

Item: 4

Investments Sub-committee: 15 June 2022.

Temporary Loans.

Report by Head of Finance.

1. Purpose of Report

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

2. Recommendation

The Sub-committee is invited to note:

2.1.

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

2.2.

That, for the period 1 April 2021 to 31 March 2022, the temporary loans portfolio made a return of £71,145.01 at an average interest rate of 0.24%.

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 March 2022 totalled £22,619,121.53. 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 March 2022:

- £2,000,000 matured from Santander 180 day notice account.
- £2,000,000 invested with Santander at a rate of 1.03%.
- £3,900,000 invested with Insight Liquidity Fund, with an average net yield of 0.64%.

- £2,200,000 recalled from Insight Liquidity Fund.
- £2,200,000 invested with Aberdeen Standard Investments Liquidity Fund, with an average net yield of 0.59%.
- £600,000 recalled from Aberdeen Standard Investments Liquidity Fund.

3.3.

The value of the temporary loans stood at £25,282,586.49 as at 30 April 2022.

4. Rate of Return

4.1.

For the period 1 April 2021 to 31 March 2022, the temporary loans returned an average interest rate of 0.24%, which equates to a return of £71,145.01.

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 7.0% for March 2022 based on Consumer Price Index (9.0% Retail Price Index), the return on temporary loans equates to a relative loss in value of 6.76% 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 March 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 longer maturity profile of the Council's temporary loan's portfolio, as fixed deposits have to mature before they can be reinvested at higher rates of interest.

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, £12.8M of planned capital spend from financial year 2021/22 has already been reprofiled into financial year 2022/23 and beyond.

5.5.

In addition to slippage on the capital programme, the cash balances as at 31 March 2022 also included £8.3M of Scottish Government grant funding 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.

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 March 2022.

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



Orkney Islands Council

Monthly Investment Analysis Review

March 2022

Monthly Economic Summary

General Economy

The Flash (i.e. provisional) Manufacturing PMI edged down to 55.2 in March, from 58.0 the previous month. However, the Flash Services PMI increased to 61.0 in March of 2022 from 60.5 in February and above forecasts of a decline to 58. The Services PMI rate of expansion was fastest expansion in the services sector in nine months, amid the further reopening of the economy from COVID-19 containment measures. The Flash Composite PMI eased to 59.7 in March from 59.9 in February, above market forecasts of 57.8. The Construction PMI, meanwhile, registered 59.1 in February, up from 56.3 in January to signal the strongest rise in output since mid-2021. UK GDP expanded 1.1% in the three months to January, better than forecasts of 0.8%. Figures came slightly better than market forecasts of a 1% rise. Services was the main contributor (0.8 percentage points), while production and construction both also contributed positively (0.1 and 0.2 percentage points respectively). The UK trade deficit widened to a record £16.159bn in January from £2.337bn in December. Exports tumbled 8.3% as good sales fell 15.8%, dragged down by a 22.2% fall in exports to EU countries and a 9.6% decrease in those to non-EU countries. Meanwhile, imports rose 16% as good purchases surged 21.8% amid increases from both EU countries and non-EU countries.

The UK's unemployment rate declined to 3.9% in the 3-months to January, the lowest in two years and below market expectations of 4%. The labour market report also showed the number of employees on payroll was up 275,324 to an all-time high of 29.67 million in February, while job vacancies hit a new record of 1.318 million. Average weekly earnings including bonuses in the UK increased 4.8% y/y in the three months to January, above 4.6% in the previous period and market forecasts of an unchanged rate. Similarly, average weekly earnings excluding bonuses rose 3.8%, also above 3.7% in the three months to December, and expectations also of 3.7%.

UK inflation, as measured by the Consumer Price Index, increased to 6.2% y/y in February from 5.5% in January and above market forecasts of 5.9%. This represents the highest inflation rate since 1992, as the rising cost of energy and food continues to squeeze household incomes. Against this backdrop, the Monetary Policy Committee voted by a majority of 8-1 to raise Bank Rate by 25bps to 0.75% at its March 2022 meeting, in line with expectations. The Committee judged that some further modest tightening in monetary policy may be appropriate in the coming months, in particular as the invasion of Ukraine by Russia is likely to accentuate both the peak and longevity of above target inflation and the expected adverse impact on activity.

