

June 30, 2023

GLOBAL MARKETS PERFORMANCE REPORT

FT Wilshire 5000 - Sector, Style, Factors

Global Equities and Sectors

Fixed Income and FX

Alternatives



IN THIS REPORT

FT Wilshire Indexes Insights

- The FT Wilshire 5000 rose 6.9% in June, was up 8.4% in Q2 and has returned 16.3% YTD
- Growth style gained 13.9% in Q2 vs Value which rose 3.9%. Large cap (8.9%) outperformed small cap (5.6%) in Q2
- Digital information and technology sectors again the largest contributors to Q2 and YTD returns

+8.4%

FT Wilshire 5000
return in Q2 2023

+27.4%

Growth Style
outperformance
versus Value YTD

See [PAGE 4](#)

Global Equities

- US and Japanese equities outperformed in Q2. Chinese equities continued to miss out on the global rally seeing further declines
- Wide divergence amongst emerging market country returns in Q2
- Q2 and YTD US outperformance vs World ex US driven by superior positive contributions from technology and consumer discretionary sectors

+5.7%

Q2 2023 return of
Japanese equities
(USD)

+12.6%

Return of the World
Equity Index YTD

See [PAGE 16](#)

Fixed Income, Foreign Exchange

- A 43bps rise in the real yield drove the US 10 year bond yield higher in Q2
- The US 10-2yr yield curve inverted further towards the end of Q2. At -113bps its back to the March lows
- The dollar rose 0.4% in Q2. CNY and JPY saw substantial declines against all major FX

+43bps

Rise in US 10-year
real yield in Q2 2023

-7.9%

Depreciation of JPY
vs USD in Q2 2023

See [PAGE 28](#)

Alternatives

- Economically-sensitive commodities (copper, oil and iron ore) saw further declines in Q2 on Chinese growth concerns
- US apartment REITS see strong gains in Q2. Office REITS remain the notable laggard YTD
- FT Wilshire Digital Assets Index rose 8.9% in Q2 and is up 72.4% so far in 2023.

-9.1%

Decline in Industrial
Metals prices QTD

+72.4%

FT Wilshire Digital
Assets Index return
YTD

See [PAGE 33](#)

Multi-Asset Class returns: Global equity market rally continues in Q2, led by US growth stocks. Bonds decline on pick up in interest rate expectations.

Chart 1: US large cap growth posted double-digit gains in the second quarter with the US and Japan outperforming at a regional level. China continued to significantly underperform. Most bond markets posted negative returns as yields rose. Oil and copper pulled back further on global growth concerns.

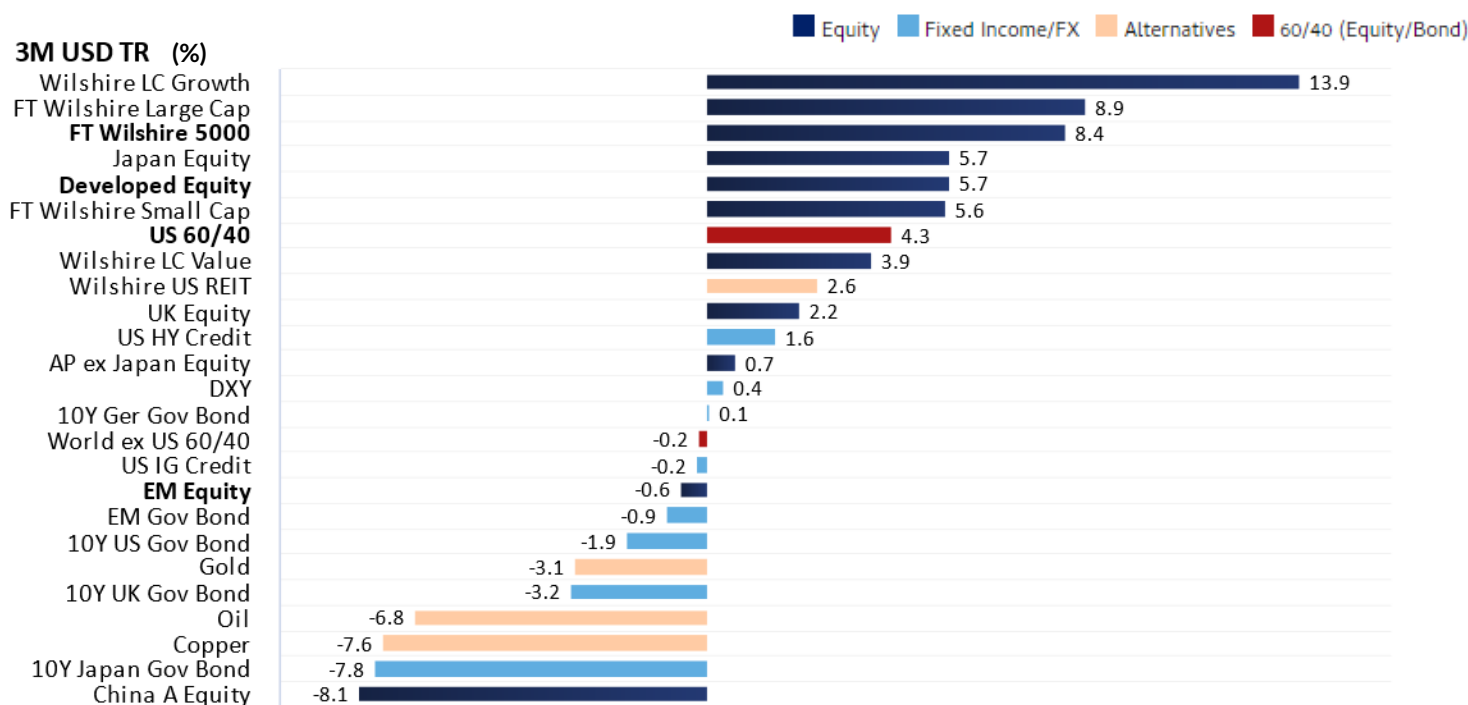
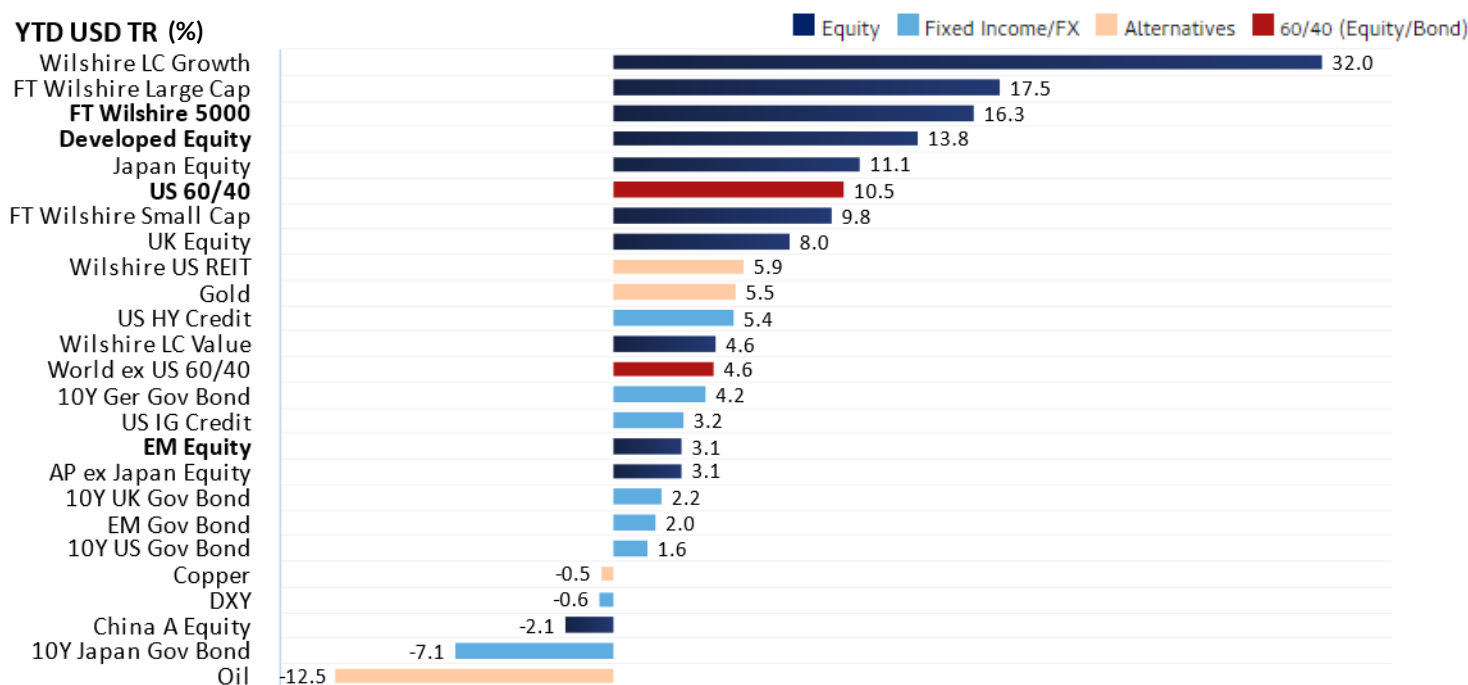


Chart 2: Year to date US large cap growth has significantly outperformed. Strong US returns and declines for China mean developed markets have outperformed emerging. Despite the rise in yields in Q2 most bond markets have posted small YTD gains. Oil has underperformed within the commodities space



Source: Wilshire, FactSet and Refinitiv. Data as of June 30, 2023

FT Wilshire 5000 Index Insights

1

+8.4%

The return of the FT Wilshire 5000 in Q2 2023

2

+16.3%

Appreciation of the FT Wilshire 5000 YTD

3

+27.4%

Outperformance of Growth style versus Value YTD

4

+50.9%

Performance of the Technology sector YTD

CONTENTS

05 FT Wilshire 5000 key observations
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07 Sector performance
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09 Style indexes performance
10 Style indexes relative returns

11 Pure Factor Indexes
12 Style vs Factors
13 Technical analysis
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15 Risk/return analysis

The FT Wilshire 5000 index successfully navigated its way through debt ceiling brinkmanship, regional bank concerns and hawkish Fed guidance to finish the second quarter strongly. The index has entered 'bull market' territory, up 24.6% from the October 14 2022 low.



Source: Wilshire, FactSet. Data as of June 30, 2023

FT Wilshire 5000 Key Observations: Strong finish to the second quarter as market rally broadens out. Tech stocks still the main drivers behind Q2 returns

Market snapshot

- ◆ The FT Wilshire 5000 rose 6.9% in June, 8.4% in Q2 and has delivered a return of 16.3% year to date in 2023 ([page 4](#))
- ◆ 'Magnificent 7' stocks contribute 4.8% of the 8.4% FT Wilshire 5000 return in Q2 but rally broadens towards the end of the second quarter ([page 6](#))
- ◆ FT Wilshire large cap growth continued to significantly outperform large cap value in Q2. Small cap outperformed large cap in June but still underperformed in Q2 ([page 9](#))
- ◆ Digital information and technology delivered the strongest returns and were the biggest contributors to FT Wilshire 5000 returns in Q2. Financials, energy and food and beverage underperformed ([page 8](#))
- ◆ Within the Pure factor space Momentum outperformed in Q2, with Beta lagging ([page 12](#))

Chronology of Key Market Events in 2023

- ◆ January: Risk appetite buoyed by Goldilocks optimism - avoidance of a recession and hopes about the visibility of peak rates
- ◆ February: Fed caution against excessive interest rate optimism - markets retreat
- ◆ March: Silicon Valley Bank (SVB) collapses with contagion concern impacting global bank stocks. Y/E 2023 US market rate expectations plummet by 160bps
- ◆ March: AI theme turbo charges US technology sector
- ◆ April: Risk appetite recovers on back of Technology Q1 results, the AI trade and less bank contagion concern
- ◆ May: Debt ceiling brinkmanship sees markets tread water
- ◆ June: Despite hawkish Fed guidance, debt ceiling resolution and tech rally see strong Q2 market returns

Chart 1: FT Wilshire 5000 Real vs nominal total return - despite the 2022 drawdown, US equities have delivered an 9.4% real annualized return over the last 10 years



Perspectives : FT Wilshire 5000 sees an improvement in market breadth towards the end of Q2 but the 'Magnificent 7' still dominate returns so far in

Chart 1: The market rally broadened out towards the end of the second quarter with a recovery in the FT Wilshire 5000 equally-weighted sector index

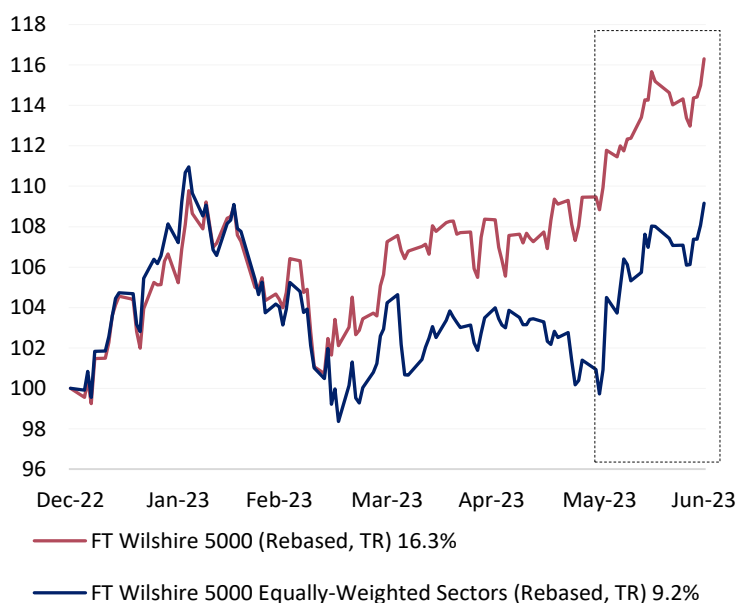


Chart 2: The 'Magnificent 7' stocks contributed 4.8% of the 8.4% Q2 return and 10.5% of the 16.3% YTD return for the FT Wilshire 5000

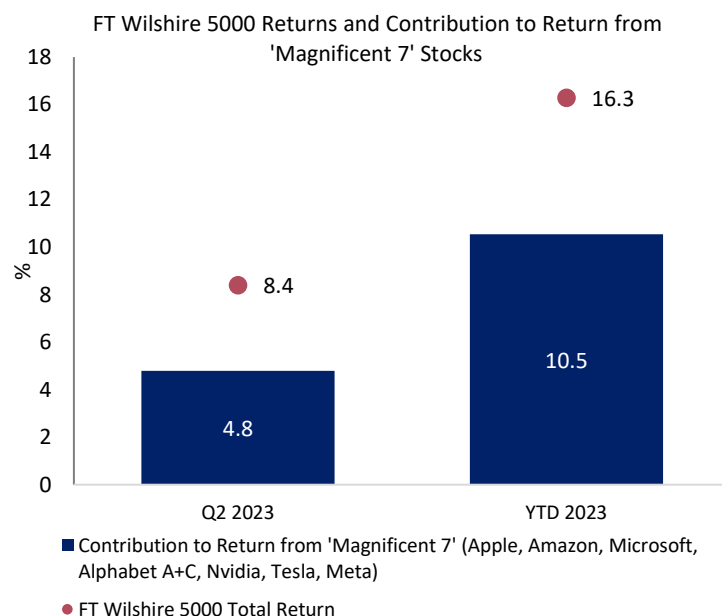


Chart 3: The deteriorating market breath YTD vs 2022 can also be expressed through significant underperformance of small cap relative to large cap so far in 2023

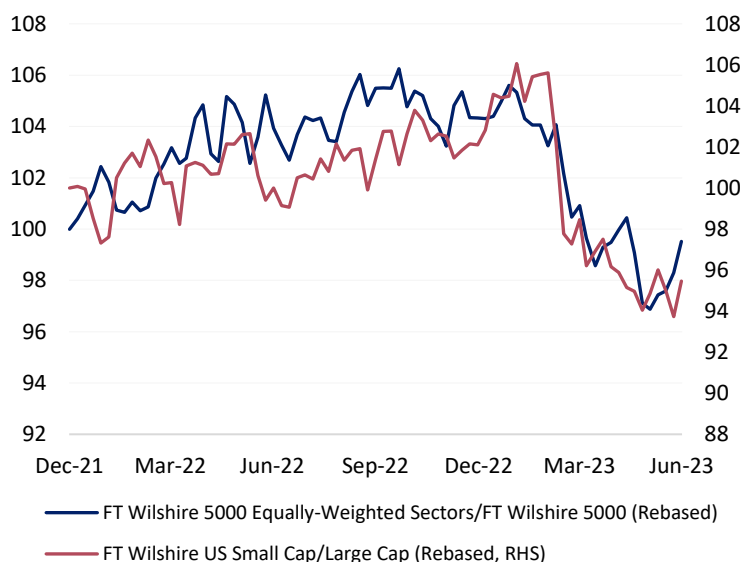
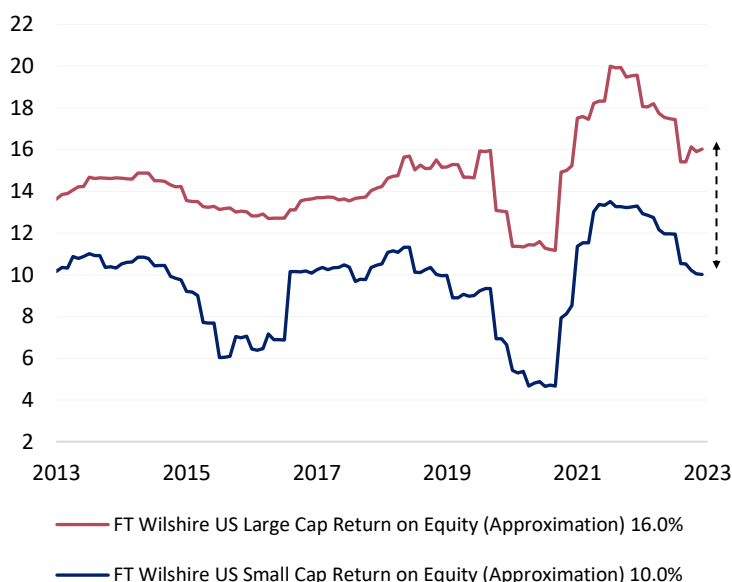


Chart 4: Superior levels of profitability is perhaps one of the drivers behind the outperformance of large cap relative to small cap

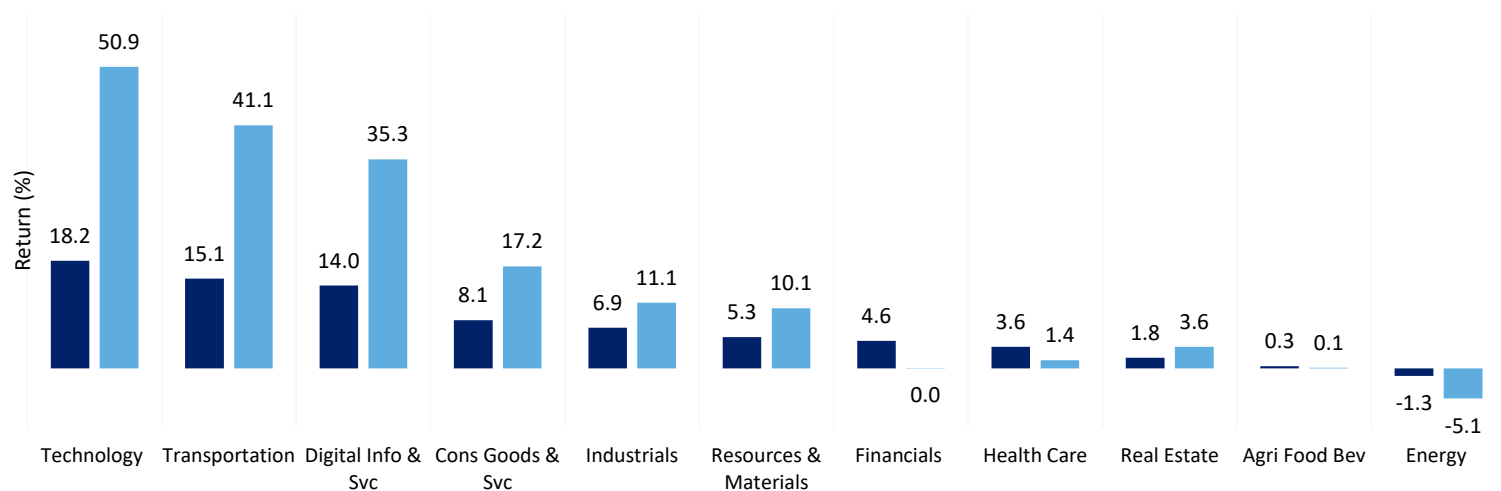


Sector performance and contributions: Technology and digital information the dominant contributors to returns but rally broadens in Q2

Sector returns Digital information, technology and transportation are the standout performers in Q2 and 2023 YTD, delivering strong double-digit returns. Energy and financial have been the main underperformers.

FT Wilshire 5000: Returns Q2 2023 vs YTD (USD, TR, %)

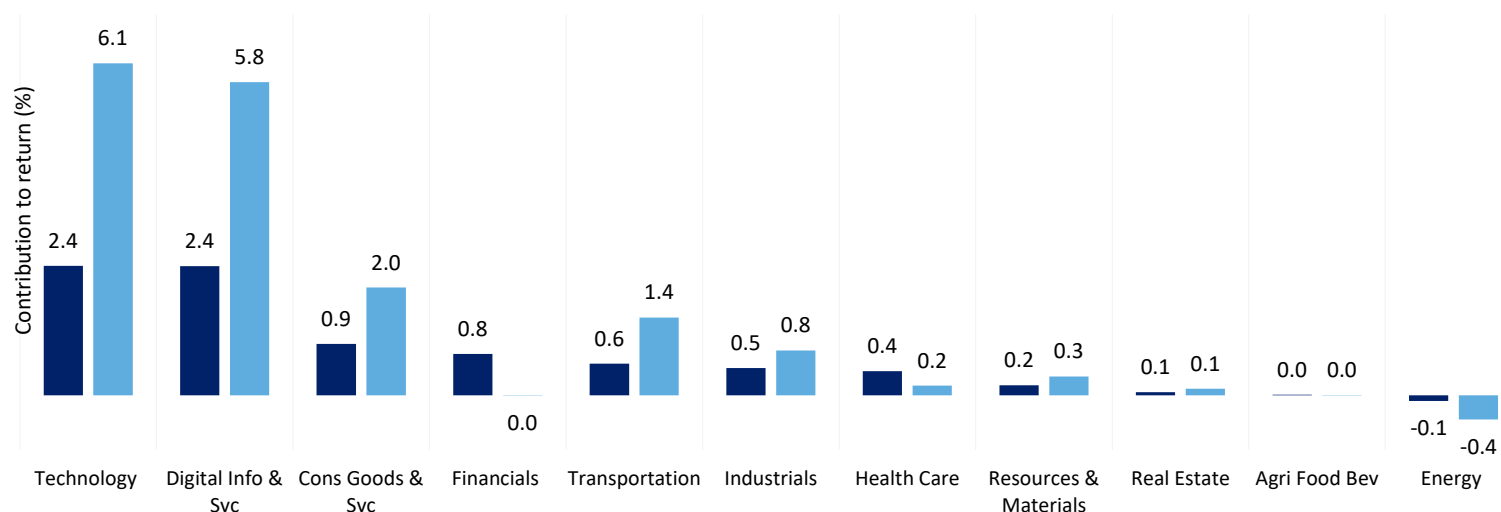
■ QTD: 8.4% ■ YTD: 16.3%



Sector weighted contributions blend sector performance with sector weighting to establish aggregate return drivers. QTD and YTD technology and digital information sectors have been the dominant drivers of FT Wilshire 5000 returns. YTD financials and energy have been negative contributors to returns.

