

## **Item: 5**

**Investments Sub-committee: 16 November 2022.**

**Temporary Loans.**

**Report by Head of Finance.**

### **1. Purpose of Report**

To advise of the status of the temporary loan portfolio as at 30 September 2022.

### **2. Recommendation**

The Sub-committee is invited to note:

#### **2.1.**

The status of the temporary loan portfolio as at 30 September 2022, as detailed in section 3 of this report.

#### **2.2.**

That, for the period 1 April to 30 September 2022, the temporary loans portfolio made a return of £89,569.79 at an average interest rate of 0.93%.

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 30 September 2022 totalled £19,242,602.20. 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 30 September 2022:

- £1,000,000 Santander CD matured.
- £2,600,000 invested with Insight Liquidity Fund, with an average net yield of 2.12%.
- £3,200,000 recalled from Insight Liquidity Fund.

- £1,300,000 invested with Aberdeen Standard Investments Liquidity Fund, with an average net yield of 2.22%.
- £1,900,000 recalled from Aberdeen Standard Investments Liquidity Fund.
- £3,200,000 recalled from BlackRock Institutional Sterling Liquidity Fund.
- £1,000,000 3-month Santander CD purchased, with a net yield of 3.12%.

### **3.3.**

The value of the temporary loans stood at £14,891,973.30 as at 31 October 2022.

## **4. Rate of Return**

### **4.1.**

For the period 1 April to 30 September 2022, the temporary loans returned an average interest rate of 0.93%, which equates to a return of £89,569.79.

### **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 10.1% for September 2022 based on Consumer Price Index (12.6% Retail Price Index), the return on temporary loans equates to a relative loss in value of 9.17% 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 30 September 2022, attached as Appendix 2 to this report, indicates that the Council is performing slightly 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 loans 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.**

Uncertainty over the cashflow requirements can in the main be attributed to the high levels of slippage that remain as a recurring feature of the Council's capital programme. While some of this can be attributed to the COVID-19 pandemic and the subsequent delays in delivery and nationwide shortages of materials, overly ambitious lead-in times for the delivery of capital projects also contribute towards this position.

### **5.4.**

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 30 September 2022 is only £9.960M against an approved annual budget of £39.6M.

### **5.5.**

In addition to slippage on the capital programme, the cash balances as at 30 September 2022 also still include the majority of Scottish Government grant funding, amounting to £8.3M, which has been allocated to enable a range of COVID-19 recovery programmes to be developed across the Council. Until these programmes have been fully developed, it is not possible to predict the timelines over which these funds will be utilised.

## **5. 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.

## **6. Financial Implications**

### **6.1.**

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

### **6.2.**

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.

## **7. 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.

## **8. Contact Officers**

Erik Knight, Head of Finance, extension 2127, Email [erik.knight@orkney.gov.uk](mailto:erik.knight@orkney.gov.uk).

Shonagh Merriman, Service Manager (Corporate Finance), extension 2105, Email [shonagh.merriman@orkney.gov.uk](mailto:shonagh.merriman@orkney.gov.uk).

## **9. Appendices**

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

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



## Orkney Islands Council

### Monthly Investment Analysis Review

September 2022

## Monthly Economic Summary

**General Economy**

The UK Manufacturing PMI rose to 48.5 in September from 47.3 in the previous month and above market expectations of 47.5. Still, the latest reading pointed to a second consecutive month of contraction in the sector as production continued to fall amid weaker intakes of new business. The UK Services PMI fell to 49.2 in September from 50.9 in August, missing market expectations of 50, flash estimates showed. This marked the first drop in services' activity since February 2021, though the rate of decline was only marginal. This was largely due to the slowdown in sales amid the cost of living crisis and rising economic uncertainty weighing in on activity levels. The UK Composite PMI slipped to 48.4 in September 2022 from 49.6 in August, below expectations of 49. The biggest concern with businesses often included the negative impact of high costs and a weaker economic outlook on client spending and output. The UK Construction PMI edged higher to 49.2 in August of 2022 from 48.9 in July, compared to market forecasts of 48. Although stronger than expected, the reading was a second consecutive month of falling construction output, as customer demand moved closer to stagnation amid cost pressures and economic uncertainty.

