

Performance Insights

MONTHLY REPORT | JULY 2024

Equity advance slows. Long-duration assets continue to struggle.

Markets digest sustained uncertainty from rate cut timing and election outcomes in major developed and emerging economies.

Global Asset Classes - Monetary outlook & Al optimism are still key drivers

The equity advance in Q2 was slower than in Q1 and more volatile, with a pullback in April and a rebound in May. Long-dated government and corporate bond segments continued to struggle in most regions. The broad commodity index gained. Oil posted a modest loss after Q1's strong showing. The US dollar's performance was mixed over the quarter.

Global Equities - Emerging, US & UK shine

The Emerging index, the US and the UK outperformed the FTSE All-World and peers. Asia Pacific, Europe and Japan lagged the global benchmark in that order.

Industry returns - Technology & Financials lead, Real Estate lags

On average, Technology & Financials led industry returns, while Real Estate lagged the most with monetary policy still restrictive in most regions.

Alternative Indices - REITs & Infrastructure underperform

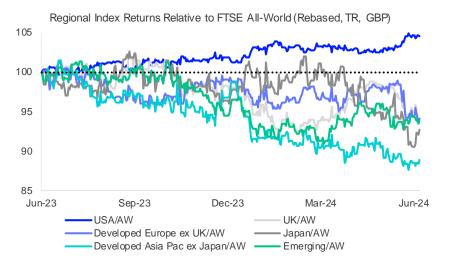
REITs and Core infrastructure underperformed globally. FTSE4Good outperformed in all but Developed Asia. Environmental Opportunities posted mixed results for Q2.

Factor performance - Size lags

(Small) Size broadly underperformed in Q2 and YTD, indicating the risk rally was mostly driven by large stocks. Momentum outperformed in 4 out of 6 regions in Q2.

Foreign exchange - USD's & GBP's performance is mixed

The USD weakened modestly versus the British pound but strengthened versus the yuan, euro and yen over Q2. The yen's steep losses versus the USD & GBP continued.



GBP EDITION

CONTENTS

Macro and Market Overview	2
Asset Class Returns	3
Global Equity Markets	4
Industry/Sector Contributions	5-7
Alternative Indices	8
Regional Factor Indicators	9
Foreign Exchange	10
Asset Class Risk/Return	11
Asset Class Correlations	12
Appendix	13

AUTHORS

Mark Barnes, PhD Head of Global Investment Research, Americas Mark.Barnes@lseg.com

Indhu Raghavan, CFA Investment Research Writer Indhu.Raghavan@lseg.com

+3.7% FTSE 100 (TR)

+3.2% FTSE 250 (TR) Q2 2024 Q2 2024

-1.1%

+24 bps Move in Oil Price (USD) Q2 2024

+11.9%

FTSE UK Telecoms (TR) Q2 2024

Move in 10-year UK Gilt Yield Q2 2024

-4.4% FTSE UK Technology (TR) Q2 2024

Source: FTSE Russell and LSEG. Data as of June 30, 2024. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Macro and Market Overview — Q2 2024

Uncertainty over the timing of monetary policy easing and election outcomes in major developed and emerging economies moved global markets in Q2 2024.

Growth divergence continued in Q2, but with US growth softening and some non-US economies playing catchup. The US's Q1 GDP was revised down from 1.6% to 1.4%. The UK and Eurozone returned to growth in Q1 from a technical recession. Japan slowed to a contraction in Q1 from the previous quarter.

Lower April and May inflation readings provided relief to US markets and policymakers after stubborn Q1 inflation. Disinflation continued in the UK, although markets remained concerned about the services component. The US and UK central banks held policy rates.

While Canada and the Eurozone made their first policy rate cut after the latest hiking cycle, expectations are not for quick subsequent cuts as inflation in both jurisdictions ticked up in May after declining in April.

In Japan, given the yen's historic weakness (breaching 160 yen/dollar), there is speculation about a possible rate hike to support the yen alongside other measures. CPI in

The UK just outperformed global peers in Q2 but continued to lag the All-World ex UK index over 12M.

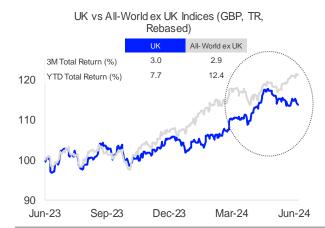
Japan remained above target. In China, the central bank balanced supporting the yuan with stimulating the economy and inflation. China's CPI crept back up to 0.3% YoY after hovering closer to zero in Q1.

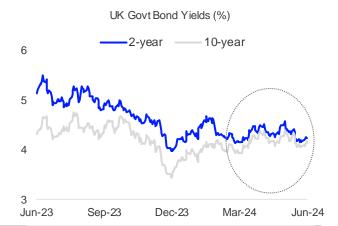
Government 10-year yields in the US, UK and Germany were bumpy during the quarter and slightly higher at quarter-end. Long yields rose in Japan after the relaxing of yield curve controls and were slightly lower in China QoQ.

