Item: 5

Investments Sub-committee: 27 November 2019.

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 2019.

2. Recommendation

The Sub-committee is invited to note:

2.1.

The status of the temporary loan portfolio as at 30 September 2019, as detailed in section 3 of this report.

2.2.

That, for the period 1 April to 30 September 2019, the temporary loans portfolio made a return of £144,262.85 at an average interest rate of 1.01%.

2.3.

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

3. Temporary Loan Portfolio

3.1.

The temporary loan portfolio as at 30 September 2019 totalled £28,707,470. Further details are provided in the Monthly Investment Analysis Review that is prepared by Link Asset Services, attached as Appendix 1 to this report.

3.2.

The following transactions have taken place since 30 September 2019:

- £2,000,000 matured from North Tyneside Metropolitan Borough Council.
- £2,000,000 matured from Toronto Dominion.
- £1,000,000 matured from Bank of Scotland.
- £2,000,000 invested with Thurrock Council at a rate of 0.85%.
- £1,000,000 invested with Santander at a rate of 1.10%.
- £2,000,000 invested with Lancashire County Council at a rate of 1.02%.

- £5,300,000 recalled from Aberdeen Standard Investments Liquidity Fund.
- £3,100,000 invested with Aberdeen Standard Investments Liquidity Fund, with an average net yield of 0.73%.
- £2,100,000 recalled from Insight Liquidity Fund.
- £3,700,000 invested with Insight Liquidity Fund, with an average net yield of 0.71%.

3.3.

The value of the temporary loans stood at £28,071,646 as at 31 October 2019.

4. Rate of Return

4.1.

For the period 1 April to 30 September 2019, the temporary loans returned an average interest rate of 1.01%. This equates to a return of £144,262.85 on the temporary loans for the six months to 30 September 2019.

4.2.

By comparison, the equivalent 90-day London Inter-Bank Offered Rate of 0.76% is considered to be the target.

4.3.

With inflation quoted at 1.7% for September 2019 based on Consumer Price Index (2.4% Retail Price Index), the return on temporary loans equates to a relative decline in value of 0.69% 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 2019, attached as Appendix 2 to this report, indicates that the Council is achieving a higher weighted average rate of return than the benchmarking group and the Scottish Unitary Authorities.

5. Cash Balances

5.1.

Recurring slippage continues to be a feature within the approved capital programme. In financial year 2018 to 2019, works valued at £15,187,000 were reprofiled into 2019 to 2020 and beyond. Not only does this impact on the cost of delivering the capital programme, it also delays the timescale over which the capital finance is required. Uncertainty over the timing of contract payments on capital projects results in additional cash balances being held over the short term. Although these surplus balances are re-invested the shorter duration and uncertainty does impact on performance.

5.2.

The following analysis of the consolidated loans fund summarises the main components that make up the temporary loans balance for the Council's activities as a whole. This indicates that these balances should reduce by £20,600,000 or 60% during financial year 2019 to 2020:

Consolidated Loans Fund.	2018 to 2019 £000.	Movements £000.	2019 to 2020 £000.
Capital:			
Debt - Public Works Loans Board/Salix.	30,200.	-5,000.	25,200.
Loans Fund Deposits – Unapplied Capital Receipts.	2,800.	0.	2,800.
Loans Fund Advances – Capital Financing Requirements.	-32,800.	-19,400.	-52,200.
Revenue:			
Loans Fund Deposits (Revenue Deposits).	38,600.	5,000.	43,600.
Loans Fund Advances (Revenue Advances/Use of Reserves).	-4,900.	-1,600.	-6,500.
Net Current Assets	300.	0.	300.
Bank (Balance)/Overdraft.	-100.	0.	-100.
Temporary Loans Balance.	34,100.	-20,600.	13,100.

5.3.

With £8,755,000 of spend to 30 September 2019, against a full year budget of £33,351,000, it would appear that this trend will be continuing into financial year 2019 to 2019, along with a number of spending programmes reporting end-loaded spend profiles.

5.4.

The Council traditionally relied on its ability to finance its capital spending programmes through the use of internal borrowings. However, in approving the development of a major Schools Investment Programme in 2008 at an estimated capital cost of £58,000,000, and thereafter a significant Social Housing build programme, it was acknowledged that this approach would need to change. In particular, as interest rates were originally predicted to start to increase in 2010, the Council increased external borrowings to £40,000,000 to fund at least part of this sizable programme of capital works. At that time, this was regarded as an effective way for the Council to manage the risk of interest rate movements over the life of the programme, which could otherwise have the potential to adversely impact on the affordability of this programme going forward including future Council budgets. This also applied in the case of the house build programme where any increase in interest rates would impact on the affordability of the overall development, which relies on the ability of housing tenants to support the loan charges in the form of tenant rent increases.

