-	59.04%				AA-	62.29%					AA-	68.58%				
					AAA	6.42%					AAA	2.79%				
					AA+	4.22%					AA+	1.76%				
											AA	0.69%				

Since MMFs are ring-fenced institutions and do not belong to a specific country, the sovereign breakdowns will exclude them from the analysis. As a result the "% of Portfolio" may not add up to 100%.

Benchmarking Rationale and Methodology

The aim of this benchmarking model is to compare portfolio weighted average rate of returns (WARoR) by adjusting for the risks inherent in the portfolio. The main risks in cash portfolios are:

- Maturity Risk
- Credit Risk

As such, the model must normalise WARoRs by adjusting for these risks so as to calculate risk-adjusted returns, or "Model WARoR". The risks the model looks at include:

- Maturity Risk
- Credit Risk
- Change in the shape of the yield curve

This will account for the majority of all risk in the portfolio, however, there will still be some "model uncertainty" as no model can fully explain each WARoR. The difference in model WARoR and actual WARoR may be due to the following reasons:

- Timing differences
- Higher diversification
- Tilt towards a particular asset type or institution type that is extraordinarily paying an above market rate (e.g. special tranche rates)

As a result, the model will build "Standard Error Bands" around the model WARoR calculated so as to adjust for this model uncertainty. This gives us a range for where the actual WARoR should fall. If the actual WARoR is above this upper band, then we would say the client is above on a risk-adjusted basis given the risks inherent in the portfolio. If the actual WARoR is below the lower band, then we would say the client is below on a risk-adjusted basis given the risks inherent in the portfolio.

Model Band Some values when compared to the Model Band will fall outside the range even if the value appears to be equal to the minimum or maximum. This is due to rounding the data to two decimal places within Excel.

For example:
The value returned is 0.9512 and the range is 0.9541 – 1.2321. When rounded the data will be represented as 0.95 and a range of 0.95 – 1.23, although this appears to be in line with the range the underlying data will actually fall outside.

Definitions

WARoR	Weighted Average Rate of Return	This is the average annualised rate of return weighted by the principal amount in each rate.
WAM	Weighted Average Time to Maturity	This is the average time, in days, till the portfolio matures, weighted by principal amount.
WATT	Weighted Average Total Time	This is the average time, in days, that deposits are lent out for, weighted by principal amount.
WA Risk	Weighted Average Credit Risk Number	Each institution is assigned a colour corresponding to a suggested duration using Link Asset Services' Suggested Credit Methodology. 1 = Yellow; 1.25 = Pink 1; 1.5 = Pink 2, 2 = Purple; 3 = Blue; 4 = Orange; 5 = Red; 6 = Green; 7 = No Colour
Model WARoR	Model Weighted Average Rate of Return	This is the WARoR that the model produces by taking into account the risks inherent in the portfolio.
Difference	Difference	This is the difference between the actual WARoR and the model WARoR; Actual WARoR minus Model WARoR