LIN	K Group

Monthly Investment Analysis Review

December 2022

Monthly Economic Summary

General Economy

The UK Manufacturing PMI declined to 44.7 in December 2022, from 46.5 in November. It was the lowest reading since May 2020. New business volumes continued to decline while contributing to a deterioration in order books, with exports also falling further. Regarding employment numbers, manufacturing companies shed the most jobs since October 2020 amid a deteriorating outlook for growth. In contrast, the UK Services PMI rose to 50.0 in December 2022, up from 48.8 in the previous month. The latest reading pointed to a stabilisation of activity, following two months of decline, helped by a smaller decline in inflows of new business. This result helped the UK Composite PMI rise to 49.0 in December 2022, up from 48.2 in the previous month and above market expectations of no change. Still, the latest reading pointed to the fifth consecutive month of contraction in private sector business activity, but at a rate that was the softest for three months. Elsewhere, the UK Sonstruction PMI, which lags by a month, fell to a three-month low of 50.4 in November of 2022 from 53.2 in October, signalling a slowdown in construction activity, amid subdued demand and reduced risk appetite among clients. Higher borrowing costs and worries about the economic outlook also weighed. The UK GDP shrank 0.3% on quarter in the three months to September of 2022, slightly more than a preliminary estimate of a 0.2% drop. Household expenditure dropped 1.1%, while business investment went down 2.5% and inventories fell by £5.2 billion, mainly driven by reductions for retail and manufacturing. On the other hand, government expenditure went up 0.5% and government investment surged 17.3%, while exports jumped 8.9% compared to a 3.6% decline for imports. Nevertheless, The UK monthly GDP grew by 0.5% in October from September, the biggest increase in nearly a year and above forecasts of 0.4%

The UK trade deficit shrank to £1.8 billion in October from £3.1 billion in the previous month. It was the narrowest trade gap since November of 2021, as natural gas prices retreated from their peaks of the previous month and deflated the price of foreign energy purchases, driving imports to drop by 2.6%.

UK employment rose by 27K in the three months to October, beating market estimates of a 17K decline and following a 53K drop in the previous month's reading. The unemployment rate in the UK edged higher to 3.7% in October from 3.6% in the previous period, matching market forecasts. The employment rate also went up to 75.6% from 75.4%, with the timeliest figures for payrolled employees rising by 107K in November to a record of 29.9 million. Job vacancies however, fell by 65K to 1,187,000, a fifth consecutive decline, and reflecting uncertainty across industries, as economic pressures hold back on recruitment. Average weekly earnings including bonuses in the UK increased by 6.1% y/y in the three months to October, above a 6.0% gain in the three months to September but less than market forecasts of 6.2%. Meanwhile, regular pay which excludes bonus payment also went up 6.1%, the most since July 2021, exceeding forecasts of 5.9%. Adjusted for inflation, total pay fell 2.7%, and regular pay also dropped 2.7%, underlining the squeeze on households. In addition, retail sales unexpectedly declined 0.4% m/m in November, after an upwardly revised 0.9% in the previous month when there was a bounce back from the impact of the additional Bank Holiday in September for the State uneral. The annual consumer-level inflation rate in the UK eased to 10.7% in November from 11.1% in October which had been the highest since October 1981. The figure was below market forecasts of 10.9% with the Bargest downward contribution made by transport, particularly motor fuels and second-hand cars. Elsewhere, the GfK Consumer Confidence indicator rose slightly to -42 in December, improving for the third straight month but remaining near a record low of -49 reached in September as high inflation and rising borrowing rates continued to erode household incomes. In November 2022, the public sector spent more than it received in taxes and other income, requiring it to borrow (public sector net borrowing excluding public sector banks (PSNB ex)) £22.0 billion, which was £13.9 billion more than in November 2021, and the highest November borrowing since monthly records began in 1993 as various new government support schemes came on stream. The Bank of England's Monetary Policy Committee voted by a majority of 6-3 to raise interest rates by 50 basis points to 3.5% during its December meeting, pushing the cost of borrowing to the highest level since late-2008, as policymakers try to balance containing inflation amid rising concerns of a looming economic recession.

The unemployment rate in the US was unchanged at 3.7% in November 2022, matching market expectations while non-farm payrolls rose by a larger than forecast 263k. The number of unemployed persons fell from 6.059m to 6.011m in November, while the number of employed decreased by 138k to 158.5m. The labour force participation rate edged down to a four-month low of 62.1% in November from 62.2% in the previous month. The US economy grew an annualised 3.2% on quarter in Q3 2022, better than 2.9% in the second estimate, and rebounding from two straight quarters of contraction. Consumer spending rose more than anticipated as growth in health care and "other" services partially offset a decrease in spending on goods, namely motor vehicles and food and beverages. The biggest positive contribution to growth came from net trade, although exports rose slightly less than reported in the second estimate while imports were unrevised. Meanwhile, annual inflation rate in the US slowed for a fifth straight month to 7.1% in November, the lowest since December last year, and below Brecasts of 7.3%. Finally, the Federal Reserve raised the Fed Funds Rate by 50bps to 4.25%-4.5% during its monetary policy meeting of 2022, pushing borrowing costs to the highest level since 2007. It was a seventh more trade hike, following four straight three-quarter point increases.