Meanwhile, retail sales unexpectedly fell 0.3% m/m in February, partly reversing a 1.9% rise in January and compared to market forecasts of a 0.6% increase. Compared to pre-pandemic levels of February 2020, retail sales have increased 3.7%. Meanwhile, the GfK Consumer Confidence index dropped to its lowest level in 16 months at -31 in March, amid mounting concerns about surging inflation, higher interest rates and the Ukraine conflict. This followed a reading of -26 in February and was slightly lower than expectations of -30.

The UK government recorded a £13.1 billion deficit in its public finances in February, much higher than market expectations of £8.1 billion. This represented the second-highest February borrowing since monthly records began in 1993. As a result, borrowing reached £138.4 billion in the financial year-to-February. This was the third-highest financial year-to-February borrowing since monthly records began in 1993 but less than half of the £290.9 billion borrowed in the same period last year.

The US economy added 678,000 payrolls in February, the most in seven months and well above market forecasts of 400,000. As a result, the US unemployment rate edged down to 3.8% from 4% previously, representing a new pandemic low and below market expectations of 3.9%. The US economy expanded an annualised 6.9% on quarter in the last three months of 2021, 0.1% lower than in the second estimate. Against this backdrop, price growth (as measured by the Federal Reserve's preferred Personal Consumption Expenditure deflator) accelerated to 7.9% in February, the highest since January 1982, matching market expectations. Following its February decision to make no policy change, the Fed raised the target for its Fed Funds rate by a quarter-point to 0.25%-0.5% at its March meeting. This was the first hike for three years with the following press conference and associated "dot plot" of Fed member expectations signalling that this was likely the first of a series of policy tightening measures. While the Fed stated that conditions at the time of meetings would determine any action, the forecasts now sees rate hikes at each of the six remaining meetings this year.

The Eurozone economy advanced 0.3% on quarter in the last three months of 2021, matching flash estimates, as the Omicron variant's spread across the continent later in the year brought about restrictions which hurt the services sector, as well as labour shortages. The annual inflation rate in the Euro Area rose to a fresh record high of 5.9% y/y in February from 5.1% in January. Energy continued to record the biggest source of price increases. Core inflation, which excludes prices of energy, food, alcohol and tobacco, accelerated to 2.7% in February from 2.3% in January. The ECB voted to maintain interest rates at its March meeting. However, the ECB surprisingly sped up the asset purchase schedule for the coming months and said that the asset purchase program could end in the third quarter if the medium-term inflation outlook did not weaken. The Bank also confirmed that monthly net asset purchases would amount to €40 billion in Q2, €30 billion in Q3 and €20 billion from October onwards and for as long as necessary to reinforce the accommodative impact of its policy rates.

Housing

The Nationwide House Price Index jumped 14.3% y/y in March, the strongest increase since November 2004, and above forecasts of 13.5%. On a monthly basis, prices increased 1.1%, also above forecasts of 0.8%, the eighth consecutive monthly increase. The price of a typical UK home climbed to a new record high. According to Nationwide, prices are now 21% higher than before the pandemic struck in early 2020.

Currency

Sterling depreciated against both the US dollar and Euro this month amid the ongoing war in Ukraine and surging commodity prices, which raised the prospect of slowing growth and high inflation in the UK.

March	Start	End	High	Low
GBP/USD	\$1.3938	\$1.3797	\$1.3991	\$1.3712
GBP/EUR	€1.1565	€1.1739	€1.1739	€1.1565

Forecast

The Bank of England's Monetary Policy Committee increased the Bank Rate by 0.25% to 0.75% at its March meeting, which was in line with Link Group's forecast.

Bank Rate	Now	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Link Group	0.75%	1.00%	1.00%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
Capital Economics	0.75%	1.00%	1.25%	1.25%	1.50%	1.75%	2.00%	2.00%	-	-	-	-