The British economy unexpectedly expanded 0.2% on quarter in the Q2 2022, better than initial estimates of a 0.1% contraction. Services rose 0.2%, revised from initial estimates of a 0.4% drop with the largest contributors coming from human health and social work. Meanwhile, production contracted 0.2%, with manufacturing falling 1.1% and mining 1% while electricity and gas, went up 3.9%. The UK trade deficit narrowed to £7.8 billion in July from £11.4 billion in the previous month. It was the smallest trade shortfall since last December, as exports rose by 4.2% (goods sales advanced by 7.2% and exports of services were up 0.6%). Meanwhile, imports fell by 1.6%, as goods purchases declined by 2.3%, mostly from non-EU countries (-4.1%). Conversely, imports of services rose by 0.7%. The Chancellor Kwasi Kwarteng has announced his "Growth Plan" in a Mini-Budget. The Growth Plan sets an ambitious target for annual economic growth of 2.5% and is supported by a range of cuts to both direct and indirect taxes, support for individuals and businesses to tackle increasing energy costs, and measures to encourage and reward investment. The proposed fiscal package and its unfunded nature, which seemed somewhat at odds to the Bank of England's focus on dampening inflation, caused a sharp market reaction in the immediate aftermath of the announcement. This saw Bank Rate expectations through the final two meetings of the year and 2023 ratchet higher, while gilt yields rose significantly.

UK employment went up by 40,000 in the three months to July, the smallest increase in five months, and less than a third of market forecasts of 128,000. Full-time employees and self-employed workers increased while part-time employees decreased. The unemployment rate in the UK fell to 3.6% in the three months to July, the lowest since 1974, from 3.8% in the previous period as the number of people who are no longer looking for work increased. Average weekly earnings including bonuses in the UK increased by 5.5% y/y in the three months to July, above an upwardly revised 5.2% in the three months to June. In addition, regular pay which excludes bonus payment went up 5.2%, after 4.7% rise in the previous period. However, adjusted for inflation, total pay fell 2.6% while regular pay dropped 2.8%, amid a squeeze in UK living standards. UK inflation, as measured by the Consumer Price Index edged lower to 9.9% in August from 10.1% in July, below market forecasts of 10.2%. It is the first time in 11 months inflation eased, with motor fuels prices making the largest downward contribution. The Bank of England's Monetary Policy Committee raised its key interest rate by 50bps to 2.25% during its September 2022 meeting, the 7th consecutive rate hike, and pushing borrowing costs to the highest since 2008. The GfK Consumer Confidence indicator fell to -49 in September from -44 in August, hitting a new record low as British households continued to grapple with the cost of living crisis and wider economic uncertainties. This is evidently shown a fall in retail sales by 1.6% m/m in August, the biggest decline so far this year and following a 0.4% rise in July. In August 2022, initial estimates show that the public sector

spent more than it received in taxes and other income. This required it to borrow £11.8 billion, which was £5.8 billion more than the £6.0 billion forecast by the Office for Budget Responsibility (OBR).

The US unemployment rate rose to 3.7% in August, the highest since February and above market expectations of 3.5%. The number of unemployed people increased by 344,000 to 6.01 million, while employment levels went up by 442,000 to 158.73 million. The US economy contracted by an annualised 0.6% on quarter in Q2 2022, matching the second estimate, and confirming the economy technically entered a recession, following a 1.6% drop in Q1. The Federal Reserve raised the Federal Funds Rate by 75 bps to the 3%-3.25% range at its September meeting, the third straight three-quarter point increase and pushing borrowing costs to the highest since 2008. Policymakers also anticipate that ongoing increases in the target range will be appropriate, which was reinforced by Chair Powell at the post-meeting press conference. The Fed's "dot plot", which outlines individual member forecasts, showed interest rates will likely reach 4.4% by December, above 3.4% projected in June, and rise to 4.6% next year.

The Euro Area economy expanded 0.8% on quarter in Q2 2022, higher than a 0.6% rise indicated in the second estimate, and the strongest growth rate in three quarters. Household spending was the main driver of the expansion, prompted by the easing of covid restrictions and the summer tourism season. The annual inflation rate in the Euro Area jumped to 10% in September of 2022 from 9.1% in August. It marks the fifth consecutive month of rising inflation, with prices showing no signs of peaking. In a similar vein, core inflation, which excludes prices of energy, food, alcohol and tobacco, increased to a record high of 4.8% in September from 4.3% in August.

### Housing

The Nationwide House Price Index in the UK increased 9.5% y/y in September, slightly less than 10% in August and below market forecasts of 10%. The growth rate came back to single digits for the first time since October last year. The South West region was the strongest performer region once again, while London remained the weakest. Moreover, The Halifax house price index in the United Kingdom rose 11.5% y/y in August of 2022, the lowest level in three months.

### Currency

Sterling depreciated against both the US dollar and Euro across August amid the ongoing conflict in Ukraine and surging commodity prices, which raised the prospect of stagflation.

September	Start	End	High	Low
<b>GBP/USD</b>	\$1.1601	\$1.1395	\$1.1640	\$1.1159
<b>GBP/EUR</b>	€1.1527	€1.1163	€1.1706	€1.0747

### Forecast

The Bank Rate was raised to 2.25% at the Monetary Policy Committee's meeting in September, with both Link Group and Capital Economics now expecting rates to peak at 5.00% by Q1 2023.