Markets dealt with uncertainty from scheduled elections in South Africa, Mexico and India, where the outcomes were in line with expectations. However, others were unanticipated, such as the timing of the UK general elections in early July and parliamentary elections in France at the same time with a highly uncertain outcome.

Given this macro and geopolitical backdrop, it was a volatile quarter for equities, with a pullback in April, a rebound in May and more moderation in June. Still, equities were broadly up in Q2. Long-duration bonds continued to struggle in both government and corporate segments. Oil posted a modest loss after Q1's strong showing. The US dollar's performance was mixed.

The UK 2-year and 10-year yields rose by 8 and 24 bps, respectively, in Q2.





Key Macro Indicators

	GDF	GDP (%)		omposite PMI		CPI (%)		CPI Core (%)		Unemployment (%)		Policy Rate (%)		ield (%)
	QoQ	Poll			YoY		YoY							
period	24Q1	2024	Jun	May	May	Apr	May	Apr	May	Apr	Jun	Chng	Jun	May
US	1.4	2.3	54.6	54.5	3.3	3.4	3.4	3.6	4.0	3.9	5.50	HOLD	4.34	4.51
Canada	1.7	0.7		49.3	2.8	2.7	1.8	1.7	6.2	6.1	4.75	CUT	3.51	3.63
UK	2.9	0.7	51.7	53.0	2.0	2.4	3.5	3.9	4.3	4.1	5.25	HOLD	4.18	4.32
Germany	0.9	0.1	50.6	52.4	2.4	2.2	3.0	3.0	5.9	5.9	4.25	CUT	2.49	2.65
Eurozone	1.3	0.7	50.8	52.2	2.6	2.4	2.9	2.7		6.4	4.25	CUT	-	-
Japan	-2.9	0.9	50.1	50.4	2.9	2.5	2.1	2.4	2.6	2.6	0.00	HOLD	1.05	1.07
China	9.7	4.6		54.1	0.3	0.2	0.5	0.7	4.9	4.9	3.45	HOLD	2.21	2.32

Important notes: GDP: QoQ GDP growth rates are annualized. Japan's poll GDP growth is for FY 2024 ending March 2025. Composite PMI: June PMI are flash composite PMI, except for Japan which is flash manufacturing PMI. May PMI are final composite PMI, except for Canada and Japan which are final manufacturing PMI.

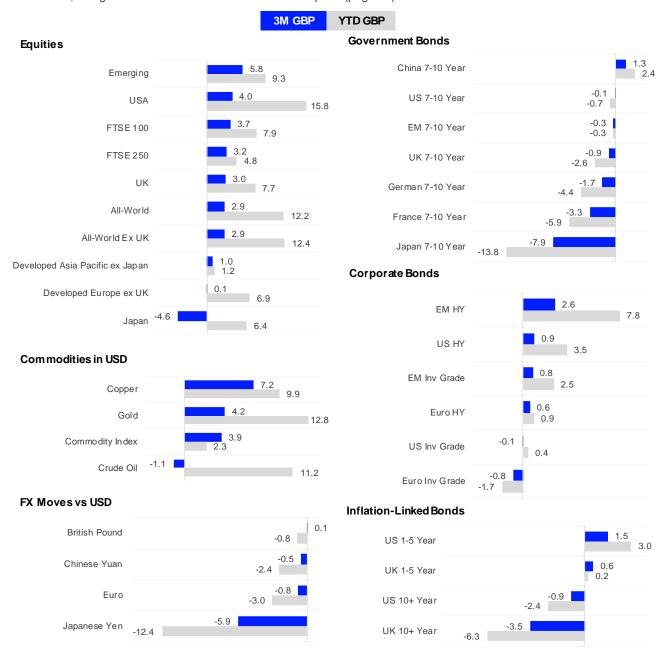
Asset Class Returns – 3M & YTD (GBP, TR %)

Equities continued to advance in Q2, albeit at a slower pace than in Q1. The Emerging index led equity market returns followed by the US, the FTSE 100 and FTSE 250, all of which outperformed the FTSE All-World and peers. Asia Pacific, Europe and Japan lagged the global index in that order. YTD, US equities still held the lead, while Asia Pacific equities lagged the most among the major regions (page 4).

Chinese government 7-10 year bonds bested their developed market and EM cohorts. French and Japanese 7-10 year bonds lagged the most given the political uncertainty in France and the historic rise in Japanese long yields. EM, US and Eurozone high yield outperformed their investment grade counterparts as duration continued to be challenged. Similarly, short-dated US and UK inflation-linked bonds outperformed their longer-dated (10yr+) counterparts, consistent with YTD trends.

After Q1's strong showing, oil experienced a volatile quarter and posted a modest loss in Q2. The broader FTSE Commodity index posted gains. Copper and gold continued to rally.

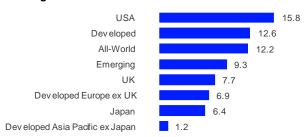
The US dollar weakened slightly versus the British pound over the quarter but strengthened versus other major currencies such as the yuan, euro and yen. The yen posted steep losses versus the British pound over both 3M & YTD timeframes, alongside the Brazilian real and the Mexican peso (page 10).