FT Wilshire 5000: Contribution to returns Q2 2023 vs YTD (USD, TR, %)

■ QTD: 8.4% ■ YTD: 16.3%



Sector returns and weights across the FT Wilshire indexes: Strong Technology and digital information returns drive large cap and growth outperformance

Q2 2023 Sector returns and average weights across the FT Wilshire indexes: Comparing sector weights, large cap are heavily exposed to the technology and digital info sectors while small cap are more exposed to the cyclical industrials, resources and real estate sectors. Value is skewed to energy and financials while growth is more exposed to technology and consumer goods.

QTD	FTW 5000		Large Cap		Small Cap		Micro Cap		Growth		Value	
	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts
Technology	18.2	13.1	18.7	14.2	10.2	6.1	10.5	4.9	23.0	19.1	9.1	9.5
Transportation	15.1	3.9	16.0	3.8	11.0	4.3	3.3	3.8	25.4	3.5	6.6	4.0
Digital Info & Svc	14.0	17.0	14.7	18.2	5.4	10.1	2.3	6.7	16.8	29.5	6.4	8.3
Cons Goods & Svc	8.1	11.6	8.8	11.5	4.4	13.0	4.1	9.7	13.0	13.3	3.9	10.5
Industrials	6.9	7.3	6.4	6.6	8.8	12.1	7.3	10.1	9.3	3.8	5.1	8.2
Resources & Materials	5.3	3.5	4.8	2.7	6.8	8.8	1.4	6.5	5.2	1.7	3.7	4.2
Financials	4.6	16.5	5.1	16.4	1.9	16.3	-1.9	21.9	5.1	9.9	5.1	22.5
Health Care	3.6	12.3	3.1	12.4	7.4	10.0	7.5	23.8	3.2	13.1	3.1	11.1
Real Estate	1.8	3.3	1.1	2.6	3.1	7.7	5.0	4.8	-0.9	3.2	3.8	2.1
Agri Food Bev	0.3	3.5	-0.1	3.7	5.5	2.2	2.8	1.2	3.6	1.2	-0.5	6.1
Energy	-1.3	8.0	-1.8	7.9	1.7	9.4	2.5	6.6	1.3	1.8	-2.1	13.6
Market	8.4		8.9		5.6		3.9		13.9		3.9	

YTD 2023 Sector returns and average weights across the FT Wilshire indexes: Digital information, technology and transportation sectors were the strongest performers YTD. Energy and financials been the weakest, delivering negative returns across most indexes.

YTD	FTW 5000		Large Cap		Small Cap		Micro Cap		Growth		Value	
	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts
Technology	51.0	12.0	52.6	13.0	28.6	5.8	16.6	4.8	64.1	17.6	30.8	8.9
Transportation	41.1	3.5	45.1	3.4	21.4	4.0	7.6	3.6	96.5	2.8	13.1	3.8
Digital Info & Svc	35.3	16.3	37.1	17.4	15.9	9.8	4.6	6.4	41.5	29.2	19.7	8.0
Cons Goods & Svc	17.2	11.5	17.8	11.4	13.9	12.5	11.2	9.1	27.0	13.5	5.6	10.5
Industrials	11.1	7.5	9.6	6.8	16.6	12.0	14.5	9.7	18.5	3.8	6.5	8.1
Resources & Materials	10.1	3.4	8.2	2.6	15.0	8.6	5.1	6.4	6.3	1.7	8.7	4.0
Real Estate	3.6	3.3	3.1	2.7	5.1	7.9	2.2	4.8	2.1	3.4	4.2	2.0
Health Care	1.4	13.1	0.4	13.3	9.6	10.1	3.7	24.4	5.0	14.3	-3.8	11.7
Agri Food Bev	0.1	3.7	-0.7	4.0	8.9	2.3	7.7	1.1	6.4	1.4	-1.5	6.3
Financials	0.0	17.0	0.7	16.9	-3.3	16.8	-11.0	22.8	4.4	10.4	-1.1	22.6
Energy	-5.1	8.7	-5.4	8.5	-3.5	10.3	-3.7	7.0	-3.6	2.1	-5.5	14.2
Market	16.3		17.5		9.8		2.5		32.0		4.7	

Sector-weighted contributions across the FT Wilshire indexes: Technology and digital information sectors dominate the contributors to Q2 and YTD returns

Q2 2023 sector-weighted performance contributions across the FT Wilshire indexes: Technology and digital information have been the dominant contributors to returns for the FT Wilshire 5000, large cap and growth indexes in Q2. Energy has been the main drag on returns.

Q2 2023	FTW 5000	Large Cap	Small Cap	Micro Cap	Growth	Value
	Contr	Contr	Contr	Contr	Contr	Contr
Digital Info & Svc	2.9	3.3	0.3	-0.4	5.2	0.5
Technology	2.7	2.9	1.0	0.7	5.0	0.9
Cons Goods & Svc	1.0	1.0	0.6	0.3	1.6	0.4
Transportation	0.6	0.7	0.5	-0.4	0.9	0.3
Industrials	0.5	0.4	1.0	1.0	0.4	0.5
Health Care	0.4	0.4	0.4	1.8	0.4	0.4
Resources & Materials	0.2	0.1	0.7	0.8	0.1	0.2
Real Estate	0.1	0.1	0.3	0.3	0.0	0.1
Financials	0.1	0.1	0.1	-0.7	0.5	1.1
Agri Food Bev	0.0	0.0	0.2	0.0	0.0	0.0
Energy	-0.1	-0.1	0.4	-0.1	0.0	-0.3
Market	8.4	8.9	5.6	3.8	13.9	3.9

YTD sector-weighted performance contributions across the FT Wilshire indexes: Superior positive contributions from digital information have been the key drivers behind large cap outperformance relative to small cap, and growth outperformance relative to value so far in 2023.

YTD	FTW 5000	Large Cap	Small Cap	Micro Cap	Growth	Value
	Contr	Contr	Contr	Contr	Contr	Contr
Technology	6.1	6.8	1.6	0.8	11.2	2.7
Digital Info & Svc	5.8	6.5	1.6	0.3	12.1	1.6
Cons Goods & Svc	2.0	2.0	1.7	1.0	3.6	0.6
Transportation	1.4	1.5	0.9	0.3	2.7	0.5
Industrials	0.8	0.7	2.0	1.4	0.7	0.5
Resources & Materials	0.3	0.2	1.3	0.3	0.1	0.3
Health Care	0.2	0.1	1.0	0.9	0.7	-0.4
Real Estate	0.1	0.1	0.4	0.1	0.1	0.1
Agri Food Bev	0.0	0.0	0.2	0.1	0.1	-0.1
Financials	0.0	0.1	-0.6	-2.5	0.5	-0.2
Energy	-0.4	-0.5	-0.4	-0.3	-0.1	-0.8
Market	16.3	17.5	9.8	2.5	32.0	4.7

Source: Wilshire. Data as of June 30, 2023

FT Wilshire Size and Style Indexes: Small cap and value make up ground in June but both still lagged behind in Q2 and have significantly underperformed YTD

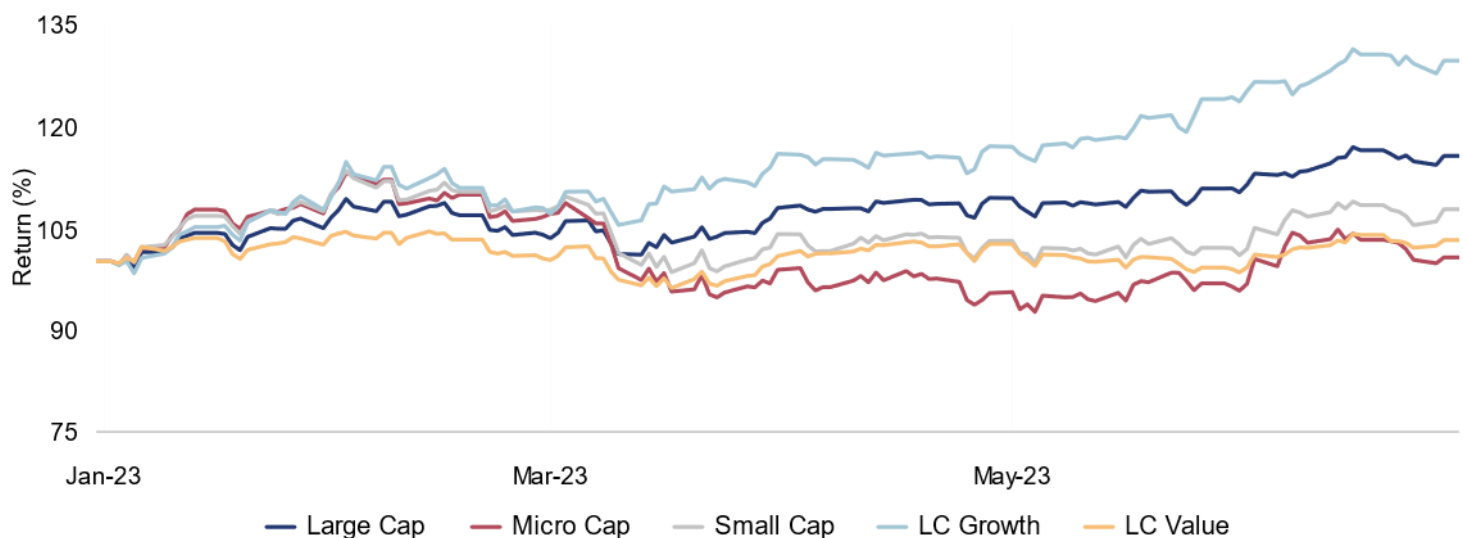
Table 1: Small cap outperformed large cap in June but still lagged behind in Q2 and YTD. Growth continues to lead the way delivering strong returns in the second quarter and so far in 2023.

USD, TR %	Size		Style		
	Large Cap	Small Cap	Micro Cap	LC Growth	LC Value
1M	6.6	8.8	7.1	6.8	6.4
3M	8.9	5.6	3.8	13.9	3.9
YTD	17.5	9.8	2.5	32.0	4.6
2022	-19.2	-17.5	-21.4	-31.1	-6.0
2021	27.8	19.1	21.7	27.6	27.5

Table 2: Large cap have delivered a 10yr annualized return of 13.0% vs a small cap return of 9.6%

USD, TR %	Large Cap		Small Cap		Micro Cap		LC Growth		LC Value	
	Aggr	Ann	Aggr	Ann	Aggr	Ann	Aggr	Ann	Aggr	Ann
2Y	5.5	2.7	-7.4	-3.8	-23.8	-12.7	2.1	1.0	8.0	3.9
3Y	49.8	14.4	44.8	13.1	35.9	10.8	46.4	13.5	51.4	14.8
5Y	79.8	12.5	38.9	6.8	16.7	3.1	106.5	15.6	52.8	8.9
10Y	239.0	13.0	149.2	9.6	116.8	8.0				
20Y	585.6	10.1	612.8	10.3	408.0	8.5				

Chart 1: Size and style index returns - 2023 YTD (USD, TR %)



Style and Size Indexes: Momentum remains behind growth relative to value in Q2. Small cap regains some ground against large cap in June

Chart 1: Growth vs Value (USD, TR, %).

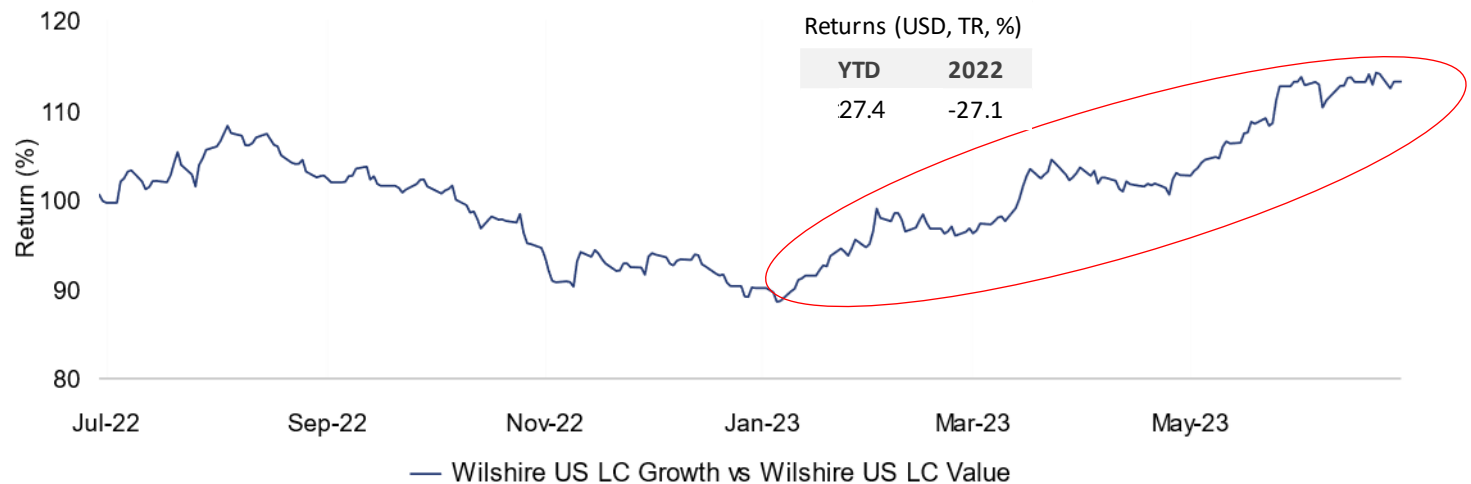


Chart 2: Large vs Small Cap (USD, TR, %).



Chart 3: Large vs Micro Cap (USD, TR, %).



Pure Factor Indexes: Momentum outperforms in Q2 and YTD with Beta continuing to lag behind

Our “Pure Factors” are designed to eliminate the unintended sector and factor exposures incorporated into most conventional factor methodologies. In this regard they are designed to deliver “pure” factor premia.

Chart 1: Q2 2023 - Pure Momentum outperformed with Beta the laggard. Value outperformed quality

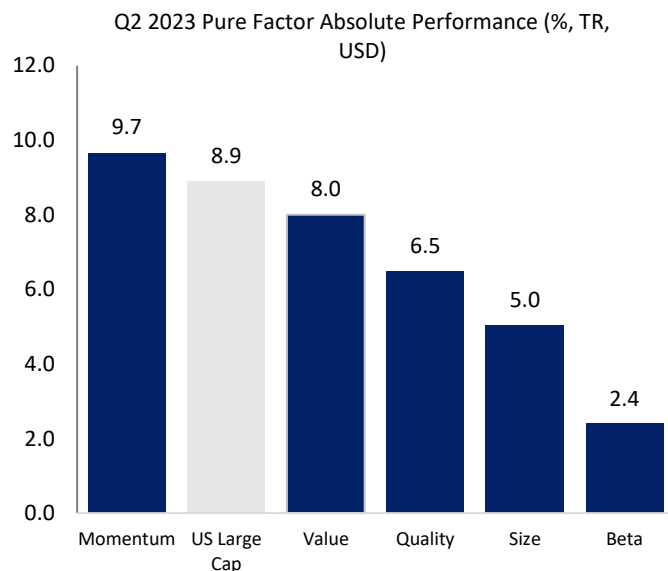


Chart 2: YTD 2023-Pure Momentum and Value have been the strongest performers. Beta has significantly underperformed

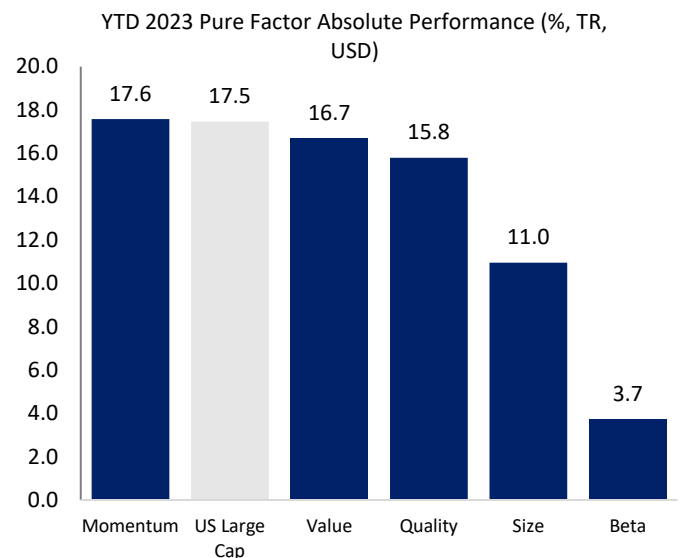


Chart 3: Pure Quality has outperformed over the past 12 months

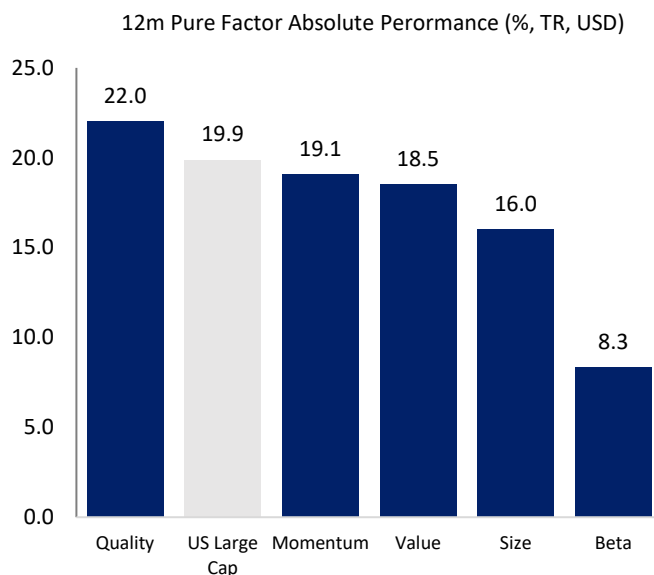
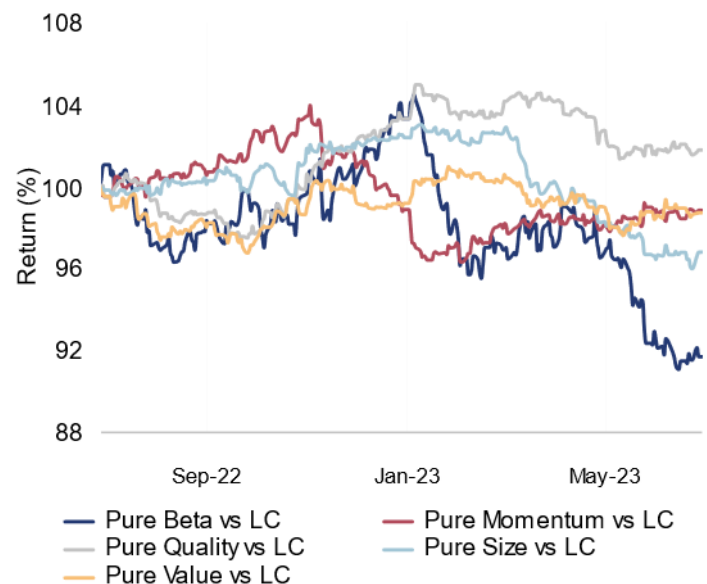


Chart 4: Pure Factor Indexes Relative to FT Wilshire US Large Cap Index over 12 months (Rebased, TR, USD)



Comparing Factor vs Style returns: Pure Quality factor continues to lag growth style. Pure Value outperforms value style in Q2 and YTD

Chart 1: Pure Factor and Style Absolute Performance - Q2, YTD, 2022 and 3YR

Returns (USD, TR %)	Q2 2023	YTD	2022	3Y
Pure Factor Quality	6.5	15.8	-13.7	56.8
Style Growth	13.9	32.0	-31.1	46.4
Pure Factor Value	8.0	16.7	-16.2	54.0
Style Value	3.9	4.6	-6.0	51.4
Pure Factor Size	5.0	11.0	-17.5	43.4
Style Small Cap	5.6	9.8	-17.5	44.8

Chart 2: Pure Factor Quality Index has significantly underperformed growth style YTD