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Current Investment List

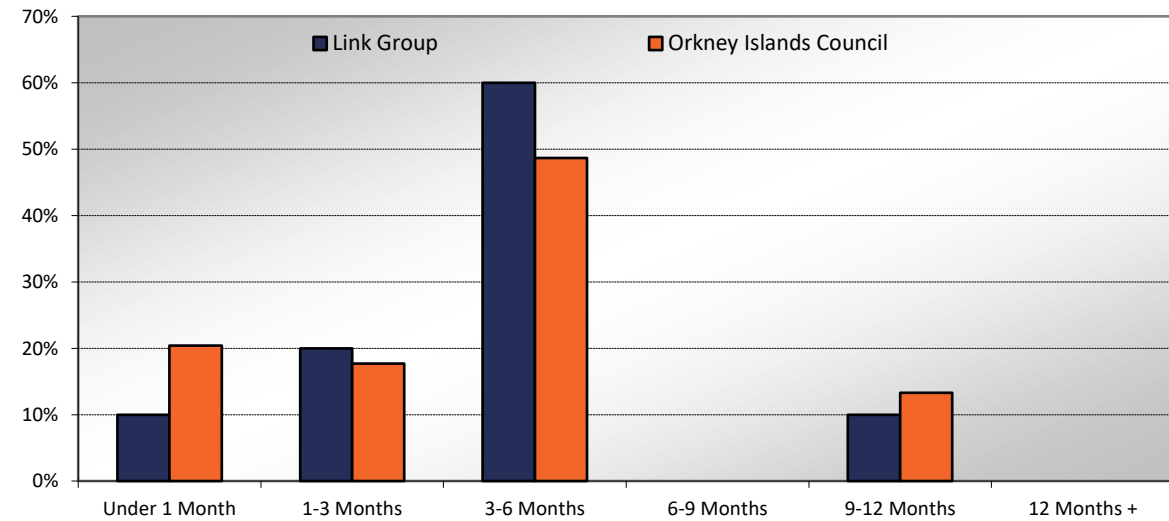
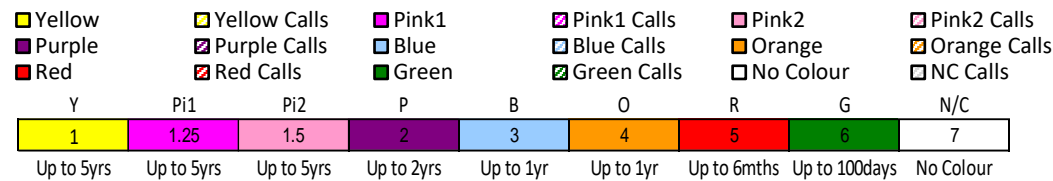
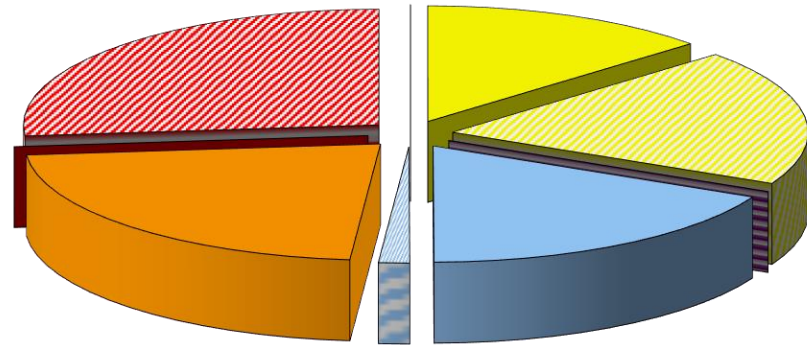
Borrower	Principal (£)	Interest Rate	Start Date	Maturity Date	Lowest LT / Fund Rating	Historic Risk of Default	Expected Credit Loss (£)
MMF Insight	4,300,000	0.39%		MMF	AAAm		
The Royal Bank of Scotland Plc (RFB)	319,122	0.01%		Call	A	0.000%	0
National Westminster Bank Plc (RFB)	1,000,000	0.16%	19/05/2021	18/05/2022	A	0.006%	61
Warrington Borough Council	3,000,000	0.10%	09/06/2021	08/06/2022	AA-	0.004%	0
Toronto Dominion Bank	2,000,000	0.40%	10/12/2021	04/08/2022	AA-	0.008%	158
Toronto Dominion Bank	3,000,000	0.20%	06/09/2021	02/09/2022	AA-	0.010%	292
Santander UK PLC	2,000,000	0.53%		Call180	A	0.023%	455
Santander UK PLC	4,000,000	0.53%		Call180	A	0.023%	910
National Westminster Bank Plc (RFB)	3,000,000	0.82%	14/01/2022	13/01/2023	A	0.036%	1092
Total Investments	£22,619,122	0.41%				0.017%	£2,967

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

The Historic Risk of Default column is based on the lowest long term rating. If clients are using this % for their Expected Credit Loss calculation under IFRS 9, please be aware that the Code does not recognise a loss allowance where the counterparty is central government or a local authority since relevant statutory provisions prevent default. For these instruments, the Expected Credit Loss will be nil. Please note that we are currently using Historic Default Rates from 1990-2021 for Fitch, 1983-2021 for Moody's and 1981-2021 for S&P.

