

July 31, 2023

GLOBAL MARKETS PERFORMANCE REPORT

FT Wilshire 5000 - Sector, Style, Factors

FT Wilshire Global Equity Markets and Sectors

Fixed Income and FX

Alternatives



IN THIS REPORT

FT Wilshire Indexes Insights

- The FT Wilshire 5000 rose 3.6% in July, is up 19.6% from the post-SVB March low (13 March) and has returned 20.5% YTD
- Value style (+3.4%) matched the performance of growth (+3.4%) in July. Small cap (+4.8%) outperformed large cap (+3.4%)
- Financials and digital information were the biggest contributors to returns in July

+3.6%

FT Wilshire 5000
return in July (TR)

+20.5%

FT Wilshire 5000
YTD return (TR)

See [PAGE 4](#)

Global Equities

- Chinese equities outperformed in July, playing catch up after YTD underperformance.
- Japanese equities (in USD terms) continue to lose some momentum
- July sees previously underperforming sectors, financials and energy, amongst the biggest contributors to returns in the US and Global ex US

+10.8%

July return of
Chinese equities
(USD,TR)

+17.8%

Return of the Global
Equity Index YTD
(USD, TR)

See [PAGE 16](#)

Fixed Income, Foreign Exchange

- The 53bps rise in the US 10-year bond yield over the last 3 month has largely been driven by a rise in the real yield (+34bps)
- Japanese 10-year yield rises to the highest level in nine years on a BoJ policy change.
- The DXY dollar index declines by -1.0% in July, driven mostly by a rise in the JPY

+53bps

3 month rise in US
10-year bond yield

-1.0%

Depreciation in DXY
dollar index in July

See [PAGE 28](#)

Alternatives

- The oil price rose by 14.1% in July, driven by supply cuts from the world's largest producers and the prospect of Chinese economic stimulus
- US office REITS recovered in July, rising 12.6%
- FT Wilshire Digital Assets Index lost some momentum declining -3.4% in July but is still up 66.6% so far in 2023.

+14.1%

Rise in oil price in
July

+66.6%

FT Wilshire Digital
Assets Index return
YTD

See [PAGE 33](#)

Multi-Asset Class returns: Risk appetite broadens out in July as China and emerging markets play catch up and commodity prices rebound

Chart 1: The global equity market rally broadened out in July with a strong rebound in Chinese equities helping Emerging markets outperform. US large cap value and growth delivered equal returns, small cap outperformed large cap. Oil saw strong gains on the back on supply restrictions from the big producers.

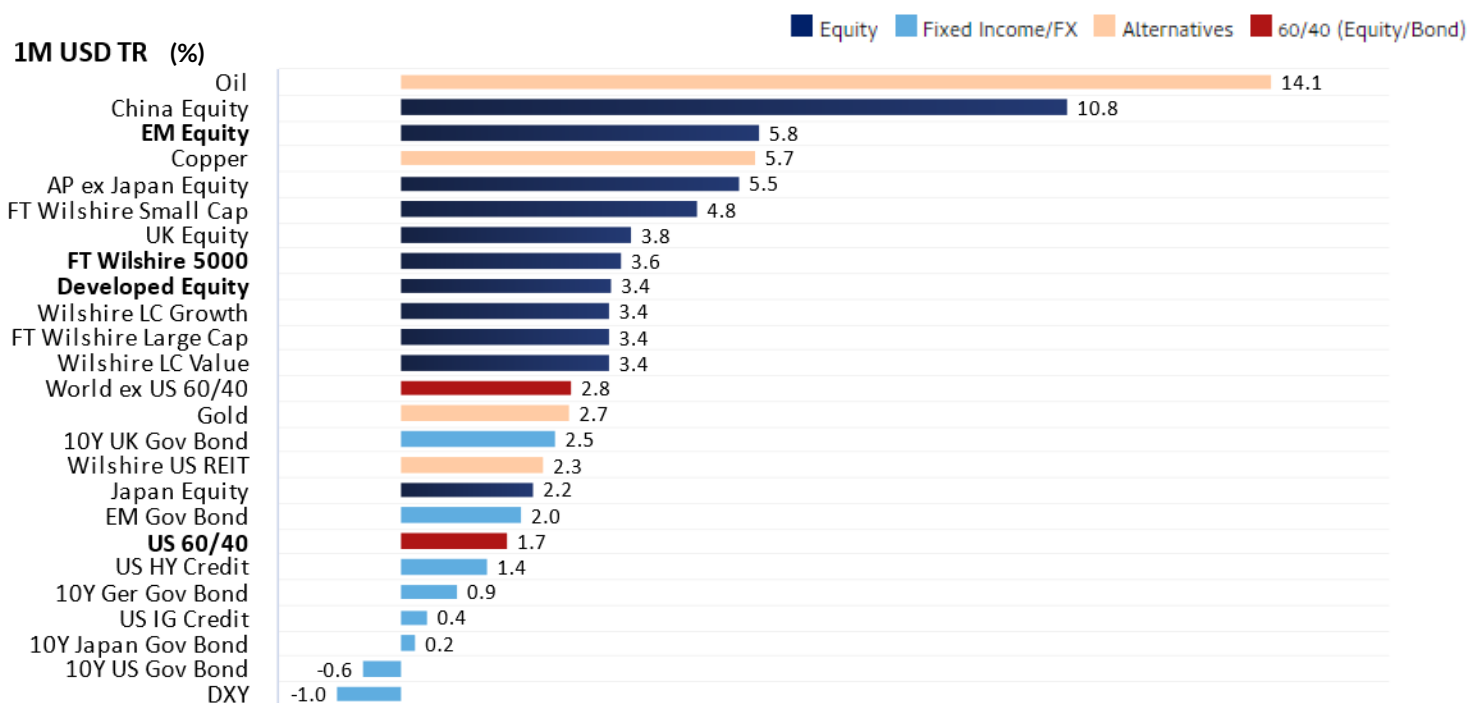
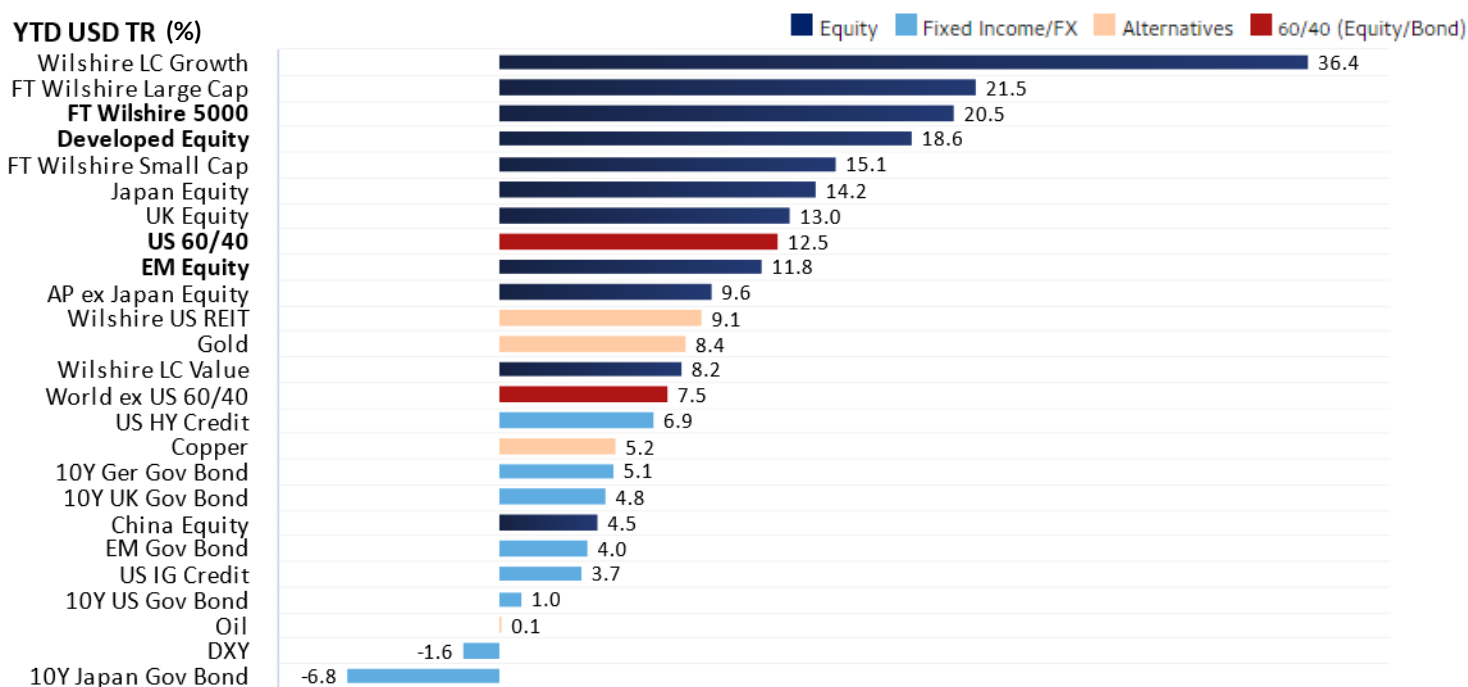


Chart 2: Year to date US large cap growth remains the standout performer. US equities have outperformed at a regional level with China still lagging YTD. US 60/40 has comfortably outperformed the World ex US. Japanese bonds (in USD terms) have significantly underperformed within fixed income.



Source: Wilshire, FactSet and Refinitiv. Data as of July 31, 2023

FT Wilshire 5000 Index Insights

1

+3.6%

The return of the FT Wilshire 5000 in July

2

+20.5%

Appreciation of the FT Wilshire 5000 YTD

3

+28.2%

Outperformance of Growth style versus Value YTD

4

+56.3%

Performance of the Technology sector YTD

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12 Style vs Factors

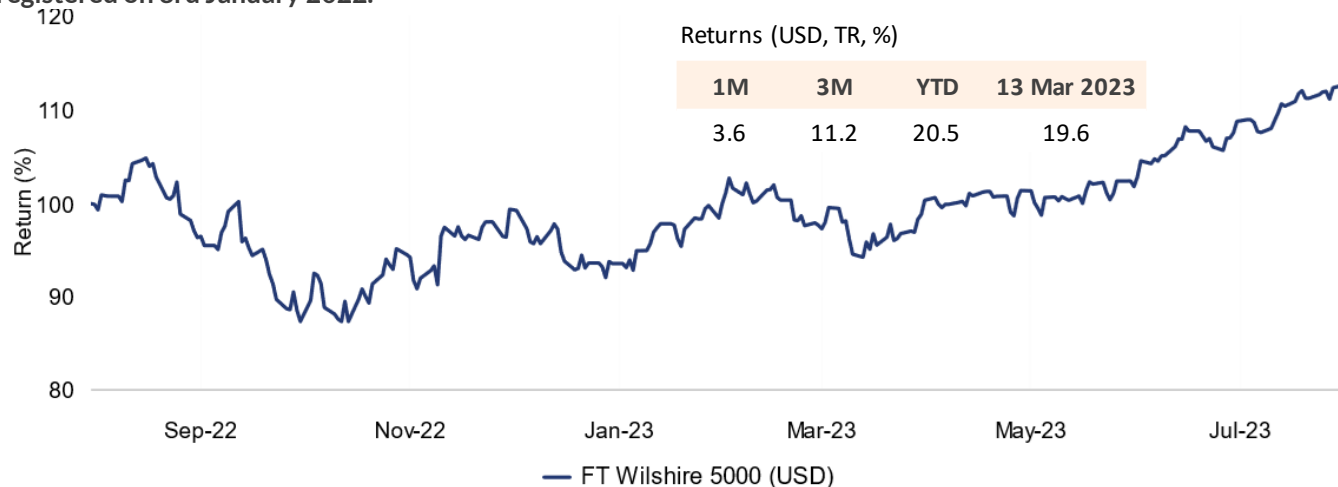
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The FT Wilshire 5000 index has maintained momentum, recently boosted by further signs of declining US inflation. The index has delivered a strong return of 19.6% from the post-SVB March low and is just 3.1% below the all-time high registered on 3rd January 2022.



