Item: 5

Investments Sub-committee: 27 May 2021.

**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 2021.

### 2. Recommendation

The Sub-committee is invited to note:

### 2.1.

The status of the temporary loan portfolio as at 31 March 2021, as detailed in section 3 of this report.

### 2.2.

That, for the period 1 April 2020 to 31 March 2021, the temporary loans portfolio made a return of £164,584.58 at an average interest rate of 0.53%.

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 2021 totalled £34,981,578.25. 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 31 March 2021:

- £3,000,000 invested with BlackRock Stirling Liquidity Fund, with an average net yield of 0.01%.
- £2,000,000 matured from Bank of Scotland.

### 3.3.

The value of the temporary loans stood at £30,317,983.18 as at 30 April 2021.

### 4. Rate of Return

### 4.1.

For the period 1 April 2020 to 31 March 2021, the temporary loans returned an average interest rate of 0.53%. This equates to a return of £164,584.58 on the temporary loans for the twelve months to 31 March 2021.

### 4.2.

By comparison, the equivalent 90-day London Inter-Bank Offered Rate of 0.09% is considered to be the target.

### 4.3.

With inflation quoted at 0.7% for March 2021 based on Consumer Price Index (1.5% Retail Price Index), the return on temporary loans equates to a relative loss in value of 0.12% 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 2021, attached as Appendix 2 to this report, indicates that the Council is performing marginally behind the weighted average rate of return of the benchmarking group but ahead of the Scottish Unitary Authorities.

### 5. Cash Balances

### 5.1.

Recurring slippage continues to be a feature within the approved capital programme. During financial year 2019/20, works valued at £14,356,000 were reprofiled into future periods. While this would ordinarily have defaulted into financial year 2020/21, a large proportion of this relates to the proposed new Kirkwall Care Facility, which

was subject of a revised Stage 2 Capital Project Appraisal, resulting in the overall extent of the slippage including a further £4,239,000 reprofiled into future periods from financial year 2020/21. Accordingly, at the end of financial year 2019/20, a total of £18,595,000 of planned capital programme spend was slipped or deferred by between 2 to 4 years.

### 5.2.

In addition to this, it should be noted that COVID-19 closedown measures have had an adverse impact on delivery of the capital programme during financial year 2020/21, such that little capital spend was incurred during this period. 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. Early indications are that approximately £10,000,000 of slippage on the planned programme of works for 2020/21 will require to be slipped into future financial years.

### 5.3.

In the last 2 weeks of financial year 2020/21, £12,032,000 cash was received from the Scottish Government in respect of redetermination. The majority of this payment was for the following and will be carried forward to be spent in financial year 2021/22:

- £4,882,000 Estimate UK Government Consequential Lost Income Scheme
- £3,666,000 General COVID Funding

### 5.4.

If the redetermination funding shown at section 5.3 above had not been received prior to year-end the closing cash balance at 31 March 2021 would have been in the region of £23,000,000.

# 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 2021.

Appendix 2: Link Asset Services Investment Portfolio Benchmarking Analysis for March 2021.



Monthly Investment Analysis Review

March 2021

# Monthly Economic Summary

## **General Economy**

The UK Flash (i.e. provisional) manufacturing PMI increased to 57.9 in March from 55.1 in February. This signalled the strongest rate of factory output growth since November 2017, despite COVID-19 restrictions remaining in place. The Flash Services PMI, meanwhile, rose to 56.8 in March from 49.7 in February, signalling the first month of expansion in the services sector since October 2020. Together, these gains saw the Flash Composite PMI (which incorporates both sectors), rise to 56.6 in March compared to 49.8 in February, and above the no change 50 mark for the first time in three months. The construction PMI, meanwhile, which is released one month behind, rose to 53.3 in February from 49.2 in January, as project starts increased ahead of the impending end of the third national lockdown.

Monthly GDP data for January revealed that the reimposition of national lockdown measures on the economy at the end of December resulted in output contracting by 2.9% m/m, compared to December's 1.2% m/m expansion. Although this left GDP 9.2% lower than a year ago, the decline was better than the 4.9% contraction expected by the consensus and significantly better than the contractions witnessed during the first lockdown, which started in March last year, suggesting that the economy has become more resilient to lockdowns. Trade data, meanwhile, revealed that an 18.5% fall in imports outweighed a record 11.5% contraction in exports during January, ultimately causing the UK's trade deficit to fall to £1.6 billion in January from £6.2 billion in December. According to analysts, the stockpiling of goods ahead of Brexit and the impact of COVID-19 lockdowns in the UK and Europe contributed to the decline.