Where Link Group have provided a return for a property fund, that return covers the 12 months to December 2021, which are the latest returns currently available.

Portfolio Composition by Link Group's Suggested Lending Criteria



Portfolios weighted average risk number = **3.11**

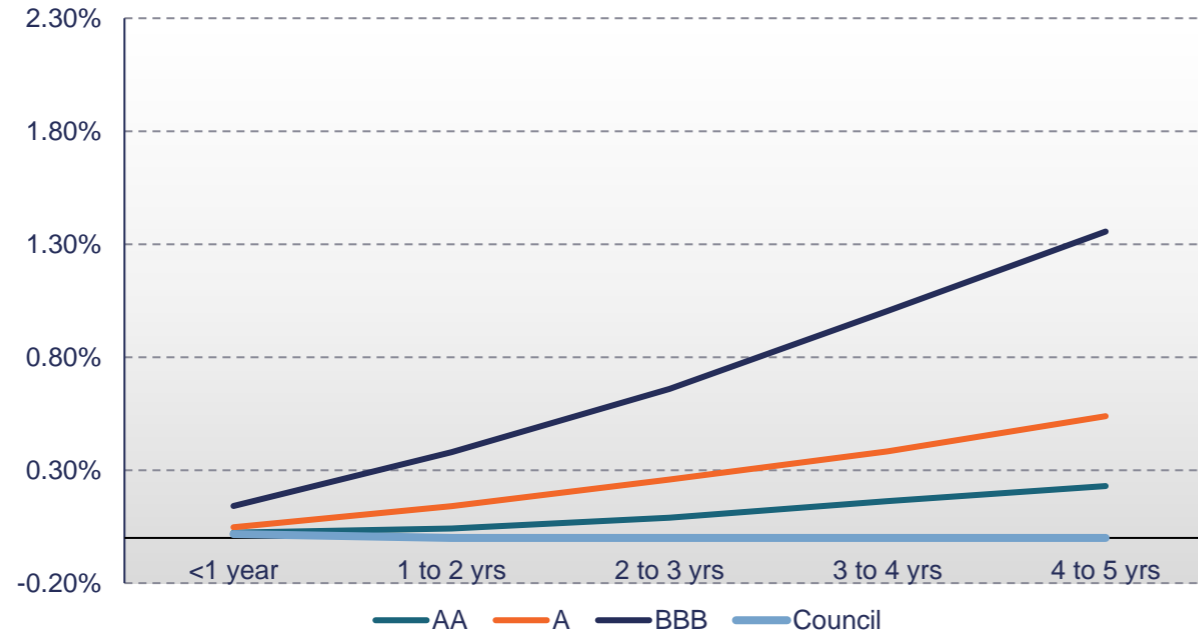
WARoR = Weighted Average Rate of Return
WAM = Weighted Average Time to Maturity

	% 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	32.27%	£7,300,000	58.90%	£4,300,000	19.01%	0.27%	28	150	69	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	19.10%	£4,319,122	7.39%	£319,122	1.41%	0.61%	211	337	228	364
Orange	22.11%	£5,000,000	0.00%	£0	0.00%	0.28%	143	311	143	311
Red	26.53%	£6,000,000	100.00%	£6,000,000	26.53%	0.53%	180	180	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
Total	100.00%	£22,619,122	46.95%	£10,619,122	46.95%	0.41%	129	229	153	342

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Investment Risk and Rating Exposure

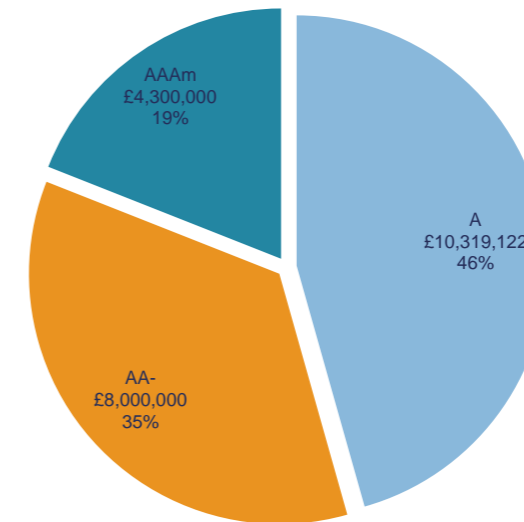
Investment Risk Vs. Rating Categories



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	0.017%	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.