Source: Wilshire, FactSet. Data as of July 31, 2023

FT Wilshire 5000 Key Observations: Further signs of falling inflation help broaden and maintain market rally as 'unloved' sectors outperform in July

Market snapshot

- ◆ The FT Wilshire 5000 rose 3.6% in July and has delivered a return of 20.5% year to date in 2023. Index is just 3.1% below its peak on 3 Jan 2022 ([page 4](#))
- ◆ Market rally continues to broaden in July but FT Wilshire 5000 equal weight is still 21.9% below its prior peak on 8 November 2021 ([page 6](#))
- ◆ FT Wilshire large cap value and growth matched each other in July. Small cap outperforms large cap ([page 9](#))
- ◆ Financials sector the biggest contributor to FT Wilshire 5000 return in July. Digital info and technology still the dominant drivers of returns YTD ([page 8](#))
- ◆ Within the Pure factor space Quality regains leadership, outperforming in July. Beta remains the laggard YTD. ([page 12](#))

Chronology of Key Market Events in 2023

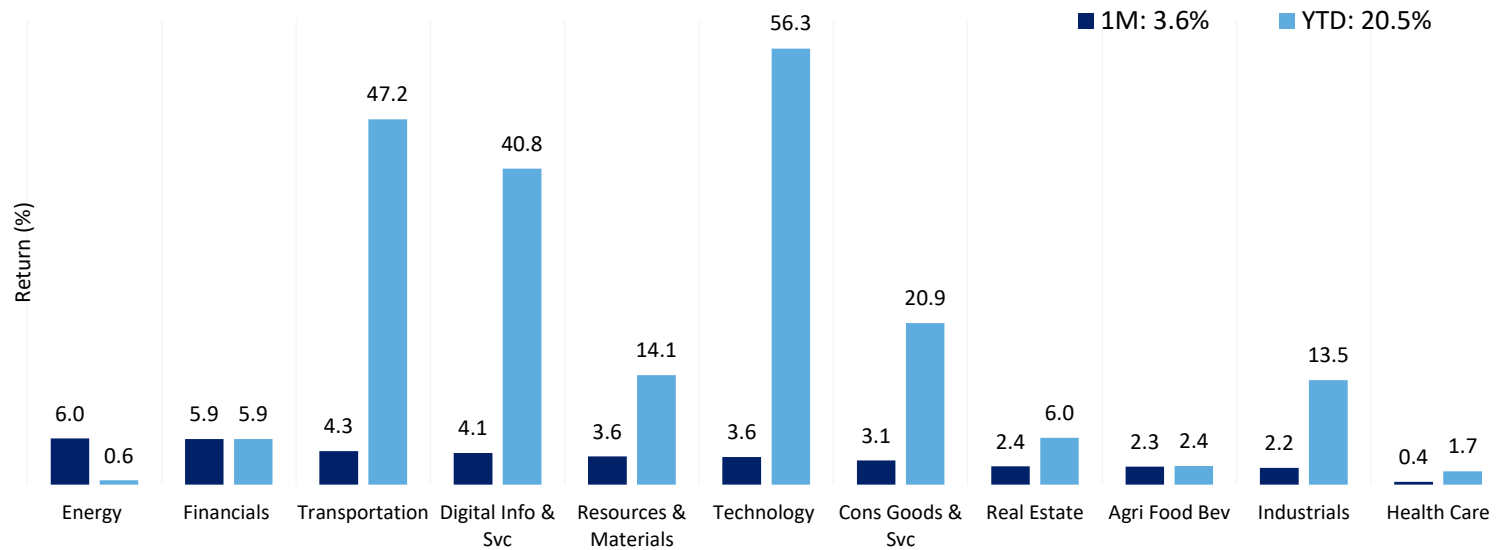
- ◆ January: Risk appetite buoyed by hopes of soft landing and the visibility of peak rates
- ◆ February: Fed caution against excessive interest rate optimism - markets retreat
- ◆ March: Silicon Valley Bank (SVB) collapses with contagion concern impacting global bank stocks.
- ◆ March/April: AI theme turbo charges US technology sector and bank contagion fear ease
- ◆ May: Debt ceiling brinkmanship sees markets tread water
- ◆ June: Market rallies on Debt ceiling resolution. Fed pauses on rate hikes
- ◆ July: Weaker than expected US inflation helps boost risk appetite. US inflation falls to lowest in over 2 years

Chart 1: FT Wilshire 5000 Real vs nominal total return - despite the sizeable 2022 drawdown, US equities have delivered an 9.4% real annualized return over the last 10 years and 7.5% in the last 5 years



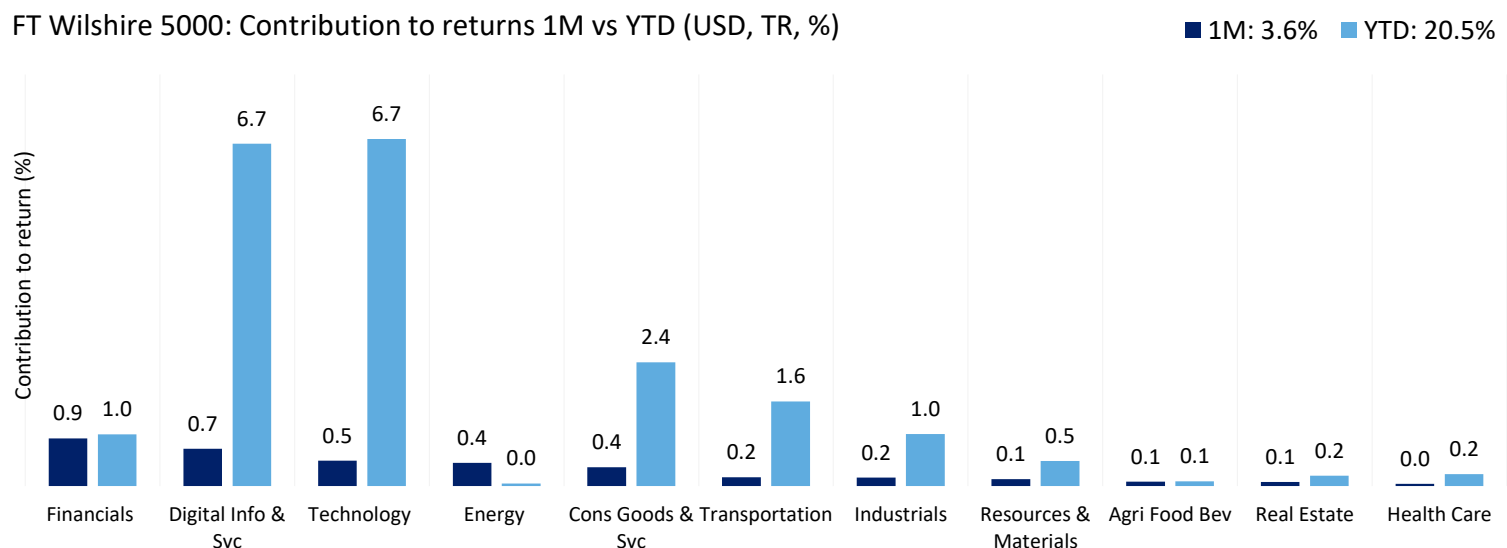
Sector performance and contributions: Value-exposed sectors play catch up as financials and energy outperform in July

Sector returns All 11 sectors posted gains in July (dark blue) but there was a shift into more value-focused sectors, with financials and energy outperforming. Transportation, digital information and services and technology sectors have still significantly outperformed in 2023 (light blue) YTD.



Sector weighted contributions blend sector performance with sector weighting to establish aggregate return drivers. Financials, energy and digital information were the main contributors to returns in July (dark blue). Technology and digital information continue to dominate returns YTD (light Blue)

FT Wilshire 5000: Contribution to returns 1M vs YTD (USD, TR, %)



Sector returns and weights across the FT Wilshire indexes: Financials and energy outperform in July but tech, digital info and transport standout performers YTD

July 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.

1M	FTW 5000		Large Cap		Small Cap		Micro Cap		Growth		Value	
	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts
Energy	6.0	7.5	5.5	7.4	5.3	8.9	9.7	6.3	4.8	1.6	5.5	13.2
Financials	5.9	15.6	5.2	15.6	8.7	15.3	11.4	20.9	3.5	9.5	6.0	21.7
Transportation	4.3	3.8	3.9	3.8	6.4	4.4	7.4	3.6	4.6	3.6	3.0	3.9
Digital Info & Svc	4.1	17.8	4.0	18.9	-3.3	10.4	4.7	7.0	4.1	30.3	3.6	8.0
Resources & Materials	3.6	3.6	3.1	2.8	3.9	8.9	5.1	6.3	1.8	1.7	3.6	4.2
Technology	3.6	13.8	3.7	15.0	-0.9	6.1	1.9	5.0	3.8	20.4	3.4	9.5
Cons Goods & Svc	3.1	11.7	2.9	11.5	0.7	13.0	8.8	9.9	3.3	12.8	2.4	10.8
Real Estate	2.4	3.2	1.2	2.5	1.9	7.7	3.9	4.9	0.4	2.9	2.4	2.1
Agri Food Bev	2.3	3.4	2.3	3.6	3.3	2.3	-1.0	1.3	5.6	0.9	1.9	6.4
Industrials	2.2	7.4	2.1	6.6	0.1	12.3	4.6	10.7	2.6	4.1	2.0	8.7
Health Care	0.4	12.3	0.3	12.3	-1.7	10.7	1.6	24.2	1.1	12.5	-0.4	11.6
Market	3.6		3.4		4.8		5.7		3.4		3.4	

YTD 2023 Sector returns and average weights across the FT Wilshire indexes: Digital information, technology and transportation sectors remain the standout performers so far in 2023.

YTD	FTW 5000		Large Cap		Small Cap		Micro Cap		Growth		Value	
	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts	Return	Wghts
Technology	56.3	12.0	58.2	13.0	27.4	5.8	18.9	4.8	70.3	17.6	35.3	8.9
Transportation	47.2	3.5	50.8	3.4	29.1	4.0	15.6	3.6	105.6	2.8	16.5	3.8
Digital Info & Svc	40.8	16.3	42.6	17.4	12.1	9.8	9.5	6.4	47.3	29.2	23.7	8.0
Cons Goods & Svc	20.9	11.5	21.2	11.4	14.7	12.5	21.0	9.1	31.2	13.5	8.2	10.5
Resources & Materials	14.1	3.4	11.5	2.6	19.5	8.6	10.5	6.4	8.2	1.7	13.1	4.0
Industrials	13.5	7.5	12.0	6.8	16.7	12.0	19.8	9.7	21.5	3.8	8.4	8.1
Real Estate	6.0	3.3	4.3	2.7	7.0	7.9	4.5	4.8	2.5	3.4	6.6	2.0
Financials	5.9	17.0	5.9	16.9	5.1	16.8	-0.9	22.8	8.0	10.4	4.9	22.6
Agri Food Bev	2.4	3.7	1.5	4.0	12.5	2.3	6.6	1.1	12.3	1.4	0.4	6.3
Health Care	1.7	13.1	0.7	13.3	7.7	10.1	5.4	24.4	6.2	14.3	-4.2	11.7
Energy	0.6	8.7	-0.2	8.5	1.6	10.3	5.6	7.0	1.1	2.1	-0.3	14.2
Market	20.5		21.5		15.1		8.3		36.4		8.2	

Sector-weighted contributions across the FT Wilshire indexes: Financials the biggest contributors in July but tech and digital information the main drivers of YTD returns

July 2023 sector-weighted performance contributions across the FT Wilshire indexes: Financials were the largest contributor to returns across the key FT Wilshire indexes last month. Energy and digital information also contributed to FT Wilshire 5000 gains last month.