Global Equity Market Returns – 3M & YTD (GBP, TR %)

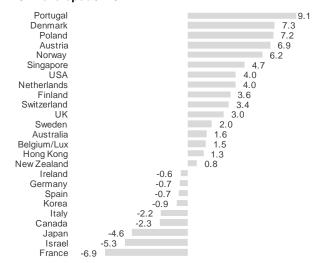
-4.6

FTSE Regions YTDGBP

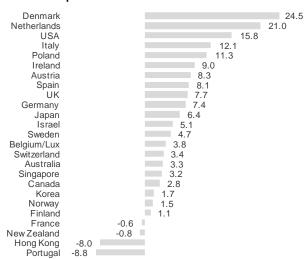


FTSE Developed 3M GBP

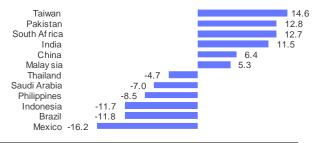
Japan



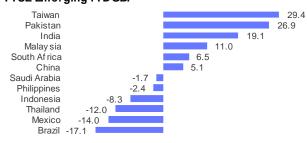
FTSE Developed YTD GBP



FTSE Emerging 3M GBP

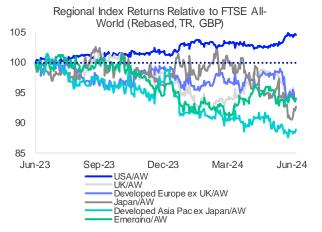


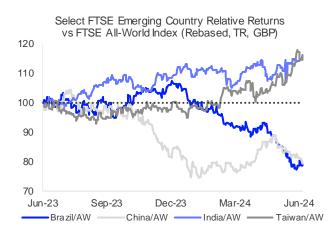
FTSE Emerging YTD GBP



The US continued to beat the global index over 12M, while Asia Pacific lagged the most.

Over 12M, both Taiwan and Indian equities performed better than the global index to buoy Emerging's returns.





Regional Industry-Weighted Contributions to Returns – 3M (GBP, TR %)

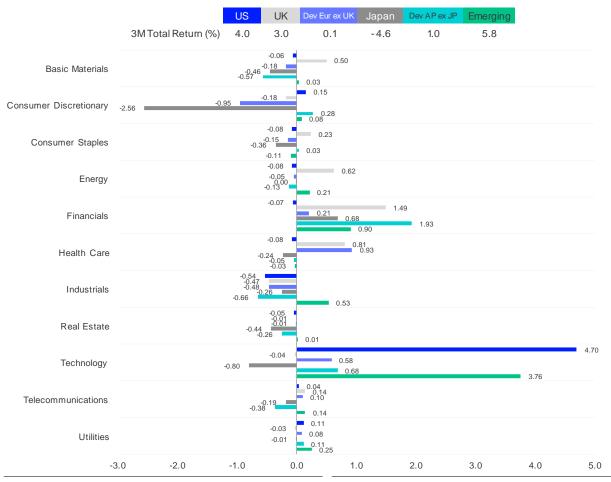
Industry contributions were mixed in Q2.

Tech contributed the bulk of returns in the top-performing Emerging index & the US, and to a lesser extent in Europe & Asia Pacific given their lower tech exposures.

Financials made solid contributions across major regions, except in the US where it detracted modestly. Utilities contributed in 4 out of 6 regions with the electricity

sector potentially benefitting from higher AI-related computing needs.

At the other end of the return distribution, real estate continued to struggle except in the Emerging index. Industrials detracted in 5 out of 6 regions, while solidly contributing in Emerging. And discretionary's negative contribution to European and Japanese equity returns was notable.



On average, tech & financials topped industry performance, while real estate lagged the most.

Tech is the largest in the US & Emerging; financials in the UK & Asia Pacific; industrials in Europe & Japan.

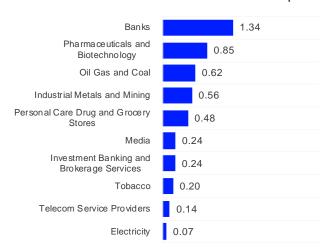
	3M Regional Industry Returns (TR, GBP)												
	US	UK	Dev Eur ex UK	Japan	Dev AP ex JP	Emerging							
Basic Materials	- 3.8	6.8	- 4.0	- 8.9	- 5.1	0.5							
Cons. Disc.	1.1	- 1.6	- 7.0	-11.0	3.1	0.7							
Cons. Staples	- 1.7	1.6	- 2.0	- 6.4	0.9	- 1.9							
Energy	- 1.9	5.1	- 1.4	- 0.2	- 4.1	3.1							
Financials	- 0.6	8.3	1.1	5.5	7.1	3.9							
Health Care	- 0.7	6.3	5.8	- 3.4	- 0.8	- 1.0							
Industrials	- 4.5	- 3.0	- 2.6	- 1.0	- 6.1	6.4							
Real Estate	- 2.1	- 1.0	- 1.4	-12.4	- 3.8	0.6							
Technology	13.7	- 4.4	5.4	- 6.7	10.6	15.2							
Telecoms	1.8	11.9	3.5	- 5.0	- 3.0	3.7							
Utilities	4.4	- 1.0	2.1	- 0.7	3.9	6.4							