Bank Rate	Now	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25
Link Group	2.25%	4.00%	5.00%	5.00%	5.00%	4.50%	4.00%	3.75%	3.25%	3.00%	2.75%	2.75%	2.50%
Capital Economics	2.25%	4.25%	5.00%	5.00%	5.00%	5.00%	4.75%	4.25%	3.75%	3.25%			

## Orkney Islands Council

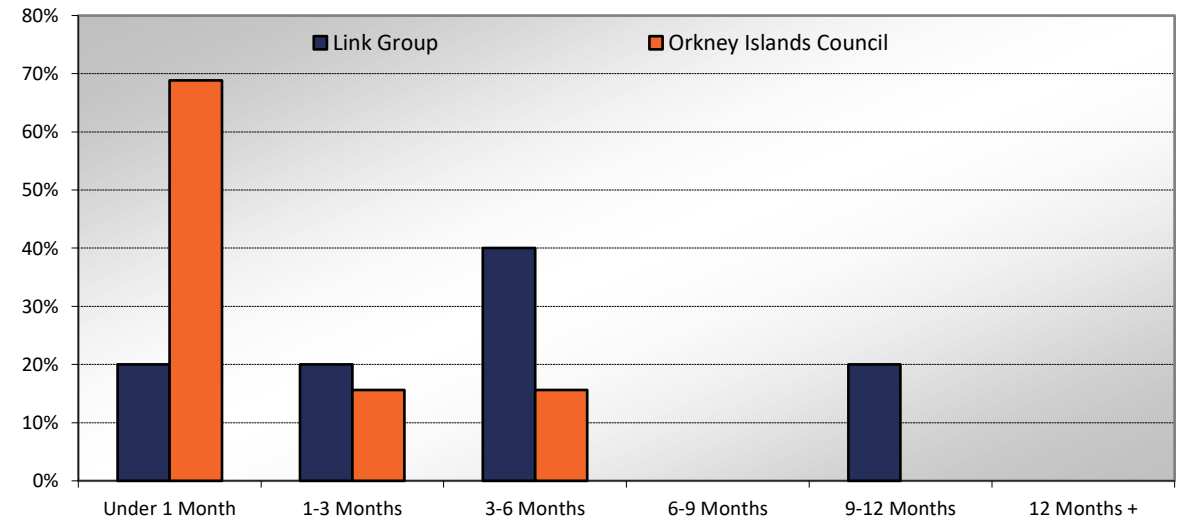
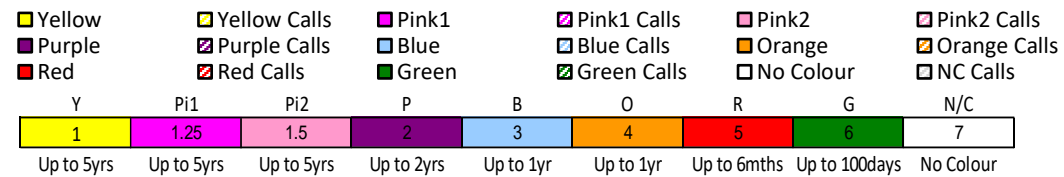
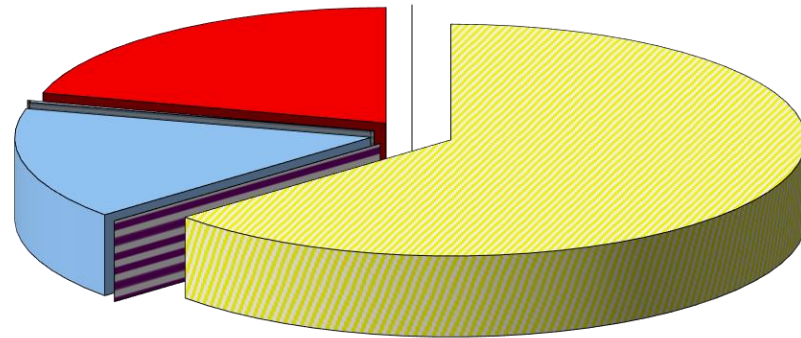
### Current Investment List

Borrower	Principal (£)	Interest Rate	Start Date	Maturity Date	Lowest LT / Fund Rating	Historic Risk of Default
The Royal Bank of Scotland Plc (RFB)	42,602	0.30%		Call	A	0.000%
MMF Aberdeen Standard Investments	4,000,000	1.54%		MMF	AAAm	
MMF BlackRock	4,200,000	1.66%		MMF	AAAm	
MMF Insight	4,000,000	1.83%		MMF	AAAm	
Santander UK PLC	1,000,000	1.69%	05/07/2022	05/10/2022	A	0.001%
Standard Chartered Bank	1,000,000	1.90%	09/06/2022	09/12/2022	A+	0.009%
Santander UK PLC	1,000,000	2.03%	14/07/2022	14/12/2022	A	0.009%
Lloyds Bank Plc (RFB)	1,000,000	2.01%	22/06/2022	22/12/2022	A+	0.010%
National Westminster Bank Plc (RFB)	3,000,000	0.82%	14/01/2022	13/01/2023	A	0.013%
<b>Total Investments</b>	<b>£19,242,602</b>	<b>1.59%</b>				<b>0.010%</b>

