



Leicestershire County Council

Investment Portfolio Benchmarking Analysis

March 2021

Group Members:

- Amber Valley Borough Council
- City Of Lincoln Council
- Doncaster Metropolitan Borough Council
- Leicestershire County Council
- Lincolnshire County Council
- Melton Borough Council
- North East Lincolnshire Council
- North Kesteven District Council
- North Lincolnshire Council
- Nottingham City Council
- Nottinghamshire Fire And Rescue
- South Kesteven District Council
- The Police And Crime Commissioner For Lincolnshire
- West Lindsey District Council

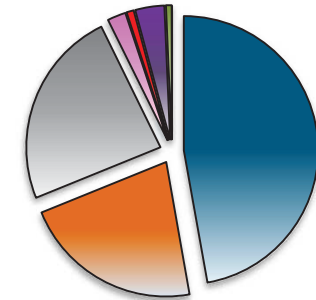
Leicestershire County Council

Summary Sheet

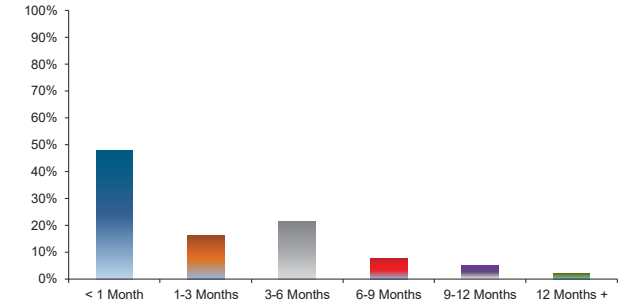
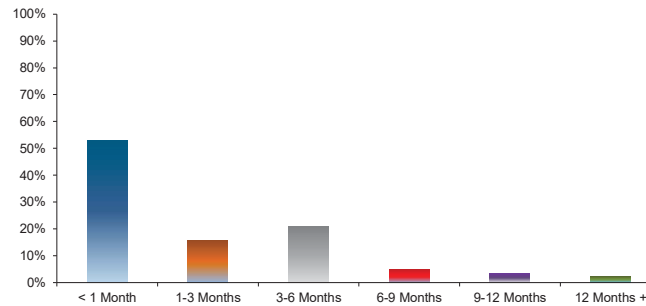
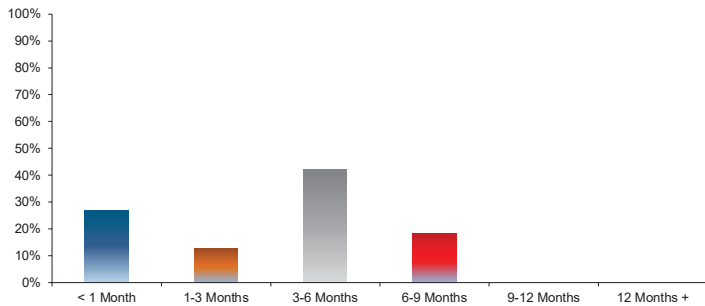
Leicestershire County Council		Benchmarking Group 11 (14) Basic Portfolio Characteristics		English Counties (13)	
WARoR	0.17%		0.18%		0.23%
WAM	101		82		85
WATT	173		124		156
WA Credit Risk	3.60		2.92		2.40
Model WARoR	0.23%		0.19%		0.23%
Difference	-0.06%		-0.01%		0.00%
Model Band	0.18% - 0.28%		0.13% - 0.24%		0.18% - 0.28%
Performance	Below		Inline		Inline