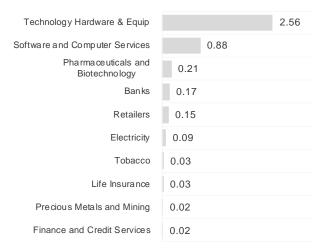
	Regional Industry Exposures (%)												
	US	UK	Dev Eur ex UK	Japan	Dev AP ex JP	Emerging							
Basic Materials	1.5	7.7	4.2	4.9	10.6	6.1							
Cons. Disc.	13.7	11.0	12.6	21.6	9.2	11.0							
Cons. Staples	4.3	14.5	7.2	5.5	3.4	5.4							
Energy	3.7	12.4	3.7	0.9	3.2	6.6							
Financials	10.2	18.7	18.2	13.6	28.4	22.6							
Health Care	11.3	13.5	17.0	7.2	6.7	3.2							
Industrials	11.0	14.8	18.3	26.2	10.0	8.4							
Real Estate	2.2	1.3	1.0	3.2	6.4	2.1							
Technology	37.6	0.9	11.3	11.5	7.1	27.0							
Telecoms	2.0	1.2	2.9	3.9	12.1	3.9							
Utilities	2.5	3.9	3.6	1.5	2.9	3.9							

FTSE UK vs AW ex UK: Sector-Weighted Return Contributions – 3M (GBP, TR %)

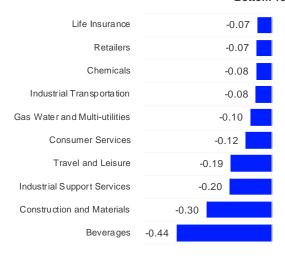


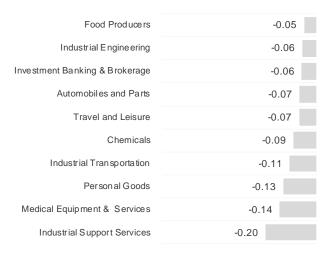
Top 10 Contributors





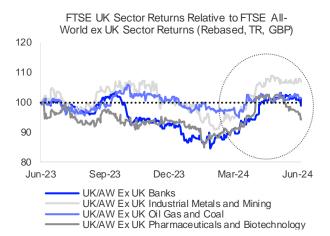
Bottom 10 Contributors

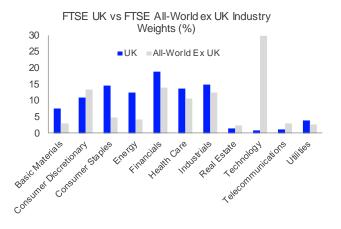




The UK just outperformed peers in Q2 by leading in sectors like banks, metals & mining, oil, gas & coal and pharma & biotech.

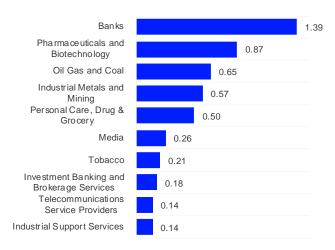
The FTSE UK is tilted more to staples, energy & materials than its peers, and less to technology & discretionary.

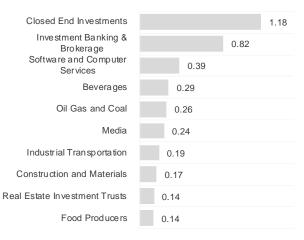




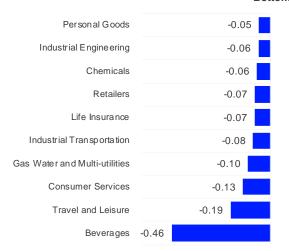
FTSE 100 vs 250: Sector-Weighted Return Contributions – 3M (GBP, TR %)