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 = **2.15**

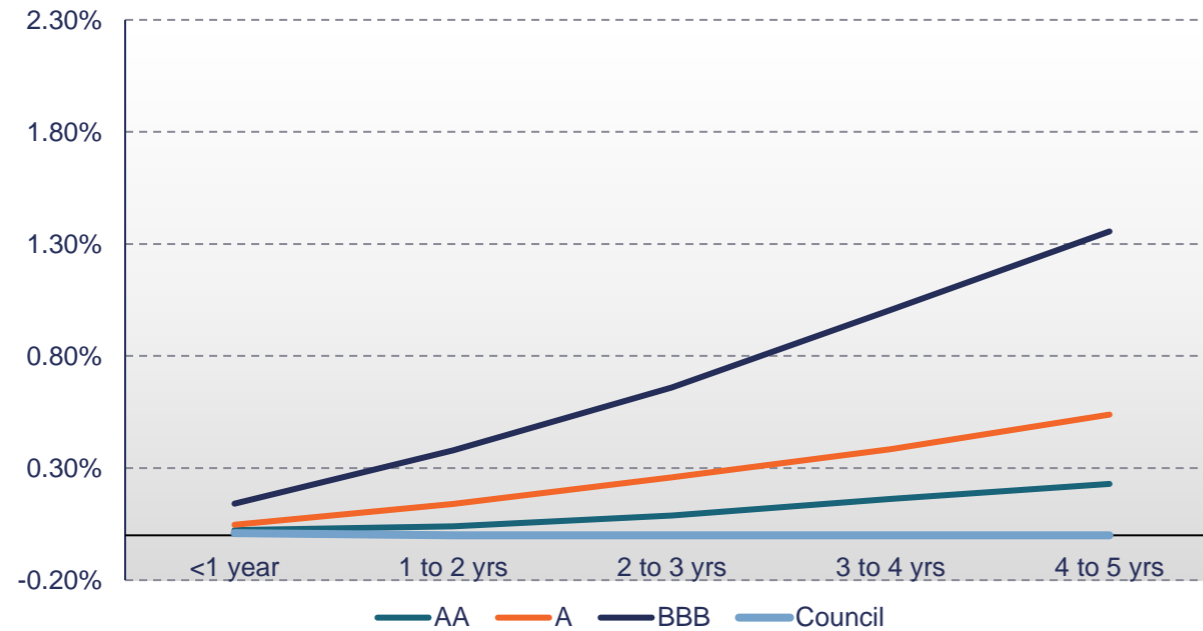
WARoR = Weighted Average Rate of Return  
WAM = Weighted Average Time to Maturity

	% 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	63.40%	£12,200,000	100.00%	£12,200,000	63.40%	1.68%	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	15.81%	£3,042,602	1.40%	£42,602	0.22%	0.81%	104	359	105	364
Orange	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Red	20.79%	£4,000,000	0.00%	£0	0.00%	1.91%	58	153	58	153
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
<b>Total</b>	<b>100.00%</b>	<b>£19,242,602</b>	<b>63.62%</b>	<b>£12,242,602</b>	<b>63.62%</b>	<b>1.59%</b>	<b>28</b>	<b>89</b>	<b>78</b>	<b>243</b>

# Orkney Islands Council

## Investment Risk and Rating Exposure

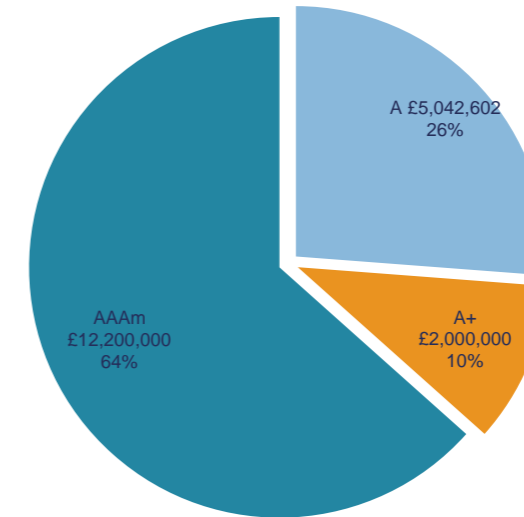
Investment Risk Vs. Rating Categories



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	0.01%	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.

## Orkney Islands Council

### Monthly Credit Rating Changes MOODY'S

Date	Update Number	Institution	Country	Rating Action
23/09/2022	1927	NatWest Markets Plc (NRFB)	United Kingdom	The Long Term Rating was upgraded to 'A1' from 'A2'. At the same time the Outlook on the Long Term rating was changed to Stable from Positive.