The Eurozone economy quarterly growth was revised slightly higher to 0.3% in the third quarter of 2022 from preliminary estimates of 0.2%. Fixed investment was the main driver of growth, rising by 3.6% during the quarter. The ECB raised interest rates by 50 bps during its last monetary policy meeting of 2022, marking a fourth rate increase, following two consecutive 75bps hikes. In addition, household consumption advanced 0.9% and government spending increased slightly by 0.1%. Among the biggest economies, Italy and Germany's GDP grew fastest while France and Spain's GDP showed slight growth and Netherlands contracted. Meanwhile, the annual inflation in the Euro Area was revised to 10.1% in November, slightly up from a preliminary estimate of 10.0%. Energy prices rose at a softer rate compared to last month but remained the largest contributor to the overall price increase.

Housing

The Nationwide House Price Index in the UK increased by 2.8% y/y in December of 2022, much less than 4.4% in November but still modestly ahead of market expectations for 2.3%. Compared to the previous month, prices edged 0.1% lower, the fourth consecutive fall. It was also the worst run since 2008, leaving prices 2.5% lower from their August peak. The Halifax house price index increased 4.7% y/y in November, the least since July of 2020, following an 8.2% rise in October.

Currency

Sterling depreciated slightly against the US dollar and Euro across December amid the ongoing conflict in Ukraine and surging commodity prices.

	December	Start	End	High	Low
age	GBP/USD	\$1.2267	\$1.2029	\$1.2406	\$1.2018
167	GBP/EUR	€1.1698	€1.1271	€1.1698	€1.1271

Forecast

The Bank Rate was raised to 3.50% at the Monetary Policy Committee's meeting in December, with Capital Economics pencilling in rates to peak at 4.50% by Q2 2023.

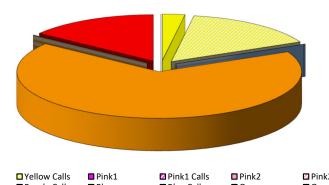
Bank Rate													
	Now	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25
Link Group	3.50%	4.25%	4.50%	4.50%	4.50%	4.00%	3.75%	3.50%	3.25%	3.00%	2.75%	2.50%	2.50%
Capital Economics	3.50%	4.50%	4.50%	4.50%	4.50%	4.25%	4.00%	3.50%	3.00%	-	-	-	-

Current Investment List

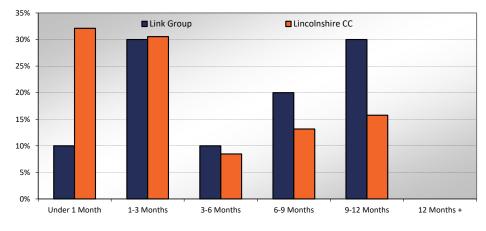
Borrower	Principal (£)	Interest Rate	Start Date	Maturity Date	Lowest LT / Fund Rating	Histori Risk o Defaul
MMF Aberdeen Standard Investments	14,220,000	3.19%		MMF	AAAm	
MMF Deutsche	25,000,000	3.16%		MMF	AAAm	
Cooperatieve Rabobank U.A.	7,270,659	2.30%	17/08/2022	10/01/2023	A+	0.001%
HSBC UK Bank Plc (RFB)	20,000,000	2.78%	12/12/2022	12/01/2023	A+	0.002
Close Brothers Ltd	5,000,000	2.40%	29/07/2022	31/01/2023	A-	0.004
DBS Bank Ltd	10,000,000	2.48%	29/07/2022	31/01/2023	AA-	0.002
National Bank of Canada	5,000,000	2.50%	05/08/2022	06/02/2023	А	0.005
Santander UK PLC	5,000,000	3.35%	18/11/2022	20/02/2023	А	0.006
National Bank of Canada	5,000,000	3.45%	21/10/2022	21/02/2023	A	0.007
DZ Bank AG (Deutsche Zentral-Genossenschaftsbank)	10,000,000	2.75%	22/08/2022	22/02/2023	A+	0.007
Landesbank Hessen-Thueringen Girozentrale (Helaba)	8,700,000	2.44%	05/08/2022	23/02/2023	A+	0.007
Australia and New Zealand Banking Group Ltd	5,000,000	3.31%	02/09/2022	02/03/2023	A+	0.008
Santander UK PLC	5,000,000	3.63%	06/12/2022	06/03/2023	А	0.008
Santander UK PLC	2,500,000	3.63%	06/12/2022	06/03/2023	А	0.008
Landesbank Hessen-Thueringen Girozentrale (Helaba)	6,300,000	3.31%	07/09/2022	07/03/2023	A+	0.008
DBS Bank Ltd	10,000,000	3.40%	15/09/2022	15/03/2023	AA-	0.005
DZ Bank AG (Deutsche Zentral-Genossenschaftsbank)	10,000,000	3.75%	25/11/2022	27/03/2023	A+	0.011
DBS Bank Ltd	5,000,000	4.60%	30/09/2022	31/03/2023	AA-	0.006
Oversea Chinese Banking Corporation Ltd	5,000,000	4.40%	14/10/2022	14/04/2023	AA-	0.007
Standard Chartered Bank	5,000,000	4.32%	14/10/2022	14/04/2023	A+	0.013
Close Brothers Ltd	5,000,000	4.20%	25/10/2022	25/04/2023	A-	0.015
Slough Borough Council	6,500,000	0.33%	05/05/2021	04/05/2023	AA-	0.008
Toronto Dominion Bank	10,000,000	4.05%	13/09/2022	13/09/2023	AA-	0.016
Australia and New Zealand Banking Group Ltd	8,750,000	4.25%	20/09/2022	19/09/2023	A+	0.033
Australia and New Zealand Banking Group Ltd	4,580,000	5.24%	26/09/2022	25/09/2023	A+	0.034
Oversea Chinese Banking Corporation Ltd	10,100,000	5.10%	30/09/2022	29/09/2023	AA-	0.017
Bank of Montreal	10,000,000	5.36%	14/10/2022	13/10/2023	A+	0.036
Toronto Dominion Bank	5,000,000	5.50%	14/10/2022	13/10/2023	AA-	0.018
Toronto Dominion Bank	10,000,000	5.13%	18/10/2022	18/10/2023	AA-	0.018
Bank of Montreal	10,000,000	4.80%	07/11/2022	06/11/2023	A+	0.039
Bank of Montreal	5,000,000	4.85%	18/11/2022	17/11/2023	A+	0.041
Total Investments	£253,920,659	3.59%				0.013