5.5.

Whilst the subsequent decision of Scottish Government, in mid-2010, to change the funding structure for the Schools Investment Programme through the award of a £40,000,000 capital grant which effectively reduced the Council’s borrowing requirements for future years, the terms of the borrowings were still regarded as favourable at that time such that the Council was well placed to benefit from savings on loan charges in the longer term.

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 September 2019.

Appendix 2: Link Asset Services Investment Portfolio Benchmarking Analysis for September 2019.

LINK Asset Services

Orkney Islands Council

Monthly Investment Analysis Review

September 2019

Monthly Economic Summary

General Economy

September's economic data began with the August Markit/CIPS Manufacturing PMI figure falling to 47.4, from 48.0 the previous month. The latest reading pointed to the steepest month of contraction in the manufacturing sector since July 2012 as new orders fell the most in over seven years, amid ongoing global trade tensions, slower world economic growth and Brexit uncertainty. The Construction PMI, meanwhile, fell by 0.3 points to 45.0. The latest reading pointed to the fourth consecutive month of contraction in the construction sector, led by the sharpest reduction in new work since March 2009. Rounding out the set of activity surveys for July, the Services PMI fell to 50.6 from July's figure of 51.4, leaving the Composite figure at 50.2, indicating the UK economy expanded slightly last month.

The UK posted a trade deficit of £0.22 billion in July compared to a downwardly revised £0.13 billion deficit in the prior month. Imports rose 2.7% while exports grew at a slower 2.5% rate. GDP data, meanwhile, showed that the UK economy stagnated in the three months to July, improving on the contraction in the three months to June. The stagnation reflected subdued growth in the services sector of just 0.2% and contraction in both the production and construction sectors of 0.5% and 0.8% respectively. However, year-on-year GDP growth remained steady at 1% during July.

The UK's unemployment rate fell to 3.8% in the three months to July, back at its joint lowest in the last 44 years, slightly below market expectations of 3.9%. Unemployment declined by 11,000 to 1.294 million and employment jumped by 31,000 to 32.777 million, below forecasts of a 53,000 increase. Average earnings excluding bonuses, meanwhile, rose by 3.8% in the three months to July, after a 3.9% increase in the previous period, which matched market expectations.

On an annual basis, CPI inflation fell to 1.7% y/y in 2019 from 2.1% y/y in July, below market expectation of 1.9% and the Bank of England's 2% target. This was the lowest inflation rate since December 2016, amid a slowdown in cost of transport and fall in clothing and footwear prices. The Core CPI figure (which strips out the more volatile components), decreased to 1.5% in August from 1.9% in July, the lowest figure since November 2016.Retail sales fell by 0.2% m/m in August, following an upwardly revised rise of 0.4% in the previous month and compared to market forecasts of no change. Much of the decline was attributable to a 3.2% fall in non-store (predominately online) sales. Year-on-year retail sales growth eased to 2.7%, down from 3.4% in July and below market forecasts of 2.9% growth.

The number of mortgages approved for house purchases in the UK dropped to 65,545 in August, from an 18-month high of 67,011 in July and below market expectations of 66,400. In addition, the number of approved loans secured on dwellings for remortgaging rose to 48,515 from 47,110 in July, while the number of loans for other purposes increased to 14,635 from 13,965. Net mortgage lending rose by £3.85 billion in August, missing the market's consensus of a £4.2 billion rise. The Confederation of British Industry's monthly retail sales balance jumped 33 points from a month earlier to -16 in September, recovering from a near 11-year low. It was also well above market expectations of -25. Still, the latest reading pointed to the fifth consecutive month of decline in retail sales, amid a weaker pound, concerns about potential tariffs and supply issues in the event of a no-deal Brexit. The GfK Consumer Confidence index, meanwhile, rose by 2 points to -12 last month, beating the market forecast of -14, as all five sub-indices recorded gains.

Against the backdrop, the Bank of England's Monetary Policy Committee voted unanimously to hold the bank rate at 0.75% during its September policy meeting, as was widely expected. The bank also reaffirmed its pledge to enact gradual and limited rate rises, assuming a smooth Brexit and some recovery in global growth levels.