## Orkney Islands Council

### Monthly Credit Rating Changes FITCH

Date	Update Number	Institution	Country	Rating Action
13/09/2022	1918	UBS AG	Switzerland	The Support Rating was withdrawn
13/09/2022	1921	Societe Generale	Fance	The Support Rating was withdrawn
13/09/2022	1919	Deutsche Bank AG	Germany	The Support Rating was withdrawn
13/09/2022	1922	Barclays Bank UK PLC (RFB)	United Kingdom	The Support Rating was withdrawn
13/09/2022	1920	BNP Paribas	France	The Support Rating was withdrawn
20/09/2022	1925	Citibank N.A.	United States	The Support Rating was withdrawn
20/09/2022	1923	Bank of America N.A.	United States	The Support Rating was withdrawn
20/09/2022	1924	JPMorgan Chase Bank, N.A.	United States	The Support Rating was withdrawn
20/09/2022	1926	Goldman Sachs International Bank	United Kingdom	The Support Rating was withdrawn
23/09/2022	1929	HSBC UK Bank Plc (RFB)	United Kingdom	The Outlook on the Long Term Rating was changed to Stable from Negative. At the same time the Support Rating was withdrawn
23/09/2022	1928	HSBC Bank PLC (NRFB)	United Kingdom	The Outlook on the Long Term Rating was changed to Stable from Negative. At the same time the Support Rating was withdrawn

Orkney Islands Council

Monthly Credit Rating Changes  
S&P

Date	Update Number	Institution	Country	Rating Action

Whilst Link Group makes every effort to ensure that all the information it provides is accurate and complete, it does not guarantee the correctness or the due receipt of such information and will not be held responsible for any errors therein or omissions arising there from. All information supplied by Link Group should only be used as a factor to assist in the making of a business decision and should not be used as a sole basis for any decision. The Client should not regard the advice or information as a substitute for the exercise by the Client of its own judgement.

Link Group is a trading name of Link Treasury Services Limited (registered in England and Wales No. 2652033). Link Treasury Services Limited is authorised and regulated by the Financial Conduct Authority only for conducting advisory and arranging activities in the UK as part of its Treasury Management Service, FCA register number 150403. Registered office: 6th Floor, 65 Gresham Street, London, EC2V 7NQ.



## Orkney Islands Council

### Investment Portfolio Benchmarking Analysis September 2022

**Group Members:**

Aberdeen City Council  
Aberdeenshire Council  
Angus Council  
Clackmannanshire Council  
Midlothian Council  
Orkney Islands Council  
Perth & Kinross Council  
The Highland Council

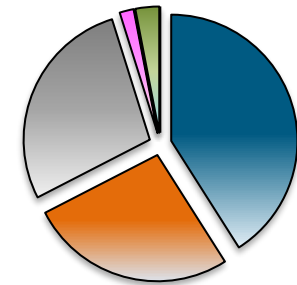
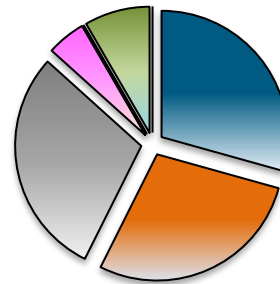
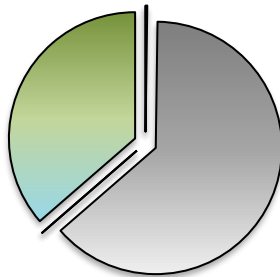
# Orkney Islands Council