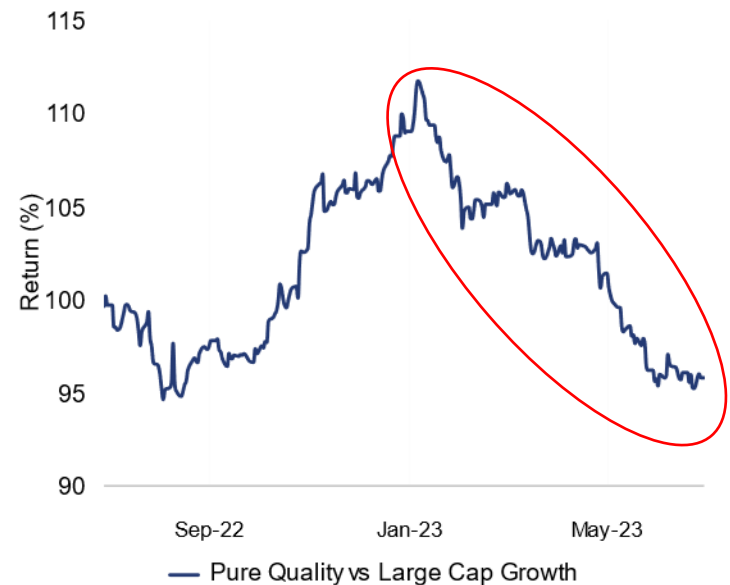


Chart 3: Pure value factor has outperformed value style since the start of 2023

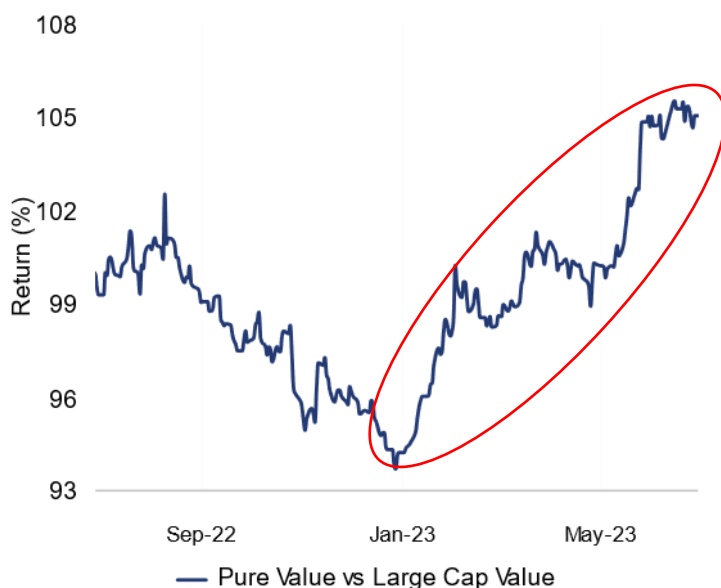
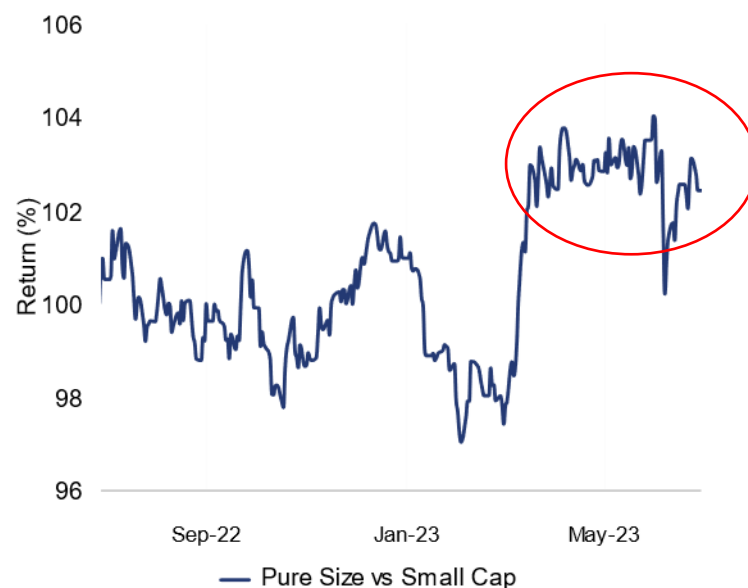


Chart 4: Pure Factor Size Index lost momentum against US small cap in Q2



Technical Analysis: 2023 has seen the tenth best H1 (Dec-Jun) return for the FT Wilshire 5000 since inception in 1970

Chart 1: 2023 has witnessed the tenth best H1 return (Dec-Jun) since the inception of the FT Wilshire 5000 index in 1970

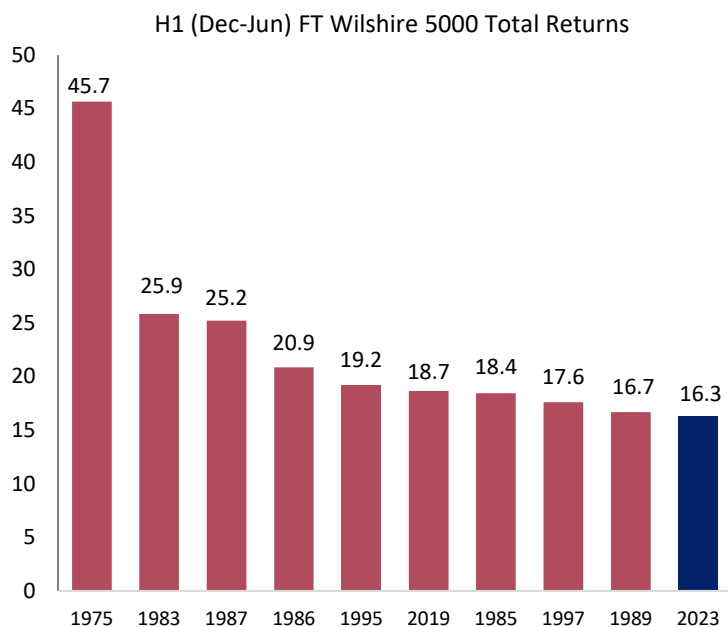


Chart 2: FT Wilshire LC Growth/Value index positioning vs its 200DMA is almost 2.5 standard deviations above its average level-technicals potentially looking stretched

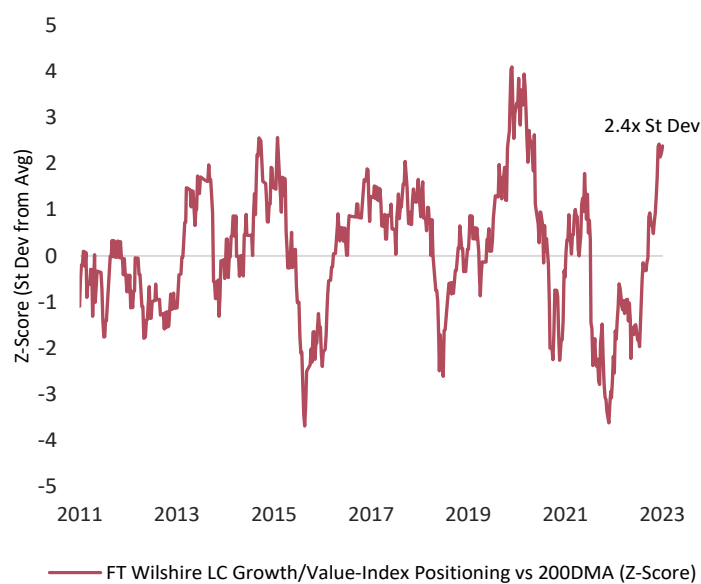


Chart 3: Volatility (measured by 6m annualised st deviation) declined further in Q2 and is now approaching pre-Covid levels

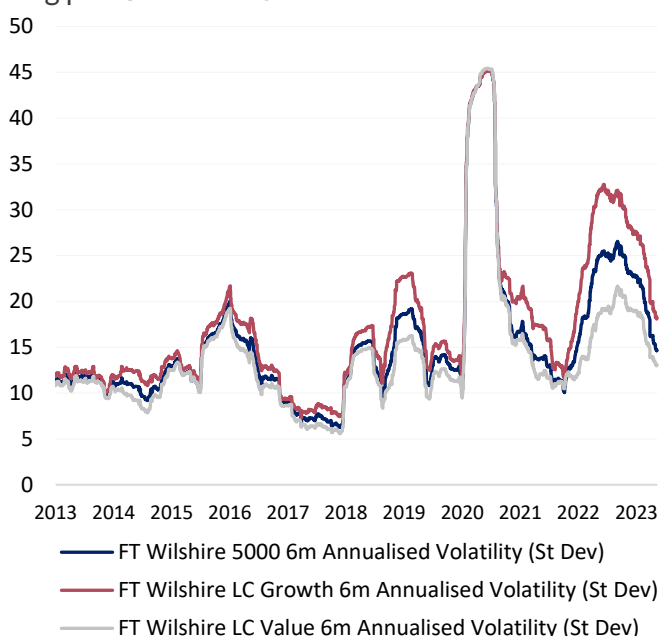
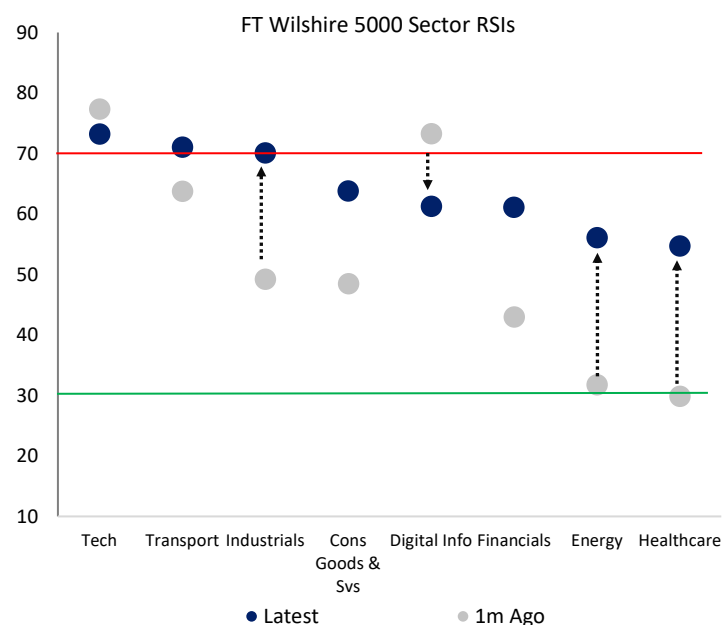


Chart 4: FT Wilshire 5000 sector Relative Strength Indexes (RSI) vs 1m ago -Tech, transport and industrials registering overbought RSIs



Performance Dispersion Analysis: YTD FT Wilshire 5000 median stock return only 2.9% vs 66.2% aggregate return for the top 10 largest stocks by market cap

Chart 1: Median stock return very modest vs the aggregate top 10 largest stocks by market cap

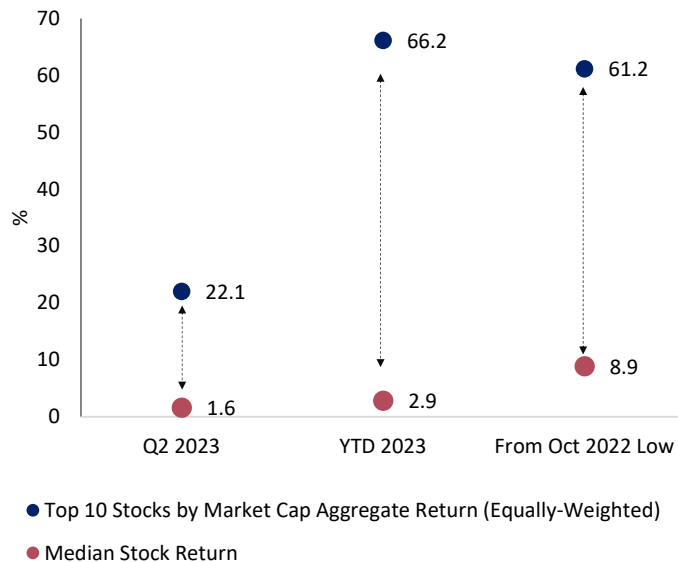
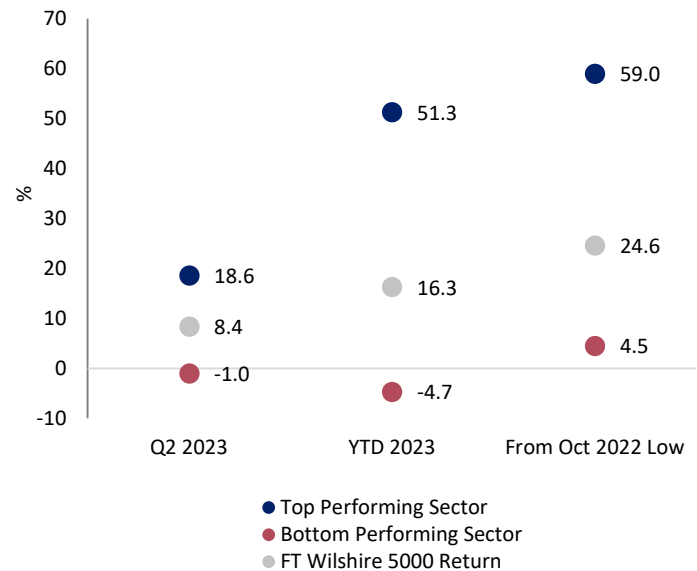


Chart 2: FT Wilshire 5000 top vs bottom performing sector returns in Q2, YTD and since October low



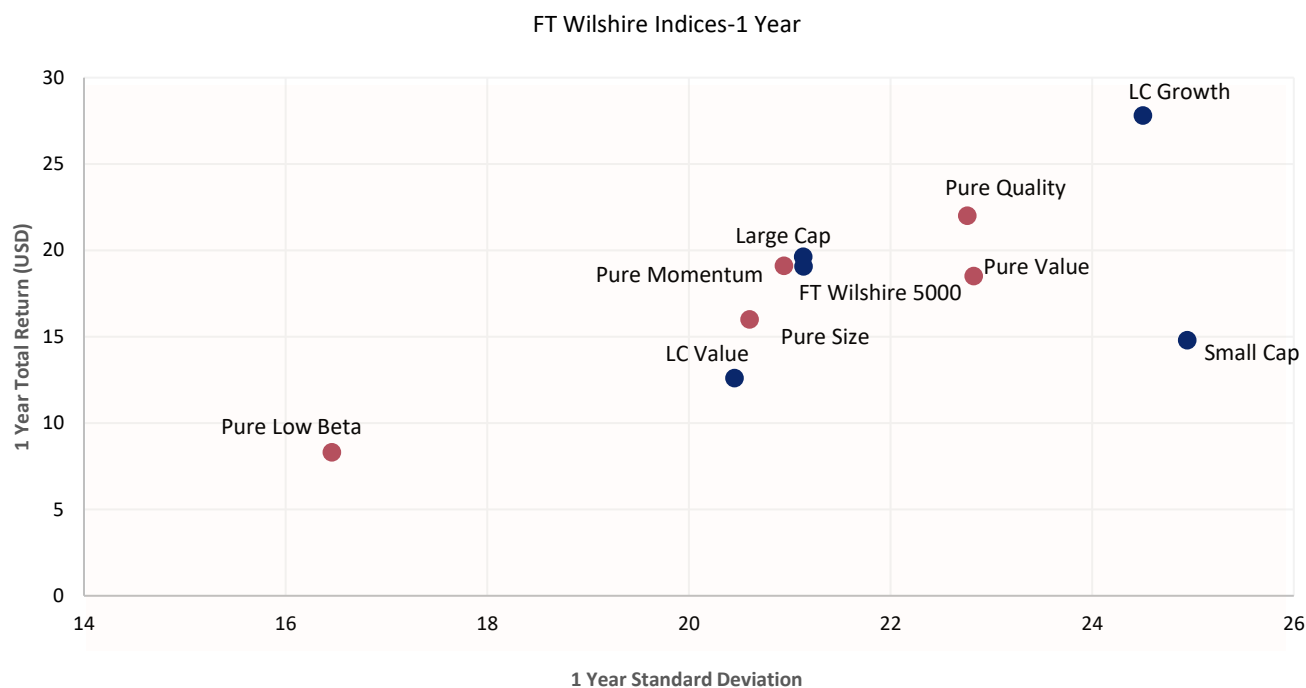
Q2 2023 Returns (USD, TR, %)

FT Wilshire 5000: 8.4%			
	Wght	Return (%)	Contrib (%)
Apple Inc	7.0	17.8	1.15
Microsoft Corp	5.7	18.4	0.96
Nvidia Corp	2.3	52.3	0.85
Thermo Fisher Scientifi	0.5	-9.4	-0.05
At&T Inc	0.3	-16.0	-0.05
Abbvie Inc	0.5	-14.7	-0.10
Wilshire Large Cap: 8.9%			
	Wght	Return (%)	Contrib (%)
Apple Inc	8.1	17.8	1.33
Microsoft Corp	6.5	18.4	1.10
Nvidia Corp	2.6	52.3	0.98
Thermo Fisher Scientifi	0.5	-9.4	-0.06
At&T Inc	0.3	-16.0	-0.06
Abbvie Inc	0.6	-14.7	-0.12
Wilshire Small Cap: 5.6%			
	Wght	Return (%)	Contrib (%)
Super Micro Computer In	0.2	133.9	0.14
Builders Firstsource	0.4	53.2	0.14
Hubbell Inc	0.4	36.8	0.10
Advance Auto Parts	0.1	-41.5	-0.06
Texas Pacific Land Corp	0.2	-22.4	-0.06
First Horizon Natl C	0.1	-35.8	-0.07

Wilshire Micro Cap: 3.8%			
	Wght	Return (%)	Contrib (%)
Immunogen Inc	0.8	391.4	0.58
Green Brick Partners In	0.4	62.0	0.16
Amphastar Pharmaceutica	0.4	53.3	0.13
Pliant Therapeutics Inc	0.1	-31.9	-0.07
Traverse Therapeutics In	0.2	-31.7	-0.09
Viewray Inc	0.0	-89.8	-0.09
Wilshire Growth: 13.9%			
	Wght	Return (%)	Contrib (%)
Apple Inc	13.7	17.8	2.37
Microsoft Corp	11.1	18.4	1.97
Nvidia Corp	4.5	52.3	1.75
Moderna Inc	0.2	-20.9	-0.06
Estee Lauder Co. Inc.	0.2	-20.0	-0.06
Thermo Fisher Scientifi	0.9	-9.4	-0.11
Wilshire Value: 3.9%			
	Wght	Return (%)	Contrib (%)
Eli Lilly & Co	2.2	36.9	0.61
J P Morgan Chase & C	2.4	12.5	0.27
Oracle Corp	1.0	28.7	0.23
Pfizer Inc	1.2	-9.1	-0.12
At&T Inc	0.6	-16.0	-0.12
Abbvie Inc	1.3	-14.7	-0.24

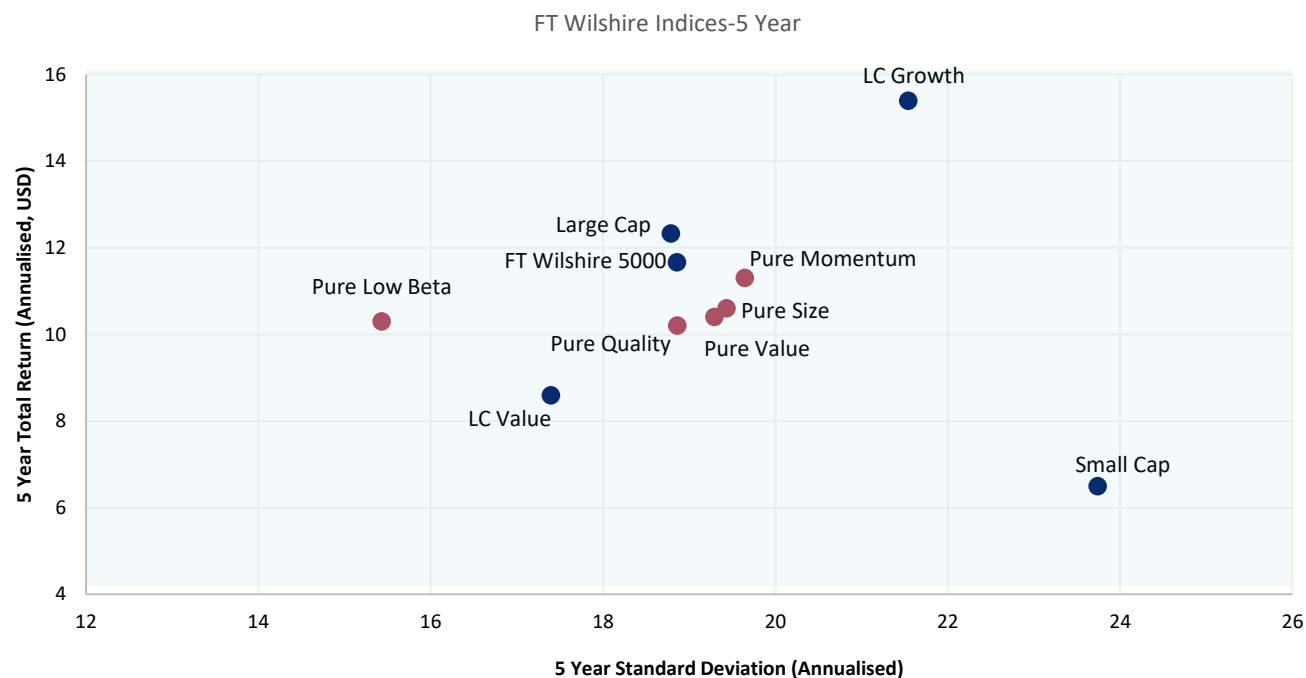
FT Wilshire Index Risk vs Return: 1 year and 5 year perspectives

FT Wilshire Indexes: Risk vs Return Over 1 Year



FT Wilshire Indexes: Risk vs Return Over 5 Years

Pure Factor ■ Style ■



Global Equities

1

+5.7%

Rise in Japanese equities in Q2 2023 (USD)

2

+12.6%

Rise in World Equity Index YTD

3

-8.1%

Decline in Chinese equities in Q2 2023 (USD)

4

+9.0%

10-year annualized return for the World Equity Index

CONTENTS

17	Synopsis	23	Regional sector comparison
18	Major market returns	24	Sector-weighted contribution analysis
19	Multi-currency regional returns	25	Dispersion
20	Relative returns	26	Market Cap (incl US)
21	Country level performance	27	Risk/return analysis
22	Technical analysis		

US equities performance vs global non US equities. US equities have comfortably outperformed the World ex US in Q2 and YTD after underperforming in 2022



Global Equity Market Synopsis: Risk appetite remains buoyant with a strong finish to Q2 as US continues to lead the way. China misses out on global rally.