In the US, nonfarm payrolls increased by 130,000 in August, following a downwardly revised 159,000 in July and below market expectations of 158,000. Job gains were recorded in the public sector (largely reflecting the hiring of temporary workers for the 2020 Census), health care and financial activities. Average hourly earnings for all employees increased by 0.4% m/m and 3.2% y/y. The unemployment rate remained at the 3.7% rate recorded in July, which was expected by the market.

US CPI rose by 1.7% y/y in August, marginally below consensus forecasts of a 1.8% y/y rise, largely the result of a fall in energy prices. Excluding the more volatile items, such as food and energy prices, core inflation rose to 2.4% in August, the highest this year and above market expectation of a 2.3% gain. The US economy grew at a 2.3% annual rate in the second quarter, down from the 3.1% expansion recorded in the first quarter.The Euro Area unemployment rate reduced slightly to 7.4% in August, the lowest since May 2008 and slightly below market expectations of 7.5%, as the number of unemployed continued to decline. Compared with July, the number of people unemployed in the Euro Area decreased by 115,000 to 12.169 million.

Housing

The Halifax House Price Index in the UK increased 1.8 percent year-on-year in the three months to August of 2019, following a downwardly revised 1.5 percent rise in the previous month and below market expectations of 3.4 percent.

Currency

Over the month of September, the pound moved significantly against the dollar, increasing from $1.213 to $1.256 in mid-late September, but ultimately fell back to finish at $1.231. Likewise against the Euro, the pound started the month at €1.105, peaked at €1.136 and ultimately ended the month at €1.125. The pound’s volatility during the month resulted from the ever changing UK political and Brexit outlooks, as well as increasing signs of a global slowdown.

Forecast

The domestic economy remains unsettled in the run up to the Brexit deadline while the global economy follows suite (US economic figures have actually shown a decline in the past month). Link Asset Services do not expect a base rate rise until Q4 2020.

Bank Rate	Now	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
Link Asset Services	**0.75%**	0.75%	0.75%	0.75%	0.75%	1.00%	1.00%
Capital Economics	**0.75%**	0.75%	0.75%	0.75%	1.00%	1.00%	-

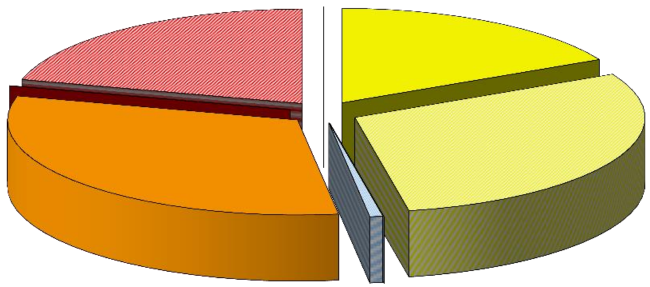
Orkney Islands Council

Current Investment List

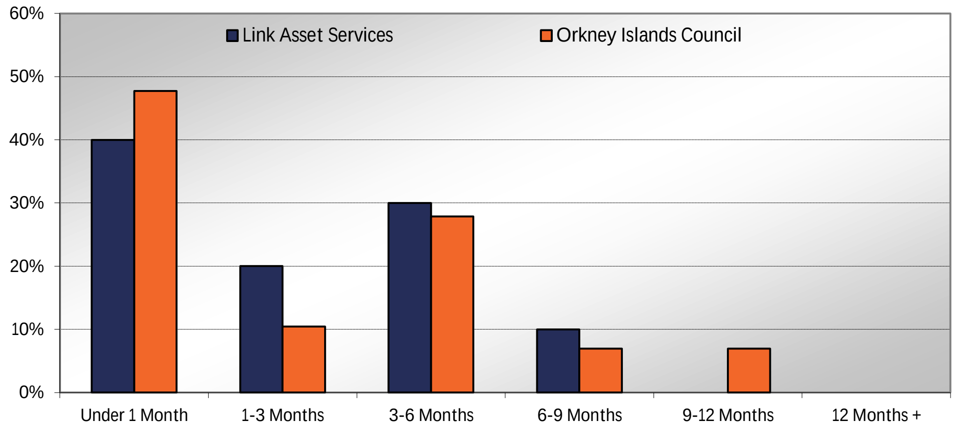
Borrower	Principal (£)	Interest Rate	Start Date	Maturity Date	Lowest Long Term Rating	Historic Risk of Default
MMF Aberdeen Standard Investments	6,700,000	0.74%		MMF	AAA	0.000%
MMF Insight	1,800,000	0.71%		MMF	AAA	0.000%
The Royal Bank of Scotland Plc (RFB)	207,470	0.20%		Call	A	0.000%
North Tyneside Metropolitan Borough Council	2,000,000	1.05%	02/10/2018	01/10/2019	AA	0.000%
Toronto Dominion Bank	2,000,000	1.08%	26/10/2018	25/10/2019	AA-	0.002%
Bank of Scotland Plc (RFB)	1,000,000	0.95%	26/09/2019	28/10/2019	A+	0.004%
Santander UK Plc	1,000,000	1.00%		Call53	A	0.008%
Santander UK Plc	2,000,000	1.00%		Call74	A	0.011%
Thurrock Borough Council	3,000,000	1.10%	18/01/2019	17/01/2020	AA	0.007%
Lloyds Bank Plc (RFB)	2,000,000	1.23%	28/01/2019	28/01/2020	A+	0.017%
Santander UK Plc	3,000,000	1.10%		Call163	A	0.024%
Bank of Scotland Plc (RFB)	2,000,000	1.25%	21/06/2019	22/06/2020	A+	0.038%
Bank of Scotland Plc (RFB)	2,000,000	1.25%	19/07/2019	17/07/2020	A+	0.042%
Total Investments	**£28,707,470**	**0.99%**				0.011%