1M	FTW 5000	Large Cap	Small Cap	Micro Cap	Growth	Value
	Contr	Contr	Contr	Contr	Contr	Contr
Financials	0.9	0.8	2.4	2.4	0.3	1.3
Digital Info & Svc	0.7	0.8	-0.3	0.3	1.3	0.3
Technology	0.5	0.6	-0.1	0.1	0.8	0.3
Energy	0.5	0.4	1.0	0.6	0.1	0.7
Cons Goods & Svc	0.4	0.3	0.3	0.9	0.4	0.3
Transportation	0.2	0.2	0.3	0.3	0.2	0.1
Industrials	0.2	0.1	0.0	0.5	0.1	0.2
Resources & Materials	0.1	0.1	0.6	0.3	0.0	0.2
Agri Food Bev	0.1	0.1	0.2	0.0	0.1	0.1
Real Estate	0.1	0.0	0.3	0.2	0.0	0.1
Health Care	0.0	0.0	-0.2	0.4	0.1	-0.1
Market	3.6	3.4	4.8	5.7	3.4	3.4

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

YTD	FTW 5000	Large Cap	Small Cap	Micro Cap	Growth	Value
	Contr	Contr	Contr	Contr	Contr	Contr
Technology	6.7	7.6	1.6	0.9	12.3	3.1
Digital Info & Svc	6.7	7.4	1.2	0.6	13.8	1.9
Cons Goods & Svc	2.4	2.4	1.8	1.9	4.2	0.9
Transportation	1.6	1.7	1.2	0.6	2.9	0.6
Industrials	1.0	0.8	2.0	1.9	0.8	0.7
Financials	1.0	1.0	0.9	-0.2	0.8	1.1
Resources & Materials	0.5	0.3	1.7	0.7	0.1	0.5
Health Care	0.2	0.1	0.8	1.3	0.9	-0.5
Real Estate	0.2	0.1	0.6	0.2	0.1	0.1
Agri Food Bev	0.1	0.1	0.3	0.1	0.2	0.0
Energy	0.0	0.0	0.2	0.4	0.0	0.0
Market Return	20.5	21.5	15.1	8.3	36.4	8.2

Source: Wilshire. Data as of July 31, 2023

FT Wilshire Size and Style Indexes: Value keeps pace with growth and small cap outperforms in July but large cap and growth still out ahead YTD

Table 1: July saw positive returns across the main FT Wilshire indexes with small cap marginally outperforming and value matching the return of growth. Small cap has now moved ahead of large cap over the last three months but growth and large cap still lead the way YTD.

USD, TR %	Size		Style		
	Large Cap	Small Cap	Micro Cap	LC Growth	LC Value
1M	3.4	4.8	5.7	3.4	3.4
3M	11.0	11.8	13.7	16.7	5.5
YTD	21.4	15.1	8.3	36.4	8.2
2022	-19.2	-17.5	-21.4	-31.1	-6.0
2021	27.8	19.1	21.7	27.7	27.4

Table 2: Growth has delivered a 5yr annualized return of 15% vs a value return of 9.3%

USD, TR %	Large Cap		Small Cap		Micro Cap		LC Growth		LC Value	
	Aggr	Ann	Aggr	Ann	Aggr	Ann	Aggr	Ann	Aggr	Ann
2Y	6.6	3.2	-1.9	-1.0	-15.5	-8.1	2.0	1.0	10.4	5.1
3Y	46.3	13.5	45.3	13.3	39.9	11.9	40.4	12.0	51.0	14.7
5Y	79.1	12.4	42.9	7.4	23.1	4.3	101.5	15.0	55.9	9.3
10Y	233.1	12.8	144.7	9.4	112.6	7.8				
20Y	608.6	10.3	626.5	10.4	404.7	8.4				

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



Style and Size Indexes: Growth outperformance relative to value loses some momentum. Small cap continues to outperform large cap in recent months

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

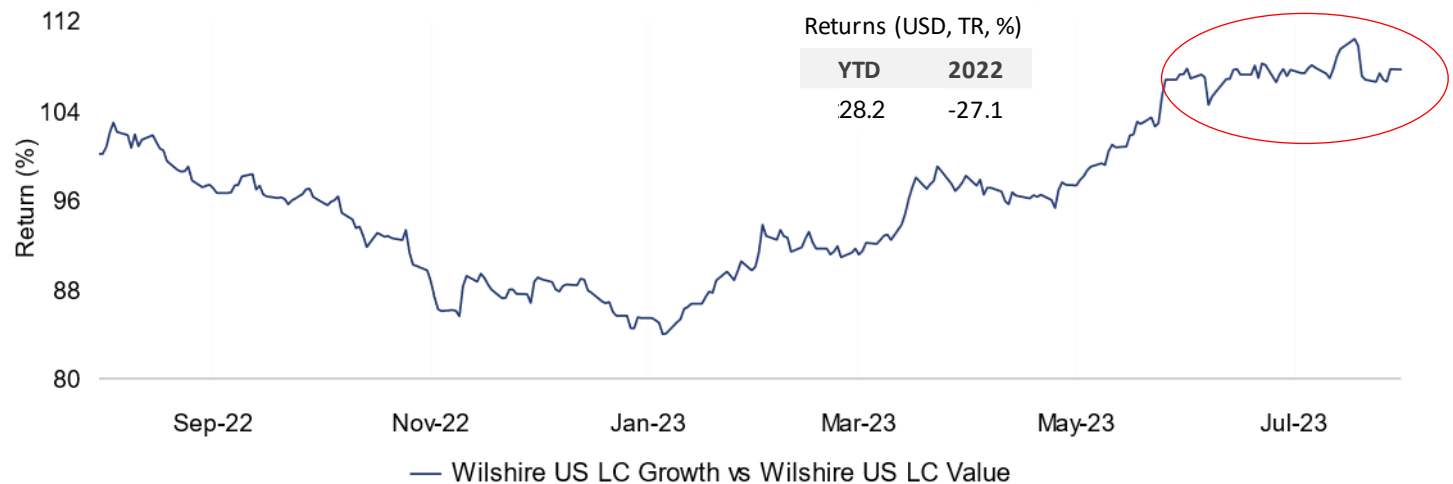


Chart 2: Large vs Small Cap (USD, TR, %).



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



Pure Factor Indexes: Quality regains leadership as Beta continues to underperform

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: 1M - Pure Quality outperformed in July with Beta and Momentum lagging behind

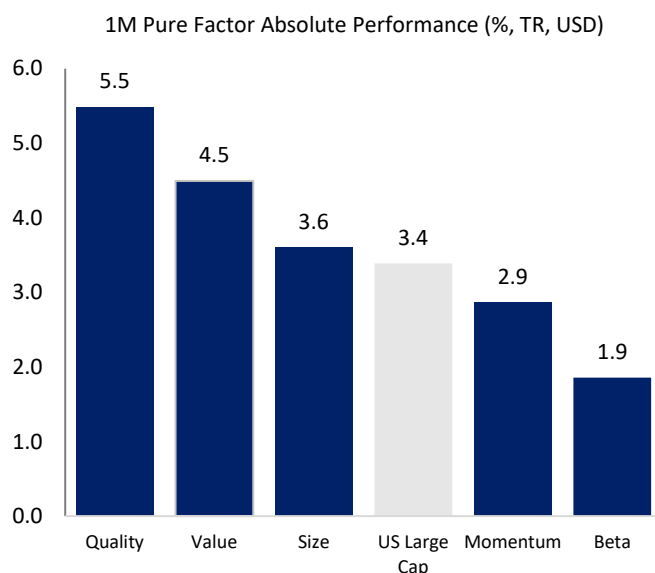


Chart 2: YTD 2023-Pure Quality and Value have been the strongest performers. Beta has significantly underperformed

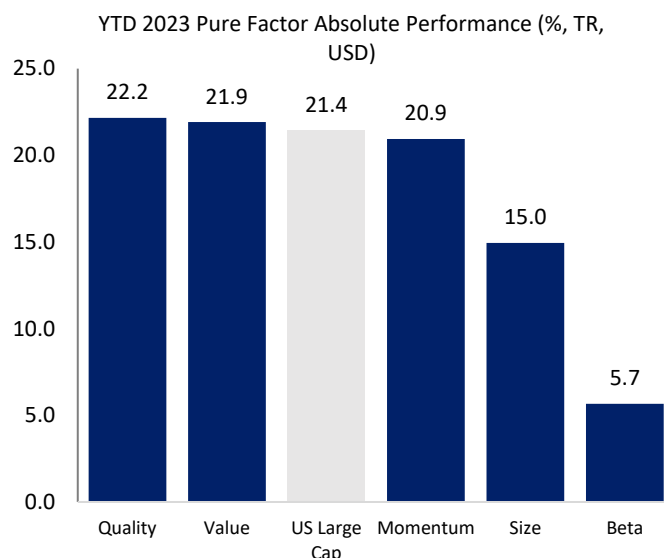


Chart 3: Pure Quality has been the strongest performer over the past 12 months

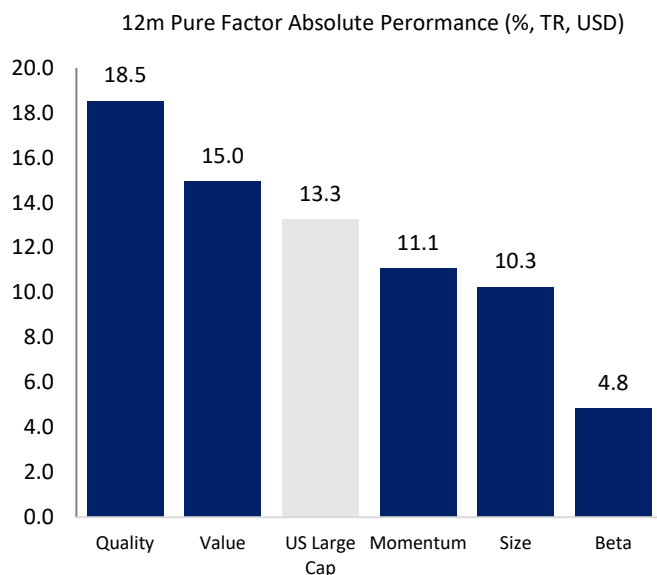
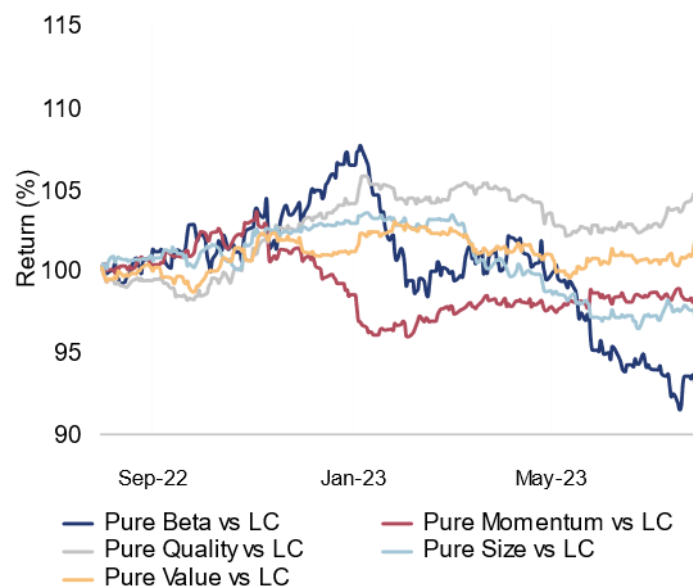


Chart 4: Pure Factor Indexes Relative to FT Wilshire US Large Cap Index over 12 months (Rebased, TR, USD)



Comparing Factor vs Style returns: Pure Quality factor regains some ground against growth style. Pure Value continues to outperform value style