## Summary Sheet

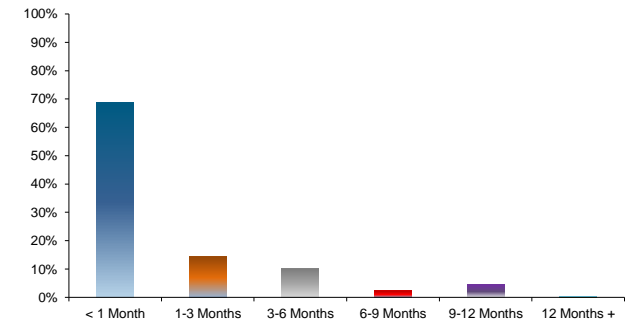
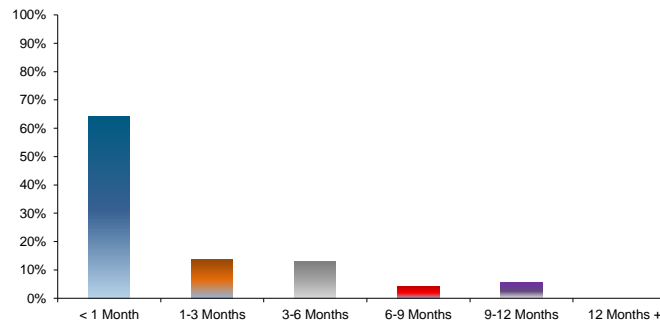
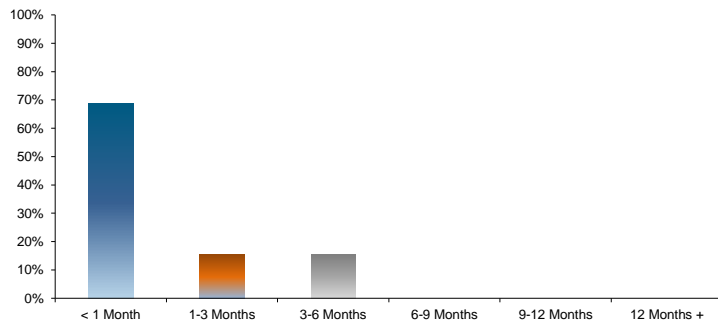
Orkney Islands Council		Benchmarking Group 6 (8) Basic Portfolio Characteristics		Scottish Unitary Authorities (22)	
<b>WARoR</b>	1.59%		1.64%		1.73%
<b>WAM</b>	28		56		45
<b>WATT</b>	89		132		96
<b>WA Credit Risk</b>	2.15		3.37		3.08
<b>Model WARoR</b>	1.65%		1.75%		1.74%
<b>Difference</b>	-0.06%		-0.11%		0.00%
<b>Model Band</b>	1.48% - 1.82%		1.58% - 1.92%		1.56% - 1.91%
<b>Performance</b>	Inline		Inline		Inline