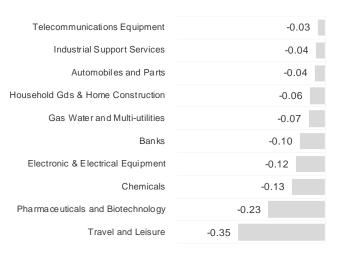






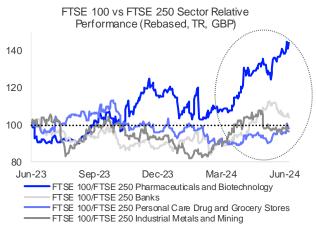
Bottom 10 Contributors

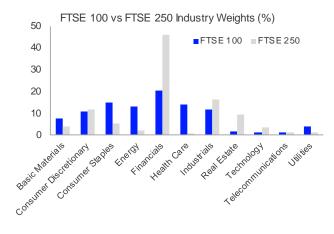




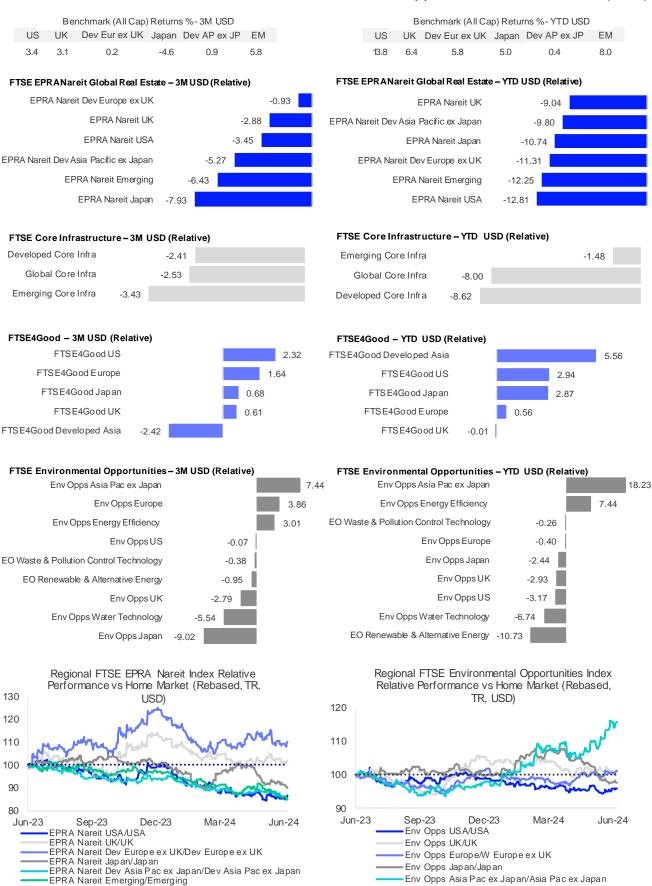
FTSE 100 outperformed FTSE 250 in Q2, leading in banks, pharma & biotech, personal care, and metals & mining.

FTSE 100 is more tilted to staples, energy & health care than FTSE 250, and less to financials, real estate & industrials.

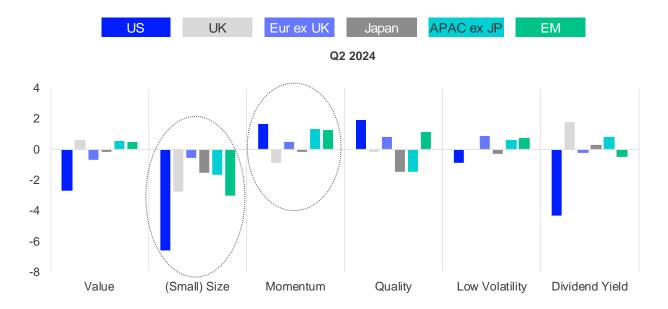




Alternative Indices – REITs, FTSE4Good, Environmental Opportunities, Infrastructure (USD)



Regional Factor Indicator Relative Returns – 3M & YTD (Local Currency, TR %)



10

Quality

Momentum

Year-to-Date

Momentum outperformed in Q2 as it has over 12M, indicating a continuation of long-term trends.

(Small) Size

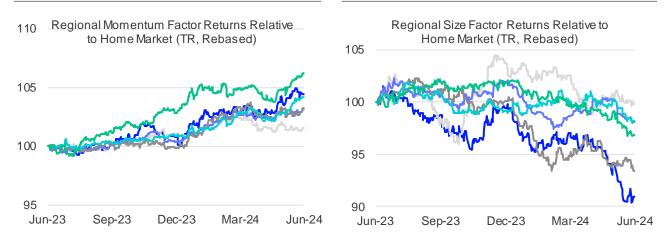
Value

-20

Size underperformed in Q2 as it has over 12M, suggesting the risk rally may be driven mostly by larger stocks.