The UK's unemployment rate fell to 5% in the three months to January, compared to 5.1% in the previous period, registering its first decline since September 2019. To an extent, this result highlighted the effectiveness of the government's Job Retention Scheme (extended until September during the month), which is currently estimated to be supporting about 4 million jobs. However, it also reflects the combined impact of 147,000 job losses recorded during the period being offset by a 136,000 fall in the labour force, meaning that unemployment only rose by a net 11,000 during the three months. More timely data, however, suggests that the number of people claiming unemployment benefits in the UK increased by 86,600 to 2.7 million during February. Although average weekly earnings including bonuses surged 4.8% y/y in the three months to January, this partly reflects the loss of low paid jobs during the pandemic. Excluding this effect, earnings were estimated to have risen at a 3.2% y/y rate.

UK inflation, as measured by the Consumer Price Index, surprisingly eased to 0.4% y/y in February from 0.7% y/y in January, below market forecasts of a rise to 0.8% y/y. The smaller than expected result was largely due to a 5.7% fall in clothing and footwear prices, which represented the largest annual decline since November 2009. On a monthly basis, consumer prices rose by 0.1% in February, compared to a 0.2% fall in January and market forecasts of a 0.4% drop. With the annual rate still well below the Monetary Policy Committee's 2% target, the Committee voted unanimously to keep Bank Rate at 0.1% and left its bond-buying programme unchanged during its March meeting.

Retail sales, meanwhile, matched market forecasts by rising 2.1% m/m in February, rebounding strongly from the 8.2% contraction recorded in January. As a result, sales remained 3.7% lower than a year earlier, although this represented an improvement on the 5.9% y/y contraction posted in January. The GfK Consumer Confidence index also registered an improvement, rising 7 points to -16 in March, ahead of market forecasts of -20. This was the highest reading since March last year, as prospects for economic recovery

improved amid vaccination rollouts.

Reflecting the impact of public health measures and government policies to support the economy during the coronavirus pandemic, the UK's public sector net borrowing (excluding public sector banks) reached £19.1 billion in February, £17.6 billion more than during the same month last year. Borrowing in the first 11 months of this financial year, meanwhile, is estimated to have been £278.8 billion, £228.2 billion more than in the same period last year and the highest public sector borrowing in any April to February period since records began in 1993. The fiscal burden is likely to remain high in the near term, given that the Chancellor provided further support amounting to approximately £70bn in this year's Spring Budget.

Aided by an easing of COVID restrictions and an acceleration of vaccinations, the US economy added 379,000 jobs in February, outperforming market expectations of a 182,000 rise. This enabled the unemployment rate to ease to 6.2% in February from 6.3% in January. The third and final estimate of GDP, meanwhile, confirmed that the US economy expanded by an annualised 4.3% rate during Q4 2020. Future growth prospects also received a boost following the signing into law of President Biden's \$1.9 trillion stimulus package. Against this backdrop, prices (as measured by the Federal Reserve's preferred core Personal Consumption Expenditure deflator), rose 1.6% y/y in February compared to expectations of 1.7% y/y and the Federal Reserve's 2% average target. With inflation still below target, the Federal Reserve maintained their ultra-accommodative monetary policy stance during its March meeting signalling that the Federal Funds Rate is unlikely to rise before 2023.

The third and final estimate of GDP confirmed that the Eurozone economy shrank by 0.7% q/q in Q4 2020 compared to the previous estimate of a 0.6% fall. Core inflation, meanwhile, fell from 1.4% y/y in January to 0.9% y/y in February. With inflation still well below the ECB's 2% target, the central bank left interest rates unchanged at their record lows during its March meeting. However, the ECB announced that "bond purchases under the PEPP over the next quarter [would be] conducted at a significantly higher pace than during the first months of this year", as the central bank aimed to lower government bond yields and support Eurozone economic recovery.

## Housing

House prices rose by 5.7% y/y during March according to the Nationwide house price index and 5.2% y/y in February according to the Halifax house price index. On a monthly basis however, prices fell by 0.2% and 0.1% respectively, likely reflecting a softening of demand ahead of the original end of the stamp duty holiday before the Chancellor announced its extension in the Budget.