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

Returns (USD, TR %)	1M	YTD	2022	3Y
Pure Factor Quality	5.5	22.2	-13.7	59.8
Style Growth	3.4	36.4	-31.1	40.4
Pure Factor Value	4.5	21.9	-16.2	55.2
Style Value	3.4	8.2	-6.0	51.0
Pure Factor Size	3.6	15.0	-17.5	40.1
Style Small Cap	4.8	15.1	-17.5	45.3

Chart 2: Pure Factor Quality vs Growth style and Pure Value vs Value style



Chart 3: Pure Quality vs Pure Value and Growth style vs Value style



Chart 4: Pure Factor Size vs US Small Cap style



Sentiment and Technical Analysis: US technical and survey-based sentiment indicators at their highest (most exuberant) levels for over 2 years

Chart 1: Our US Composite Sentiment Indicator of technical measures and the net level of (survey-based) investor bullishness has spiked to the highest level since the first quarter of 2021

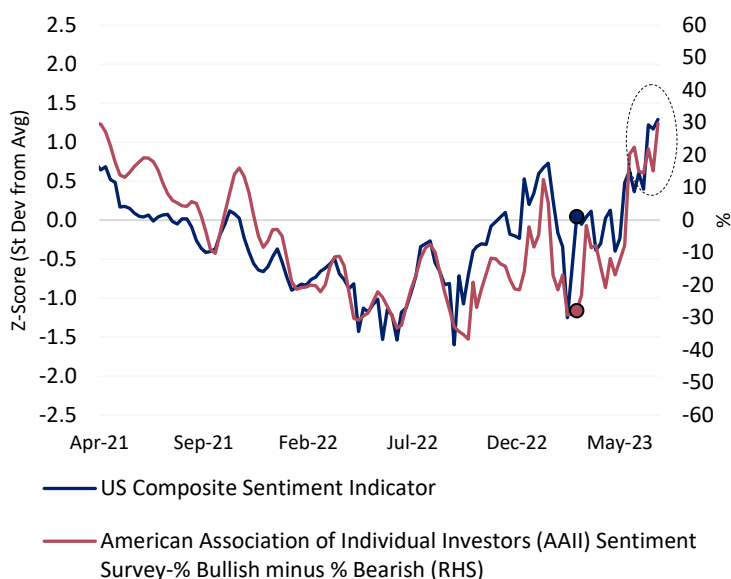


Chart 2: Key components of our US Composite Sentiment Indicator have risen to levels statistically well-above their 5-year averages, registering potentially overbought signals near-term

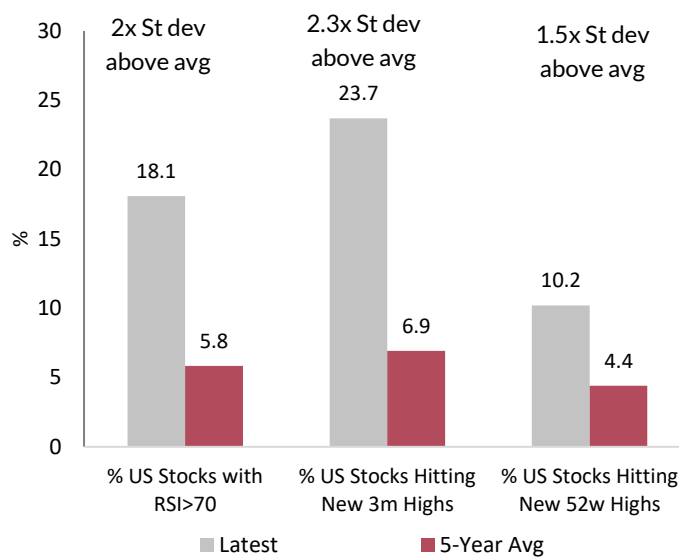


Chart 3: FT Wilshire 5000 sector Relative Strength Indexes (RSI) vs 1m ago –Financials, Resources and Materials and Energy registering overbought RSIs

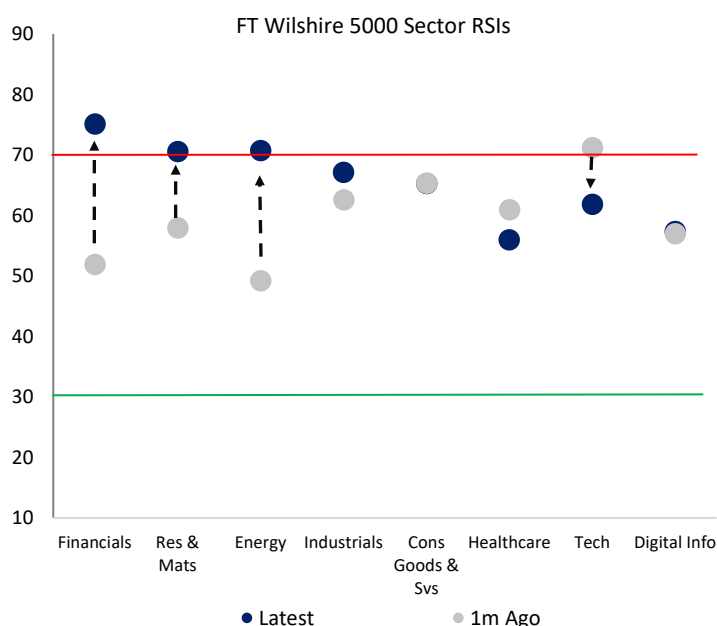
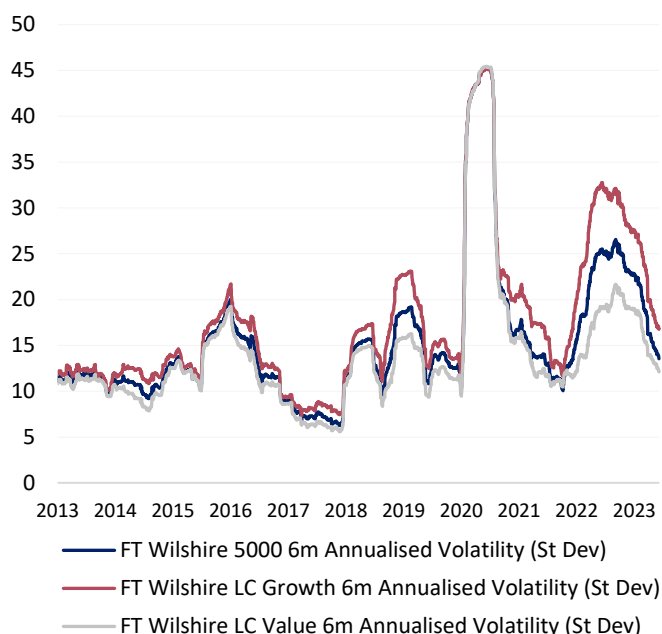


Chart 4: Volatility (measured by 6m annualised st deviation) declined further in July and is now approaching pre-Covid levels



Performance Dispersion Analysis: Broadening out of market returns in recent months but top 10 largest stocks still contribute well over half of the YTD return

Chart 1: The contribution from the top 10 largest stocks has fallen in recent months

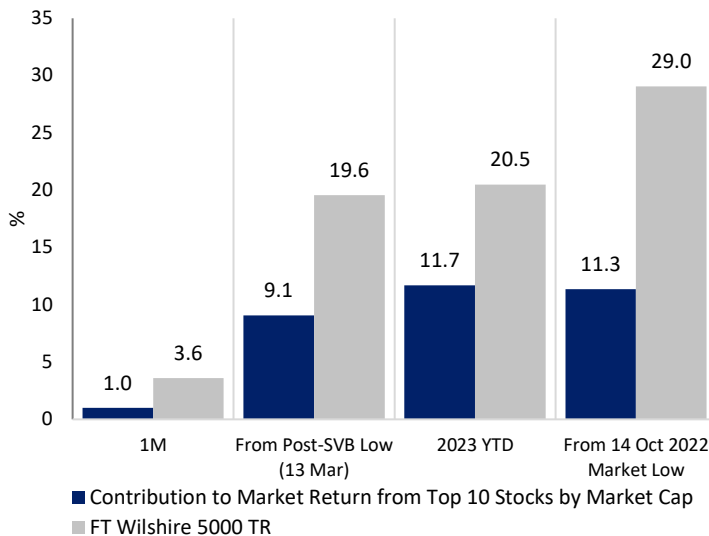
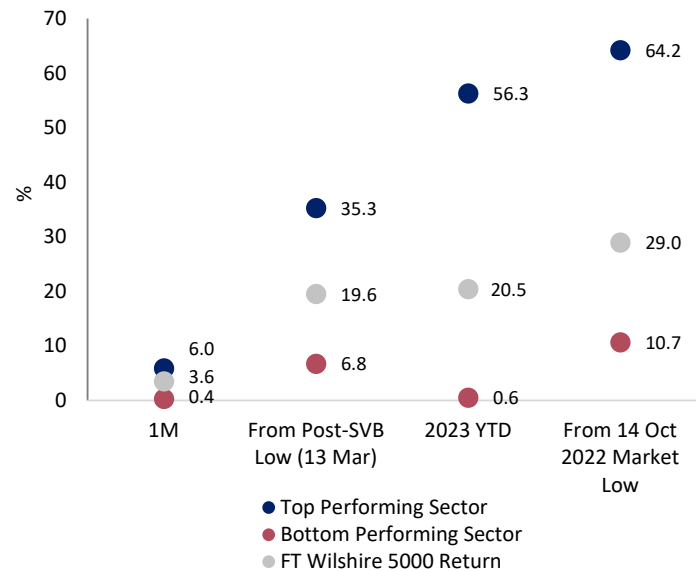


Chart 2: FT Wilshire 5000 top vs bottom performing sector returns across various time periods



1M Returns (USD, TR, %)

FT Wilshire 5000: 3.6%			
	Wght	Return (%)	Contrib (%)
Exxon Mobil Corp	0.8	43.0	0.23
Chevron Corp	0.7	25.7	0.13
Eli Lilly & Co	0.6	18.3	0.09
Microsoft Corp	5.1	-23.3	-1.24
Amazon Com Inc	3.2	-36.3	-1.27
Apple Inc	6.4	-22.8	-1.45

Wilshire Large Cap: 3.4%			
	Wght	Return (%)	Contrib (%)
Exxon Mobil Corp	0.9	43.0	0.26
Chevron Corp	0.8	25.7	0.14
Eli Lilly & Co	0.6	18.3	0.10
Microsoft Corp	5.5	-23.3	-1.35
Amazon Com Inc	3.5	-36.3	-1.39
Apple Inc	6.9	-22.8	-1.58

Wilshire Small Cap: 4.8%			
	Wght	Return (%)	Contrib (%)
Eqt Corp	0.4	59.1	0.13
Alcoa Corporation	0.2	38.5	0.12
Antero Res Corp	0.3	75.1	0.10
Tandem Diabetes Care In	0.2	-60.7	-0.13
Ambarella Inc	0.1	-67.7	-0.14
Synaptics Inc	0.2	-59.2	-0.15

Wilshire Micro Cap: 5.7%			
	Wght	Return (%)	Contrib (%)
Alpha Metallurgical Res	0.4	97.6	0.60
Sierra Oncology Inc	0.4	152.9	0.26
Bp Prudhoe Bay Rty T	0.2	519.5	0.21
Gritstone Oncology Inc	0.2	-81.2	-0.35
Inotiv Inc	0.3	-77.2	-0.36
Greenlight Biosciences H	0.2	-82.1	-0.39

Wilshire Growth: 3.4%			
	Wght	Return (%)	Contrib (%)
Lockheed Martin Corp	0.6	22.5	0.09
Vertex Pharmaceutica	0.3	28.3	0.07
Northrop Corp	0.3	24.6	0.06
Microsoft Corp	10.3	-23.3	-2.40
Amazon Com Inc	6.6	-36.3	-2.46
Apple Inc	13.0	-22.8	-2.79