Orkney Islands Council

Portfolio Composition by Link Asset Services' Suggested Lending Criteria



Y	Pi1	Pi2	P	B	O	R	G	N/C
1	1.25	1.5	2	3	4	5	6	7
Up to 5yrs	Up to 5yrs	Up to 5yrs	Up to 2yrs	Up to 1yr	Up to 1yr	Up to 6mths	Up to 100days	No Colour



Portfolios weighted average risk number = 2.79

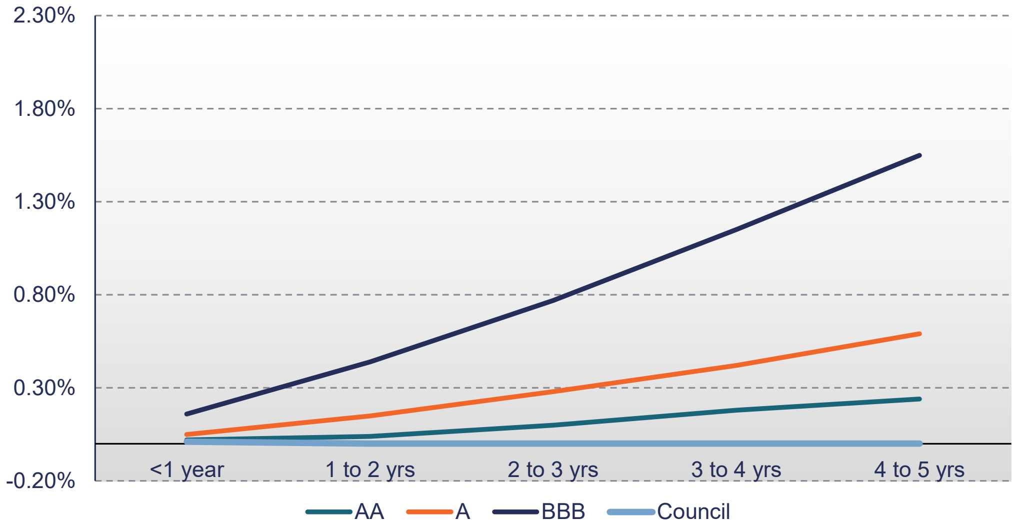
WARoR = Weighted Average Rate of Return
WAM = Weighted Average Time to Maturity

	% 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	Excluding Calls/MMFs/USDBFs WAM at Execution
Yellow	47.03%	£13,500,000	62.96%	£8,500,000	29.61%	0.86%	24	135	66	364
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	0.72%	£207,470	100.00%	£207,470	0.72%	0.20%	0	0	0	0
Orange	31.35%	£9,000,000	0.00%	£0	0.00%	1.17%	159	328	159	328
Red	20.90%	£6,000,000	100.00%	£6,000,000	20.90%	1.05%	115	115	0	0
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
	100.00%	**£28,707,470**	**51.23%**	**£14,707,470**	**51.23%**	**0.99%**	**85**	**190**	**126**	**341**