### **Currency**

Sterling improved against the Euro as the UK's vaccine rollout progressed as planned whilst parts Europe witnessed rising COVID 19 cases. However, the passage of President Biden's stimulus package boosted US growth prospects further, which contributed to Sterling easing against the Dollar.

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**

Both Link Group and Capital Economics have made no change to their interest rate forecasts. Bank Rate is forecast to remain unchanged at 0.1% throughout 2021.

Bank Rate													
	Now	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Link Group	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Capital Economics	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	-	-	-	-	

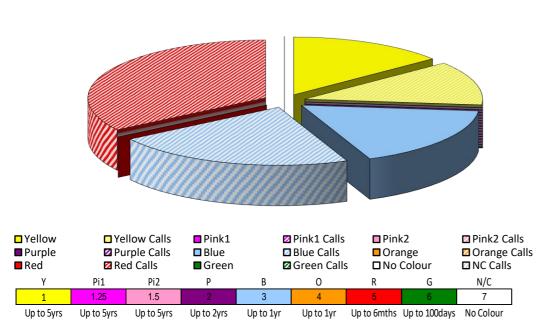
### **Current Investment List**

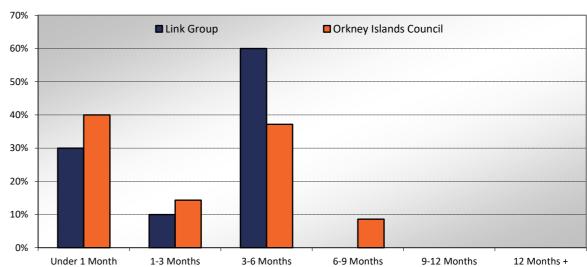
Borrower	Principal (£)	Interest Rate	Start Date	Maturity Date	Lowest LT / Fund Rating	Historic Risk of Default	Expected Credit Loss (£)
MMF Aberdeen Standard Investments	4,300,000	0.01%		MMF	AAAm		
The Royal Bank of Scotland Plc (RFB)	7,681,578	0.01%		Call	Α	0.000%	10
Bank of Scotland Plc (RFB)	2,000,000	0.10%		Call15	A+	0.002%	39
National Westminster Bank Plc (RFB)	3,000,000	0.49%	10/06/2020	09/06/2021	Α	0.009%	271
Santander UK Plc	2,000,000	0.58%		Call76	Α	0.010%	196
Bank of Scotland Plc (RFB)	2,000,000	0.05%		Call95	A+	0.012%	245
Santander UK Plc	2,000,000	0.58%		Call106	Α	0.014%	274
Santander UK Plc	2,000,000	0.58%		Call135	Α	0.017%	349
Highland Council	5,000,000	0.18%	02/12/2020	02/09/2021	AA-	0.010%	0
Santander UK Plc	2,000,000	0.58%		Call180	Α	0.023%	465
National Westminster Bank Plc (RFB)	3,000,000	0.10%	30/03/2021	30/12/2021	Α	0.035%	1062
Total Investments	£34,981,578	0.22%				0.011%	£2,911

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 1990-2020 for Fitch, 1983-2020 for Moody's and 1981-2020 for S&P.

# Portfolio Composition by Link Group's Suggested Lending Criteria





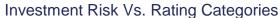
Portfolios weighted average risk number =

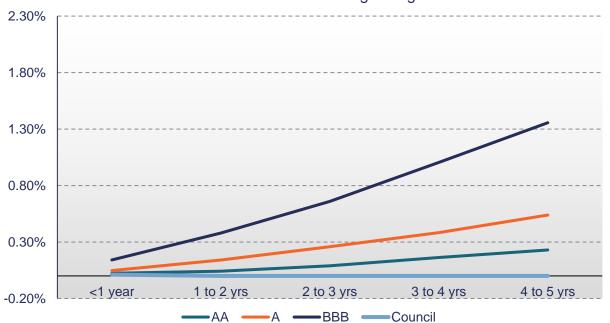
3.15

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

			% of Colour	Amount of	% of Call					Calls/MMFs/USDBFs
	% of Portfolio	Amount	in Calls	<b>Colour in Calls</b>	in Portfolio	WARoR	WAM	WAM at Execution	WAM	WAM at Execution
Yellow	26.59%	£9,300,000	46.24%	£4,300,000	12.29%	0.10%	83	147	155	274
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	39.11%	£13,681,578	56.15%	£7,681,578	21.96%	0.13%	75	140	172	320
Orange	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Red	34.30%	£12,000,000	100.00%	£12,000,000	34.30%	0.41%	101	101	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%	£34,981,578	68.55%	£23,981,578	68.55%	0.22%	86	129	164	299