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 FITCH

Date	Update Number	Institution	Country	Rating Action
17/03/2022	1884	Bayerische Landesbank	Germany	The Support Rating was withdrawn.
18/03/2022	1885	Landesbank Baden-Wuerttemberg	Germany	The Support Rating was withdrawn.
25/03/2022	1887	Co-operative Bank PLC (The)	United Kingdom	The Support Rating was withdrawn.
28/03/2022	1888	Australia and New Zealand Banking Group Ltd.	Australia	The Support Rating was withdrawn.
28/03/2022	1888	Commonwealth Bank of Australia	Australia	The Support Rating was withdrawn.
28/03/2022	1888	National Australia Bank Ltd	Australia	The Support Rating was withdrawn.
28/03/2022	1888	Westpac Banking Corp.	Australia	The Support Rating was withdrawn.

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Monthly Credit Rating Changes MOODY'S

Date	Update Number	Institution	Country	Rating Action
01/03/2022	1883	Swedbank AB	Sweden	The Long Term Rating was placed on Negative Outlook and removed from Negative Watch.

Orkney Islands Council

Monthly Credit Rating Changes S&P

Date	Update Number	Institution	Country	Rating Action
22/03/2022	1886	Landesbank Hessen-Thuringen Girozentrale	Germany	The Long Term Rating was upgraded to 'A' from 'A-' and the Short Term Rating was upgraded to 'A-1' from 'A-2'.

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Orkney Islands Council

Investment Portfolio Benchmarking Analysis

March 2022

Group Members:

Aberdeen City Council

Aberdeenshire Council

Angus Council

Clackmannanshire Council

Highland Council

Midlothian Council

Orkney Islands Council

Perth & Kinross Council

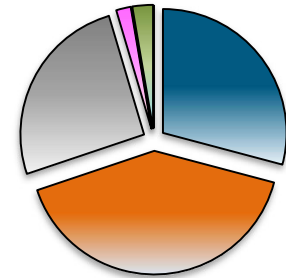
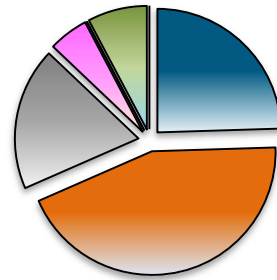
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Summary Sheet

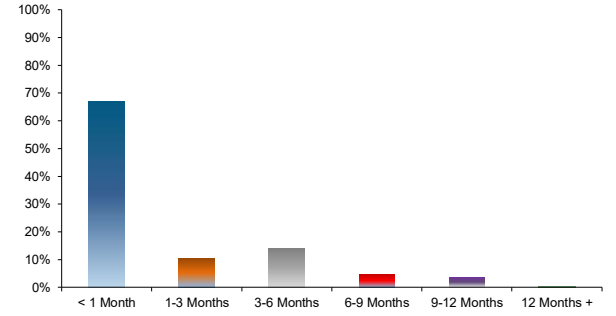
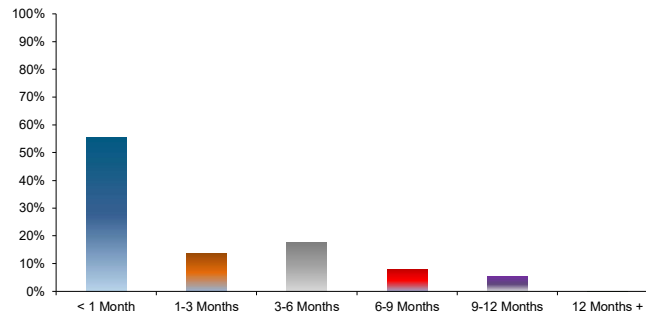
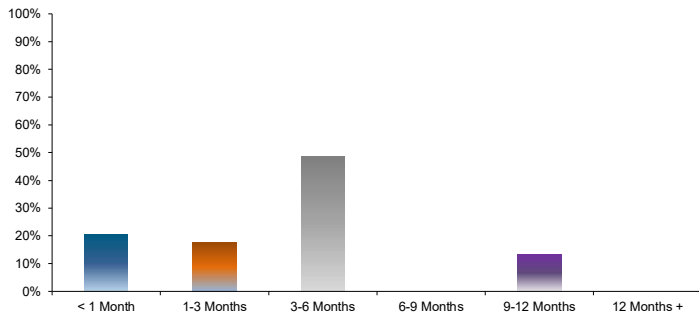
Orkney Islands Council	Benchmarking Group 6 (8) Basic Portfolio Characteristics	Scottish Unitary Authorities (23)
WARoR	0.41%	0.46%
WAM	129	71
WATT	229	144
WA Credit Risk	3.11	3.69
Model WARoR	0.47%	0.47%
Difference	-0.07%	-0.01%
Model Band	0.38% - 0.56%	0.38% - 0.56%
Performance	Inline	Inline