Asset Breakdown

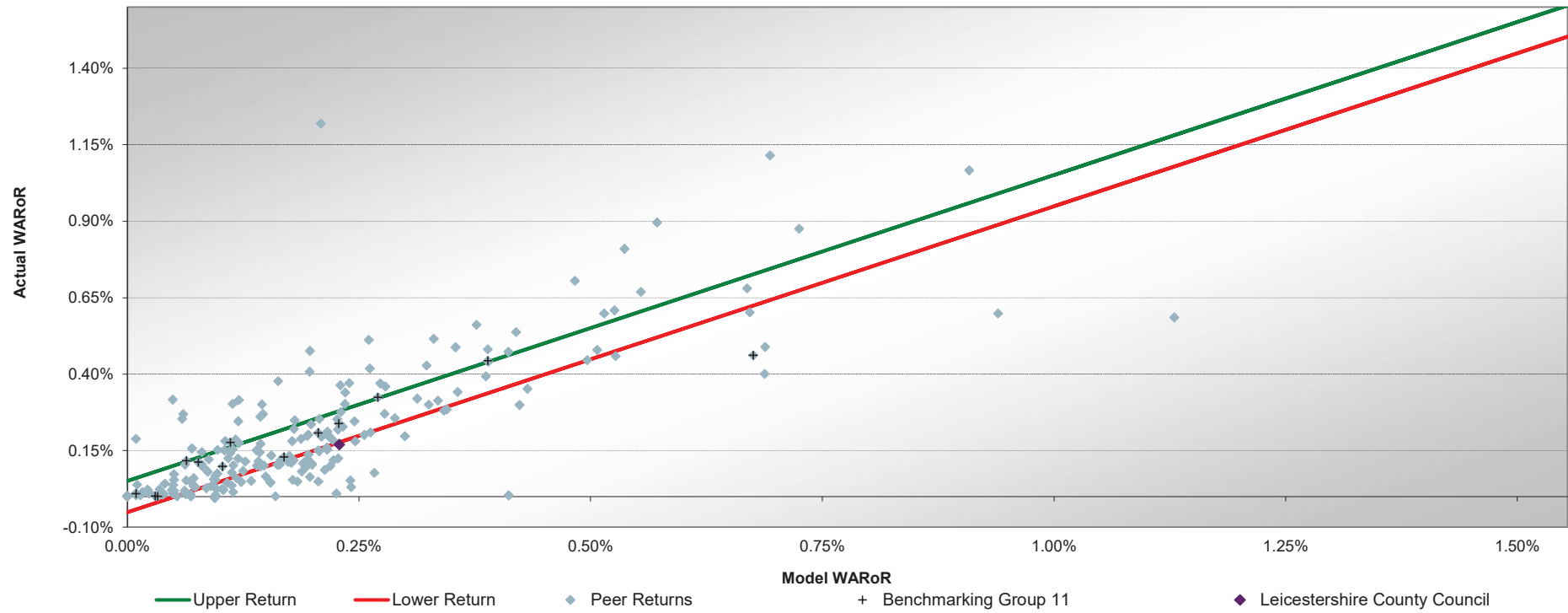
- Fixed Deposits
- Calls & O/N
- MMFs
- USDBFs
- Struct. Prods.
- Bonds
- CDs