### Investment Risk and Rating Exposure

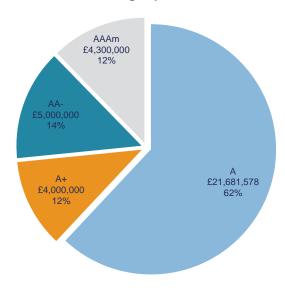




#### Historic Risk of Default

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%
Α	0.05%	0.14%	0.26%	0.38%	0.54%
BBB	0.14%	0.38%	0.66%	1.01%	1.36%
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.

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.

# Monthly Credit Rating Changes FITCH

Date	Update Number	Institution	Country	Rating Action
03/03/2021	1795	UBS AG	Switzerland	The Outlook on the Long Term Rating was changed to Stable from Negative.
04/03/2021	1796	Commerzbank AG	Germany	All ratings were affirmed and simultaneously withdrawn.

# Monthly Credit Rating Changes MOODY'S

Date	Update Number	Institution	Country	Rating Action
31/03/2021	1798	Credit Suisse AG	Switzerland	The Outlook on the Long Term Rating was changed to Negative from Stable.

# Monthly Credit Rating Changes S&P

Date	Update Number	Institution	Country	Rating Action
01/03/2021	1793	Nordea Bank Abp	Finland	The Outlook on the Long Term Rating was changed to Stable from Negative.
01/03/2021	1793	Deutsche Bank AG	Germany	The Outlook on the Long Term Rating was changed to Positive from Negative.
01/03/2021	1794	Barclays Bank PLC (NRFB)	United Kingdom	The Outlook on the Long Term Rating was changed to Stable from Negative.
01/03/2021	1794	Barclays Bank UK PLC (RFB)	United Kingdom	The Outlook on the Long Term Rating was changed to Stable from Negative.
30/03/2021	1797	Credit Suisse AG	Switzerland	The Outlook on the Long Term Rating was changed to Negative from Stable.

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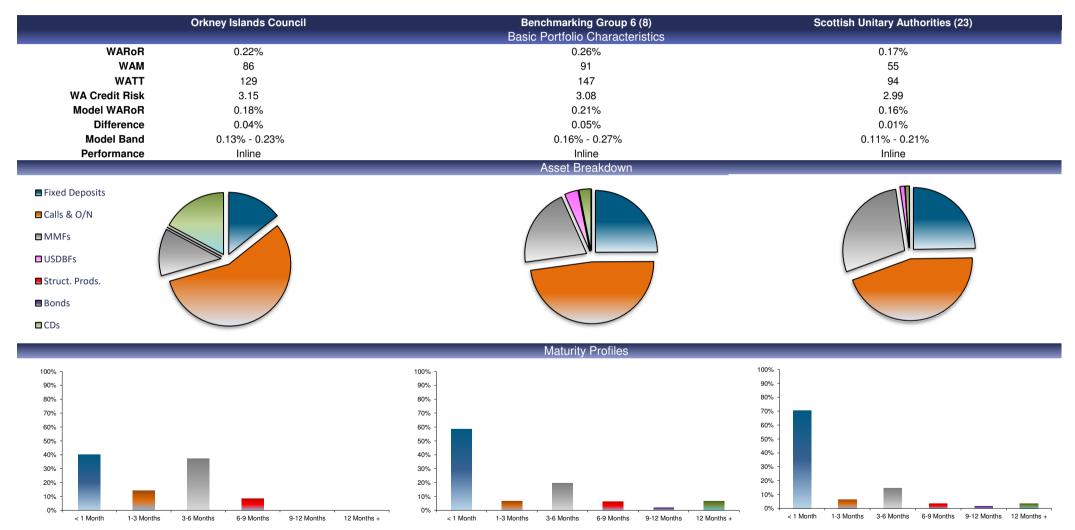