Orkney Islands Council

Investment Risk and Rating Exposure

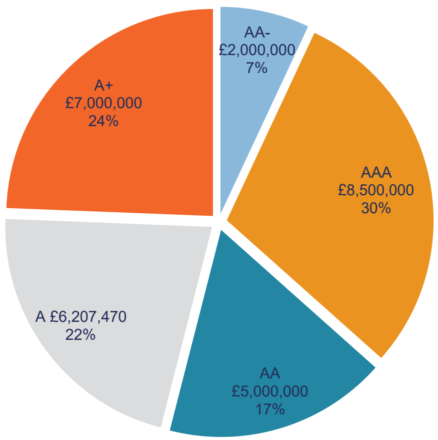
Investment Risk Vs. Rating Categories



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%	0.10%	0.18%	0.24%
A	0.05%	0.15%	0.28%	0.42%	0.59%
BBB	0.16%	0.44%	0.77%	1.15%	1.55%
Council	0.011%	0.000%	0.000%	0.000%	0.000%

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.

Monthly Credit Rating Changes
FITCH

Date	Update Number	Institution	Country	Rating Action
06/09/2019	1693	Commerzbank AG	Germany	The Short Term Rating was upgraded to 'F1' from 'F2'.

Orkney Islands Council

Monthly Credit Rating Changes
MOODY'S

Date	Update Number	Institution	Country	Rating Action
20/09/2019	1696	Credit Agricole Corporate and Investment Bank	France	The Long Term Rating was upgraded to 'Aa3' from 'A1' and the Outlook was changed to Stable from Positive.
22/08/1904	1696	Credit Agricole S.A.	France	The Long Term Rating was upgraded to 'Aa3' from 'A1' and the Outlook was changed to Stable from Positive.

Orkney Islands Council

Monthly Credit Rating Changes
S&P

Date	Update Number	Institution	Country	Rating Action
16/09/2019	1694	NRW.BANK	Germany	The Long Term Rating was upgraded to 'AA' from 'AA-' and the Outlook was changed to Stable from Positive.
18/09/2019	1695	DZ Bank AG Deutsche Zentral Genossenschaftsbank	Germany	The Outlook on the Long Term Rating was changed to Negative from Stable.
27/09/2019	1697	Swedbank AB	Sweden	The Long Term Rating was removed from Negative Watch and placed on Negative Outlook.

Orkney Islands Council

Investment Portfolio Benchmarking Analysis
September 2019

Group Members:

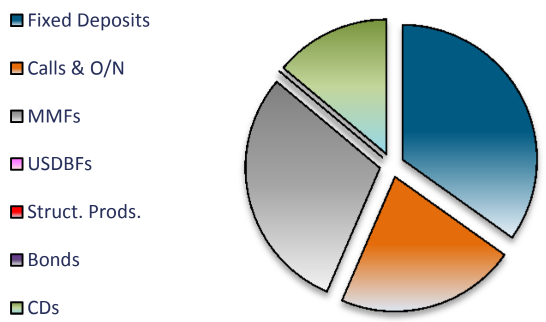
Aberdeen City Council
Aberdeenshire Council
Angus Council
Clackmannanshire Council
Midlothian Council
Orkney Islands Council
Perth & Kinross Council
The Highland Council

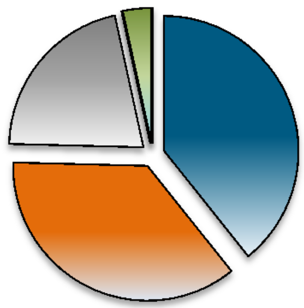
Orkney Islands Council

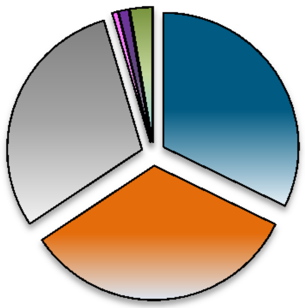
Summary Sheet

	Orkney Islands Council	Benchmarking Group 6 (8)	Scottish Unitary Authorities (22)
		Basic Portfolio Characteristics	
WARoR	0.99%	0.95%	0.85%
WAM	85	102	68
WATT	190	163	107
WA Credit Risk	2.79	3.66	3.02
Model WARoR	0.89%	0.90%	0.84%
Difference	0.10%	0.06%	0.01%
Model Band	0.85% - 0.94%	0.85% - 0.94%	0.79% - 0.89%
Performance	Above	Above	Inline