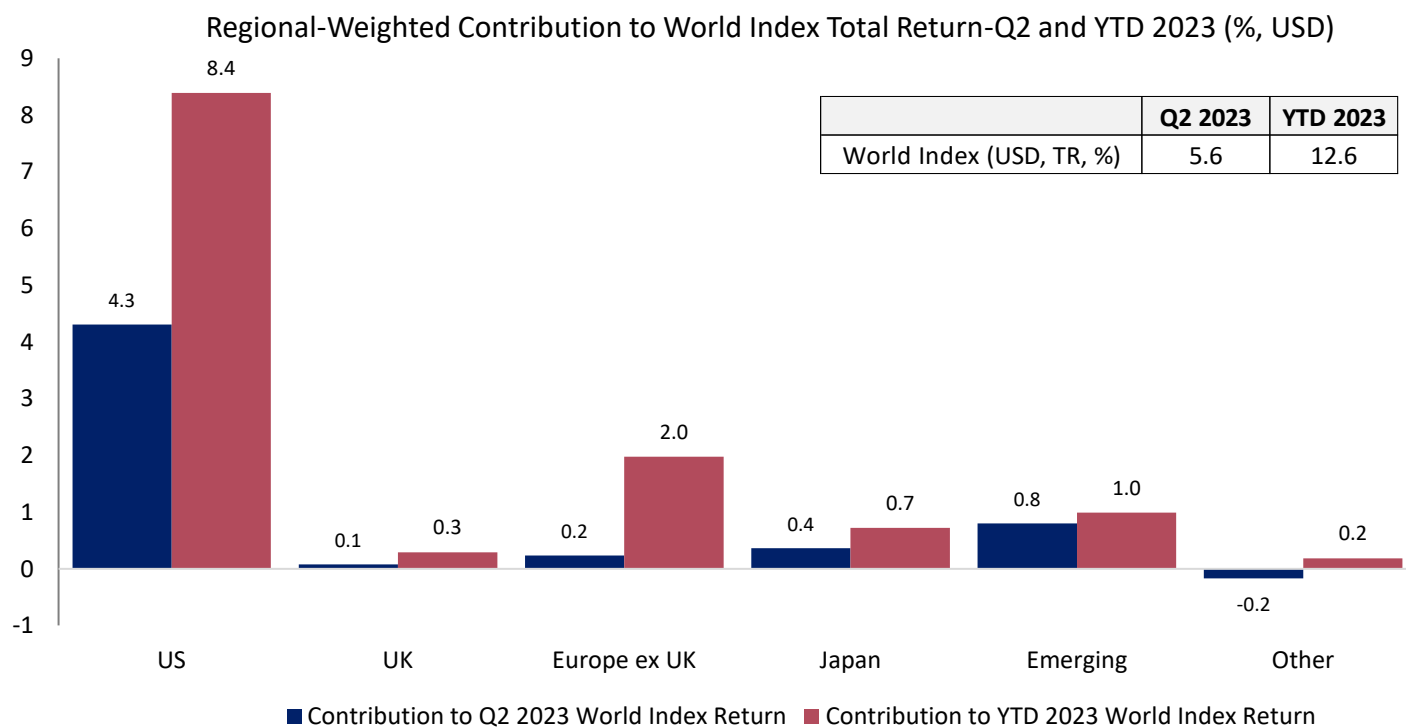
Global Markets Snapshot

- ◆ US and Japanese equities outperformed in Q2, China continued to significantly underperform (page 19)
- ◆ Sizeable depreciation in the Yen meant large difference between Q2 Japanese equity returns when measures in local currency vs USD (page 19)
- ◆ Wide divergence amongst emerging market returns in Q2 (page 22)
- ◆ Superior positive contribution from technology and consumer discretionary sectors the key drivers behind US outperformance vs World ex US in Q2 (page 23)
- ◆ Contribution to YTD returns from top 10 largest stocks far greater in the US vs other regions (page 24)
- ◆ Regional Relative Strength Indexes (RSIs) signaling US looking most overbought (page 25)

Key Market Events

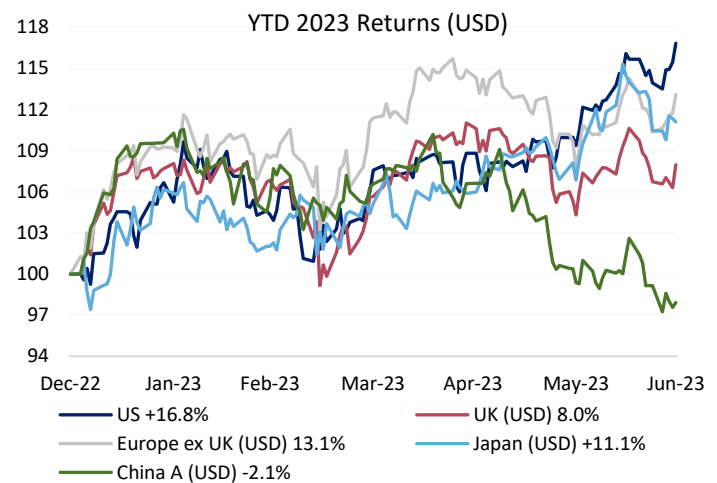
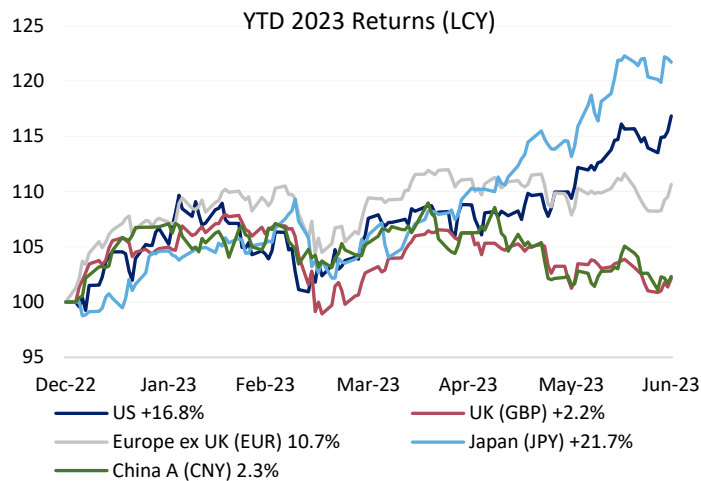
- ◆ February: Reassessment of US interest rate expectations see global bond yields rise, spooking markets
- ◆ March: Silicon Valley Bank (SVB) collapses with contagion fears rippling through to global markets. Credit Suisse turmoil weighs on European banks.
- ◆ March: Markets rebound as bank contagion fears ease. UBS agrees takeover of Credit Swiss
- ◆ April: Chinese equities pullback sharply on renewed US-China geopolitical tensions
- ◆ April: JPY weakens sharply on dovish BoJ, Japanese equities rally
- ◆ May: Weak Chinese economic data jolts European and China equities into further declines
- ◆ June: Chinese central bank cuts rates on growth concerns.

Chart 1: Regional-weighted contribution to World index return in Q2 and YTD-US dominates returns in 2023



Region and major market performance: Japan the best performer YTD on a local currency basis with the US delivering the best returns in USD

Regional YTD returns-LCY vs USD–Moves in FX (particularly the sharp decline in the Yen) has meant a large difference in YTD returns when measuring the performance in LCY vs USD. The charts below shows that on a local currency basis Japanese equities have outperformed this year. However in USD terms, the US is the top performer so far this year.



Regional Returns - Short Term (USD, TR, %)		Q2 2023	1M	YTD	12M	2022
US		8.6	6.8	16.8	19.6	-19.8
Japan		5.7	4.0	11.1	16.6	-17.5
World		5.6	5.5	12.6	15.7	-16.5
World ex US		2.7	4.1	8.5	12.0	-13.1
UK		2.2	3.5	8.0	12.6	-12.2
Europe ex UK		1.5	5.0	13.1	23.5	-17.7
Asia Pac ex Japan		0.7	2.8	3.1	3.6	-14.0
Emerging		-0.6	2.2	3.1	-0.4	-16.6
China A		-8.1	-1.4	-2.1	-16.5	-24.4

Regional Returns - Long Term (USD, TR, %)

	3Y		5Y		10Y		20Y	
	Aggr	Ann	Aggr	Ann	Aggr	Ann	Aggr	Ann
US	46.0	13.4	72.7	11.5	213.3	12.1	580.9	10.1
UK	34.1	10.3	10.1	1.9	45.1	3.8	209.6	5.8
Europe ex UK	37.9	11.3	46.1	7.9	129.0	8.6	370.3	8.0
Japan	12.2	3.9	10.3	2.0	64.5	5.1	204.5	5.7
Asia Pac ex Japan	13.9	4.4	10.2	2.0	58.7	4.7	489.8	9.3
Emerging	35.4	10.6	26.4	4.8	57.0	4.6	556.1	9.9
China A	74.5	20.4	55.4	9.2	177.4	10.7	225.0	6.1
World ex US	36.0	10.8	43.1	7.4	122.8	8.3	340.4	7.7
World	36.3	10.9	46.3	7.9	136.9	9.0	453.6	8.9

Source: Wilshire. Data as of June 30, 2023

The FX adjusted market returns - Yen weakness delivers a 28% YTD US return to a Japanese unhedged investor

FX swings can have a large impact on unhedged regional equity returns depending on the location of investors. The largest FX impact in Q2 and YTD has been JPY returns for an unhedged Japanese based investor (due to weakness of the yen). YTD in 2023 World equities have returned 23.3% (JPY), compared to a 12.6% return for a USD based investor.

Table 1: Regional returns in various FX - Q2

Q2 2023 YTD Return (TR, %)	USD	GBP	EUR	JPY
US	8.6	5.6	5.5	17.9
Japan	5.7	2.7	7.4	14.7
Developed	5.7	2.8	3.9	14.8
World	5.6	2.7	4.1	14.7
UK	2.2	-0.6	2.4	11.0
Asia Pacific ex Japan	0.7	-2.1	1.8	-0.2
Emerging	-0.6	-3.3	-1.4	8.0
Germany	-2.2	-2.2	-0.7	9.2

Table 2: Regional returns in various FX - YTD

YTD Return (TR, %)	USD	GBP	EUR	JPY
US	16.8	10.6	11.5	28.0
Developed	13.8	7.6	9.9	24.6
World	12.6	6.5	9.0	23.3
Japan	11.1	5.1	10.9	21.7
Germany	9.8	9.8	12.6	27.2
UK	8.0	2.2	6.3	18.3
Emerging	3.1	-2.4	2.3	13.0
Asia Pacific ex Japan	3.1	-2.5	2.3	7.3

Global Equity Relative Returns: US performance vs World ex US continues to gain momentum. Europe ex UK relative performance reverses course in Q2

Chart 1 : US vs World ex US (USD, TR, %)



Chart 2: Emerging Markets vs Developed (USD, TR, %)

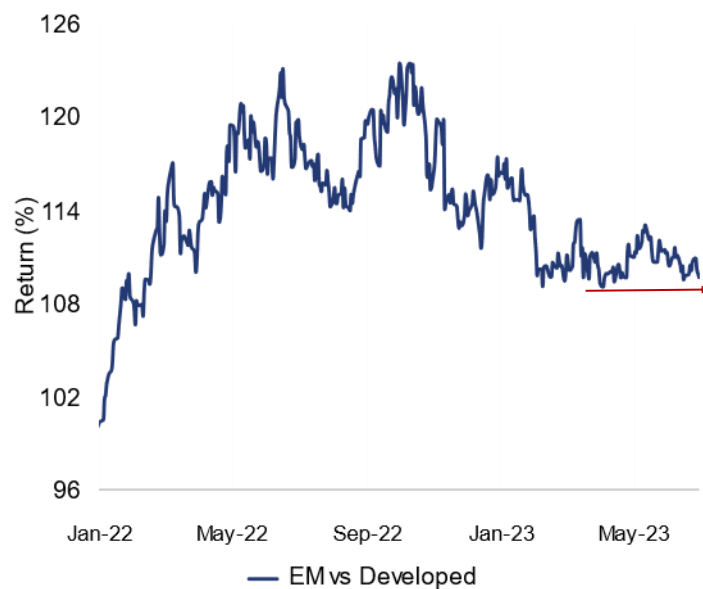


Chart 3: Europe ex UK vs Global ex Dev Europe (USD, TR, %)

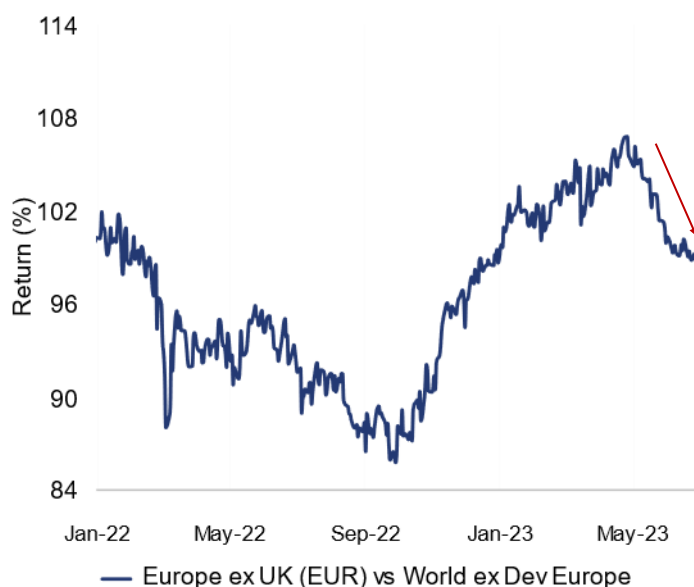
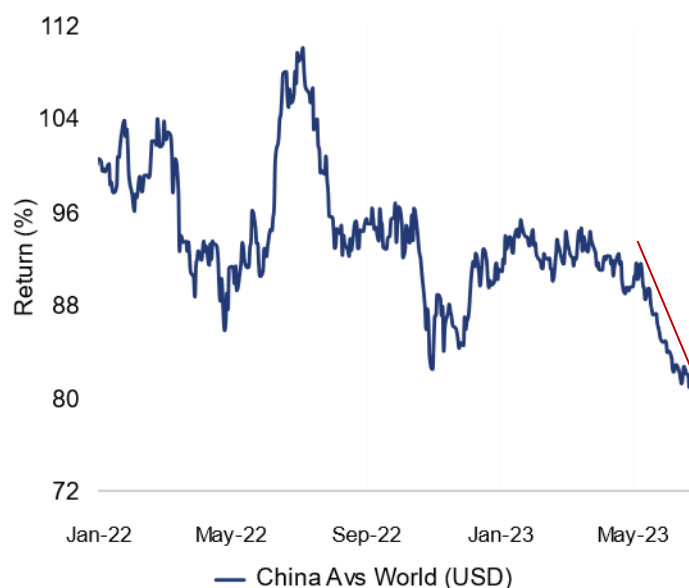


Chart 4: China vs Global ex China (USD, TR, %)



Developed and Emerging market country level performance: Wide divergence in returns amongst EM in Q2. US and Japan outperform within developed.

Chart 1: Q2 2023 - US and Japan outperformed within developed markets with most European countries delivering small positive or negative returns in Q2. Hong Kong significantly underperformed. Brazil, India and Saudi Arabia delivered strong Q2 returns within emerging markets with China A, Malaysia and South Africa underperforming

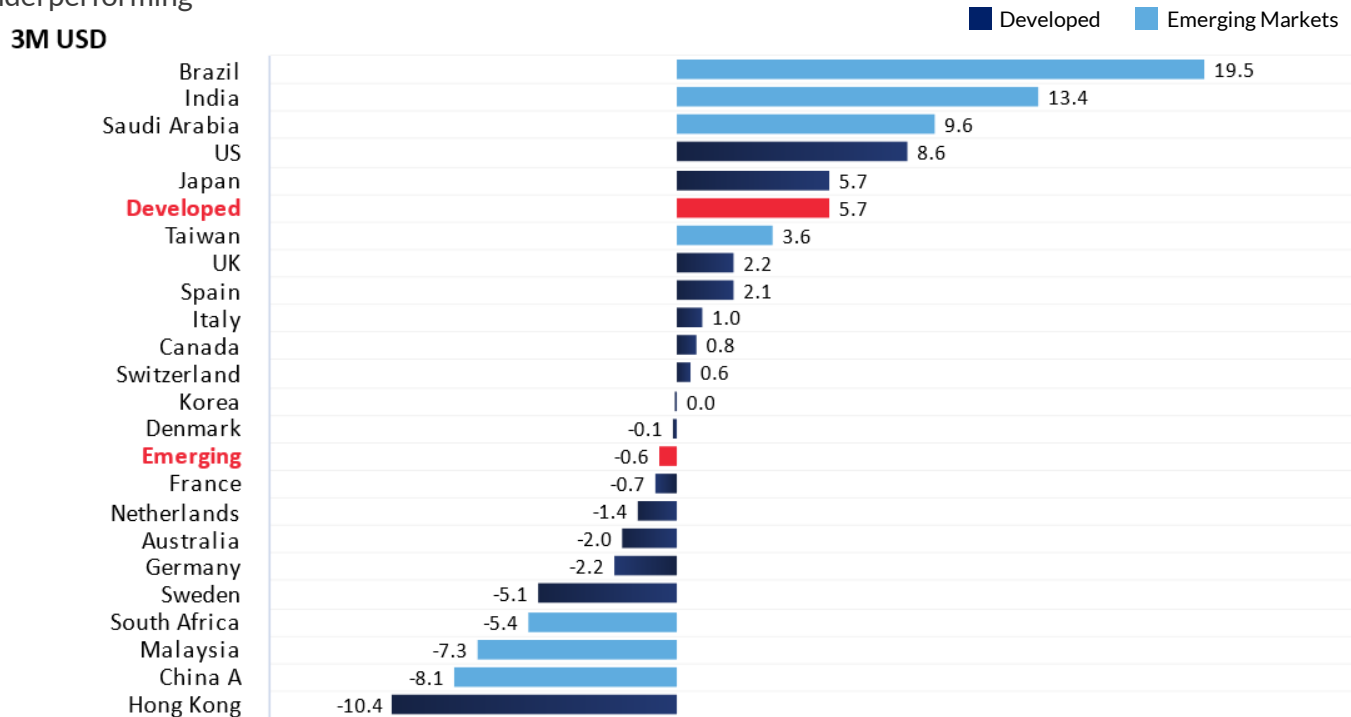
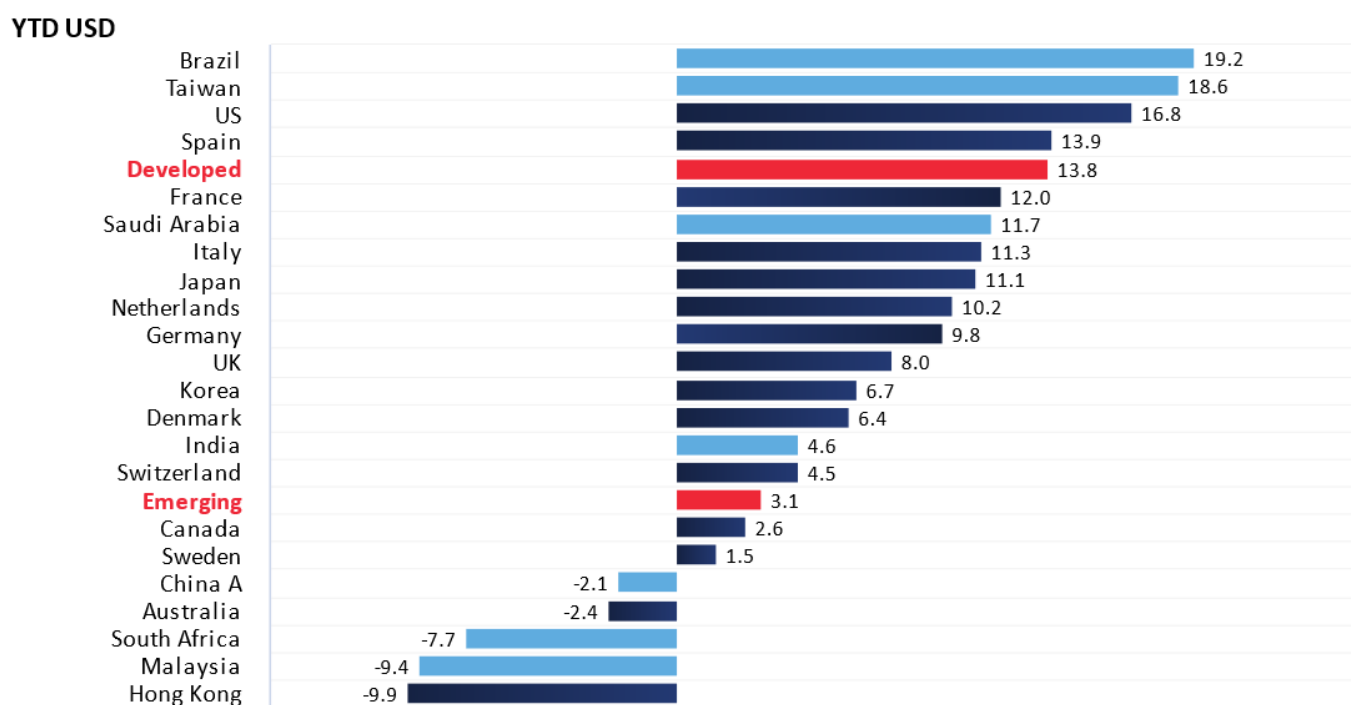


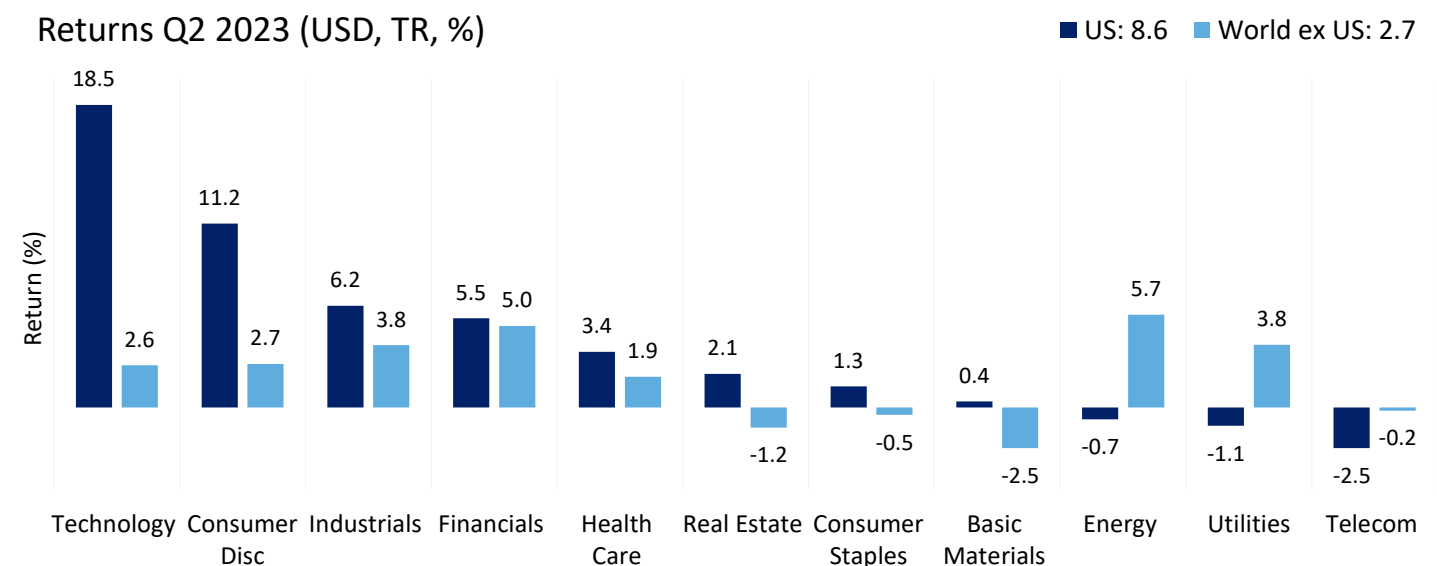
Chart 2: YTD 2023 - After a strong Q2 US equities have regained market leadership and have outperformed YTD amongst developed markets. European equities have posted positive YTD returns with Spain and France amongst the top performers. There has been wide dispersion in returns amongst emerging market YTD



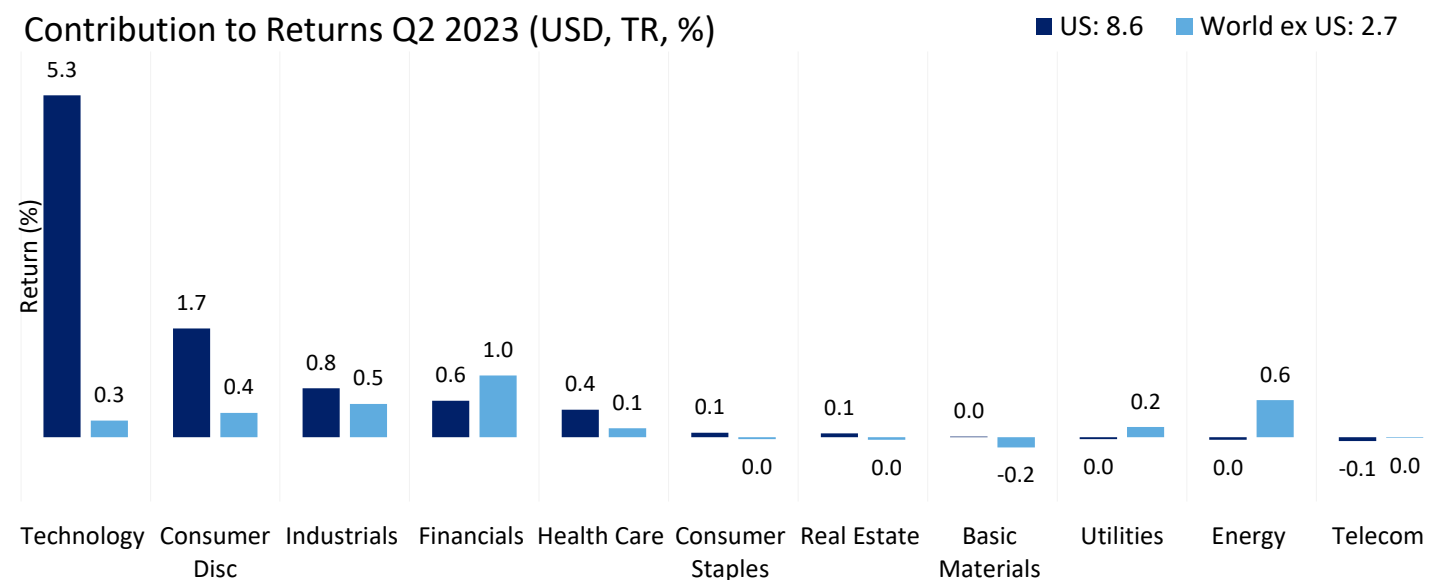
Source: Wilshire. Data as of June 30, 2023

Q2 2023-US vs World ex US sector returns and sector-weighted contribution analysis: Technology and consumer discretionary drive US outperformance

Q2 2023 US vs World ex US Sector Returns. US outperforms the World ex US across 8 of the 11 sectors in Q2 with technology and consumer discretionary significantly outperforming. US energy, utilities and telecoms underperform.