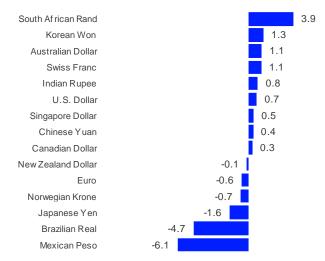
Low Volatility

Dividend Yield

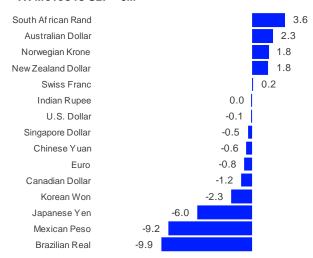


Foreign Exchange Returns %

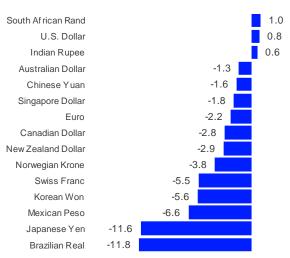
FX Moves vs GBP - 1M



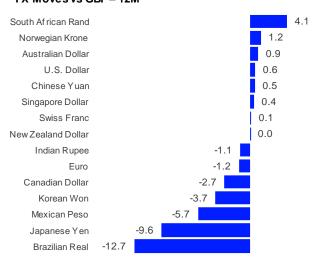
FX Moves vs GBP - 3M



FX Moves vs GBP - YTD

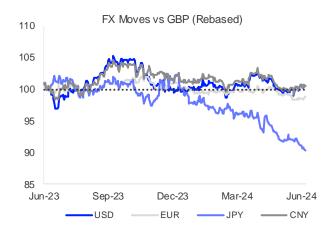


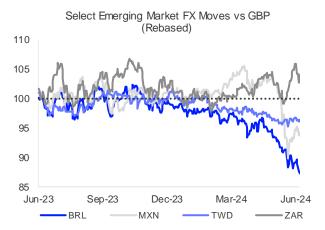
FX Moves vs GBP - 12M



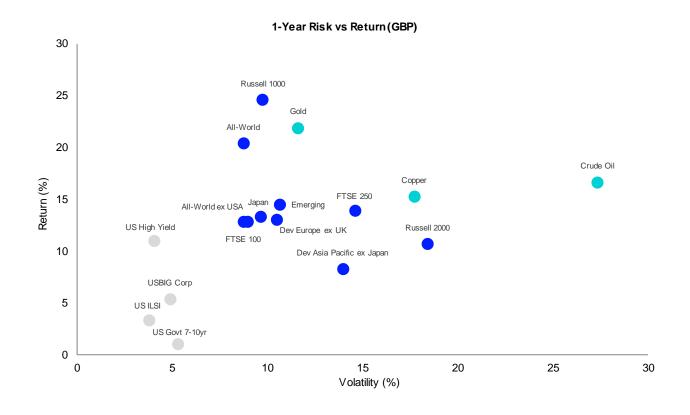
Over 12M, the GBP was essentially on par with the US dollar and yuan, but stronger versus the euro and yen.

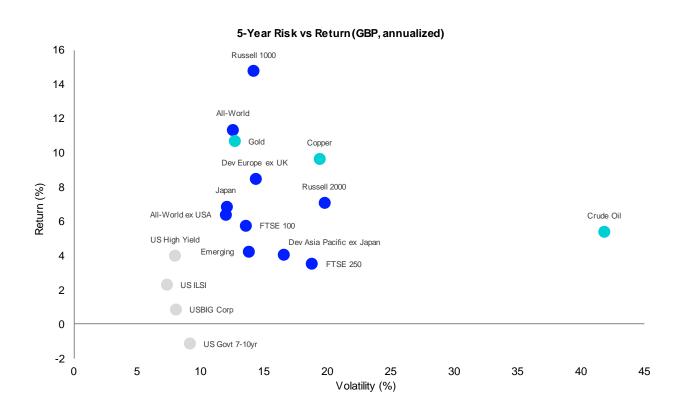
Over 12M, the GBP strengthened versus most EM currencies. The S. African rand was a notable exception.





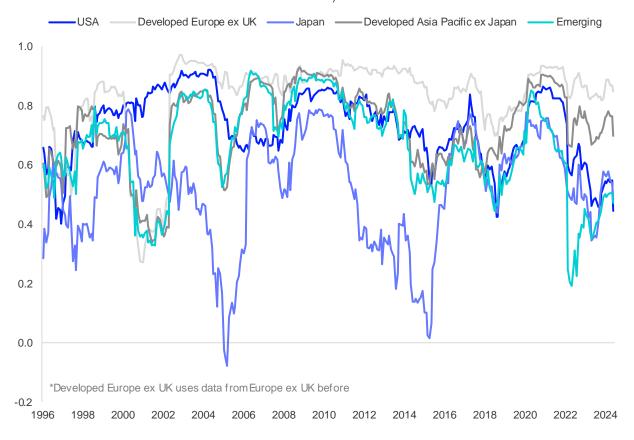
Asset Class Risk/Return – 1-Year and 5-Year (GBP)





Correlations

Regional Equity Market Correlations to the FTSE UK Index (GBP, Monthly Returns, Rolling 24M)



Three-Year Correlation Matrix (GBP)

	FTSE 100	FTSE 250	USA	Dev Europe ex UK	Japan	Dev Asia Pacific ex Japan	Emerging	All-World	UK Govt 7- 10yr	UKBIG Corp	UK High Yield	UK ILSI	Crude Oil	Copper	Gold
FTSE 100			0.43	0.79	0.38	0.68	0.44	0.60	0.49	0.59	0.65	0.33	0.15	0.20	-0.09
FTSE 250			0.65	0.90	0.52	0.70	0.33		0.67			0.49	-0.15	0.05	-0.12
USA	0.43	0.65		0.73	0.56	0.62	0.31	0.96	0.58	0.66	0.63	0.59	-0.19	-0.11	-0.18
Dev Europe ex UK		0.90			0.53	0.72	0.37		0.62			0.55	-0.24	0.07	-0.10
Japan	0.38	0.52	0.56	0.53		0.64	0.53	0.67	0.42	0.49	0.67	0.34	-0.17	-0.09	-0.06
Dev Asia Pacific ex Japan	0.68	0.70	0.62	0.72	0.64		0.71		0.53	0.60	0.66	0.45	-0.11	0.20	0.15
Emerging	0.44	0.33	0.31	0.37	0.53	0.71	-	0.50	0.20	0.27	0.39	0.28	-0.15	0.21	0.21
All-World	0.60		0.96	0.83	0.67		0.50		0.62	0.72		0.61	-0.20		-0.12
UK Govt 7-10yr	0.49	0.67	0.58	0.62	0.42	0.53	0.20	0.62		0.95	0.69	0.71	-0.11	-0.13	0.06
UKBIG Corp	0.59		0.66	0.77	0.49	0.60	0.27	0.72	0.95	-		0.71	-0.17	-0.04	0.00
UK High Yield	0.65		0.63		0.67	0.66	0.39		0.69	0.82	-	0.46	-0.13	0.05	-0.15
UK ILSI	0.33	0.49	0.59	0.55	0.34	0.45	0.28	0.61	0.71	0.71	0.46		-0.36	0.11	0.22
Crude Oil	0.15	-0.15	-0.19	-0.24	-0.17	-0.11	-0.15	-0.20	-0.11	-0.17	-0.13	-0.36		0.07	-0.20
Copper	0.20	0.05	-0.11	0.07	-0.09	0.20	0.21		-0.13	-0.04	0.05	0.11	0.07	-	0.43
Gold	-0.09	-0.12	-0.18	-0.10	-0.06	0.15	0.21	-0.12	0.06	0.00	-0.15	0.22	-0.20	0.43	-