Maturity Profiles



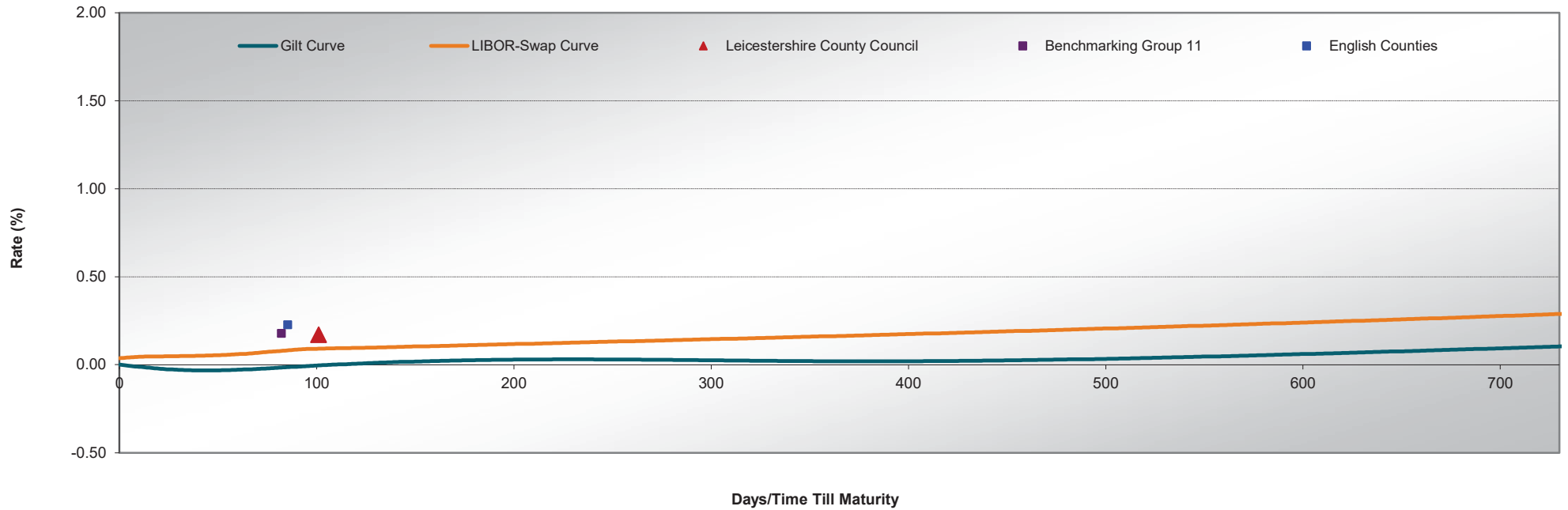
Population Returns against Model Returns



	Actual WARoR	Model WARoR	Difference	Lower Bound	Upper Bound	Performance
Leicestershire County Council	0.17%	0.23%	-0.06%	0.18%	0.28%	Below

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Returns Comparable Against the Risk-Free Rate and LIBOR Curve



	WARoR	WAM	WATT	WARisk	Gilt	LIBOR-Swap	Difference		Model	
							Gilt	LIBOR-Swap	Bands	Performance
Leicestershire County Council	0.17%	101	173	3.60	0.00%	0.09%	0.17%	0.08%	0.18% - 0.28%	Below
Benchmarking Group 11	0.18%	82	124	2.92	-0.02%	0.08%	0.19%	0.10%	0.13% - 0.24%	Inline
English Counties	0.23%	85	156	2.40	-0.01%	0.08%	0.24%	0.15%	0.18% - 0.28%	Inline

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Peer Comparison

Leicestershire County Council	Benchmarking Group 11 (14)		English Counties (13)		Population Average (214)		
Basic Characteristics							
Principal	£272,900,000	£79,785,814	£292,979,752	£86,863,321			
WARoR	0.17%	0.18%	0.23%	0.21%			
WAM	101	82	85	69			
WATT	173	124	156	130			
WA Credit Risk	3.60	2.92	2.40	2.95			
Portfolio Breakdown							
Fixed Deposits	60.46%	40.45%	11	47.19%	13	38.98%	173
Calls & O/N	16.49%	32.77%	12	21.68%	13	35.34%	186
MMFs	23.05%	26.14%	11	23.85%	11	23.12%	146
USDBFs	0.00%	0.00%	0	2.21%	2	1.27%	15
Struct. Prods.	0.00%	0.00%	0	0.87%	1	0.13%	2
Bonds	0.00%	0.00%	0	3.51%	2	0.22%	3
CDs	0.00%	0.64%	1	0.68%	1	0.95%	14
Institution Breakdown							
Banks	67.79%	41.14%	13	35.61%	12	45.93%	199
Building Socs.	9.16%	6.76%	5	3.21%	6	4.28%	53
Government	0.00%	24.80%	9	34.91%	10	24.68%	134
MMFs	23.05%	26.14%	11	23.85%	11	23.12%	146
USDBFs	0.00%	0.00%	0	2.21%	2	1.27%	15
MLDBs	0.00%	0.00%	0	0.00%	0	0.00%	0
Other	0.00%	1.16%	1	0.20%	1	0.72%	14
Domestic/Foreign Exposure							
Domestic	65.96%	68.94%	13	71.28%	13	73.02%	207
Foreign	10.99%	4.92%	3	2.66%	6	2.59%	34
MMFs	23.05%	26.14%	11	23.85%	11	23.12%	146
USDBFs	0.00%	0.00%	0	2.21%	2	1.27%	15
Maturity Structure							
< 1 Month	26.71%	52.80%		47.79%		58.10%	
1-3 Months	12.83%	15.72%		16.13%		13.39%	
3-6 Months	42.14%	20.81%		21.33%		18.48%	
6-9 Months	18.32%	4.95%		7.71%		4.72%	
9-12 Months	0.00%	3.39%		5.02%		3.12%	
12 Months +	0.00%	2.33%		2.02%		2.19%	