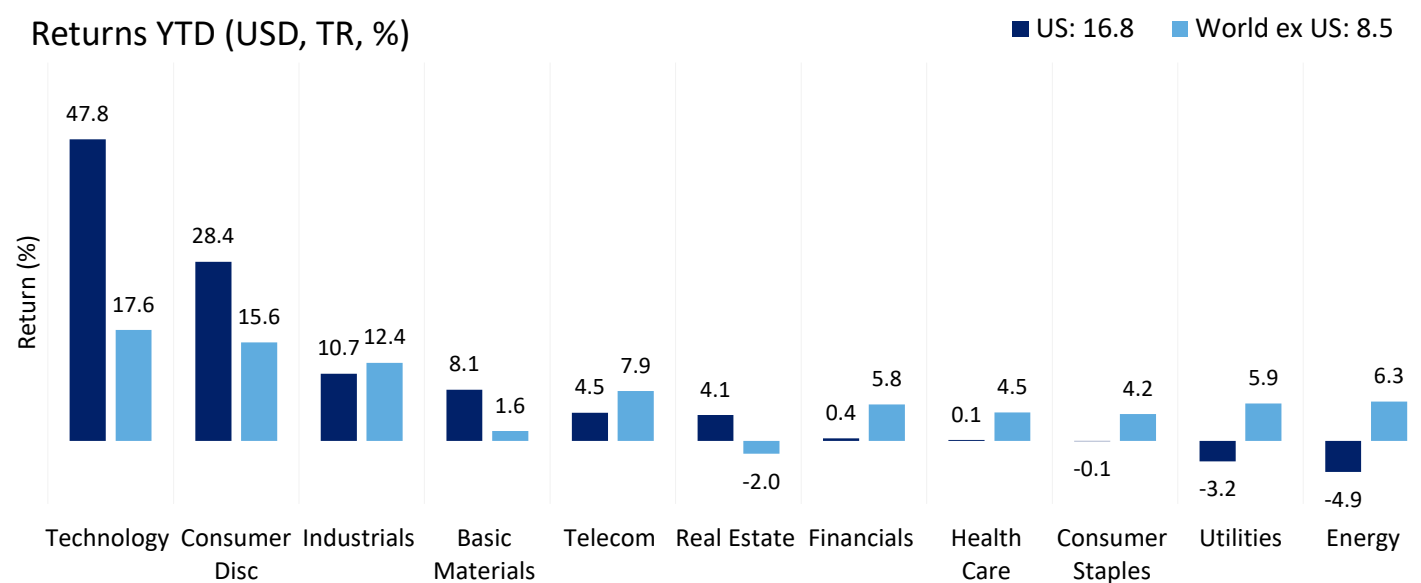


Q2 2023 US vs World ex US Sector weighted regional contribution analysis. Superior positive contributions from technology and consumer discretionary were the key drivers of US outperformance vs the World ex US in the second quarter.

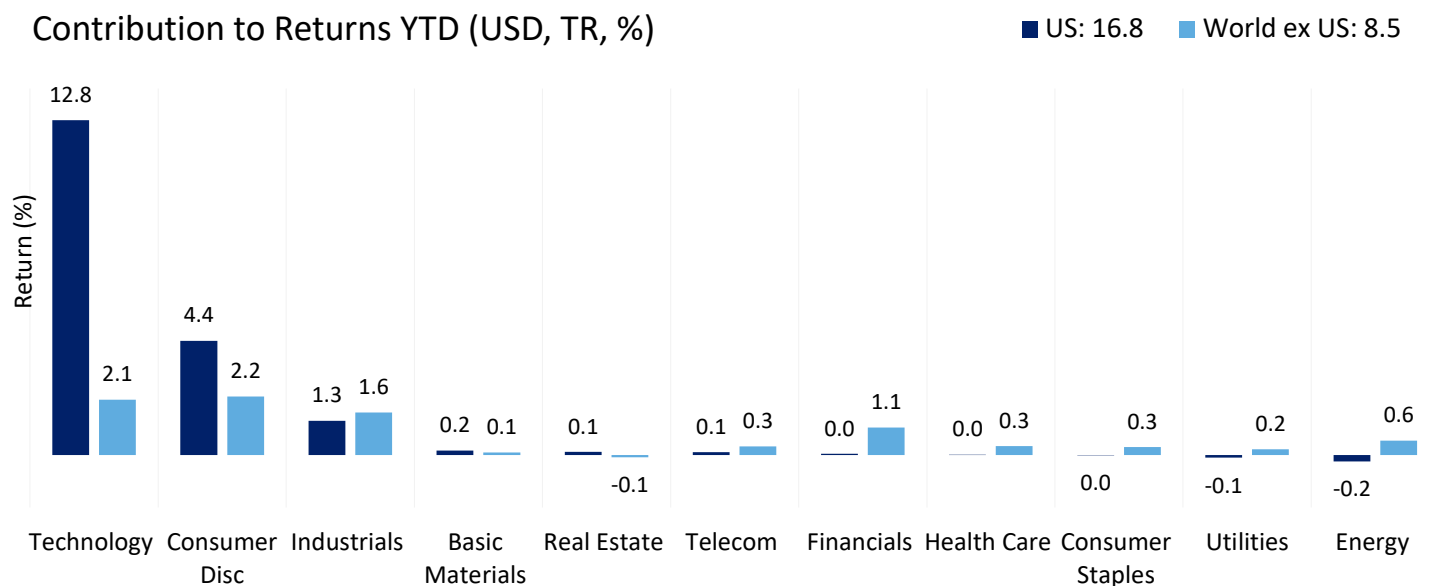


YTD-US vs World ex US sector returns and sector-weighted contribution analysis: Technology and consumer discretionary dominate YTD returns

US vs World ex US YTD Sector Returns: US technology, consumer discretionary, basic materials and real estate have outperformed the World ex US YTD. The World ex US has seen superior returns within consumer staples, health care, financials, utilities and energy sectors.



YTD US vs World ex US Sector Weighted regional contribution analysis: The superior positive contribution from technology and consumer discretionary have been the key drivers of YTD US outperformance vs World ex US. These have more than offset the small drag from utilities and energy.



Regional level sector weights and returns - Q2 and YTD 2023

Q2 2023 regional sector average weights and returns– Comparing sector weights of the US vs the World ex US, the US is overweight technology and health care. The World ex US is overweight financials, basic materials and energy.

Q2 2023	US		World ex US		UK		EU ex UK		Japan		AP ex Japan		China	
	Return	Wght	Return	Wght	Return	Wght	Return	Wght	Return	Wght	Return	Wght	Return	Wght
Technology	18.5	28.8	2.6	10.2	7.8	1.6	2.7	7.9	17.8	11.2	-0.3	19.1	-9.5	8.0
Consumer Disc	11.2	15.0	2.7	14.2	0.3	11.8	2.4	19.1	16.5	24.8	-3.2	11.7	-4.6	11.0
Industrials	6.2	12.2	3.8	13.6	2.7	11.0	1.6	17.7	16.7	24.2	3.4	9.9	-4.7	14.2
Financials	5.5	10.5	5.0	19.2	2.9	23.0	3.1	15.1	17.1	9.4	4.9	22.9	4.3	24.8
Health Care	3.4	12.8	1.9	7.4	1.0	12.2	2.3	12.9	8.4	8.2	-1.8	4.2	-8.0	6.7
Real Estate	2.1	2.7	-1.2	3.2	-7.2	2.0	-1.8	1.8	8.3	3.6	-4.4	5.1	-6.7	1.2
Consumer Staples	1.3	5.6	-0.5	7.1	-3.5	15.0	-2.6	7.9	9.0	6.2	-1.3	6.4	-16.8	9.4
Basic Materials	0.4	2.2	-2.5	6.4	-7.6	7.9	-5.1	4.2	10.3	5.0	-0.7	6.6	-9.5	7.9
Energy	-0.7	4.8	5.7	10.3	-2.4	10.3	-1.9	4.5	6.7	0.7	0.9	6.0	9.1	8.8
Utilities	-1.1	3.0	3.8	4.2	-2.1	3.4	3.1	5.5	22.2	1.3	1.8	3.2	6.2	3.8
Telecom	-2.5	2.4	-0.2	4.3	-12.6	1.8	-6.0	3.4	11.8	5.6	0.8	5.0	9.7	4.3
Market Returns	8.6		2.7		2.2		1.5		5.7		0.7		-8.1	

YTD 2023 regional sector average weights and returns: Comparing YTD sector returns, the US technology and consumer discretionary have significantly outperformed the World ex US. US consumer staples, health care, financials, utilities and energy have all underperformed.

YTD	US		World ex US		UK		EU ex UK		Japan		AP ex Japan		China	
	Return	Wght	Return	Wght	Return	Wght	Return	Wght	Return	Wght	Return	Wght	Return	Wght
Technology	47.8	27.2	17.6	10.1	18.7	1.6	22.0	7.8	20.5	11.0	12.3	18.9	0.9	8.0
Consumer Disc	28.4	14.9	15.6	14.1	21.4	11.4	22.5	18.8	14.8	24.4	1.3	11.9	-8.2	11.1
Industrials	10.7	12.5	12.4	13.5	16.9	10.7	15.0	17.6	16.5	24.0	1.7	9.8	-2.2	13.5
Basic Materials	8.1	2.3	1.6	6.5	-11.0	8.4	0.3	4.3	17.1	4.9	3.2	6.6	-7.5	8.2
Telecom	4.5	2.5	7.9	4.3	2.1	1.8	6.8	3.4	3.8	5.8	9.7	4.8	42.4	3.8
Real Estate	4.1	2.8	-2.0	3.3	0.1	2.0	-5.8	1.9	-3.5	3.7	-5.7	5.3	-17.3	1.3
Financials	0.4	11.1	5.8	19.5	10.4	23.3	6.9	15.5	3.6	9.8	3.6	22.9	1.3	23.6
Health Care	0.1	13.0	4.5	7.3	6.9	11.9	6.1	12.7	0.0	8.3	-5.4	4.3	-12.2	6.8
Consumer Staples	-0.1	5.7	4.3	7.1	2.9	15.0	5.1	7.9	2.7	6.2	-1.6	6.4	-18.0	12.2
Utilities	-3.2	3.1	6.0	4.1	12.3	3.4	10.6	5.4	11.4	1.2	-9.0	3.2	4.2	3.6
Energy	-4.9	5.1	6.2	10.1	5.9	10.5	-8.6	4.7	0.2	0.7	1.3	5.9	15.6	8.0
Market Returns	16.8		8.5		8.0		13.1		11.1		3.1		-2.1	

Source: Wilshire and Refinitiv. Data as of June 30, 2023

Wilshire Advisors LLC - Performance Report (June 2023)

Regional level sector sector-weighted performance contribution – Q2 and YTD 2023

Regional sector-weighted contributions to Q2 2023 returns: Superior positive contributions from technology and consumer discretionary have been the key drivers of US outperformance vs the World ex US in Q2.

Q2 2023	US	World ex US	UK	EU ex UK	Japan	AP ex Japan	China
	Contr	Contr	Contr	Contr	Contr	Contr	Contr
Technology	5.3	0.3	0.1	0.2	2.0	-0.1	-0.8
Consumer Disc	1.7	0.4	0.0	0.5	4.1	-0.4	-0.5
Industrials	0.8	0.5	0.3	0.3	4.0	0.3	-0.7
Financials	0.6	1.0	0.7	0.5	1.6	1.1	1.1
Health Care	0.4	0.1	0.1	0.3	0.7	-0.1	-0.5
Consumer Staples	0.1	0.0	-0.5	-0.2	0.6	-0.1	-1.6
Real Estate	0.1	0.0	-0.1	0.0	0.3	-0.2	-0.1
Basic Materials	0.0	-0.2	-0.6	-0.2	0.5	-0.1	-0.8
Utilities	0.0	0.2	-0.1	0.2	0.3	0.1	0.2
Energy	0.0	0.6	-0.3	-0.1	0.1	0.1	0.8
Telecom	-0.1	0.0	-0.2	-0.2	0.7	0.0	0.4
Market	8.6	2.7	2.2	1.5	5.7	0.7	-8.1

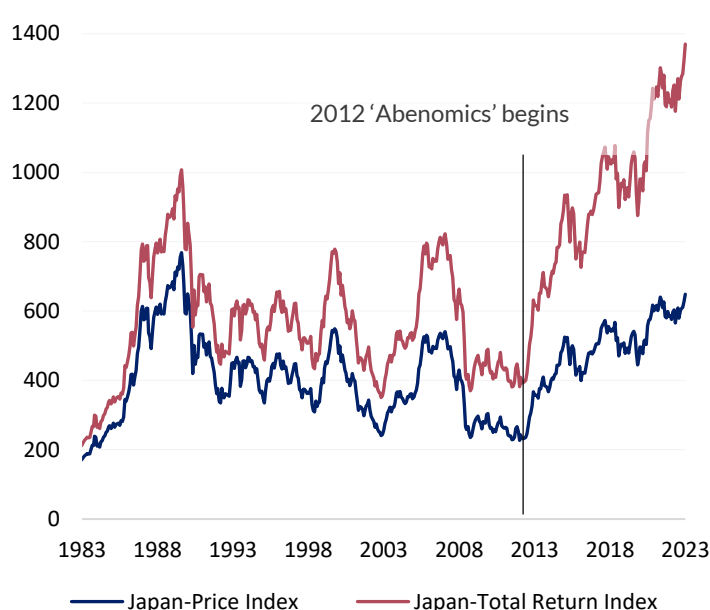
Regional sector-weighted contributions to YTD returns: The sizeable positive contribution from US technology has by far been the biggest driver of US YTD outperformance, offsetting drag from energy.

YTD	US	World ex US	UK	EU ex UK	Japan	AP ex Japan	China
	Contr	Contr	Contr	Contr	Contr	Contr	Contr
Technology	13.0	1.8	0.3	1.7	2.3	2.3	0.1
Consumer Disc	4.2	2.2	2.4	4.2	3.6	0.2	-0.9
Industrials	1.3	1.7	1.8	2.6	4.0	0.2	-0.3
Basic Materials	0.2	0.1	-0.9	0.0	0.8	0.2	-0.6
Real Estate	0.1	-0.1	0.0	-0.1	-0.1	-0.3	-0.2
Telecom	0.1	0.3	0.0	0.2	0.2	0.5	1.6
Financials	0.0	1.1	2.4	1.1	0.4	0.8	0.3
Health Care	0.0	0.3	0.8	0.8	0.0	-0.2	-0.8
Consumer Staples	0.0	0.3	0.4	0.4	0.2	-0.1	-2.2
Utilities	-0.1	0.2	0.4	0.6	0.1	-0.3	0.2
Energy	-0.2	0.6	0.6	-0.4	0.0	0.1	1.2
Market Returns	16.8	8.5	8.0	13.1	11.1	3.1	-2.1

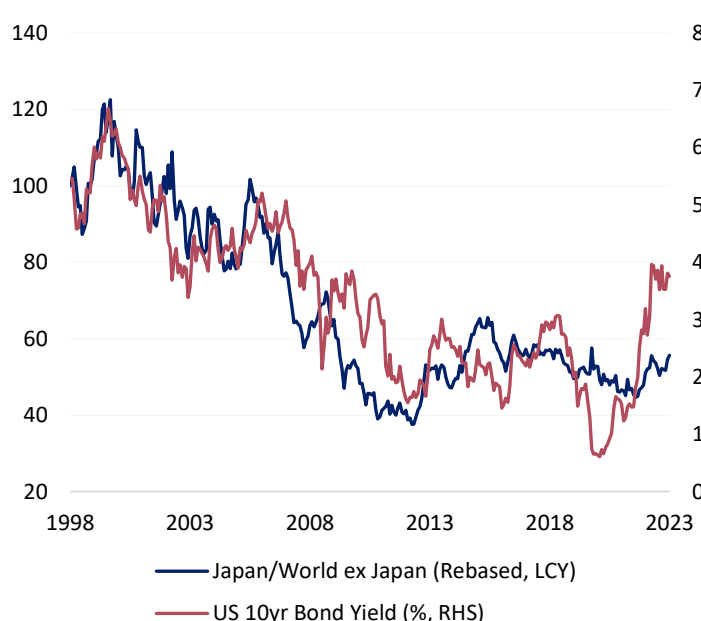
Source: Wilshire and Refinitiv. Data as of June 30, 2023

Perspectives on Japanese equities (local currency) - Total return index well above the 1989 peak and examining the drivers of strong Q2 returns

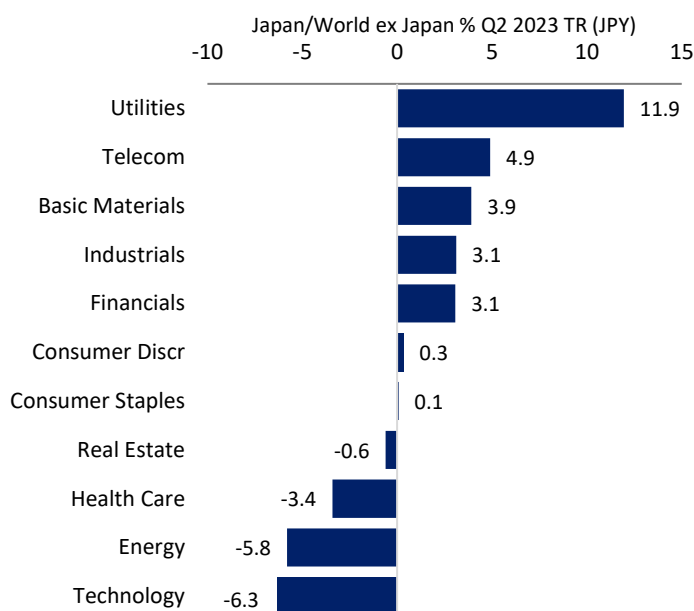
Japan price vs total return index (JPY)-Although the price index remains 15% below the 1989 peak the total return index is now 36% higher



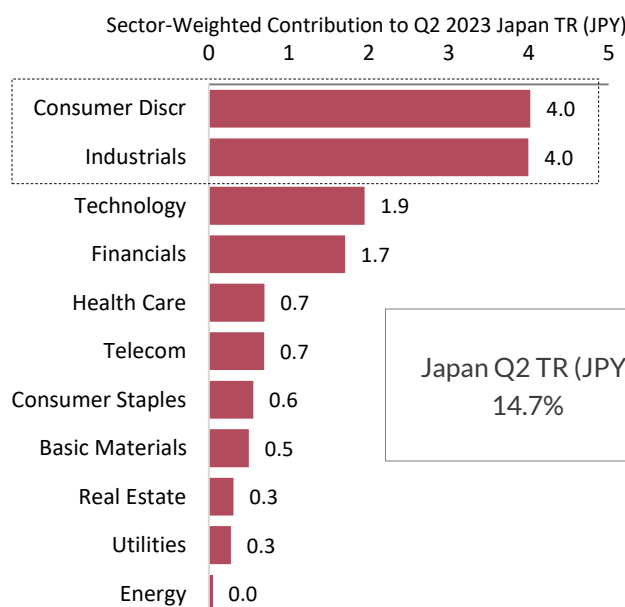
Japan/World ex Japan vs US 10yr bond yield-The relative performance of Japanese equities has historically followed shifts in the US 10yr bond yield



Q2 2023 relative sector returns (JPY)-Japan outperformed the World ex Japan in 7 of the 11 sectors in the second quarter



Sector-weighted contribution to Q2 Japanese market returns (JPY)-Industrials and consumer discretionary contributed over half of Japan's Q2 return



Regional Equities performance dispersion-measuring the contribution to Q2 and YTD returns from the top 10 largest stocks by market cap across the regions

Chart 1: Q2-Largest contribution from top 10 stocks in the US relative to other regions