Appendix

	Wgt (%)	Mkt Cap		3	M			Υ	ΓD		12M				
•		(USD bn)	LOCAL	USD	GBP	EUR	LOCAL	USD	GBP	EUR	LOCAL	USD	GBP	EUR	
All-World	100.0	74,688	3.5	2.9	2.9	3.7	13.3	11.3	12.2	14.7	21.2	19.7	20.4	21.9	
Developed	90.2	67,388	3.1	2.6	2.6	3.4	13.5	11.6	12.6	15.0	21.7	20.4	21.0	22.5	
USA	63.0	47,073	4.1	4.1	4.0	4.9	14.9	14.9	15.8	18.4	24.6	24.6	25.3	26.9	
Developed Europe ex UK	11.4	8,500	0.6	0.1	0.1	0.9	10.1	6.0	6.9	9.3	13.8	12.4	13.1	14.5	
Emerging	9.8	7,300	6.9	5.8	5.8	6.7	11.3	8.4	9.3	11.7	16.7	13.9	14.5	15.9	
Japan	5.9	4,386	1.4	-4.6	-4.6	-3.8	20.4	5.5	6.4	8.8	25.4	12.7	13.3	14.7	
Developed Asia Pacific ex Japan	4.0	2,958	0.6	1.0	1.0	1.8	3.8	0.4	1.2	3.5	8.9	7.6	8.3	9.6	
UK	3.6	2,658	3.0	3.1	3.0	3.9	7.7	6.8	7.7	10.1	13.3	12.7	13.3	14.7	

Developed - Top 20 by % weight (TR)

	Wgt (%)	Mkt Cap		3	M			Υ	ΓD		12M				
		(USD bn)	LOCAL	USD	GBP	EUR	LOCAL	USD	GBP	EUR	LOCAL	USD	GBP	EUR	
Developed	100.0	67,388	3.1	2.6	2.6	3.4	13.5	11.6	12.6	15.0	21.7	20.4	21.0	22.5	
USA	69.9	47,073	4.1	4.1	4.0	4.9	14.9	14.9	15.8	18.4	24.6	24.6	25.3	26.9	
Japan	6.5	4,386	1.4	-4.6	-4.6	-3.8	20.4	5.5	6.4	8.8	25.4	12.7	13.3	14.7	
UK	3.9	2,658	3.0	3.1	3.0	3.9	7.7	6.8	7.7	10.1	13.3	12.7	13.3	14.7	
France	2.7	1,818	-6.1	-6.9	-6.9	-6.1	1.6	-1.4	-0.6	1.6	3.2	1.3	1.9	3.2	
Canada	2.5	1,705	-1.2	-2.3	-2.3	-1.5	5.8	1.9	2.8	5.0	13.5	9.8	10.4	11.8	
Switzerland	2.4	1,616	3.3	3.5	3.4	4.3	9.5	2.5	3.4	5.7	7.1	6.6	7.2	8.5	
Germany	2.1	1,437	0.2	-0.6	-0.7	0.2	9.7	6.5	7.4	9.7	13.7	11.7	12.3	13.7	
Australia	2.0	1,378	-0.7	1.6	1.6	2.4	4.7	2.5	3.3	5.6	13.2	13.6	14.3	15.6	
Korea	1.4	945	1.3	-0.9	-0.9	-0.1	7.8	0.9	1.7	4.0	15.0	10.1	10.7	12.0	
Netherlands	1.3	878	4.9	4.1	4.0	4.9	23.6	20.0	21.0	23.6	26.0	23.8	24.5	26.0	
Denmark	0.9	626	8.2	7.4	7.3	8.2	27.3	23.5	24.5	27.3	44.1	41.3	42.2	43.9	
Sweden	0.8	564	1.1	2.1	2.0	2.9	9.1	3.8	4.7	7.0	16.8	19.2	19.8	21.3	
Italy	0.7	483	-1.4	-2.1	-2.2	-1.4	14.5	11.1	12.1	14.5	25.7	23.5	24.2	25.7	
Spain	0.7	459	0.1	-0.7	-0.7	0.1	10.5	7.2	8.1	10.5	18.6	16.5	17.2	18.6	
Hong Kong	0.5	355	1.1	1.4	1.3	2.2	-8.8	-8.8	-8.0	-6.0	-15.1	-14.7	-14.3	-13.2	
Singapore	0.3	227	5.3	4.8	4.7	5.6	5.1	2.3	3.2	5.4	10.4	10.2	10.8	12.2	
Finland	0.3	172	4.4	3.6	3.6	4.4	3.3	0.2	1.1	3.3	7.0	5.1	5.7	7.0	
Belgium/Lux	0.2	159	2.4	1.6	1.5	2.4	6.1	3.0	3.8	6.1	11.7	9.7	10.3	11.7	
Norway	0.2	112	4.3	6.3	6.2	7.1	5.6	0.7	1.5	3.8	15.2	15.9	16.6	18.0	
Israel	0.2	108	-2.5	-5.2	-5.3	-4.5	9.0	4.2	5.1	7.4	16.7	14.9	15.6	17.0	