# Investment Portfolio Benchmarking Analysis March 2021

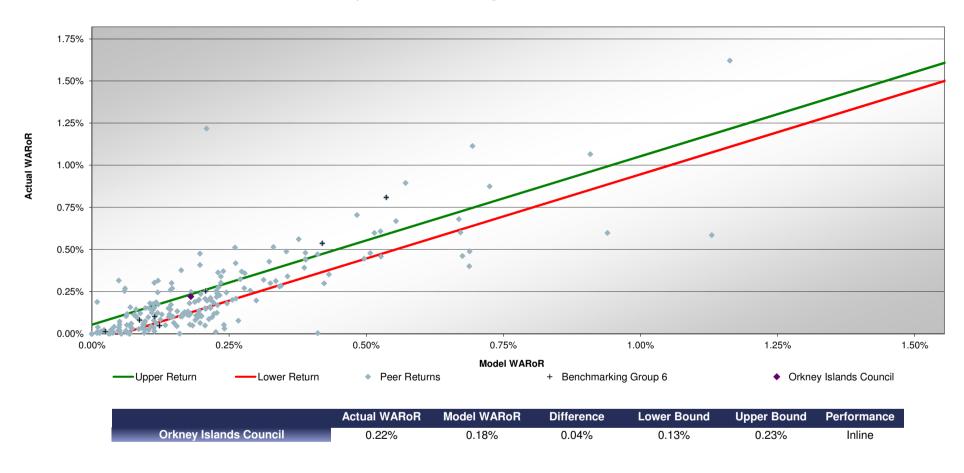
### **Group Members:**

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

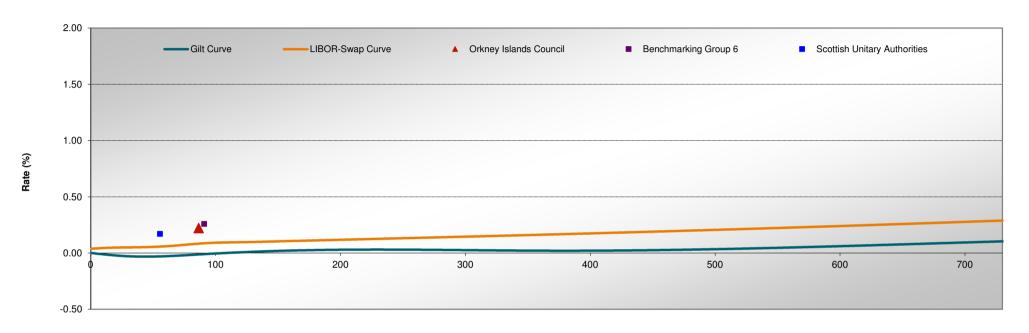
# **Summary Sheet**



### Population Returns against Model Returns



# Returns Comparable Against the Risk-Free Rate and LIBOR Curve



Days/Time Till Maturity

							Dif	ference	Model	
_	WARoR	WAM	WATT	WARisk	Gilt	LIBOR-Swap	Gilt	LIBOR-Swap	Bands	Performance
Orkney Islands Council	0.22%	86	129	3.15	-0.01%	0.08%	0.23%	0.14%	0.13% - 0.23%	Inline
Benchmarking Group 6	0.26%	91	147	3.08	-0.01%	0.09%	0.27%	0.17%	0.16% - 0.27%	Inline
Scottish Unitary Authorities	0.17%	55	94	2.99	-0.03%	0.06%	0.20%	0.11%	0.11% - 0.21%	Inline

# Peer Comparison

	Orkney Islands Council	Benchmarking Group 6 (8) Basic Characteristics	Scottish Unitary Authorities (23)	Population Average (214)		
Principal	£34,981,578	£98,962,155	£86,695,467	£86,863,321		
WARoR	0.22%	0.26%	0.17%	0.21%		
WAM	86	91	55	69		
WATT	129	147	94	130		
WA Credit Risk	3.15	3.08	2.99	2.95		
		Portfolio Breakdown				
Fixed Deposits	14.29%	24.94% 6	24.76% 17	38.98% 173		
Calls & O/N	56.26%	47.85% 8	44.66% 20	35.34% 186		
MMFs	12.29%	20.53% 5	28.26% 14	23.12% 146		
USDBFs	0.00%	3.55% 2	1.24% 2	1.27% 15		
Struct. Prods.	0.00%	0.00% 0	0.00% 0	0.13% 2		
Bonds	0.00%	0.00% 0	0.00% 0	0.22% 3		
CDs	17.15%	3.13% 2	1.09% 2	0.95% 14		
		Institution Breakdown				
Banks	73.41%	51.47% 8	49.76% 21	45.93% 199		
Building Socs.	0.00%	0.00% 0	0.00% 0	4.28% 53		
Government	14.29%	24.44% 5	20.75% 11	24.68% 134		
MMFs	12.29%	20.53% 5	28.26% 14	23.12% 146		
USDBFs	0.00%	3.55% 2	1.24% 2	1.27% 15		
MLDBs	0.00%	0.00% 0	0.00% 0	0.00% 0		
Other	0.00%	0.00% 0	0.00% 0	0.72% 14		
		Domestic/Foreign Exposure				
Domestic	87.71%	75.91% 8	70.09% 21	73.02% 207		
Foreign	0.00%	0.00% 0	0.41% 1	2.59% 34		
MMFs	12.29%	20.53% 5	28.26% 14	23.12% 146		
USDBFs	0.00%	3.55% 2	1.24% 2	1.27% 15		
		Maturity Structure				
< 1 Month	39.97%	58.68%	70.43%	58.10%		
1-3 Months	14.29%	6.54%	6.42%	13.39%		
3-6 Months	37.16%	19.74%	14.76%	18.48%		
6-9 Months	8.58%	6.42%	3.56%	4.72%		
9-12 Months	0.00%	1.96%	1.50%	3.12%		
12 Months +	0.00%	6.66%	3.34%	2.19%		