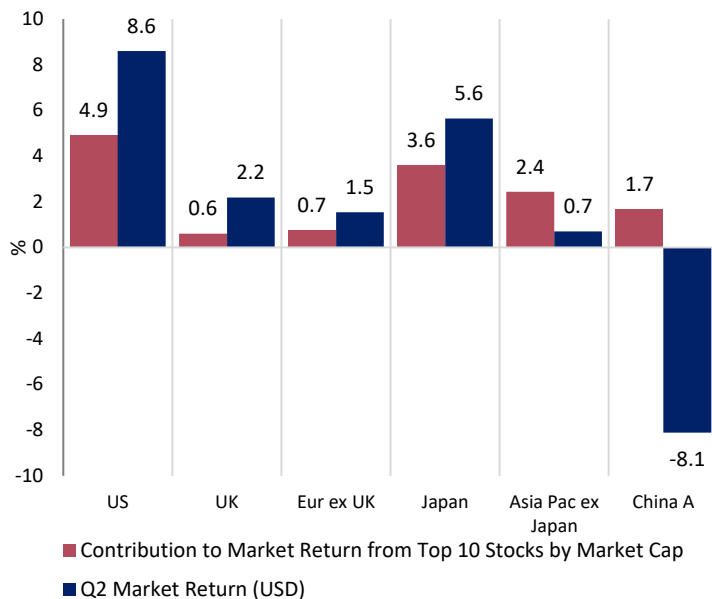


Chart 2: YTD-Significant contribution from top 10 largest stocks in the US

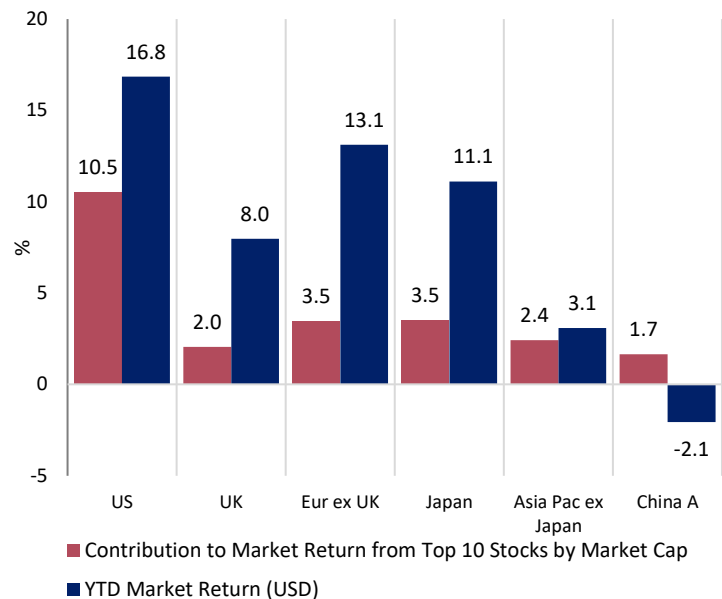


Chart 3: Q2 2023 total return (USD) decomposition*-PE re-rating drives returns in US and Japan, China see notable de-rating

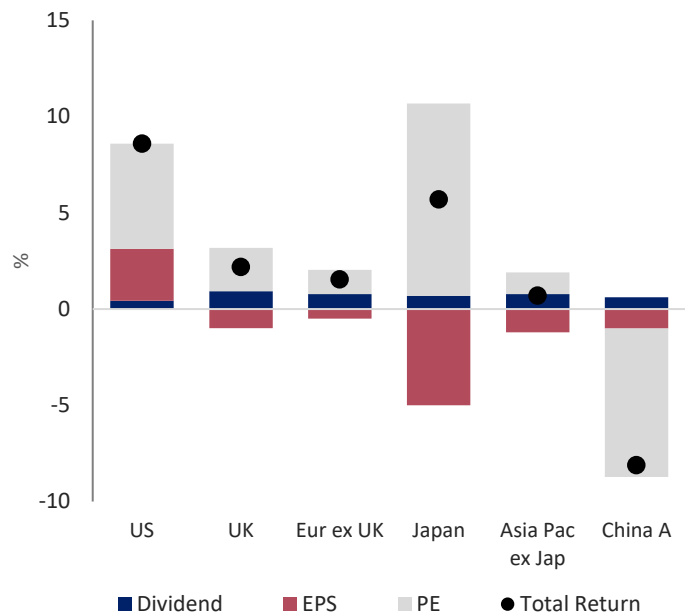
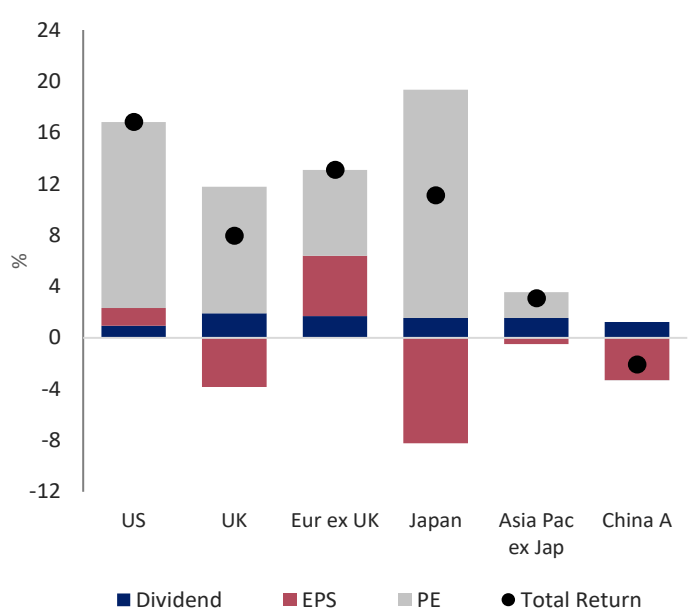


Chart 4: YTD 2022 total return (USD) decomposition*-PE de-rating main driver returns in US, UK, Europe ex UK and Japan



*Based on Refinitiv and Factset data

Technical analysis: US relative to Europe ex UK performance rebounds strongly off support levels but US RSI registering an overbought signal near-term

Chart 1: US/Europe ex UK performance rebounded strongly off the 76.4% Fibonacci retracement support level in mid-May



Chart 2: Spread between 50DMA vs 200DMA index positioning-US and Japan gain momentum, Europe ex UK losing momentum

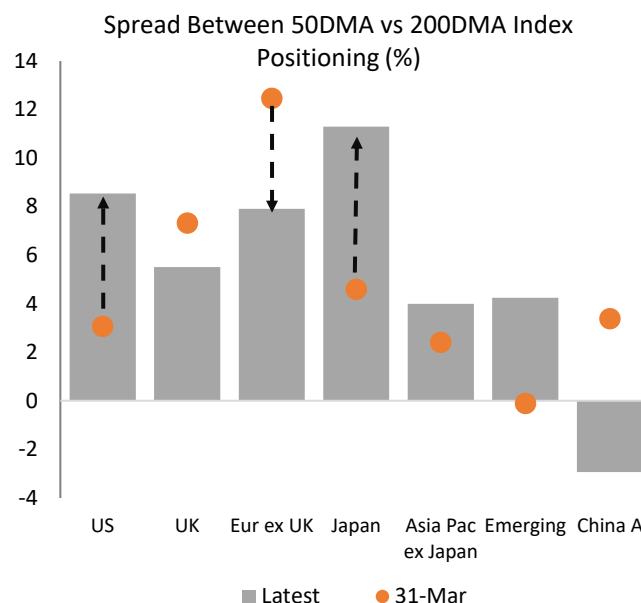


Chart 3: Regional relative RSIs (Relative Strength Index) readings (USD)-absolute and relative-US registering overbought signal

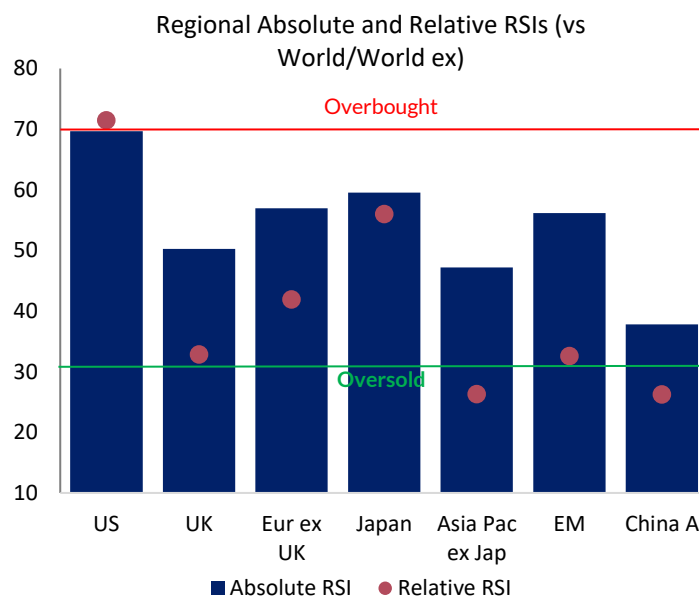
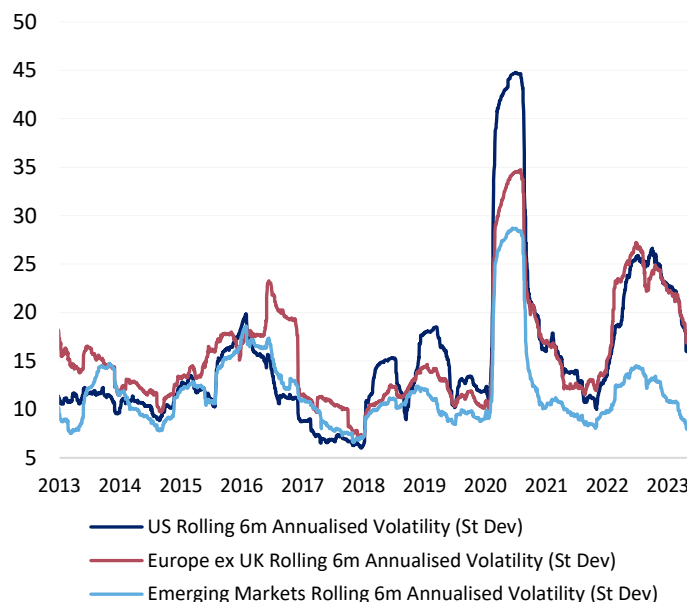


Chart 4: Volatility (rolling 6m annualised) declined further in Q2 heading back towards the level seen pre-Covid



Market Capitalization of major markets and sector weighting comparisons

Chart 1: Markets size (USD, Bn) and weights - Top 12 countries

	Latest	% World Index	10Y Ago	% World Index
US	44,486	50.8	19,183	37.7
China A	5,870	6.7	2,386	4.7
Japan	5,639	6.4	4,011	7.9
France	3,289	3.8	1,728	3.4
UK	3,136	3.6	3,114	6.1
India	2,896	3.3	945	1.9
Canada	2,442	2.8	1,601	3.1
Germany	2,226	2.5	1,487	2.9
Switzerland	1,948	2.2	1,311	2.6
Australia	1,471	1.7	1,124	2.2
Korea	1,274	1.5	788	1.5
Taiwan	1,235	1.4	539	1.1
	87,545		50,911	

Chart 2: History of regional index weightings within the World index (% USD)

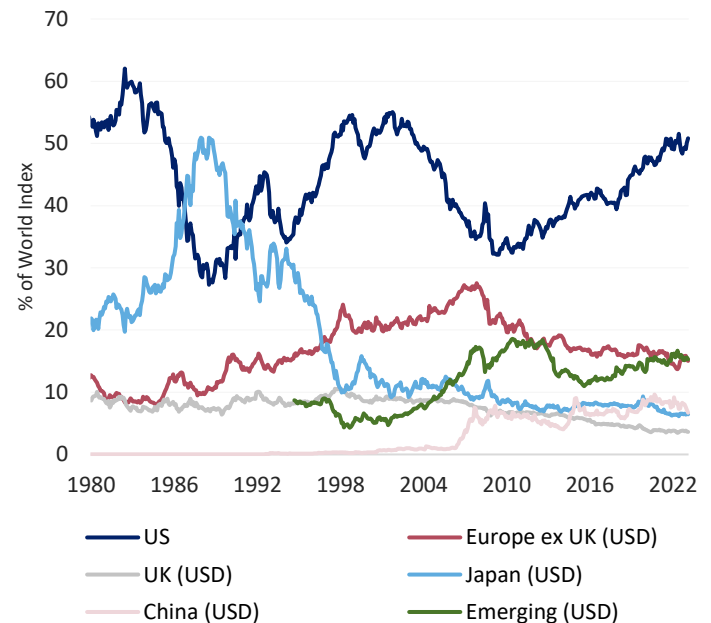
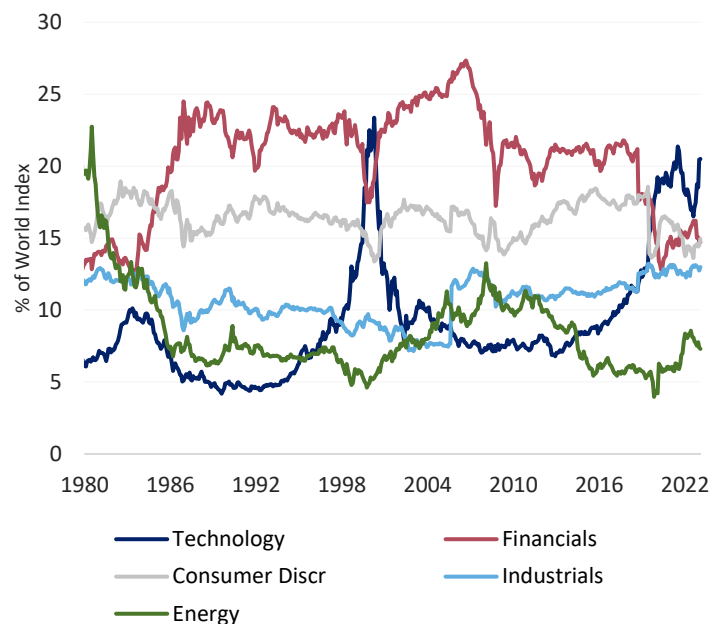


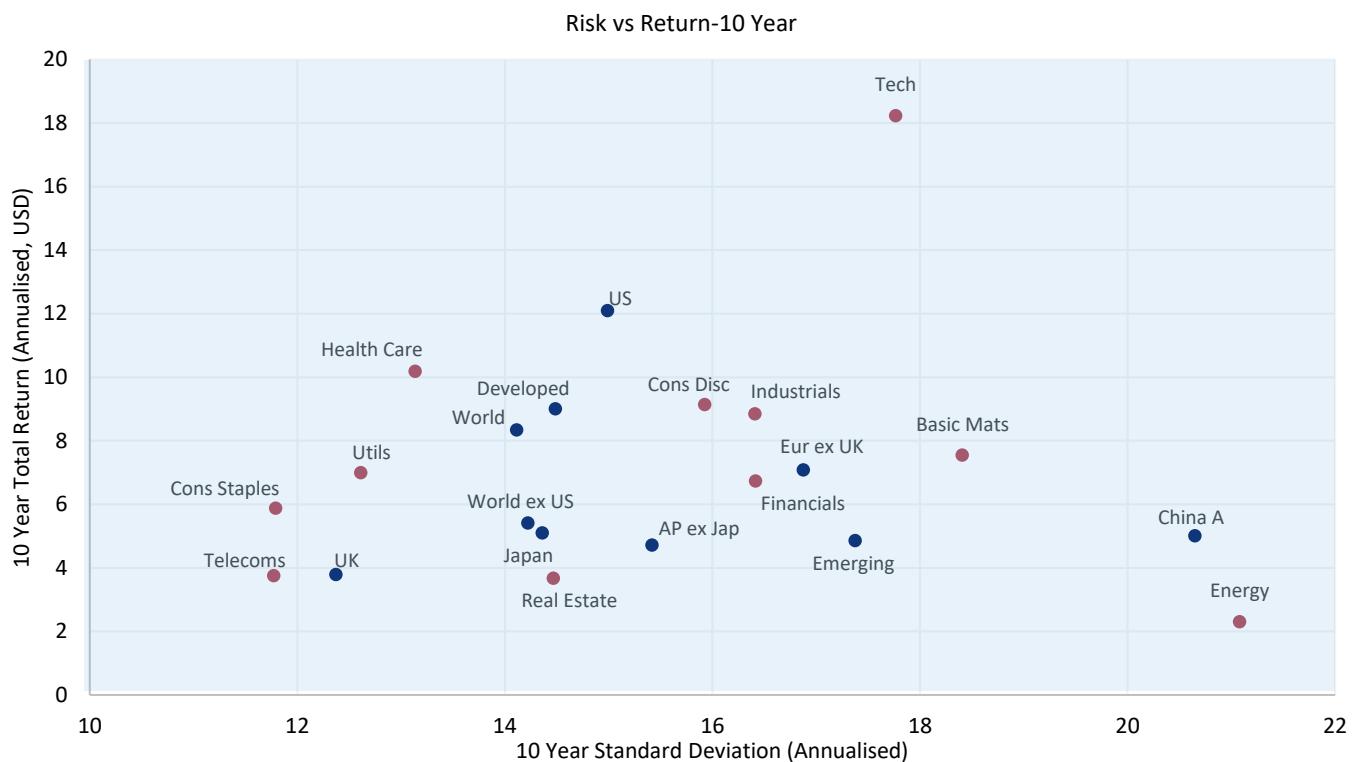
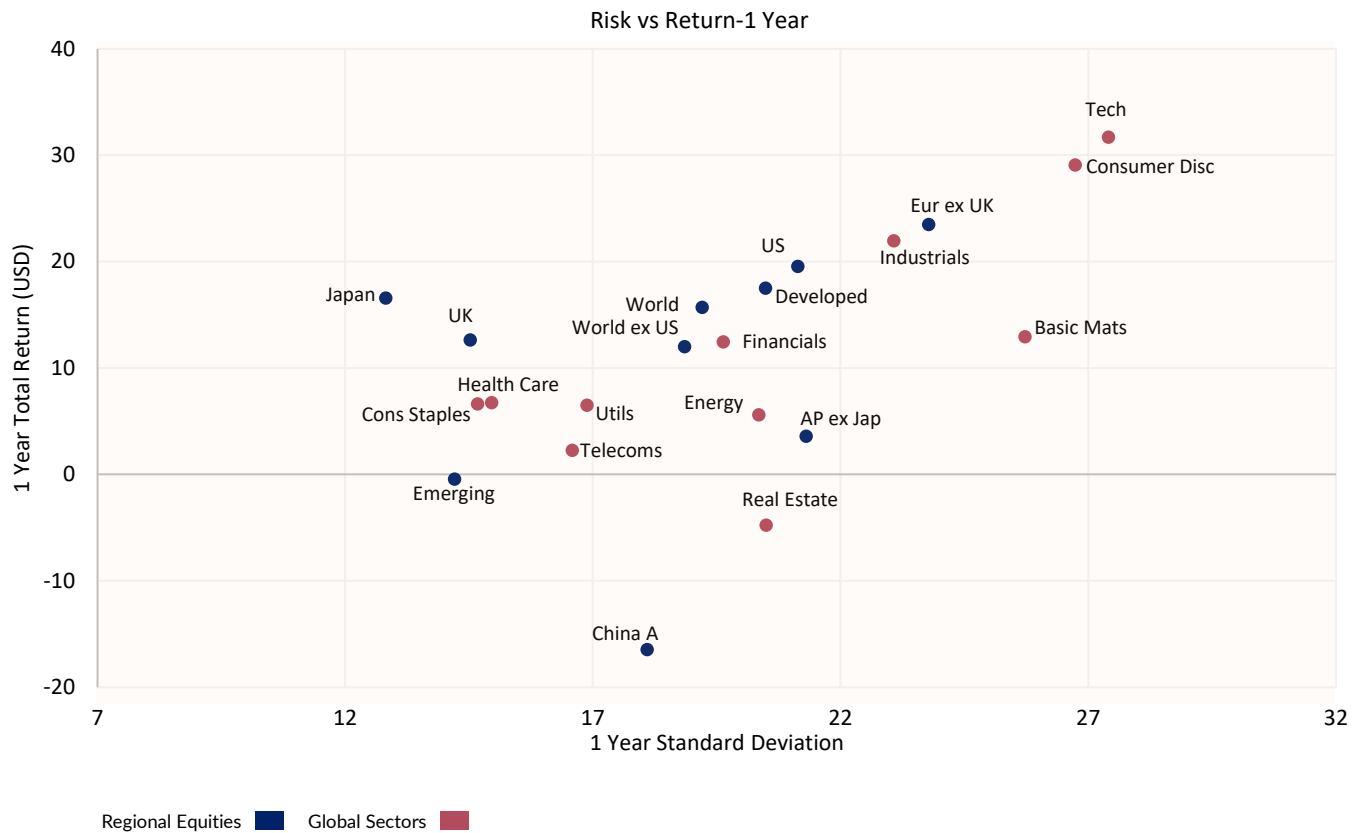
Chart 3: Markets size (USD, Bn) - US vs World ex US sectors

	US	World ex US
Energy	2.9	8.9
Basic Materials	1.9	6.6
Industrials	12.1	13.1
Consumer Staples	4.8	7.2
Health Care	12.0	7.7
Consumer Disc	16.8	14.3
Utilities	2.6	3.7
Telecom	2.8	4.3
Financials	10.8	18.3
Technology	30.3	12.1
Real Estate	3.1	3.8
Total	100.0	100.0

Chart 4: History of top 5 sector weighting within World index (% USD)



Risk vs Return: Regional equities and world sectors



Source: Refinitiv. Data as of June 30, 2023

Fixed Income and FX

1

43bps

Rise in US 10-year real yield in Q2 2023

2

105bps

Rise in UK 10-year yield in Q2 2023

3

+0.4%

Rise in DXY dollar index in Q2 2023

4

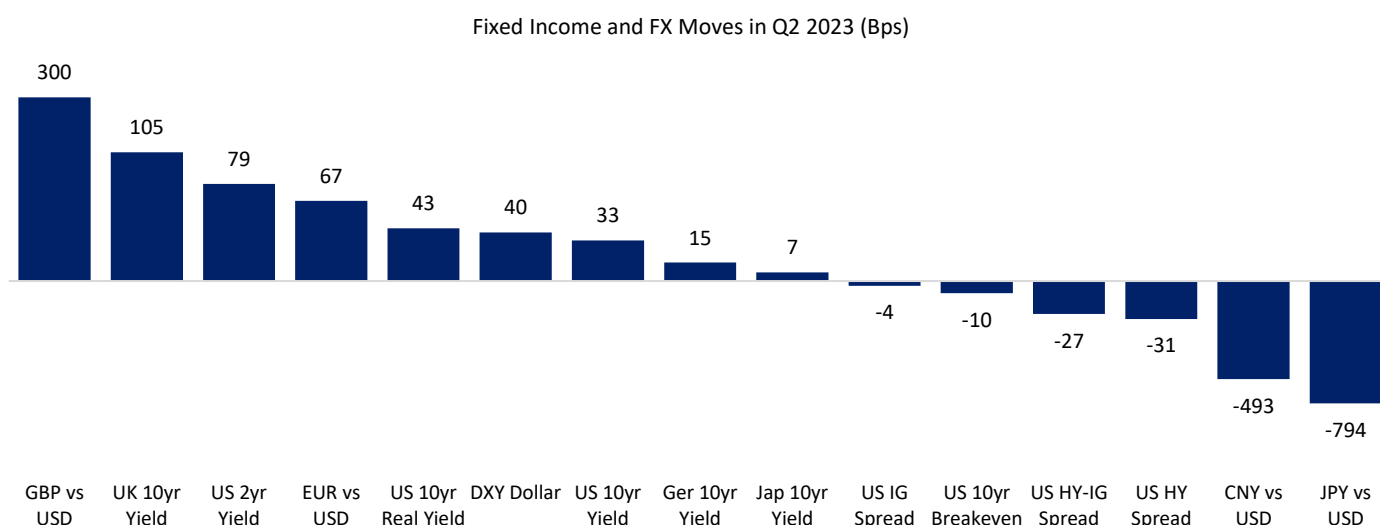
-7.9%

Decline in JPY vs USD in Q2 2023

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Moves in key FX and fixed income markets in Q2 2023