Emerging - Top 10 by % weight (TR)

	Wgt (%)	Mkt Cap	3M					Y	ΓD		12M				
		(USD bn)	LOCAL	USD	GBP	EUR	LOCAL	USD	GBP	EUR	LOCAL	USD	GBP	EUR	
Emerging	100.0	7,300	6.9	5.8	5.8	6.7	11.3	8.4	9.3	11.7	16.7	13.9	14.5	15.9	
China	28.1	2,051	6.2	6.4	6.4	7.3	4.2	4.2	5.1	7.4	-2.8	-2.5	-1.9	-0.7	
India	23.4	1,712	11.5	11.5	11.5	12.4	18.3	18.1	19.1	21.7	41.7	39.4	40.2	41.9	
Taiwan	20.6	1,503	16.2	14.6	14.6	15.5	35.6	28.3	29.4	32.2	46.2	40.3	41.1	42.8	
Brazil	4.9	361	-2.1	-11.7	-11.8	-11.1	-6.0	-17.8	-17.1	-15.3	8.1	-6.1	-5.6	-4.4	
Saudi Arabia	4.5	325	-6.9	-6.9	-7.0	-6.2	-2.5	-2.5	-1.7	0.5	1.8	1.8	2.3	3.6	
South Africa	3.2	235	8.7	12.8	12.7	13.6	5.5	5.6	6.5	8.9	10.4	14.2	14.9	16.3	
Mexico	2.5	185	-7.7	-16.1	-16.2	-15.5	-7.9	-14.7	-14.0	-12.1	0.6	-5.6	-5.1	-3.9	
Malaysia	1.8	134	5.0	5.4	5.3	6.2	13.0	10.1	11.0	13.5	23.0	21.7	22.4	23.8	
Indonesia	1.8	133	-8.8	-11.7	-11.7	-11.0	-3.3	-9.1	-8.3	-6.3	-1.9	-10.2	-9.7	-8.6	
Thailand	1.8	128	-4.1	-4.6	-4.7	-3.9	-6.2	-12.8	-12.0	-10.1	-9.6	-12.7	-12.2	-11.1	



ABOUT FTSE RUSSELL

FTSE Russell is a leading global provider of index and benchmark solutions, spanning diverse asset classes and investment objectives. As a trusted investment partner we help investors make better-informed investment decisions, manage risk, and seize opportunities. Market participants look to us for our expertise in developing and managing global index solutions across asset classes. Asset owners, asset managers, ETF providers and investment banks choose FTSE Russell solutions to benchmark their investment performance and create investment funds, ETFs, structured products, and index-based derivatives. Our clients use our solutions for asset allocation, investment strategy analysis and risk management, and value us for our robust governance process and operational integrity. For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

CONTACT US

To learn more, visit Iseg.com/en/ftse-russell; email info@ftserussell.com; or call your regional Client Service team office:

EMEA +44 (0) 20 7866 1810 North America +1 877 503 6437 Asia-Pacific Hong Kong +852 2164 3333 Tokyo +81 3 6441 1430 Sydney +61 (0) 2 7228 5659

© 2024 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) The Yield Book Inc ("YB") and (7) Beyond Ratings S.A.S. ("BR"). All rights re-served.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "The Yield Book®", "Beyond Ratings®" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or of results to be obtained from the use of FTSE Russell products, including but not limited to indexes, data and analytics, or the fitness or suitability of the FTSE Russell products for any particular purpose to which they might be put. Any representation of historical data accessible through FTSE Russell products is provided for information purposes only and is not a reliable indicator of future performance.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any error (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indexes cannot be invested in directly. Inclusion of an asset in an index is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB, BR and/or their respective licensors.

The information contained in this report should not be considered "research" as defined in recital 28 of the Commission Delegated Directive (EU) 2017/593 of 7 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council ("MiFID II") and is provided for no fee.