Asset Breakdown

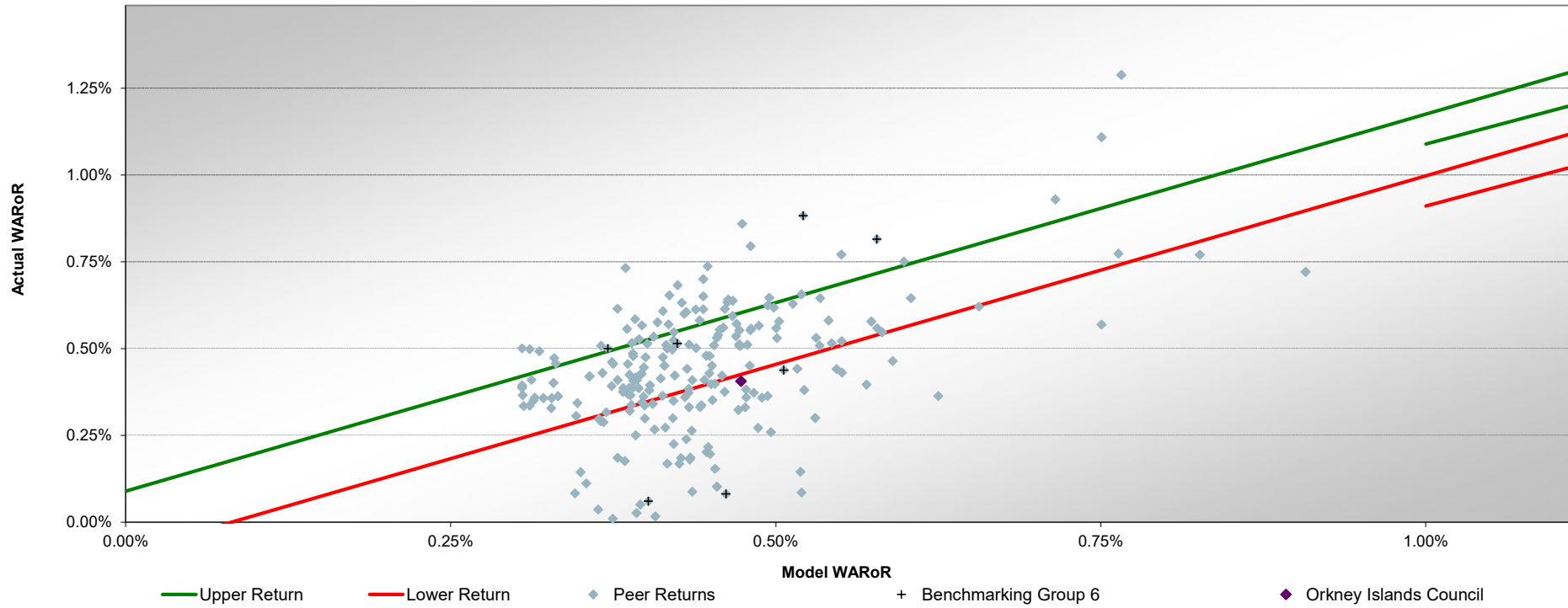
- Fixed Deposits
- Calls & O/N
- MMFs
- USDBFs
- Struct. Prods.
- Bonds
- CDs