Source: Refinitiv and Factset. Data as of June 30, 2023

Regional fixed income performance summary: Government bonds, Inflation linked and Corporates

Chart 1: 1-3 year government bond returns

USD (TR, %)	Q2 2023	YTD
Can (1-3yr)	1.6	3.1
UK (1-3yr)	0.8	4.2
Italy (1-3yr)	0.3	3.1
EURO* (1-3yr)	0.1	2.4
US (1-3yr)	-0.6	1.0
Aus (1-3yr)	-2.3	-1.9
China (1-3yr)	-4.5	-2.8
Japan (1-3yr)	-7.9	-8.5

Chart 2: 7-10 year government bond returns

USD (TR, %)	Q2 2023	YTD
Italy (7-10yr)	1.7	8.4
EURO* (7-10yr)	0.1	4.2
Can (7-10yr)	-0.5	3.7
US (7-10yr)	-1.9	1.6
UK (7-10yr)	-3.2	2.2
China (3-5yr)	-4.0	-2.2
Aus (7-10yr)	-5.4	-0.1
Japan (7-10yr)	-7.8	-7.1

Chart 3: Inflation Linked bond returns

USD (TR, %)	Q2 2023	YTD
Can IL (All)	2.5	1.5
Italy IL (All)	2.2	8.5
EURO* IL (5-10yr)	1.1	5.5
UK IL (5-10yr)	-1.5	6.4
US IL (5-10yr)	-2.2	1.7
Aus IL (All)	-3.5	2.0
Japan* IL (5-10yr)	-5.2	-5.1

Chart 4: Investment grade & high yield returns

USD (TR, %)	Q2 2023	YTD
UK HY (All)	3.5	10.5
EURO HY (All)	2.1	6.7
US HY (All)	1.6	5.4
EURO IG (All)	0.9	4.3
US IG (All)	-0.2	3.2
UK IG (All)	-0.6	4.7
Japan BBB (All)	-7.3	-6.7
Japan IG (All)	-7.4	-7.2

Fixed Income key observations: Back up in real yields drives the rise in 10 year yields in Q2. 10-2 year curves invert further with the US curve returning to the March lows

Chart 1: Most regional 10yr yields rose in Q2 in response to rising interest rate expectations. UK yields are back to Q4 'mini budget trauma' levels

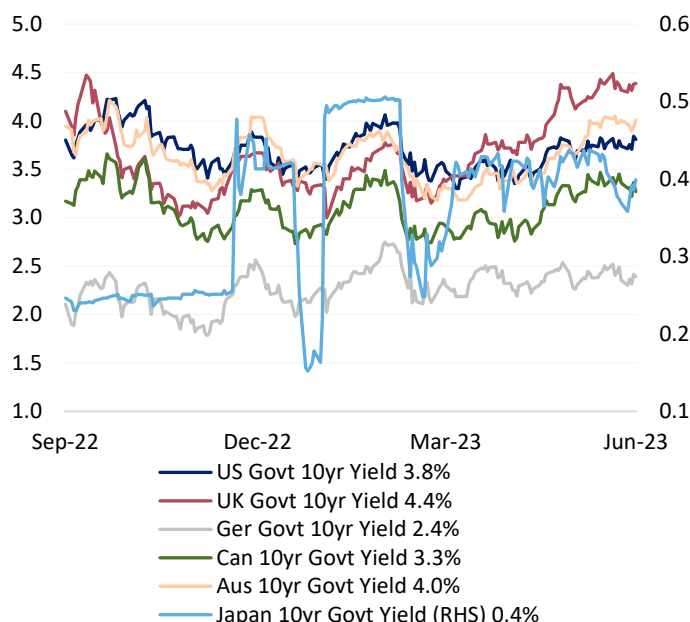


Chart 2: US, UK and German 10-2yr curves inverted further mid way through Q2. The US curve is approaching the lows witnessed in early March



Chart 3: The rise in 10yr yields in Q2 has been driven by the back up in real yields. Breakeven inflation has declined in the US and Germany

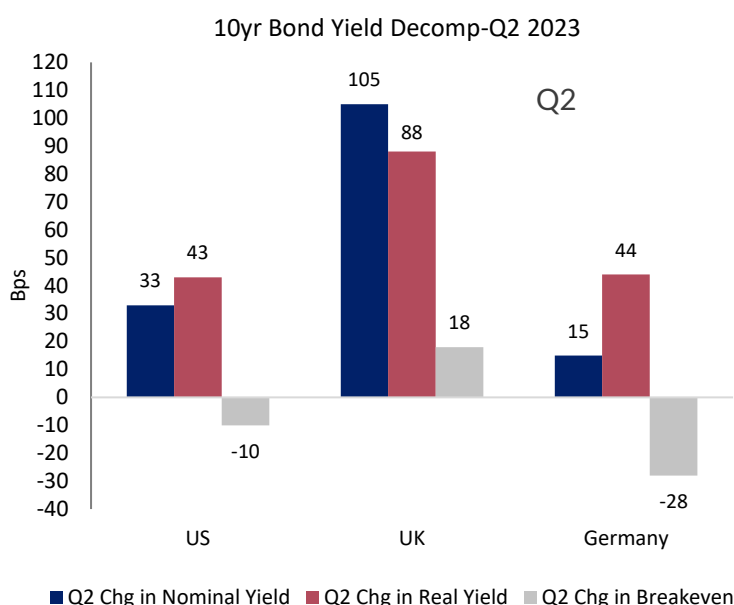
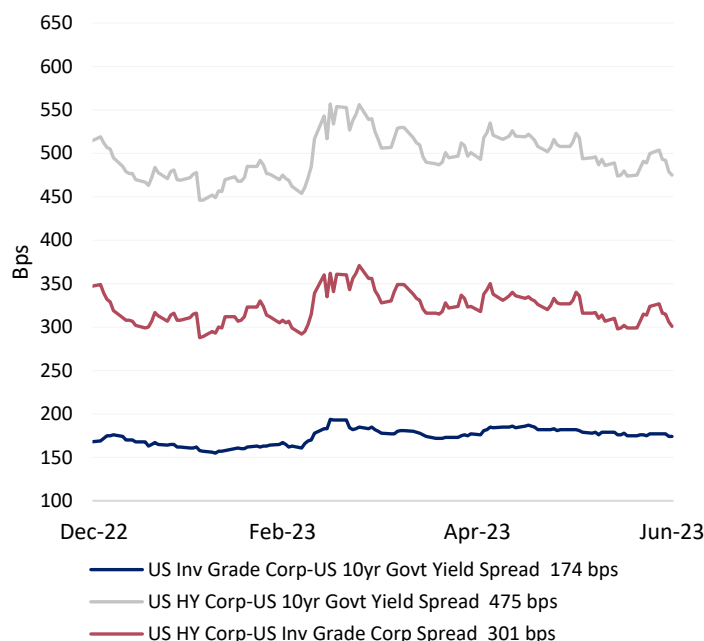


Chart 4: US corporate spreads have largely trended lower in Q2 from the highs at the end of March



FX return perspectives: Major Asian currencies (JPY and CNY) see sizeable declines against the dollar in Q2. EUR and GBP see further appreciation

Chart 1: The DXY dollar index made modest gains in Q2 but is still down -9.8% from its September peak

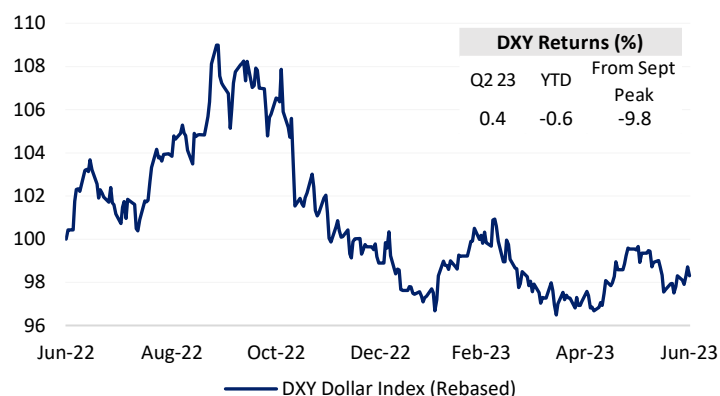


Chart 2: Long term view of the DXY Dollar Index

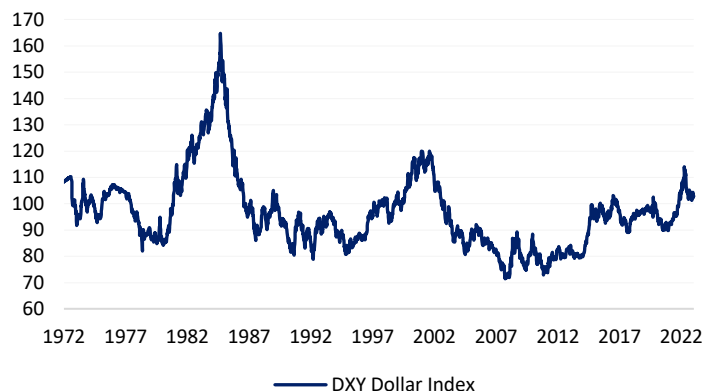


Chart 3: Regional Real Effective Exchange Rate returns-12 months (rebased)

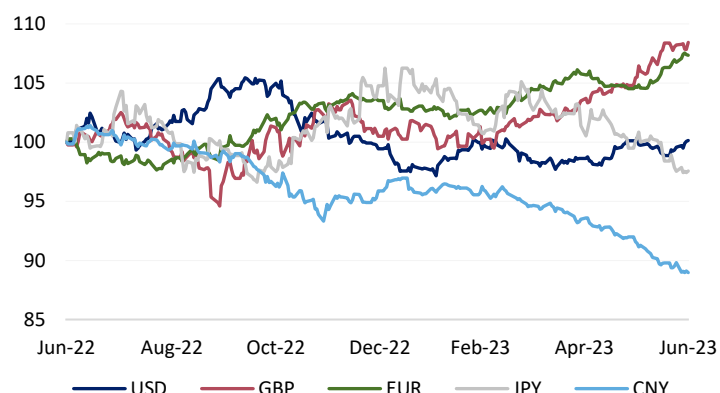


Chart 4: Regional Real Effective Exchange Rate returns over 10 years (rebased)

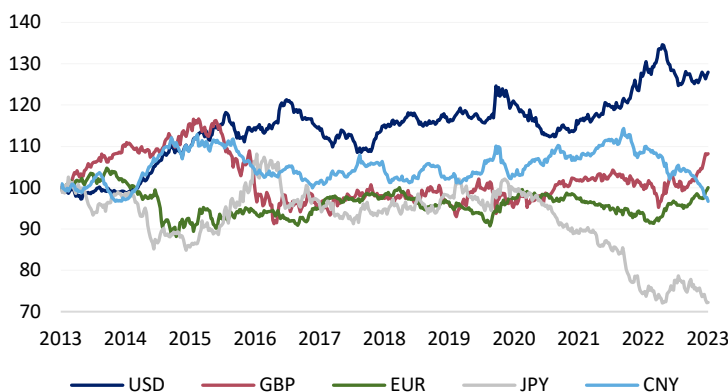


Chart 5: USD returns vs JPY, Euro, GBP and Renminbi spot rate-12 months (rebased)

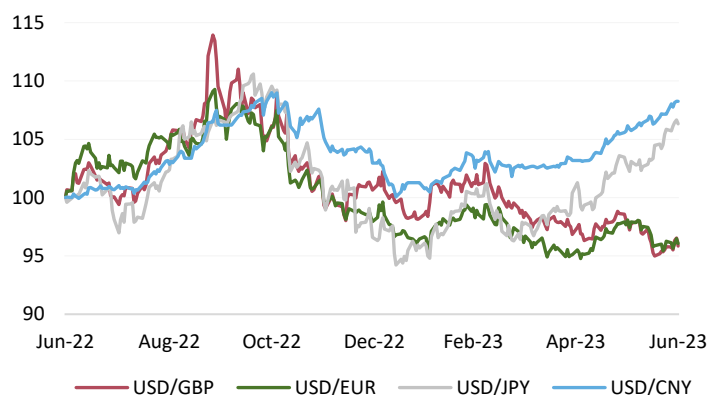


Chart 6: USD returns vs JPY, Euro, GBP and Renminbi spot rate returns over 10 years (rebased)



FX spot rate returns from a regional perspective

Q2 witnessed notable declines in the Japanese Yen and Chinese Renminbi against other major currencies, driven by interest rate differentials between Japan and the rest of the world, and the Chinese central bank cutting rates on growth concerns. Sterling rose further as sticky UK inflation led to a rise in UK market interest rate expectations.

Moves vs USD (TR, %)	3M	1M	YTD	12M
GBP	3.0	2.2	5.0	4.4
CHF	2.2	1.7	3.3	6.7
CAD	2.1	2.5	2.4	-2.8
EUR	0.7	2.1	1.9	4.1
AUD	-0.3	2.5	-2.2	-3.4
CNY	-4.9	-2.0	-3.6	-7.1
JPY	-7.9	-3.5	-8.5	-5.7

Moves vs EUR (TR, %)	3M	1M	YTD	12M
GBP	2.4	0.2	3.4	0.3
CHF	1.7	-0.2	1.2	2.6
CAD	1.4	0.5	0.4	-6.6
USD	-0.7	-2.1	-1.9	-4.1
AUD	-1.0	0.5	-4.0	-7.2
CNY	-5.8	-4.3	-7.0	-11.5
JPY	-8.7	-6.0	-11.3	-10.0

Moves vs CNY (TR, %)	3M	1M	YTD	12M
CHF	7.8	4.2	8.7	15.6
GBP	7.4	4.0	8.9	12.4
EUR	6.1	4.5	7.6	13.0
AUD	5.0	5.0	3.4	4.7
USD	4.9	2.0	3.6	7.1
JPY	-2.9	-1.6	-4.7	1.8
CAD	-7.3	-4.4	-7.1	-5.0

Moves vs AUD (TR, %)	3M	1M	YTD	12M
GBP	3.3	-0.3	7.1	7.5
CAD	2.4	0.0	4.6	0.7
EUR	1.0	-0.5	4.0	7.2
USD	0.3	-2.5	2.2	3.4
CNY	-5.0	-5.0	-3.4	-4.7
JPY	-6.8	-5.2	-6.9	-2.0

Moves vs GBP (TR, %)	3M	1M	YTD	12M
CHF	-0.7	-0.4	-2.2	2.2
CAD	-0.9	0.4	-2.5	-6.8
EUR	-2.3	-0.2	-3.3	-0.3
USD	-3.0	-2.2	-5.0	-4.4
AUD	-3.3	0.3	-7.1	-7.5
CNY	-6.9	-3.9	-8.1	-11.0
JPY	-9.4	-5.0	-12.5	-9.3

Moves vs JPY (TR, %)	3M	1M	YTD	12M
CAD	11.0	6.2	12.7	3.4
CHF	10.3	4.5	12.1	12.6
GBP	9.4	5.0	12.5	9.3
EUR	8.7	6.0	11.3	10.0
USD	7.9	3.5	8.5	5.7
AUD	6.8	5.2	6.9	2.0
CNY	2.9	1.6	4.7	-1.8

Moves vs CHF (TR, %)	3M	1M	YTD	12M
GBP	0.7	0.4	2.2	-2.2
CAD	-0.1	0.8	-0.9	-8.8
EUR	-1.7	0.2	-1.2	-2.6
USD	-2.2	-1.7	-3.3	-6.7
CNY	-7.8	-4.2	-8.7	-15.6
JPY	-10.3	-4.5	-12.1	-12.6

Trade Weighted (TR, %)	3M	1M	YTD	12M
GBP	4.1	2.1	6.0	4.6
AUD	2.3	3.3	0.1	-1.1
EUR	0.8	1.2	1.5	3.6
DX	0.4	-1.4	-0.6	-1.7
CNY	-3.8	-2.2	-3.9	-6.8
JPY	-5.2	-2.5	-6.6	-2.7

Source: Refinitiv. Data as of June 30, 2023

Alternatives: Commodity, digital asset, REITS and absolute return asset categories

1

-9.1%

Decline in Industrial Metals prices in Q2 2023

2

+5.5%

YTD rise in gold price

3

+8.1%

Return of the Wilshire US Apartments REITS in Q2 2023

4

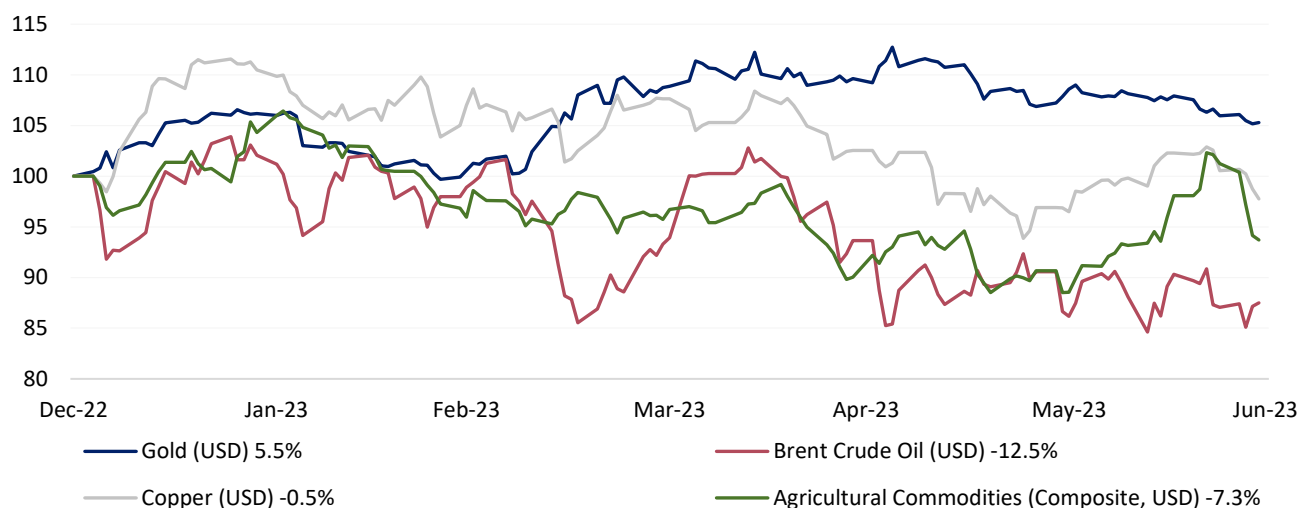
+72.4%

Rise in the FT Wilshire Digital assets index in YTD

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- 37 Digital Assets
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Commodity prices (rebased): Year to date movements in gold, copper, oil and agricultural commodities

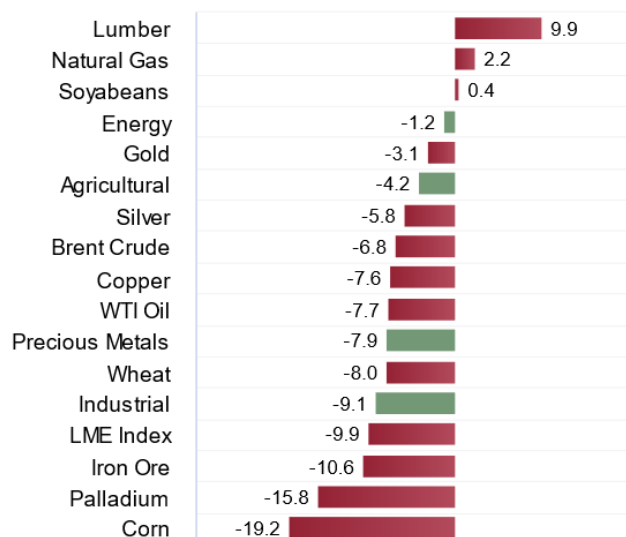


Source: Wilshire and Refinitiv. Data as of June 30, 2023

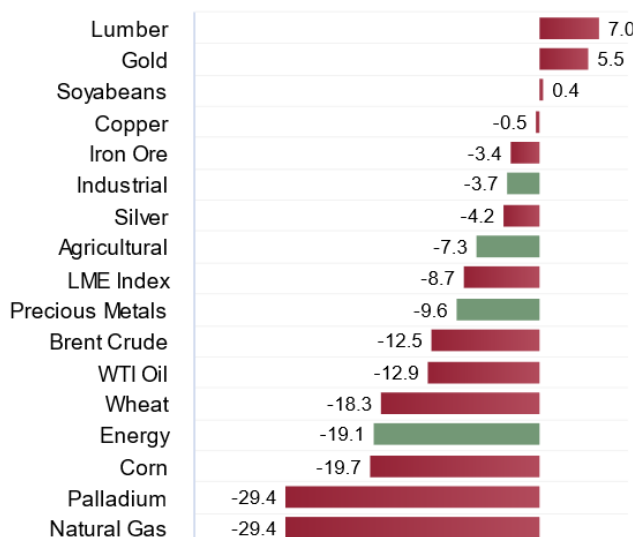
Commodities: Gold loses its shine as real yields rise. Economically-sensitive commodities see declines in Q2 on the back of Chinese growth concerns

Most commodity prices saw declines in Q2 on the back of weaker demand from China and wider concerns over sluggish global growth. After rising to its highest level in almost three years in May, gold has lost momentum since. The decline has largely been driven by the rise in real yields. The oil price has been range-bound in recent months but is down 42% from its peak in March 2022.