Leicestershire County Council

Detailed Peer Comparison

	Leicestershire County Council				Benchmarking Group 11 (14)					English Counties (13)						
	%	WARoR	WAM	WATT	%	WARoR	WAM	WATT	n	%	WARoR	WAM	WATT	n		
Asset Breakdown																
Fixed Deposits	60.46%	0.14%	117	237	40.45%	0.29%	92	165	11	47.19%	0.29%	133	263	13		
Calls	16.49%	0.50%	182	182	32.77%	0.20%	53	53	12	21.68%	0.19%	56	56	12		
Overnight	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.00%	0.00%	0	0	0		
MMFs	23.05%	0.01%	0	0	26.14%	0.01%	0	0	11	23.85%	0.01%	0	0	11		
USDBFs	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	2.21%	0.86%	0	0	2		
Structured Prods.	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.87%	0.02%	1	6	1		
Cert.of Deposit	0.00%	0.00%	0	0	0.64%	0.19%	13	18	1	0.68%	0.19%	14	19	1		
Gov. Bonds	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	3.30%	0.00%	2	4	1		
Corp. Bonds	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	0.20%	0.48%	38	84	1		
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	67.79%	0.24%	138	231	41.14%	0.22%	90	112	13	35.61%	0.17%	70	102	12		
Building Socs.	9.16%	0.04%	79	181	6.76%	0.14%	53	71	5	3.21%	0.39%	111	196	6		
Government	0.00%	0.00%	0	0	24.80%	0.24%	55	108	9	34.91%	0.35%	110	222	10		
MMFs	23.05%	0.01%	0	0	26.14%	0.01%	0	0	11	23.85%	0.01%	0	0	11		
USDBFs	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	2.21%	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	1.16%	0.98%	49	52	1	0.20%	1.40%	12	56	1		
Foreign Breakdown																
Domestic	65.96%	0.18%	123	232	68.94%	0.20%	89	138	13	71.28%	0.26%	111	204	13		
Foreign	10.99%	0.45%	179	185	4.92%	0.09%	36	53	3	2.66%	0.23%	42	71	6		
MMF	23.05%	0.01%	0	0	26.14%	0.01%	0	0	11	23.85%	0.01%	0	0	11		
USDBFs	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0	2.21%	0.86%	0	0	2		
Sovereign State Breakdown																
UK	65.96%	0.18%	123	232	UK	68.94%	0.20%	89	138	13	UK	71.28%	0.26%	111	204	13
AUS	7.33%	0.40%	185	185	QAT	2.05%	0.05%	13	26	1	AUS	1.65%	0.08%	38	58	4
DEN	3.66%	0.55%	166	184	UAE	1.37%	0.02%	12	26	1	SING	0.73%	0.02%	17	27	3
					AUS	0.84%	0.05%	24	24	2	DEN	0.28%	0.04%	13	14	1
					SING	0.40%	0.01%	11	16	1						
					DEN	0.26%	0.04%	12	13	1						
Sovereign Rating Breakdown																
AA-	65.96%				AA-	70.99%				AA-	71.28%					
AAA	10.99%				AAA	1.50%				AAA	2.66%					
					AA	1.37%										

154

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

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