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

Portfolio Composition by Link Group's Suggested Lending Criteria



1	□ Yellow ■ Purple ■ Red	🖾 Pu	llow Calls rple Calls d Calls	■ Pink1 ■ Blue ■ Green	Z	Pink1 Calls Blue Calls Green Call	Ora		 Pink2 Ca Orange NC Calls 	Calls
	Y	Pi1	Pi2	Р	В	0	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	

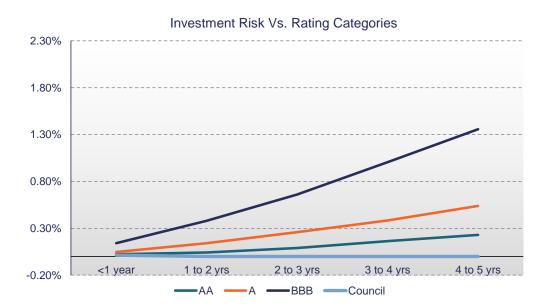


Portfolios weighted average risk number =

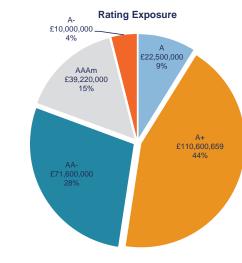
3.61

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

			% of Colour	Amount of	% of Call				Excluding	Calls/MMFs/USDBFs
	% of Portfolio	Amount	in Calls	Colour in Calls	in Portfolio	WARoR	WAM	WAM at Execution	WAM	WAM at Execution
Yellow	18.01%	£45,720,000	85.78%	£39,220,000	15.45%	2.77%	18	104	124	729
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	0.00%	£0	0.00%	£0	0.00%	0.00%	0	0	0	0
Orange	67.23%	£170,700,659	0.00%	£0	0.00%	3.85%	150	239	150	239
Red	14.77%	£37,500,000	0.00%	£0	0.00%	3.42%	65	145	65	145
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%	£253,920,659	15.45%	£39,220,000	15.45%	3.59%	114	201	135	237



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%				
А	0.05%	0.14%	0.26%	0.38%	0.54%				
BBB	0.14%	0.38%	0.66%	1.01%	1.36%				
Council	0.01%	0.00%	0.00%	0.00%	0.00%				



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.

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Investment Risk and Rating Exposure

Monthly Credit Rating Changes MOODY'S

Date	Update Number	Institution	Country	Rating Action
05/12/202	2 1946	The Co-operative Bank plc	United Kingdom	The Long Term Rating was upgraded to 'Ba1' from 'Ba2'. At the same the Outlook on the Long Term Rating changed to Positive from Stable.

Monthly Credit Rating Changes FITCH

Date	Update Number	Institution	Country	Rating Action
08/12/2022	1948	SMBC Bank International Plc	United Kingdom	The Long Term Rating was downgraded to 'A-' from 'A'. At the same the Outlook on the Long Term Rating was changed to Stable from Negative

Monthly Credit Rating Changes S&P

Date	Update Number	Institution	Country	Rating Action
05/12/2022	1947	France (Sovereign Rating)	France	The Outlook on the Sovereign Rating of France was changed to Negative from Stable. At the same time the Sovereign Rating was affirmed at 'AA'.

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