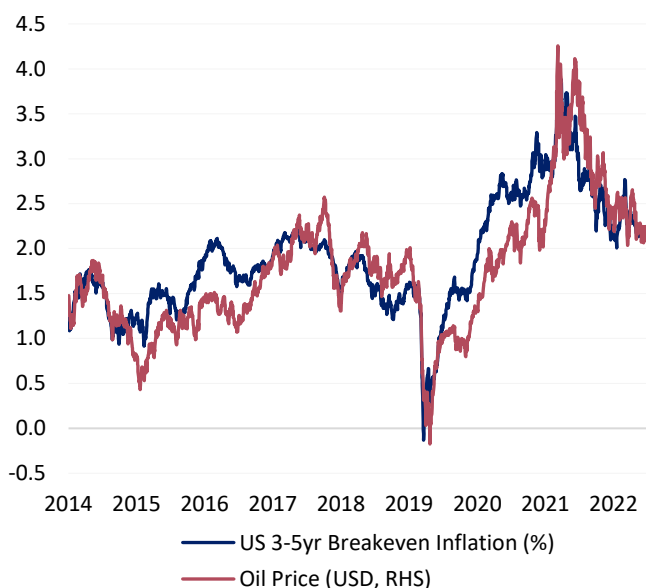
3M USD (TR, %)



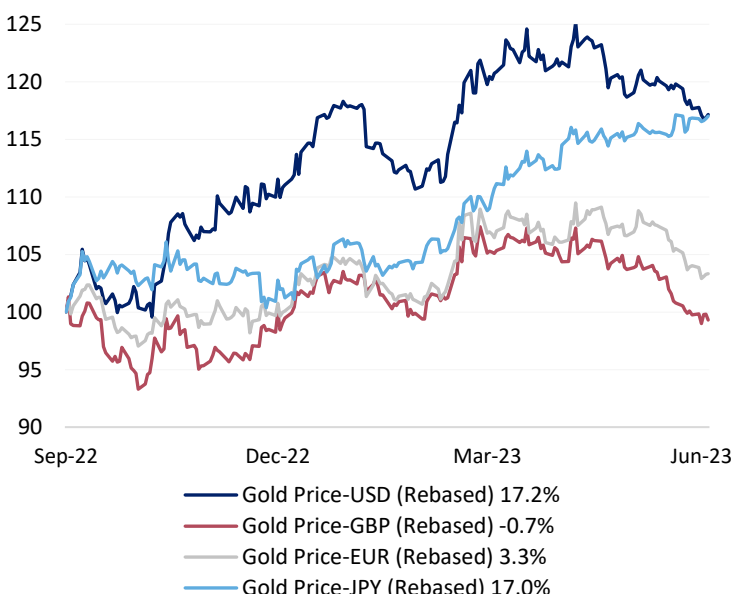
YTD USD (TR, %)



Shorter-term (3-5yr) US breakeven inflation has been closely linked to shifts in the oil price



Gold price move adjusted for different FX impact since dollar peak on 27 September 2022



Property (Wilshire REIT indexes): US REITS outperform non-US REITS in Q2 driven by strong apartment sector returns

US apartment REITS were the notable outperformers at a sector level in the second quarter. Industrial and self-storage REITS underperformed. YTD US office REITS have significantly underperformed other sectors. US REITs comfortably outperformed non-US REITS in Q2 and so far in 2023.

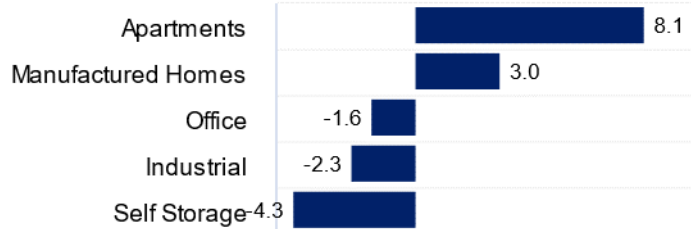
3M USD (TR, %)



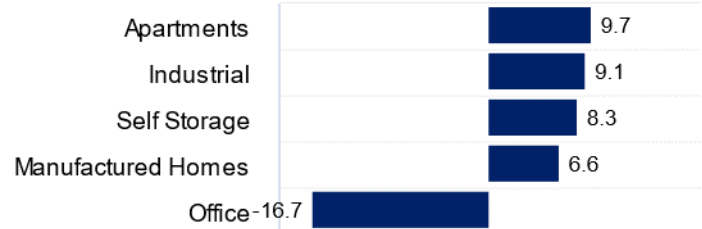
YTD USD (TR, %)



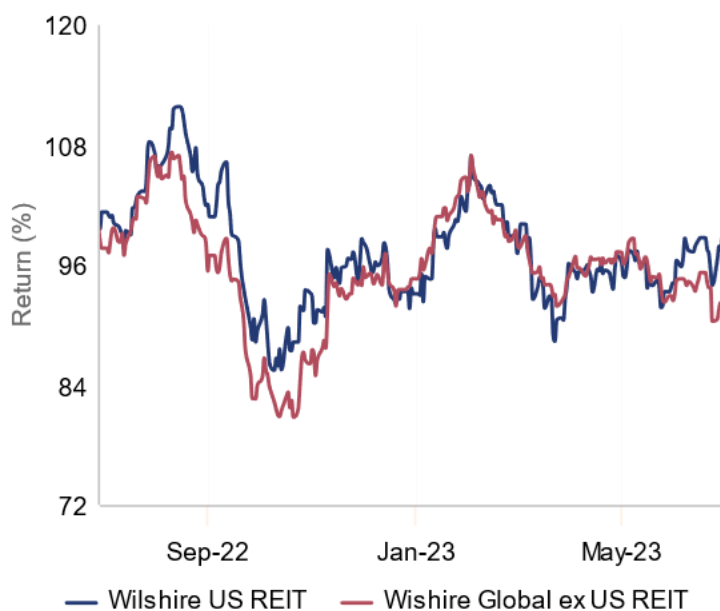
3M USD (TR, %)



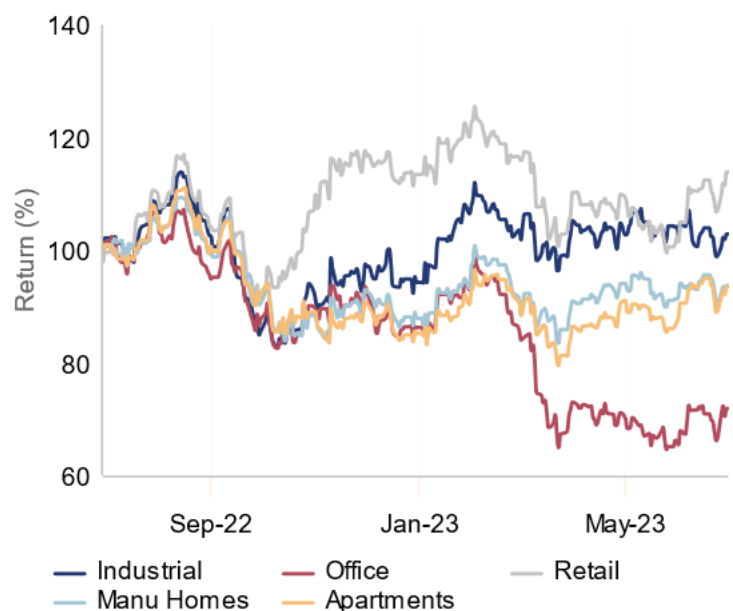
YTD USD (TR, %)



Wilshire US REIT vs Global ex US REIT - 12M (Rebased, TR)



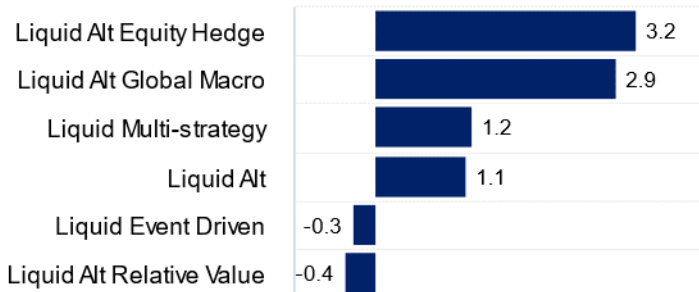
Wilshire US REIT sector performance - 12M (Rebased, TR)



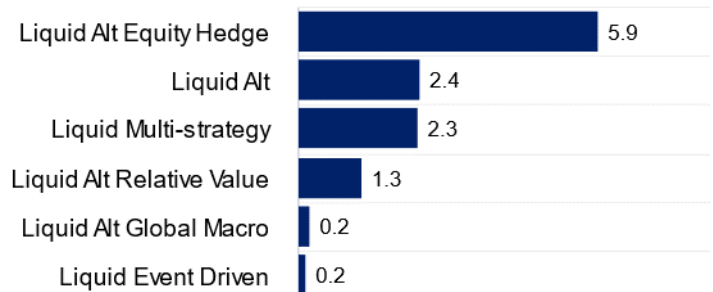
Wilshire Liquid Alternative Indexes (Absolute Return): Equity Hedge and Global Macro outperform in Q2

Equity Hedge and Global Macro were the strongest performers amongst the Wilshire Liquid Alternative series in Q2. Relative Value and Event Driven posted small negative returns in Q2. Equity Hedge remains the standout performer in 2023 so far.

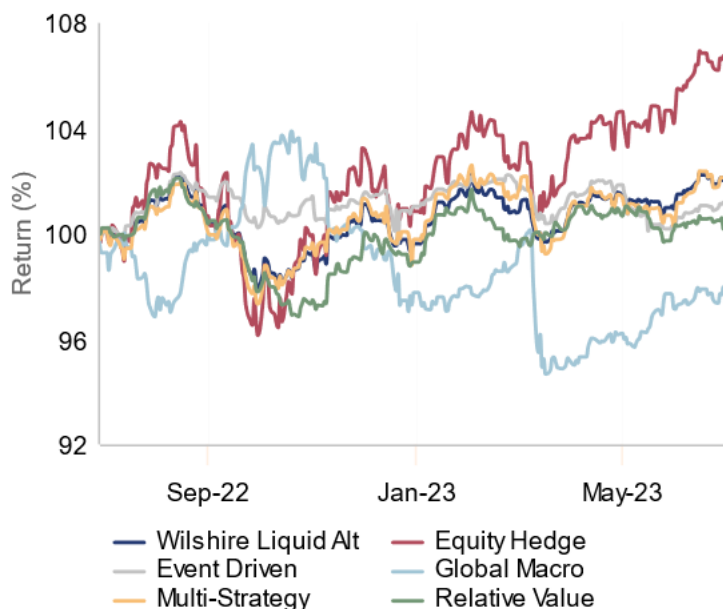
3M USD (TR, %)



YTD USD (TR, %)



Wilshire Liquid Alternative Index performance - total returns (rebased)

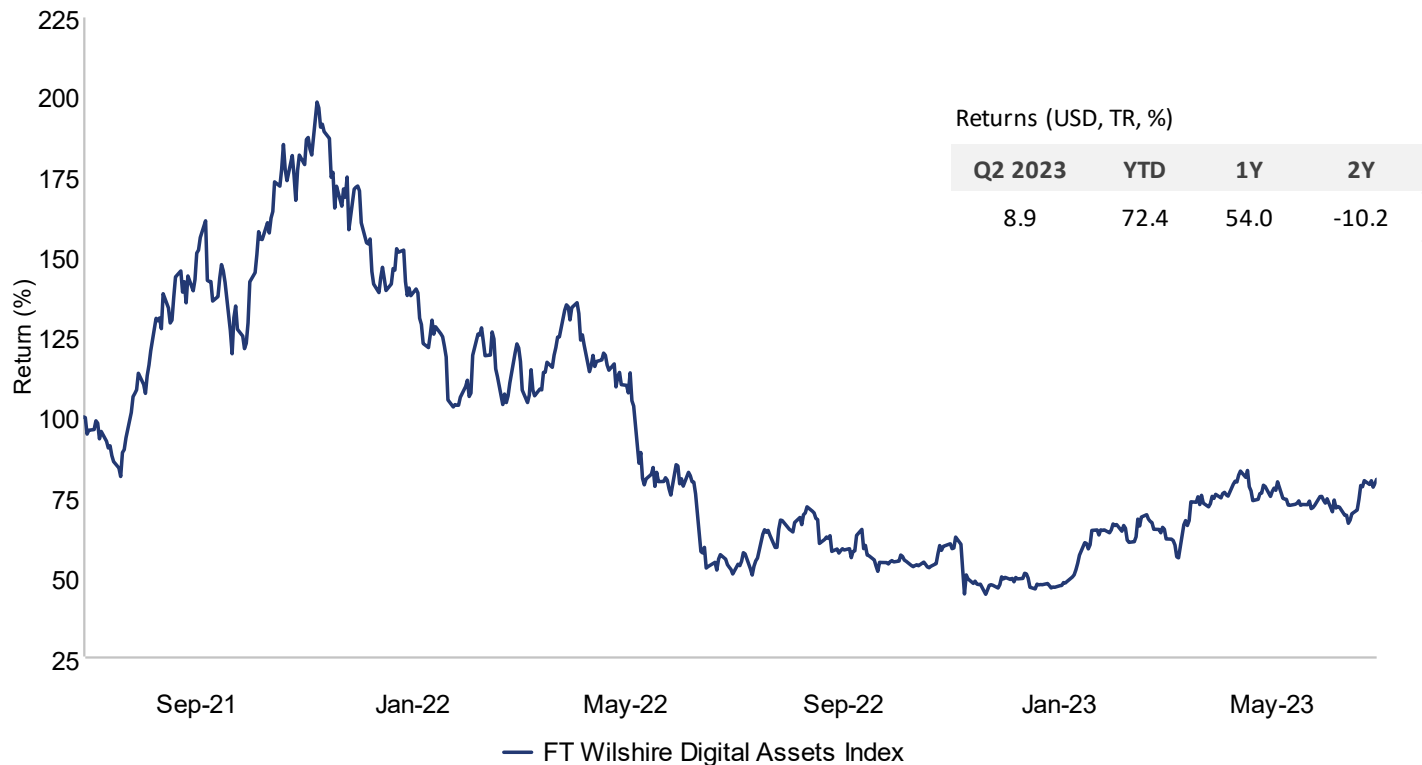


Wilshire Liquid Alternative Index relative performance vs FT Wilshire 5000 Index - total returns (rebased)

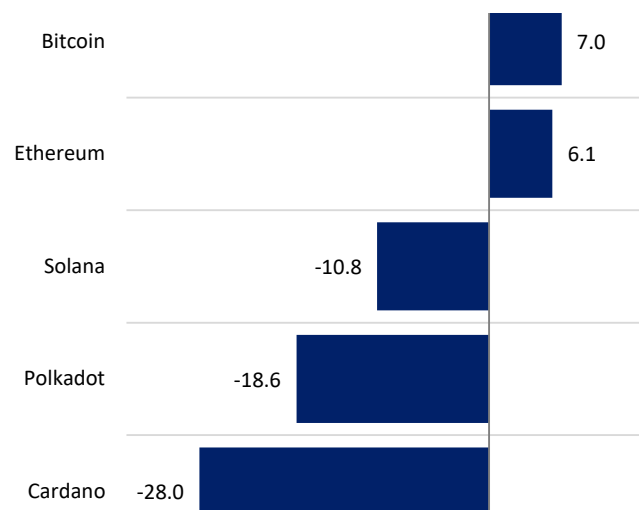


Digital Assets Index: Further gains in Q2 despite losing some momentum

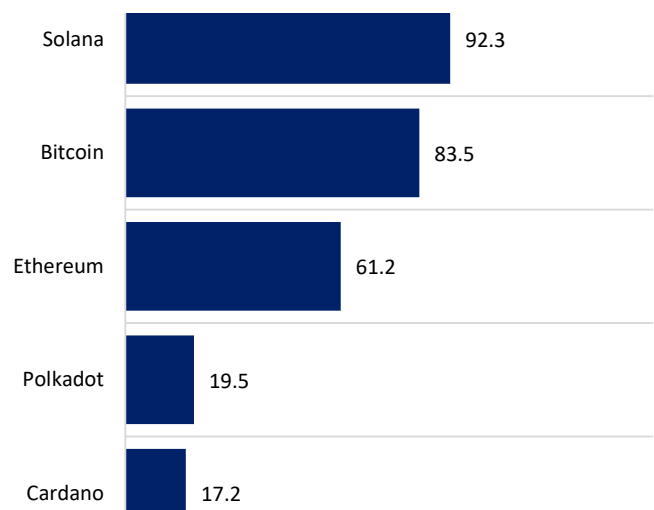
The FT Wilshire Digital Assets Index made further gains in Q2, rising 8.9%. The index is now up 72.4% in 2023 so far.



FT Wilshire Top 5 Digital Assets Index constituent performance - Q2 2023 (% USD)

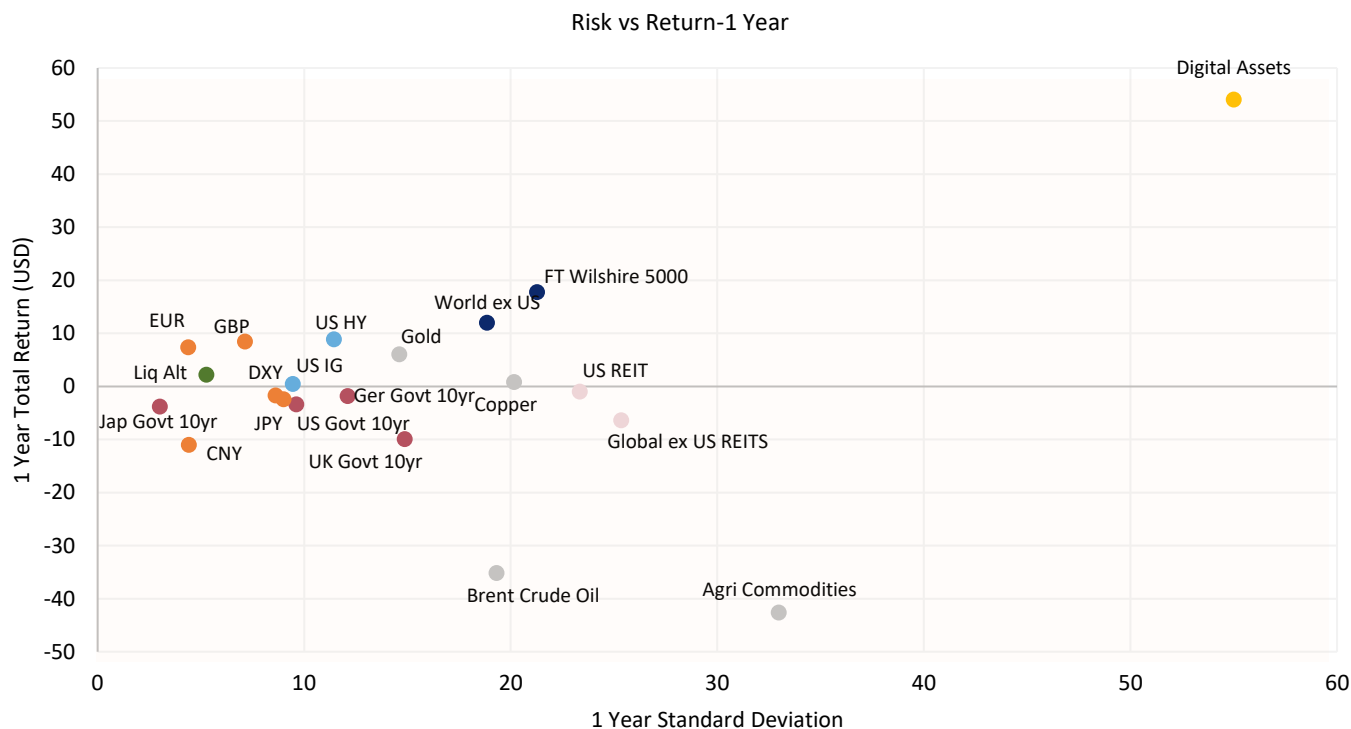


FT Wilshire Top 5 Digital Assets Index constituent performance - YTD 2023 (% USD)

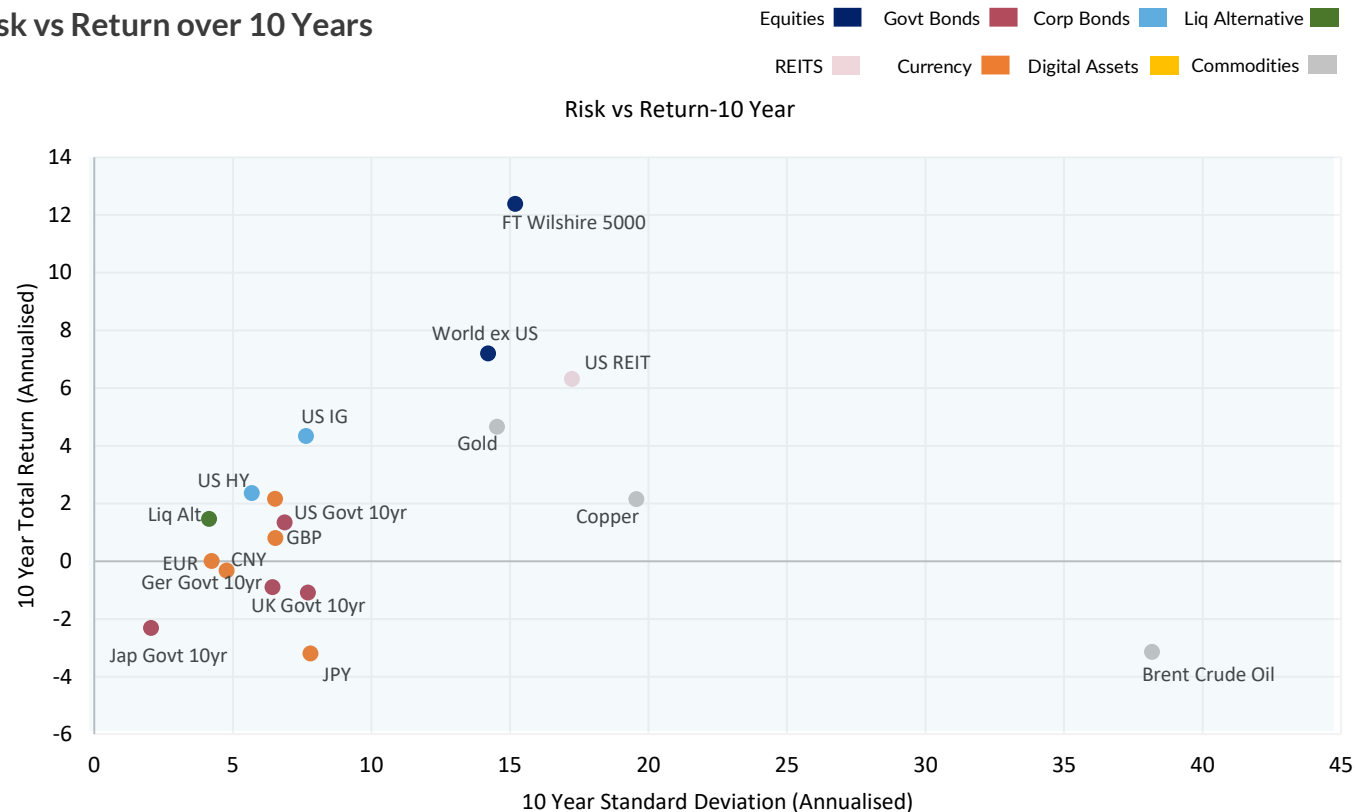


Multi Asset Class: Risk vs Return

Risk vs Return over 1 Year



Risk vs Return over 10 Years



Source: Wilshire, Refinitiv and FactSet. Data as of June 30, 2023

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