Wilshire Value: 3.4%			
	Wght	Return (%)	Contrib (%)
Exxon Mobil Corp	2.0	43.0	0.59
Chevron Corp	1.7	25.7	0.32
Eli Lilly & Co	1.3	18.3	0.23
Bk Of America Corp	1.7	-29.3	-0.53
Disney Walt Prodtns	1.2	-39.1	-0.54
J P Morgan Chase & C	2.2	-27.9	-0.70

Perspectives : FT Wilshire 5000 index just 3.1% below all-time high. Equal weight index recovers ground in recent months but remains 21.9% below peak

Chart 1: The FT Wilshire 5000 equal weight index lagged the market cap index in the post-SVB March to April period but has outperformed since the start of May, up 15.5% vs 12.6% for the market cap index

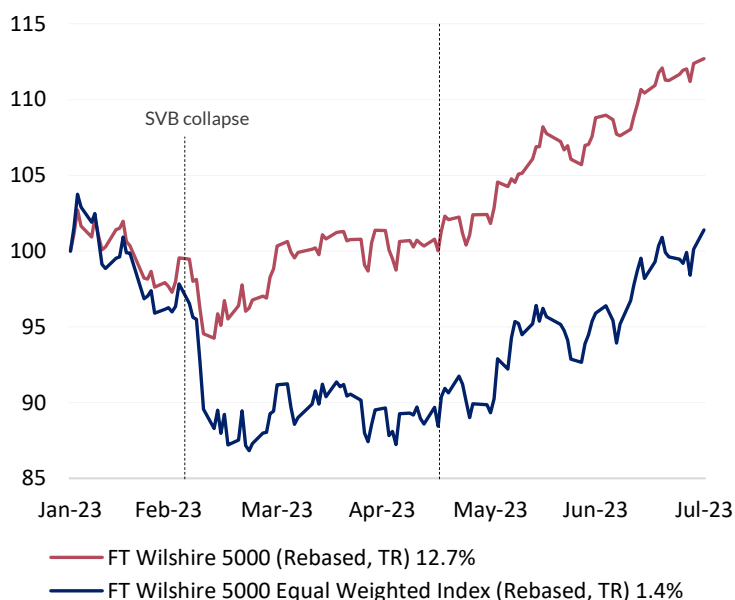


Chart 2: The FT Wilshire 5000 market cap weighted index is just 3.1% below its all-time high on the 3rd January 2022. The equal weighted index is still 21.9% below its peak on 8th November 2021

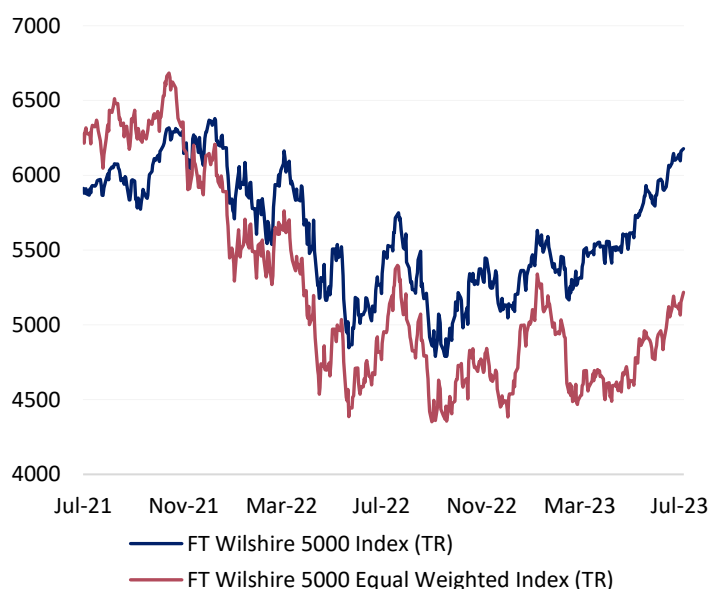


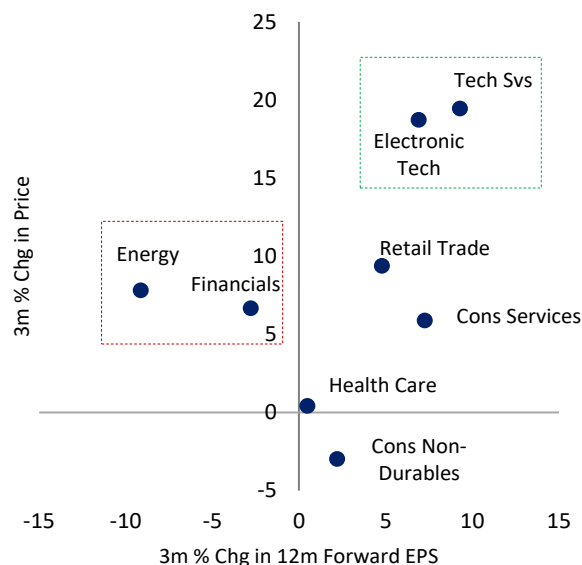
Chart 3: While most US sectors have seen negative revisions to 2023 EPS growth forecasts a strong recovery is expected across the majority of sectors in 2024

US Sector 2023 and 2024 EPS Growth Forecasts (%)*				
	2023	% Chg vs Dec	2024	% Chg vs Dec
Cons Services	63.6	19.0	29.4	3.6
Tech Services	25.0	9.8	18.8	-1.5
Prod Manufacturing	7.3	-1.0	10.8	-0.1
Cons Non-Durables	4.1	-1.4	10.5	0.7
Cons Durables	-11.9	-2.6	21.0	-2.4
Electronic Tech	-1.5	-4.8	21.5	6.1
Retail Trade	17.2	-6.3	20.2	1.8
Financials	4.8	-6.6	9.0	-0.3
Health Care	-20.3	-13.4	23.5	9.4
Energy	-33.6	-22.9	2.8	14.6
US	1.9	-5.1	14.5	5.2

*Using Factset US estimates and sectors

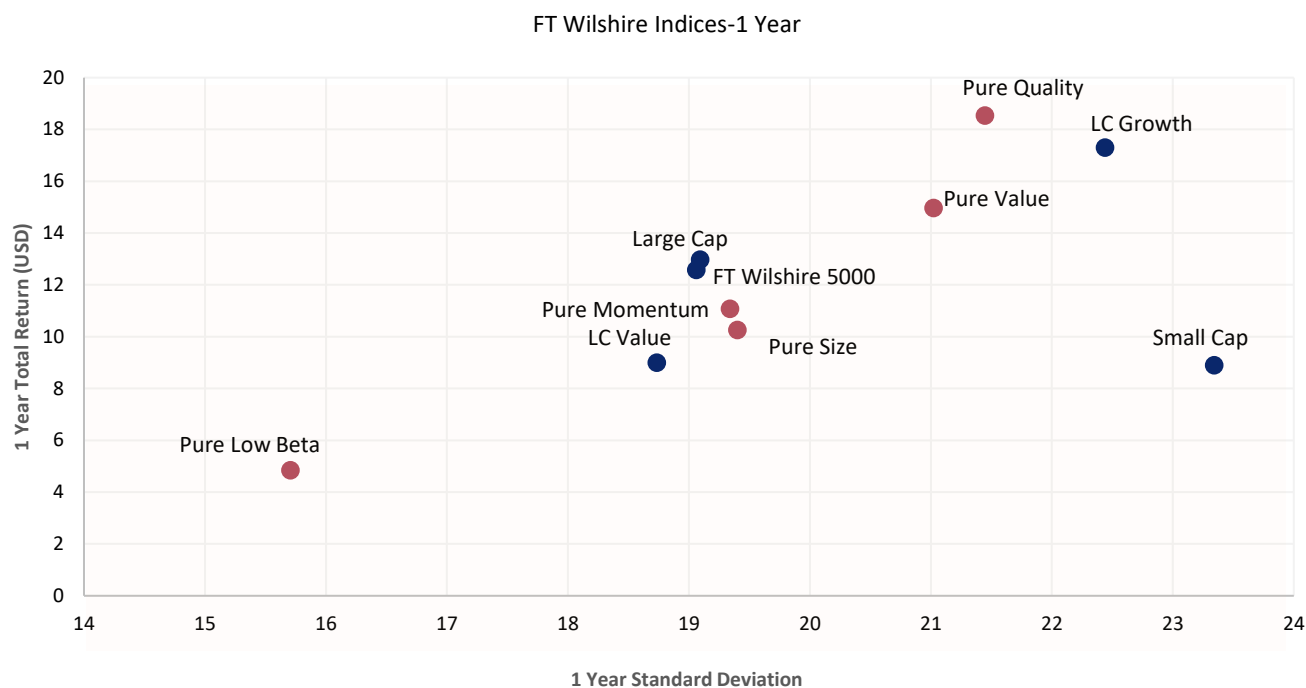
Chart 4: Technology sectors have seen the best price and EPS revision profile over the last 3 months. Energy and financials have seen price appreciation but negative revisions to 12m forward EPS

US Sector 3m % Chg in Price vs 12m Forward EPS*



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 ■



FT Wilshire Global Equity Market Series (GEMS)

1

+10.8%

Rise in Chinese equities
in July (USD, TR)

2

+17.8%

Rise in global Equity
Index YTD (USD, TR)

3

+23.0%

Rise in Japanese equities
YTD (JPY, TR)

4

+8.8%

10-year annualized
return for the global
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 Global ex US in the last three months and YTD after underperforming in 2022



Global Equity Market Synopsis: Risk appetite broadens out in July as recent regional (China) and sector (financials and energy) laggards rebound

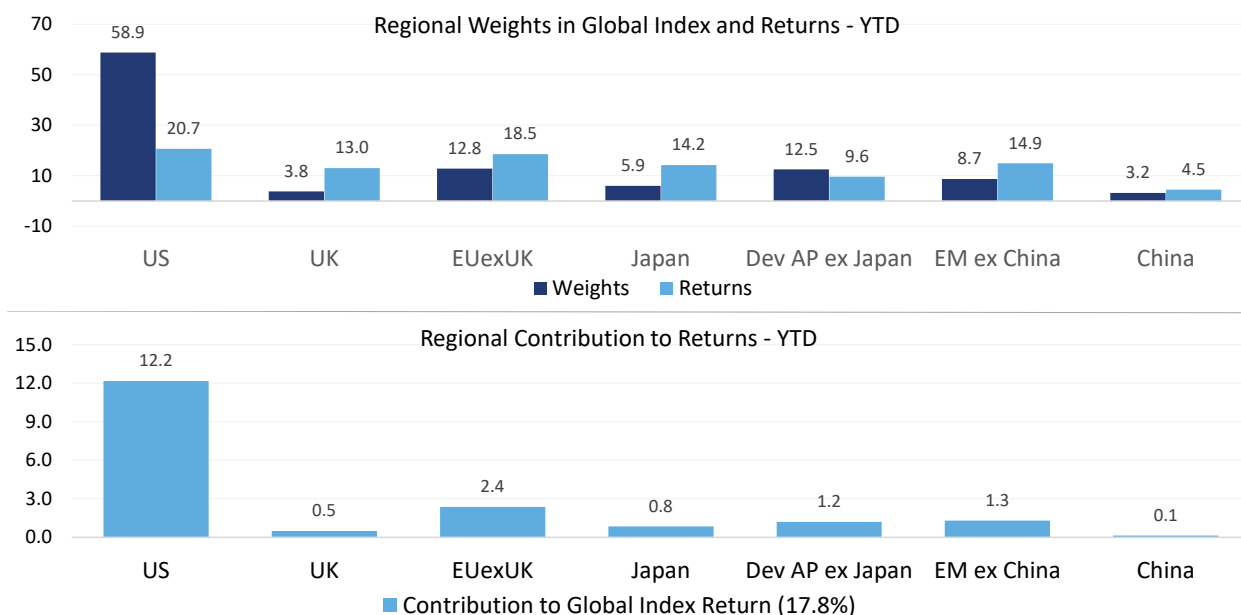
Global Markets Snapshot

- ◆ Chinese equities outperformed in July on economic stimulus hopes, bucking the trend seen YTD (page 19)
- ◆ Decline in the Yen produces large difference between YTD Japanese equity returns when measures in local currency vs USD (page 19)
- ◆ Emerging markets perform strongly in July (page 22)
- ◆ Financials and energy sectors amongst the biggest contributors to returns in July for both the US and global ex US (page 23)
- ◆ Superior contributions from technology and digital info drive US YTD outperformance vs Global ex US (page 24)
- ◆ Regional Relative Strength Indexes (RSIs) signaling emerging markets looking most overbought near-term (page 25)