# Detailed Peer Comparison

		Orkney Islar	nds Council				Benchmar	king Group	o 6 (8)				Scottish U	Initary Au	thorities (23)	
	%	WARoR	WAM	WATT	_	%	WARoR	WAM	WATT	n	_	%	WARoR	WAM	WATT	n
						А	sset Breakd	own								
Fixed Deposits	14.29%	0.18%	155	274		24.94%	0.62%	142	266	6		24.76%	0.46%	89	198	14
Calls	56.26%	0.25%	62	62		47.85%	0.17%	35	35	7		44.66%	0.12%	23	23	19
Overnight	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.00%	0.00%	0	0	0
MMFs	12.29%	0.01%	0	0		20.53%	0.01%	0	0	5		28.26%	0.01%	0	0	1.
USDBFs	0.00%	0.00%	0	0		3.55%	0.11%	0	0	2		1.24%	0.11%	0	0	2
Structured Prods.	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.00%	0.00%	0	0	(
Cert.of Deposit	17.15%	0.30%	172	320		3.13%	0.25%	44	86	2		1.09%	0.25%	15	30	2
Gov. Bonds	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.00%	0.00%	0	0	(
Corp. Bonds	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.00%	0.00%	0	0	(
MLDB Bonds	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.00%	0.00%	0	0	-
						Inoti	tutional Bre	okdown								
Banks	73.41%	0.26%	87	122	_	51.47%	0.15%	41	49	8	_	49.76%	0.13%	30	43	2
Building Socs.	0.00%	0.26%	0	0		0.00%	0.15%	0	49 0	0		0.00%	0.13%	0	43 0	(
Government	14.29%	0.00%	155	274		24.44%	0.67%	141	243	5		20.75%	0.00%	85	173	1
MMFs	12.29%	0.16%	0	0			0.67%	0	0	5 5		28.26%	0.55%	0	0	1
USDBFs			0	0		20.53%	0.01%	•	0	5 2			0.01%	•	0	
MLDBs	0.00%	0.00%	-	•		3.55%		0	0	_		1.24%		0	-	
MLDBS Other	0.00%	0.00% 0.00%	0	0		0.00%	0.00% 0.00%	0	0 0	0		0.00% 0.00%	0.00% 0.00%	0	0	
Other	0.00%	0.00%	0	U		0.00%	0.00%	0	U	0		0.00%	0.00%	0	0	
						Fo	reign Break	down		_	_	_	_	_		
Domestic	87.71%	0.25%	98	147		75.91%	0.30%	107	172	8		70.09%	0.20%	65	113	2
Foreign	0.00%	0.00%	0	0		0.00%	0.00%	0	0	0		0.41%	0.17%	3	4	
MMF	12.29%	0.01%	0	0		20.53%	0.01%	0	0	5		28.26%	0.01%	0	0	1
USDBFs	0.00%	0.00%	0	0		3.55%	0.11%	0	0	2		1.24%	0.11%	0	0	
							ign State B									
UK	87.71%	0.25%	98	147	UK	75.91%	0.30%	107	172	8	UK	70.09%	0.20%	65	113	2
											QAT	0.41%	0.01%	3	4	
							gn Rating E	reakdowi	n							
AA-	87.71%				AA-	75.91%					AA-	70.51%				

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