### Asset Breakdown

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

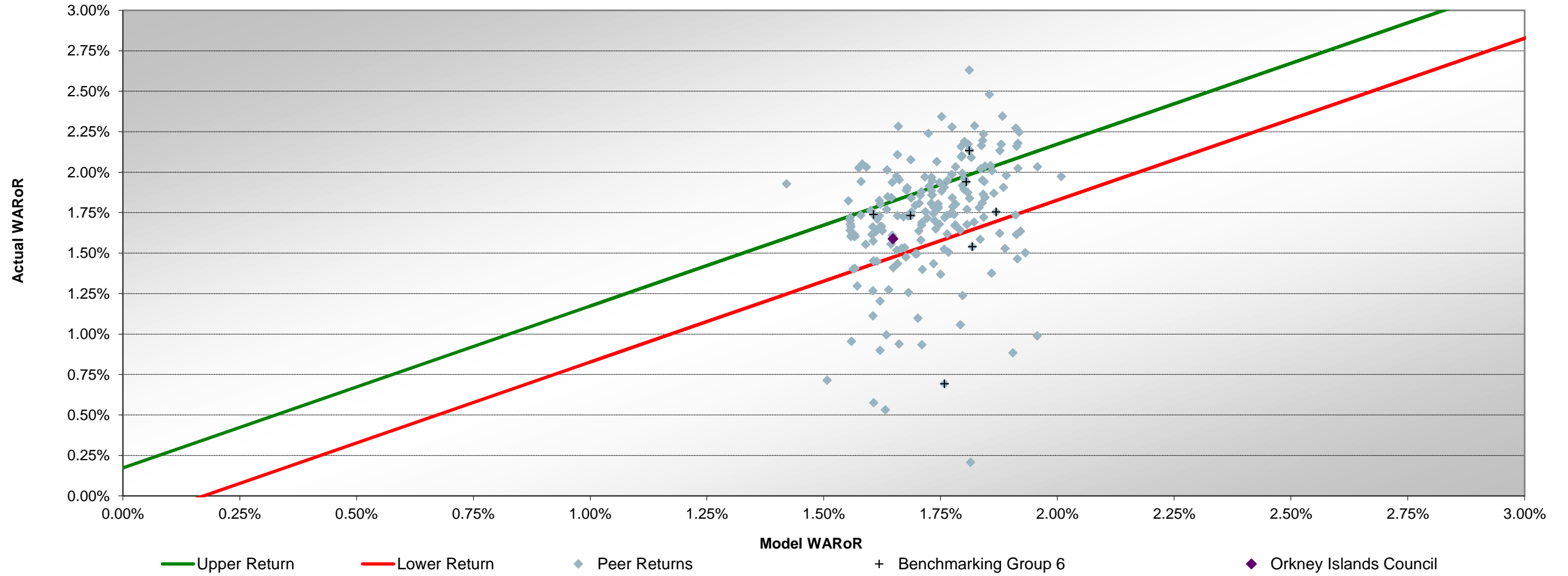


### Maturity Profiles





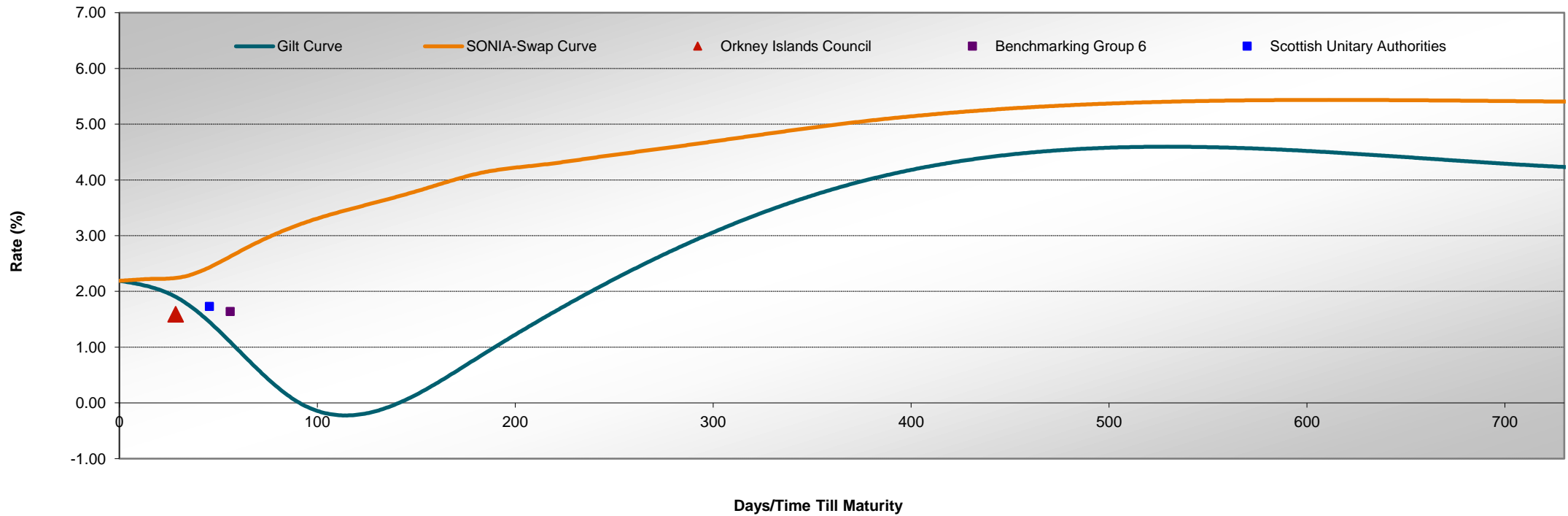
Population Returns against Model Returns



	Actual WARoR	Model WARoR	Difference	Lower Bound	Upper Bound	Performance
<b>Orkney Islands Council</b>	1.59%	1.65%	-0.06%	1.48%	1.82%	Inline

# Orkney Islands Council

## 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	1.59%	28	89	2.15	1.91%	2.24%	-0.32%	-0.65%	1.48% - 1.82%	Inline
Benchmarking Group 6	1.64%	56	132	3.37	1.09%	2.62%	0.55%	-0.98%	1.58% - 1.92%	Inline
Scottish Unitary Authorities	1.73%	45	96	3.08	1.47%	2.42%	0.26%	-0.69%	1.56% - 1.91%	Inline

# Orkney Islands Council

## Peer Comparison

	Orkney Islands Council	Benchmarking Group 6 (8)		Scottish Unitary Authorities (22)		Population Average (227)	
<b>Basic Characteristics</b>							
Principal	£19,242,602	£95,003,208		£97,933,490		£118,594,088	
WARoR	1.59%	1.64%		1.73%		1.74%	
WAM	28	56		45		73	
WATT	89	132		96		145	
WA Credit Risk	2.15	3.37		3.08		2.96	
<b>Portfolio Breakdown</b>							
Fixed Deposits	0.00%	29.33%	4	41.00%	16	54.76%	203
Calls & O/N	0.22%	28.06%	8	26.44%	19	15.03%	175
MMFs	63.40%	29.28%	7	27.72%	16	25.33%	180
USDBFs	0.00%	4.95%	1	1.80%	1	0.87%	16
Struct. Prods.	0.00%	0.00%	0	0.00%	0	0.06%	5
Bonds	0.00%	0.00%	0	0.00%	0	1.18%	13
CDs	36.38%	8.38%	2	3.05%	2	2.76%	25
<b>Institution Breakdown</b>							
Banks	36.60%	60.50%	8	49.43%	19	45.60%	218
Building Socs.	0.00%	0.00%	0	3.16%	5	5.37%	80
Government	0.00%	5.27%	4	17.89%	12	22.22%	134
MMFs	63.40%	29.28%	7	27.72%	16	25.33%	180
USDBFs	0.00%	4.95%	1	1.80%	1	0.87%	16
MLDBs	0.00%	0.00%	0	0.00%	0	0.16%	3
Other	0.00%	0.00%	0	0.00%	0	0.45%	16
<b>Domestic/Foreign Exposure</b>							
Domestic	36.60%	56.72%	8	65.35%	21	64.03%	224
Foreign	0.00%	9.04%	3	5.13%	4	9.78%	87
MMFs	63.40%	29.28%	7	27.72%	16	25.33%	180
USDBFs	0.00%	4.95%	1	1.80%	1	0.87%	16
<b>Maturity Structure</b>							
< 1 Month	68.82%	64.07%		68.64%		52.12%	
1-3 Months	15.59%	13.61%		14.29%		17.70%	
3-6 Months	15.59%	12.81%		10.07%		18.89%	
6-9 Months	0.00%	4.13%		2.33%		5.82%	
9-12 Months	0.00%	5.39%		4.48%		4.45%	
12 Months +	0.00%	0.00%		0.18%		1.03%	