Key Market Events

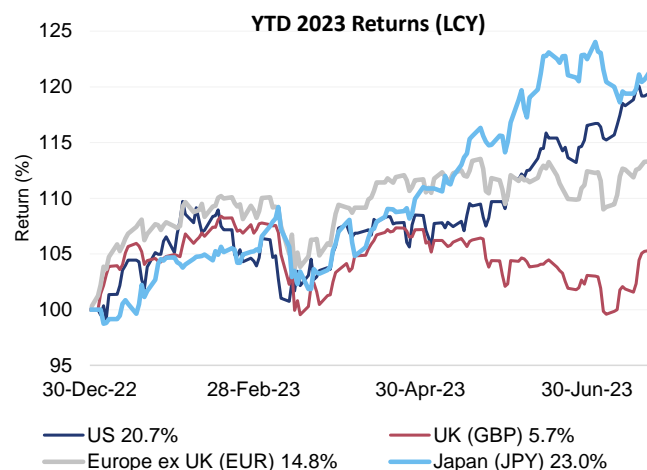
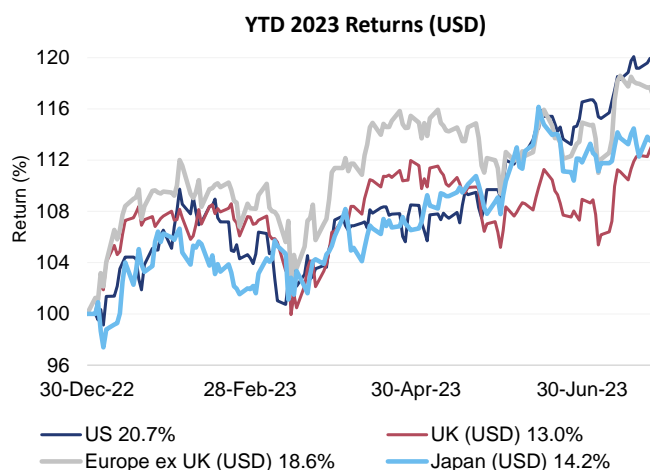
- ◆ February: Reassessment of US interest rate expectations see global bond yields rise, spooking markets
- ◆ March: Silicon Valley Bank (SVB) collapses with contagion fears rippling through to global markets. Credit Suisse turmoil weighs on European banks.
- ◆ March: Markets rebound as bank contagion 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
- ◆ June: Chinese central bank cuts rates on growth concerns.
- ◆ July: Japanese bond yields spike to the highest level in 9 years on change to BoJ yield control policy

Chart 1: Selected regional-weighted contribution to global index return YTD in 2023-US dominates returns in 2023



Region and major market performance: China rebounds on economic stimulus hopes as global equity market rally broadens in July

Regional YTD returns-LCY vs USD—Moves in FX (particularly shifts in the Yen) has meant a large differentials in YTD returns when measuring the performance in LCY vs USD. The charts below shows that in USD terms the US has outperformed. However when shown in local currencies terms we can see that Japan is the top performer so far in 2023.



Regional Returns - Short Term (USD, TR, %)		1M	3M	YTD	12M	2022
China		10.8	5.7	4.5	1.9	-21.8
Emerging		5.8	8.8	11.8	9.8	-17.2
Asia Pacific ex Japan		5.5	6.9	9.6	7.6	-17.3
Emerging ex China		4.3	10.1	14.9	13.1	-15.4
Global ex US		4.0	5.0	13.6	13.2	-15.8
United Kingdom		3.7	0.9	13.0	12.1	-10.8
Global		3.7	8.6	17.8	13.0	-17.9
USA		3.5	11.2	20.7	12.9	-19.4
Europe ex UK		3.3	2.9	18.6	22.0	-19.0
Japan		2.2	7.2	14.2	13.8	-15.5

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

	3Y		5Y		10Y		20Y	
	Aggr	Ann	Aggr	Ann	Aggr	Ann	Aggr	Ann
US	42.7	12.6	72.7	11.5	208.2	11.9	593.7	10.2
UK	35.7	10.7	13.7	2.6	41.1	3.5	217.6	5.9
Europe ex UK	35.5	10.7	47.3	8.1	126.7	8.5	375.2	8.1
Japan	17.6	5.6	13.7	2.6	68.4	5.3	202.9	5.7
Asia Pac ex Japan	13.0	4.1	14.5	2.7	64.8	5.1	491.8	9.3
Emerging	32.6	9.9	27.4	5.0	62.7	5.0	560.2	9.9
China A	68.8	19.1	52.1	8.7	200.5	11.6	240.2	6.3
World ex US	34.4	10.4	44.6	7.7	121.4	8.3	345.7	7.8
World	34.8	10.5	48.0	8.1	133.2	8.8	459.8	9.0

*Long-term returns based on Refinitiv indexes

Source: Wilshire and Refinitiv. Data as of July 31, 2023

The FX adjusted market returns - Yen weakness helps deliver a 26.8% YTD global equity return for a (unhedged) Japanese investor

FX swings can have a large impact on unhedged regional equity returns depending on the location of investors. The largest FX impact YTD and over the last 12 months has been JPY returns for an unhedged Japanese based investor (due to weakness of the yen). YTD global equities have returned 26.8% (in JPY terms), versus a 17.8% return for a USD based investor.

Table 1: Regional returns in various FX - 1M

1M Return (TR, %)	USD	GBP	EUR	JPY
China	10.8	9.5	9.6	8.9
Emerging	5.8	4.6	4.7	4.0
Asia Pacific ex Japan	5.5	4.2	4.4	3.7
United Kingdom	3.7	2.5	2.7	2.0
Global	3.7	2.5	2.6	1.9
USA	3.5	2.3	2.5	1.8
Developed	3.4	2.2	2.3	1.7
Europe ex UK	3.3	2.1	2.2	1.6
Japan	2.2	0.9	1.1	0.4

Table 2: Regional returns in various FX - YTD

YTD Return (TR, %)	USD	GBP	EUR	JPY
USA	20.7	12.8	16.8	29.9
Developed	18.6	10.8	14.8	27.7
Europe ex UK	18.6	10.8	14.8	27.7
Global	17.8	10.1	14.0	26.8
Japan	14.2	6.8	10.6	23.0
United Kingdom	13.0	5.7	9.4	21.7
Emerging	11.8	4.6	8.3	20.4
Asia Pacific ex Japan	9.6	2.5	6.1	18.0
China	4.5	-2.3	1.1	12.5

Global Equity Relative Returns: US performance vs Global ex US loses some momentum. China relative performance rebounds in July.

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



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



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

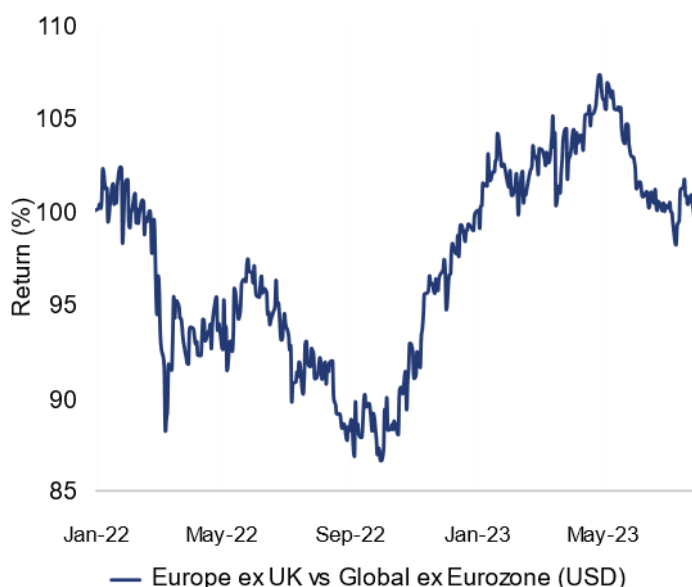
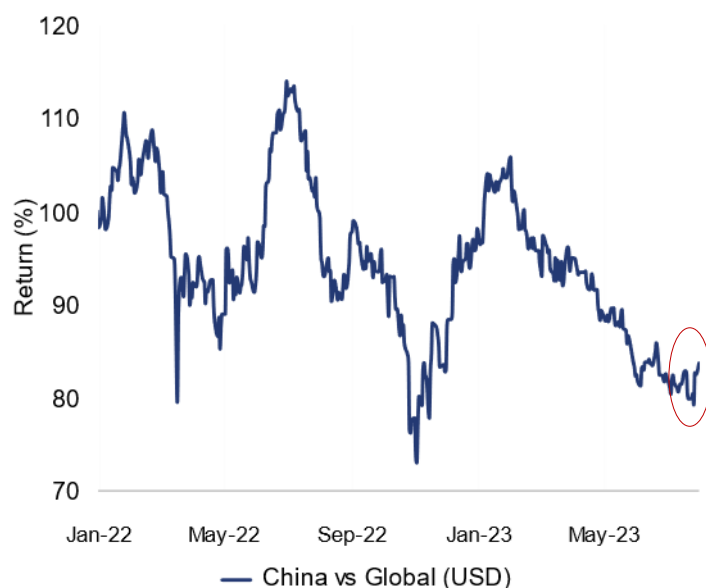


Chart 4: China vs Global ex China (USD, TR, %)



Developed and Emerging market country level performance: Emerging markets outperform in July as China rebounds

Chart 1: July 2023 - The global equity market rally continued to July with broad-based positive returns. Emerging markets outperformed led by strong returns for South Africa and China. Within developed markets Italy, Netherlands and Australia were the strongest performers over the month.