Maturity Profiles



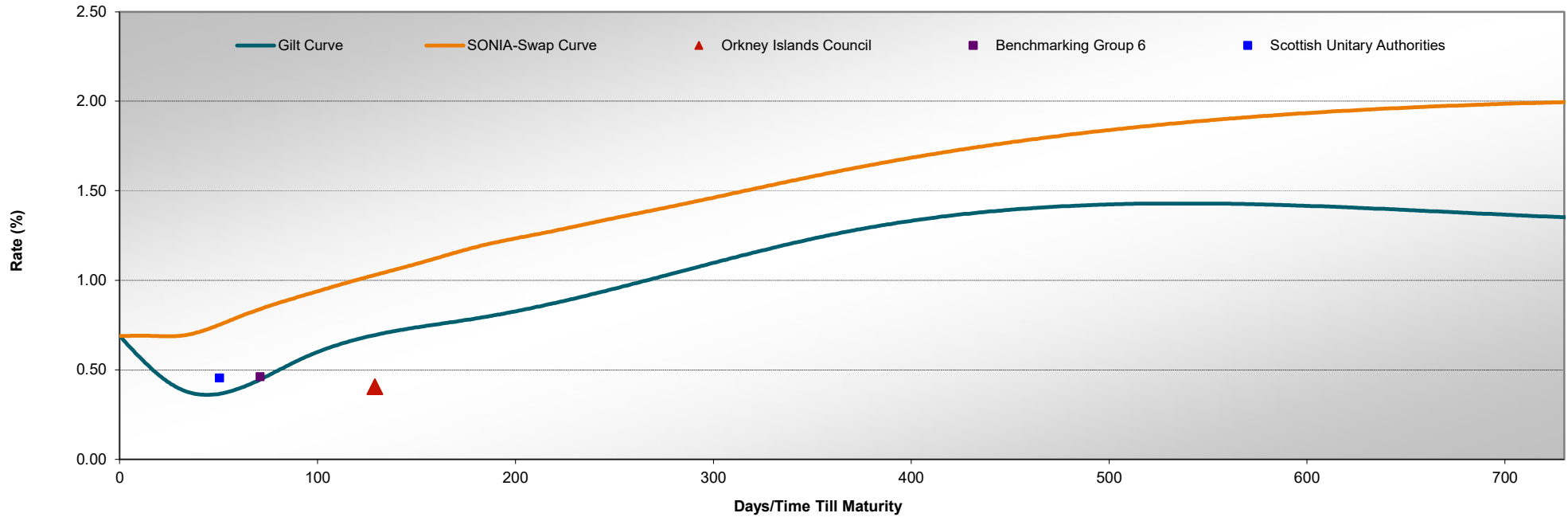
Population Returns against Model Returns



	Actual WARoR	Model WARoR	Difference	Lower Bound	Upper Bound	Performance
Orkney Islands Council	0.41%	0.47%	-0.07%	0.38%	0.56%	Inline

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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	0.41%	129	229	3.11	0.69%	1.03%	-0.29%	-0.62%	0.38% - 0.56%	Inline
Benchmarking Group 6	0.46%	71	144	3.69	0.45%	0.84%	0.02%	-0.38%	0.38% - 0.56%	Inline
Scottish Unitary Authorities	0.46%	50	101	3.29	0.37%	0.75%	0.09%	-0.29%	0.34% - 0.52%	Inline