# Orkney Islands Council

## Detailed Peer Comparison

	Orkney Islands Council				Benchmarking Group 6 (8)					Scottish Unitary Authorities (22)						
	%	WARoR	WAM	WATT	%	WARoR	WAM	WATT	n	%	WARoR	WAM	WATT	n		
<b>Asset Breakdown</b>																
Fixed Deposits	0.00%	0.00%	0	0	29.33%	1.84%	65	164	4	41.00%	2.00%	71	143	16		
Calls	0.22%	0.30%	0	0	28.06%	1.18%	15	15	8	26.44%	1.37%	6	6	19		
Overnight	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
MMFs	63.40%	1.68%	0	0	29.28%	1.72%	0	0	7	27.72%	1.75%	0	0	16		
USDBFs	0.00%	0.00%	0	0	4.95%	0.26%	0	0	1	1.80%	0.26%	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	36.38%	1.44%	78	243	8.38%	1.60%	26	67	2	3.05%	1.60%	10	24	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		
<b>Institutional Breakdown</b>																
Banks	36.60%	1.43%	78	242	60.50%	1.74%	66	132	8	49.43%	1.74%	43	82	19		
Building Socs.	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	3.16%	1.66%	12	30	5		
Government	0.00%	0.00%	0	0	5.27%	1.21%	52	291	4	17.89%	1.63%	50	168	12		
MMFs	63.40%	1.68%	0	0	29.28%	1.72%	0	0	7	27.72%	1.75%	0	0	16		
USDBFs	0.00%	0.00%	0	0	4.95%	0.26%	0	0	1	1.80%	0.26%	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		
<b>Foreign Breakdown</b>																
Domestic	36.60%	1.43%	78	242	56.72%	1.66%	61	161	8	65.35%	1.69%	57	122	21		
Foreign	0.00%	0.00%	0	0	9.04%	0.86%	68	120	3	5.13%	1.73%	29	54	4		
MMF	63.40%	1.68%	0	0	29.28%	1.72%	0	0	7	27.72%	1.75%	0	0	16		
USDBFs	0.00%	0.00%	0	0	4.95%	0.26%	0	0	1	1.80%	0.26%	0	0	1		
<b>Sovereign State Breakdown</b>																
UK	36.60%	1.43%	78	242	UK	56.72%	1.66%	61	161	8	UK	65.35%	1.69%	57	122	21
					AUS	3.08%	0.65%	56	82	2	AUS	1.49%	0.36%	24	35	3
					CAN	2.86%	0.50%	39	83	2	CAN	1.22%	0.20%	15	47	3
					SING	1.95%	0.31%	25	38	1	SING	0.89%	0.21%	10	15	2
					FIN	1.16%	0.21%	23	46	1	QAT	0.55%	0.08%	2	8	1
											UAE	0.55%	0.09%	10	17	1
											FIN	0.42%	0.08%	8	17	1
<b>Sovereign Rating Breakdown</b>																
AA-	36.60%				AA-	56.72%					AA-	65.90%				
					AAA	5.02%					AAA	2.38%				
					AA+	4.02%					AA+	1.65%				
											AA	0.55%				

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

<b>WARoR</b>	Weighted Average Rate of Return	This is the average annualised rate of return weighted by the principal amount in each rate.
<b>WAM</b>	Weighted Average Time to Maturity	This is the average time, in days, till the portfolio matures, weighted by principal amount.
<b>WATT</b>	Weighted Average Total Time	This is the average time, in days, that deposits are lent out for, weighted by principal amount.
<b>WA Risk</b>	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
<b>Model WARoR</b>	Model Weighted Average Rate of Return	This is the WARoR that the model produces by taking into account the risks inherent in the portfolio.
<b>Difference</b>	Difference	This is the difference between the actual WARoR and the model WARoR; Actual WARoR minus Model WARoR