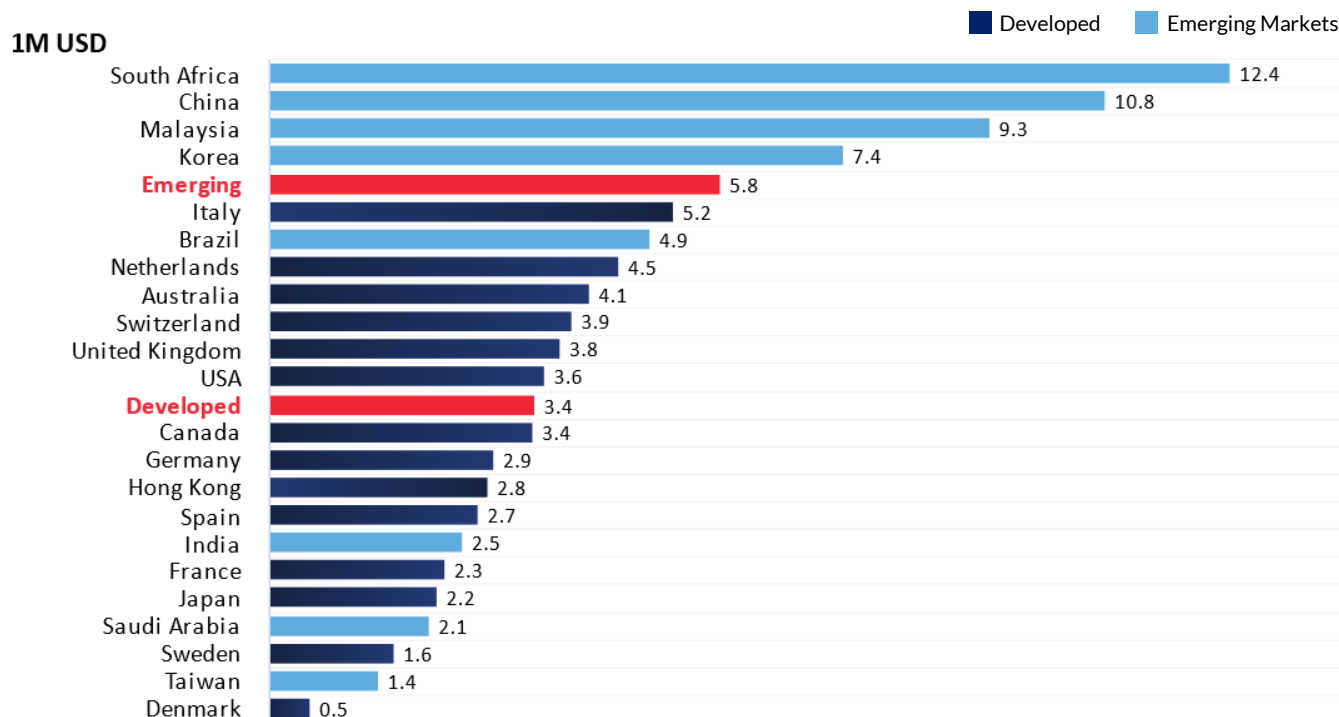
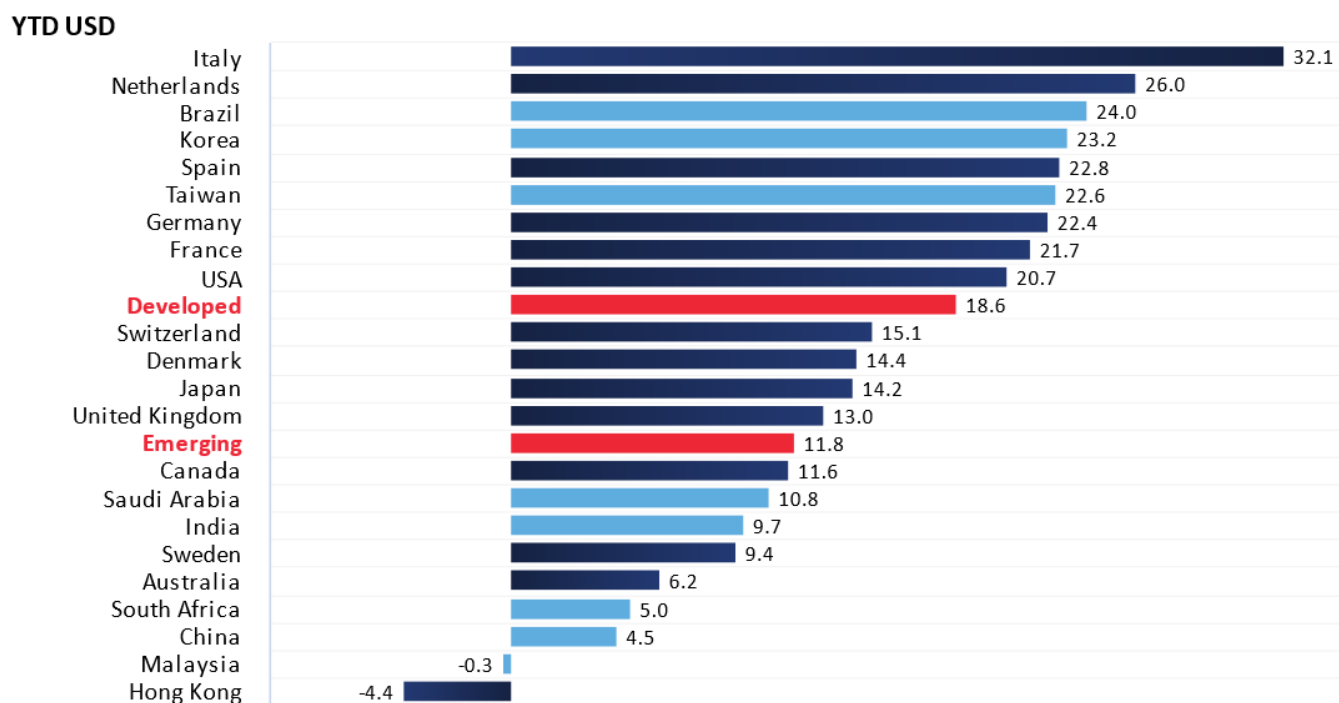


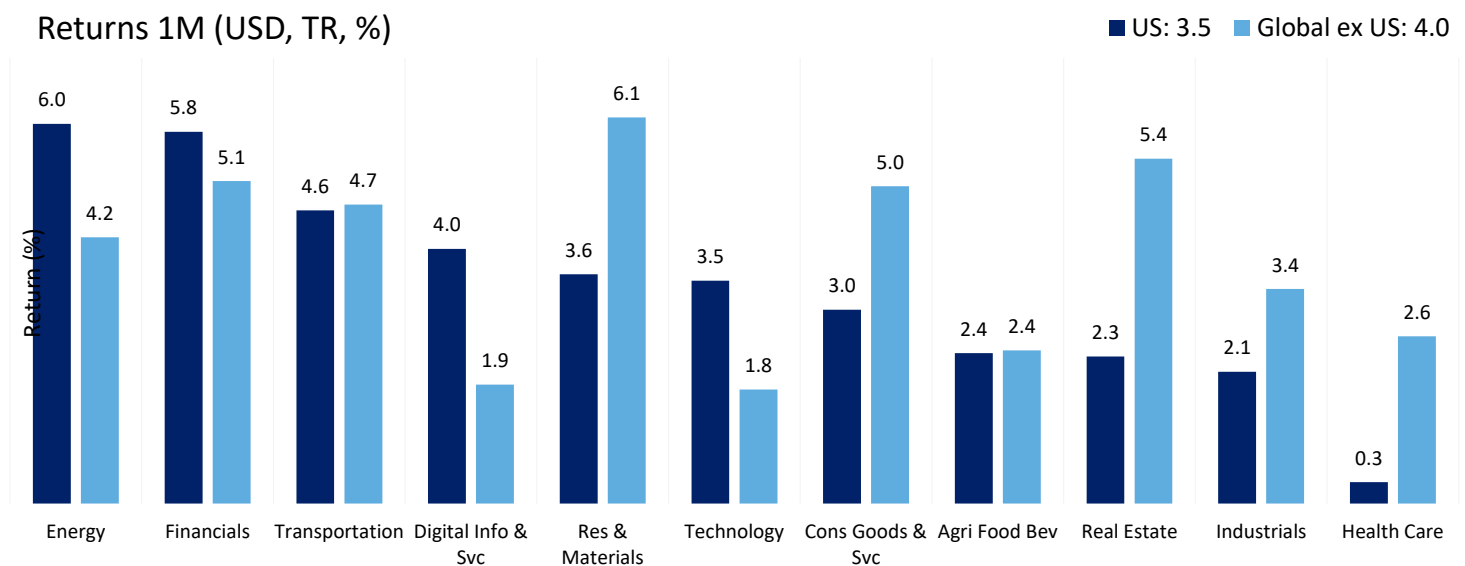
Chart 2: YTD 2023 - European equities are amongst the top performers YTD in 2023. Strong US performance and weak Chinese equity returns have helped developed markets comfortably outperform emerging YTD. Within emerging markets Brazil, Korea and Taiwan have significantly outperformed.



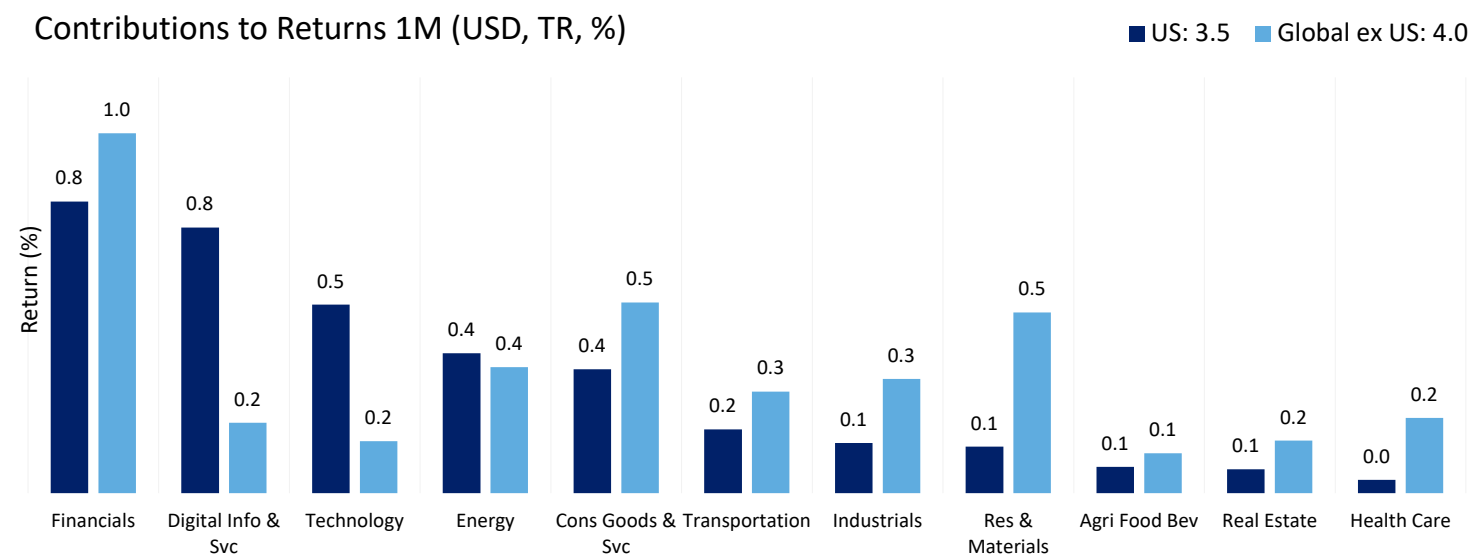
Source: Wilshire. Data as of July 31, 2023

July 2023-US vs Global ex US sector returns and sector-weighted contribution analysis: Financials the biggest driver of returns in July

July 2023 US vs Global ex US Sector Returns. The Global ex US (light blue) outperformed the US (dark blue) across 6 of the 11 sectors last month, most notably in resources and materials, consumer goods, real estate and health care. US saw outperformance in energy, financials and digital information.

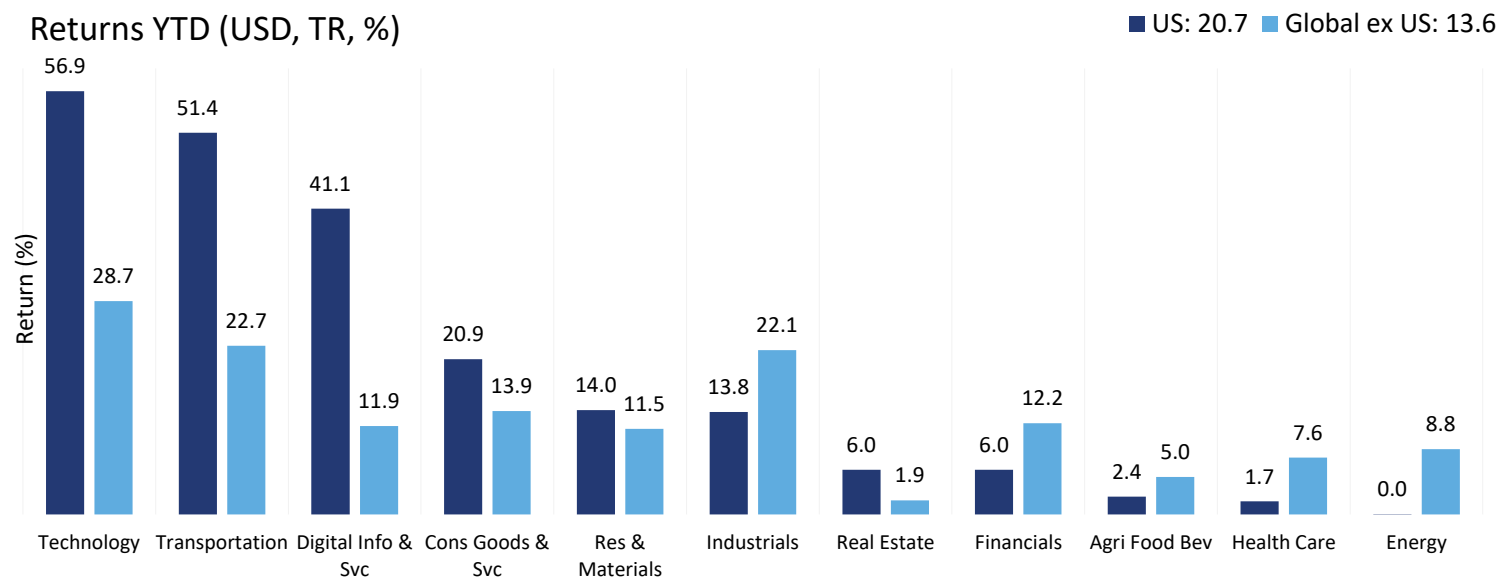


July 2023 US vs World ex US Sector weighted regional contribution analysis. Financials were the main contributors to US and Global ex US returns in July. The superior US digital information contribution offset the smaller contribution from resources and materials relative to the Global ex US.