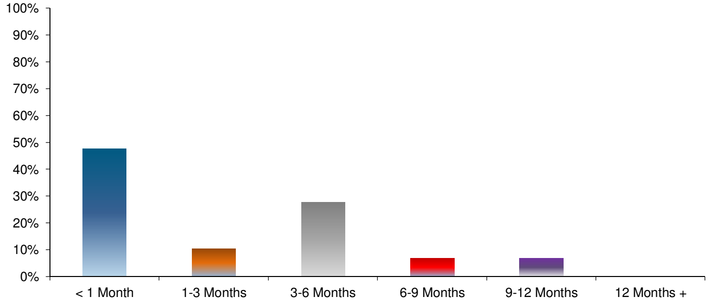
Asset Breakdown

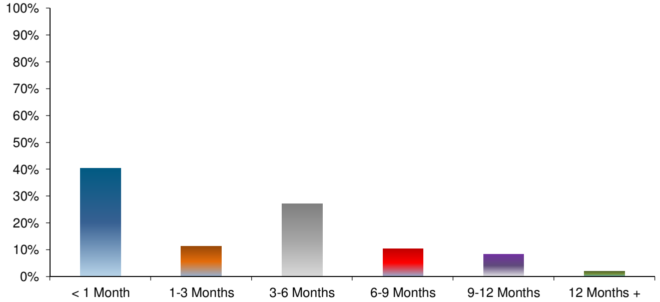


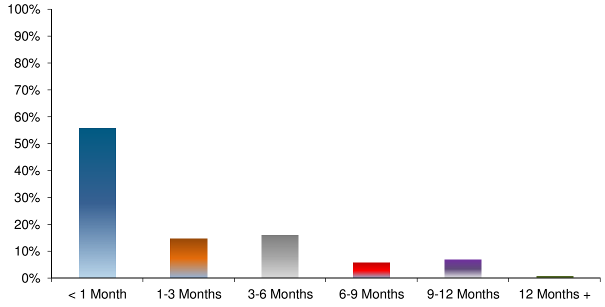




Maturity Profiles

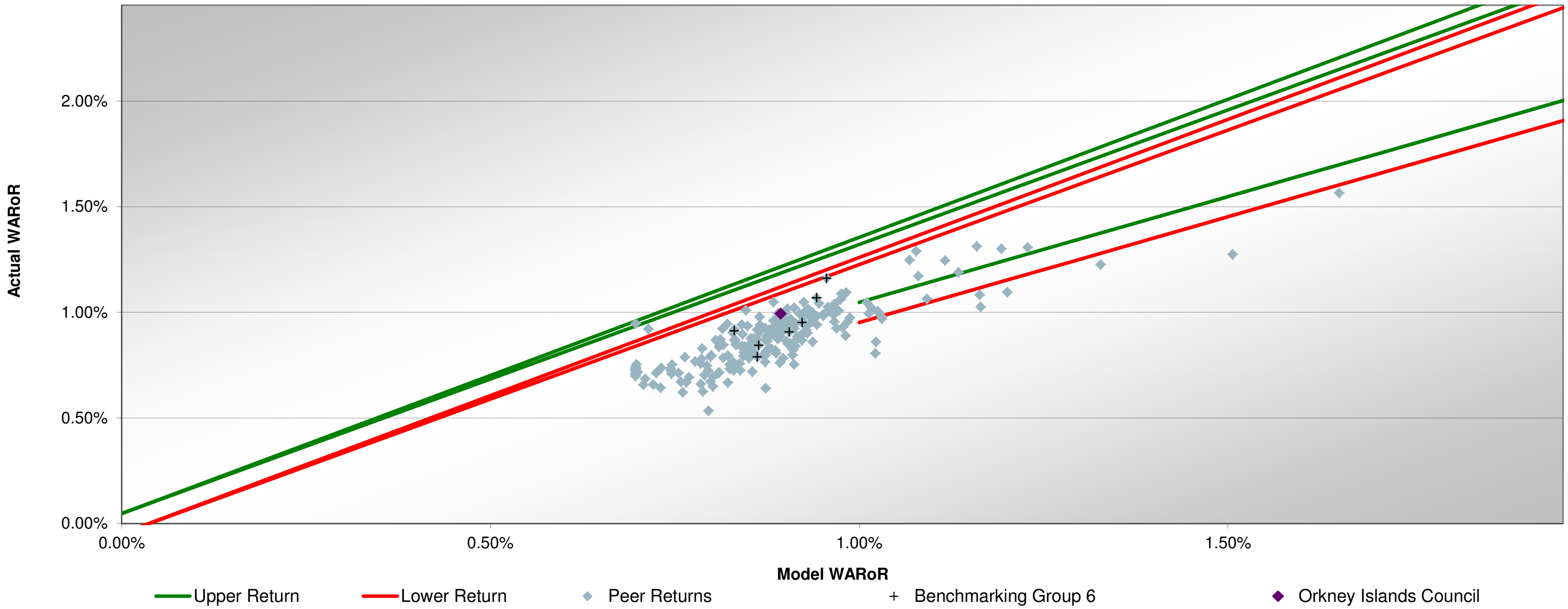






Orkney Islands Council

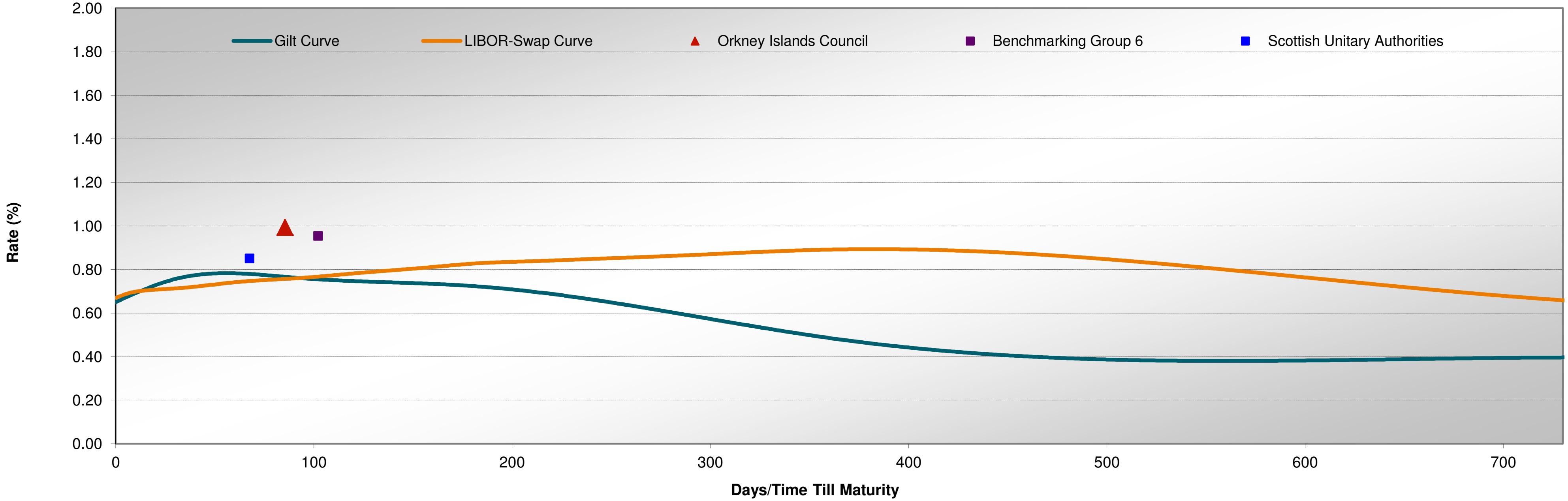
Population Returns against Model Returns



	Actual WARoR	Model WARoR	Difference	Lower Bound	Upper Bound	Performance
Orkney Islands Council	0.99%	0.89%	0.10%	0.85%	0.94%	Above

Orkney Islands Council

Returns Comparable Against the Risk-Free Rate and LIBOR Curve



	WARoR	WAM	WATT	WARisk	Gilt	LIBOR-Swap	Difference Gilt	Difference LIBOR-Swap	Model Bands	Model Performance
Orkney Islands Council	0.99%	85	190	2.79	0.77%	0.76%	0.23%	0.24%	0.85% - 0.94%	Above
Benchmarking Group 6	0.95%	102	163	3.66	0.75%	0.77%	0.20%	0.19%	0.85% - 0.94%	Above
Scottish Unitary Authorities	0.85%	68	107	3.02	0.78%	0.75%	0.07%	0.10%	0.79% - 0.89%	Inline