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Peer Comparison

	Orkney Islands Council	Benchmarking Group 6 (8)		Scottish Unitary Authorities (23)		Population Average (222)	
Basic Characteristics							
Principal	£22,619,122	£98,759,043		£85,856,176		£110,332,802	
WARoR	0.41%	0.46%		0.46%		0.44%	
WAM	129	71		50		74	
WATT	229	144		101		143	
WA Credit Risk	3.11	3.69		3.29		2.93	
Portfolio Breakdown							
Fixed Deposits	13.26%	24.51%	5	29.14%	15	48.99%	191
Calls & O/N	27.94%	43.91%	8	40.70%	21	23.39%	188
MMFs	19.01%	18.65%	5	25.56%	14	23.33%	158
USDBFs	0.00%	5.18%	1	1.90%	2	1.15%	19
Struct. Prods.	0.00%	0.00%	0	0.00%	0	0.14%	4
Bonds	0.00%	0.00%	0	0.00%	0	0.82%	14
CDs	39.79%	7.74%	3	2.69%	3	2.18%	22
Institution Breakdown							
Banks	67.73%	67.31%	8	55.68%	21	45.06%	211
Building Socs.	0.00%	0.00%	0	1.72%	3	5.44%	75
Government	13.26%	8.85%	4	15.14%	11	24.41%	140
MMFs	19.01%	18.65%	5	25.56%	14	23.29%	158
USDBFs	0.00%	5.18%	1	1.90%	2	1.15%	19
MLDBs	0.00%	0.00%	0	0.00%	0	0.01%	1
Other	0.00%	0.00%	0	0.00%	0	0.64%	17
Domestic/Foreign Exposure							
Domestic	58.88%	66.05%	8	68.21%	21	68.83%	218
Foreign	22.11%	10.11%	4	4.33%	5	6.68%	75
MMFs	19.01%	18.65%	5	25.56%	14	23.33%	158
USDBFs	0.00%	5.18%	1	1.90%	2	1.15%	19
Maturity Structure							
< 1 Month	20.42%	55.36%		66.93%		54.36%	
1-3 Months	17.68%	13.68%		10.51%		14.85%	
3-6 Months	48.63%	17.49%		14.18%		19.70%	
6-9 Months	0.00%	7.97%		4.62%		5.62%	
9-12 Months	13.26%	5.34%		3.61%		4.09%	
12 Months +	0.00%	0.16%		0.16%		1.38%	

Orkney Islands Council

Detailed Peer Comparison

	Orkney Islands Council				Benchmarking Group 6 (8)					Scottish Unitary Authorities (23)						
	%	WARoR	WAM	WATT	%	WARoR	WAM	WATT	n	%	WARoR	WAM	WATT	n		
Asset Breakdown																
Fixed Deposits	13.26%	0.10%	69	364	24.51%	0.55%	71	226	5	29.14%	0.49%	64	164	15		
Calls	27.94%	0.50%	171	171	43.91%	0.44%	59	59	8	40.70%	0.43%	35	35	21		
Overnight	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
MMFs	19.01%	0.39%	0	0	18.65%	0.39%	0	0	5	25.56%	0.39%	0	0	14		
USDBFs	0.00%	0.00%	0	0	5.18%	0.00%	0	0	1	1.90%	0.59%	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	39.79%	0.45%	181	335	7.74%	0.36%	66	133	3	2.69%	0.36%	23	46	3		
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	67.73%	0.47%	177	267	67.31%	0.48%	77	119	8	55.68%	0.46%	47	76	21		
Building Socs.	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	1.72%	0.30%	5	16	3		
Government	13.26%	0.10%	69	364	8.85%	0.70%	90	291	4	15.14%	0.63%	59	169	11		
MMFs	19.01%	0.39%	0	0	18.65%	0.39%	0	0	5	25.56%	0.39%	0	0	14		
USDBFs	0.00%	0.00%	0	0	5.18%	0.00%	0	0	1	1.90%	0.59%	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	58.88%	0.46%	165	272	66.05%	0.50%	81	170	8	68.21%	0.43%	58	121	21		
Foreign	22.11%	0.28%	143	311	10.11%	0.29%	77	135	4	4.33%	0.46%	34	61	5		
MMF	19.01%	0.39%	0	0	18.65%	0.39%	0	0	5	25.56%	0.39%	0	0	14		
USDBFs	0.00%	0.00%	0	0	5.18%	0.00%	0	0	1	1.90%	0.59%	0	0	2		
Sovereign State Breakdown																
UK	58.88%	0.46%	165	272	UK	66.05%	0.50%	81	170	8	UK	68.21%	0.43%	58	121	21
CAN	22.11%	0.28%	143	311	CAN	5.21%	0.15%	56	107	3	CAN	2.01%	0.07%	28	53	4
					AUS	3.27%	0.19%	44	77	2	AUS	1.14%	0.06%	15	27	2
					SING	1.64%	0.11%	14	21	1	SING	0.57%	0.04%	5	7	1
											UAE	0.41%	0.03%	9	16	1
											QAT	0.20%	0.03%	1	8	1
Sovereign Rating Breakdown																
AA-	58.88%				AA-	66.05%					AA-	68.41%				
AA+	22.11%				AA+	5.21%					AA+	2.02%				
					AAA	4.90%					AAA	1.71%				
											AA	0.41%				

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