Orkney Islands Council

Peer Comparison

	Orkney Islands Council	Benchmarking Group 6 (8)		Scottish Unitary Authorities (22)		Population Average (225)	
Basic Characteristics							
Principal	£28,707,470	£98,215,766		£68,118,629		£86,341,249	
WARoR	0.99%	0.95%		0.85%		0.89%	
WAM	85	102		68		86	
WATT	190	163		107		163	
WA Credit Risk	2.79	3.66		3.02		3.18	
Portfolio Breakdown							
Fixed Deposits	34.83%	39.25%	6	32.20%	17	47.38%	193
Calls & O/N	21.62%	36.14%	8	33.47%	19	25.19%	192
MMFs	29.61%	21.19%	7	29.77%	17	21.64%	161
USDBFs	0.00%	0.00%	0	0.68%	2	1.85%	23
Struct. Prods.	0.00%	0.00%	0	0.00%	0	0.06%	3
Bonds	0.00%	0.00%	0	1.21%	2	1.22%	12
CDs	13.93%	3.42%	2	2.68%	5	2.65%	33
Institution Breakdown							
Banks	52.97%	72.43%	8	56.59%	19	50.82%	210
Building Socs.	0.00%	0.00%	0	0.71%	2	8.01%	89
Government	17.42%	6.38%	3	12.26%	11	16.78%	126
MMFs	29.61%	21.19%	7	29.77%	17	22.06%	162
USDBFs	0.00%	0.00%	0	0.68%	2	1.82%	23
MLDBs	0.00%	0.00%	0	0.00%	0	0.00%	0
Other	0.00%	0.00%	0	0.00%	0	0.51%	15
Domestic/Foreign Exposure							
Domestic	63.42%	73.42%	8	66.56%	19	69.99%	215
Foreign	6.97%	5.39%	3	2.99%	4	6.12%	68
MMFs	29.61%	21.19%	7	29.77%	17	22.07%	162
USDBFs	0.00%	0.00%	0	0.68%	2	1.82%	23
Maturity Structure							
< 1 Month	47.75%	40.49%		55.83%		46.32%	
1-3 Months	10.45%	11.41%		14.76%		16.01%	
3-6 Months	27.87%	27.13%		15.98%		23.37%	
6-9 Months	6.97%	10.48%		5.80%		6.58%	
9-12 Months	6.97%	8.46%		6.90%		5.72%	
12 Months +	0.00%	2.02%		0.73%		1.99%	

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
Asset Breakdown																
Fixed Deposits	34.83%	1.14%	147	331		39.25%	1.10%	131	235	6		32.20%	0.93%	105	177	17
Calls	21.62%	1.02%	111	111		36.14%	0.92%	83	83	8		33.47%	0.84%	50	50	19
Overnight	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.00%	0.00%	0	0	0
MMFs	29.61%	0.73%	0	0		21.19%	0.73%	0	0	7		29.77%	0.72%	0	0	17
USDBFs	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.68%	0.86%	0	0	2
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	13.93%	1.16%	73	365		3.42%	1.07%	22	80	2		2.68%	1.02%	35	71	5
Gov. Bonds	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		1.21%	0.73%	7	8	2
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	52.97%	1.11%	140	239		72.43%	1.00%	126	184	8		56.59%	0.92%	79	114	19
Building Socs.	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.71%	0.74%	18	21	2
Government	17.42%	1.08%	66	364		6.38%	1.12%	58	152	3		12.26%	0.91%	65	134	11
MMFs	29.61%	0.73%	0	0		21.19%	0.73%	0	0	7		29.77%	0.72%	0	0	17
USDBFs	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.68%	0.86%	0	0	2
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	63.42%	1.11%	132	260		73.42%	1.02%	129	201	8		66.56%	0.79%	92	139	19
Foreign	6.97%	1.08%	25	364		5.39%	0.37%	40	108	3		2.99%	0.85%	23	52	4
MMF	29.61%	0.73%	0	0		21.19%	0.73%	0	0	7		29.77%	0.72%	0	0	17
USDBFs	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.68%	0.86%	0	0	2
Sovereign State Breakdown																
UK	63.42%	1.11%	132	260	UK	73.42%	1.02%	129	201	8	UK	66.56%	0.79%	92	139	19
CAN	6.97%	1.08%	25	364	AUS	3.03%	0.25%	48	75	2	AUS	1.45%	0.14%	28	44	3
					CAN	1.71%	0.24%	13	68	2	CAN	0.62%	0.09%	5	25	2
					SING	0.64%	0.10%	4	15	1	QAT	0.34%	0.05%	5	7	1
											UAE	0.34%	0.05%	9	16	1
											SING	0.23%	0.04%	1	5	1
Sovereign Rating Breakdown																
AA	63.42%				AA	73.42%					AA	66.90%				
AAA	6.97%				AAA	5.39%					AAA	2.30%				
											AA-	0.34%				

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