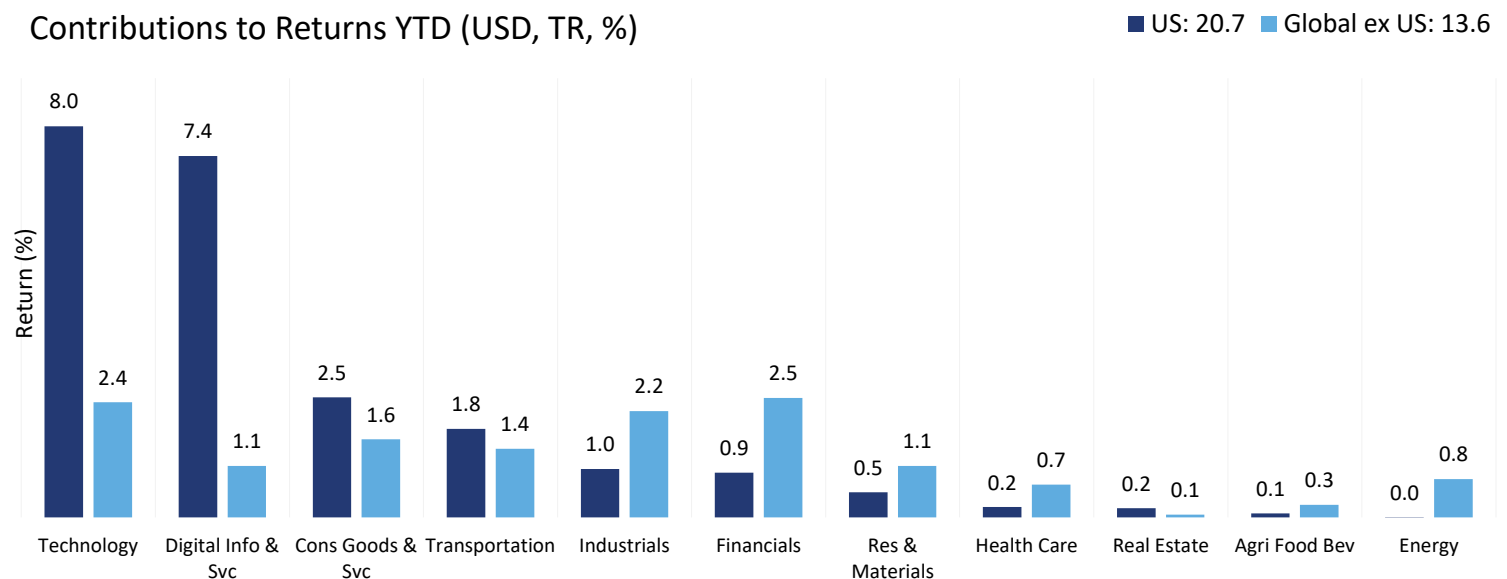


YTD-US vs Global ex US sector returns and sector-weighted contributions: US Technology, transportation and digital info significantly outperform

US vs Global ex US YTD Sector Returns: US (dark blue) technology, transportation and digital information sectors are the standout performers and have significantly outperformed Global ex US (light blue) YTD. Global ex US energy, industrials and financials have outperformed the US.



YTD US vs Global ex US Sector Weighted regional contribution analysis: The superior positive contribution from technology and digital information have been the key drivers of US outperformance vs Global ex US YTD, more than offsetting the modest drag from energy.



Regional level sector weights and returns: 1M and YTD 2023

July 2023 regional sector average weights and returns– Comparing sector weights of the US vs the Global ex US, the US is overweight digital information, technology and health care. The Global ex US is overweight financials, resources and materials and energy.

1M	US		Global 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
Energy	6.0	6.8	4.2	8.7	3.6	16.0	3.5	8.0	7.1	1.7	6.2	6.6	0.0	5.8
Financials	5.8	14.4	5.1	20.5	3.8	19.3	6.0	17.2	8.0	9.0	3.7	26.0	7.1	16.6
Transportation	4.6	4.0	4.7	6.2	1.4	1.2	3.1	6.0	4.4	10.1	7.8	5.9	19.2	8.1
Digital Info & Svc	4.0	19.2	1.9	10.9	4.5	4.6	1.6	6.0	-0.8	27.6	6.3	10.2	9.1	21.7
Res & Materials	3.6	3.7	6.1	8.6	7.0	7.0	6.4	8.2	4.0	5.3	6.6	9.0	8.5	3.7
Technology	3.5	15.5	1.8	8.4	-0.6	0.7	1.0	6.2	0.8	10.2	2.4	15.6	4.6	3.4
Cons Goods & Svc	3.0	11.7	5.0	11.0	4.2	16.3	1.8	12.7	2.7	7.9	11.1	10.3	19.0	23.6
Agri Food Bev	2.4	3.2	2.4	4.8	2.8	8.3	1.5	6.7	1.0	2.8	3.8	2.8	6.4	4.7
Real Estate	2.3	3.0	5.4	2.8	9.2	2.4	9.1	1.1	3.5	3.5	5.2	4.1	10.6	3.4
Industrials	2.1	7.0	3.4	9.8	4.4	11.8	2.0	13.5	3.1	16.0	6.7	4.6	3.6	2.8
Health Care	0.3	11.5	2.6	8.3	0.7	12.5	3.0	14.5	0.1	5.9	4.0	5.0	7.9	6.1
Market Return	3.5		4.0		3.7		3.1		2.2		5.5		10.8	

YTD 2023 regional sector average weights and returns: Comparing YTD sector returns, the US technology, transportation, digital info and consumer goods have significantly outperformed the Global ex US. US industrials, health care, financials and energy have all underperformed.

YTD	US		Global 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	56.9	14.1	28.7	8.2	14.8	0.6	29.6	5.9	28.6	11.4	28.7	15.1	3.3	3.4
Transportation	51.4	3.5	22.7	6.2	29.9	1.0	32.2	5.7	21.0	11.5	19.5	5.8	27.2	7.3
Digital Info & Svc	41.1	18.0	11.9	8.9	11.8	4.8	20.6	5.9	8.6	15.6	11.1	10.7	13.1	20.7
Cons Goods & Svc	20.9	11.8	13.9	11.5	16.6	16.1	26.3	12.4	7.7	9.5	0.7	11.5	-2.6	24.3
Res & Materials	14.0	3.7	11.5	9.2	-2.2	7.5	17.3	8.4	18.9	6.3	10.7	9.5	-0.9	3.9
Industrials	13.8	7.2	22.1	9.9	26.0	11.4	21.1	13.3	24.0	18.1	19.2	4.6	6.2	2.7
Real Estate	6.0	3.2	1.9	3.1	5.9	2.5	2.2	1.2	0.3	4.3	-0.8	4.6	-5.5	3.8
Financials	6.0	15.3	12.2	20.0	20.9	18.7	18.9	17.3	13.0	10.5	5.3	22.8	9.6	16.7
Agri Food Bev	2.4	3.5	5.0	5.2	-1.1	8.5	9.9	7.0	8.8	3.3	-1.1	3.1	-6.7	4.9
Health Care	1.7	12.3	7.6	8.8	7.7	12.8	13.3	14.5	-0.9	7.5	-2.2	5.5	-14.3	6.6
Energy	0.0	7.4	8.8	9.0	12.7	16.0	8.2	8.3	15.1	2.0	5.8	6.9	8.3	5.7
Market Returns	20.7		13.6		13.0		18.5		14.2		9.6		4.5	

Source: Wilshire and Refinitiv. Data as of July 31, 2023

Wilshire Advisors LLC - Performance Report (July 2023)

Regional level sector sector-weighted performance contribution: 1M and YTD 2023

Regional sector-weighted contributions to July returns: Financials were the main contributor to US and Global ex US returns in July. Elsewhere a large contribution from consumer goods and services was the key driver behind the strong outperformance of China last month.

1M	US	Global ex US	UK	EU ex UK	Japan	AP ex Japan	China
	Contr	Contr	Contr	Contr	Contr	Contr	Contr
Financials	0.8	1.0	0.7	1.0	0.7	1.0	1.2
Digital Info & Svc	0.8	0.2	0.2	0.1	-0.2	0.6	2.0
Technology	0.5	0.2	0.0	0.1	0.1	0.4	0.2
Energy	0.4	0.4	0.6	0.3	0.1	0.4	0.0
Cons Goods & Svc	0.4	0.5	0.7	0.2	0.2	1.2	4.5
Transportation	0.2	0.3	0.0	0.2	0.4	0.5	1.6
Industrials	0.1	0.3	0.5	0.3	0.5	0.3	0.1
Res & Materials	0.1	0.5	0.5	0.5	0.2	0.6	0.3
Agri Food Bev	0.1	0.1	0.2	0.1	0.0	0.1	0.3
Real Estate	0.1	0.2	0.0	0.1	0.1	0.2	0.4
Health Care	0.0	0.2	0.1	0.4	0.0	0.2	0.5
Market Return	3.5	4.0	3.7	3.1	2.2	5.5	10.8

Regional sector-weighted contributions to YTD returns: The sizeable positive contributions from US technology and digital info has been the biggest driver of US YTD outperformance.

YTD	US	Global ex US	UK	EU ex UK	Japan	AP ex Japan	China
	Contr	Contr	Contr	Contr	Contr	Contr	Contr
Technology	8.0	2.4	0.1	1.8	3.2	4.3	0.1
Digital Info & Svc	7.4	1.1	0.6	1.2	1.3	1.2	2.7
Cons Goods & Svc	2.5	1.6	2.7	3.3	0.7	0.1	-0.6
Transportation	1.8	1.4	0.3	1.8	2.4	1.1	2.0
Industrials	1.0	2.2	3.0	2.8	4.3	0.9	0.2
Financials	0.9	2.5	3.9	3.3	1.4	1.2	1.6
Res & Materials	0.5	1.1	-0.2	1.5	1.2	1.0	0.0
Health Care	0.2	0.7	1.0	1.9	-0.1	-0.1	-0.9
Real Estate	0.2	0.1	0.2	0.0	0.0	0.0	-0.2
Agri Food Bev	0.1	0.3	-0.1	0.7	0.3	0.0	-0.3
Energy	0.0	0.8	2.0	0.7	0.3	0.4	0.5
Market Returns	20.7	13.6	13.0	18.5	14.2	9.6	4.5

Source: Wilshire and Refinitiv. Data as of July 31, 2023

Regional Equities sector performance dispersion over 1 month and YTD: Narrowing of sector dispersion over the month in US, Europe and Japan

Chart 1: 1M vs YTD sector dispersion-Narrowing of sector dispersion over the month, US wide YTD

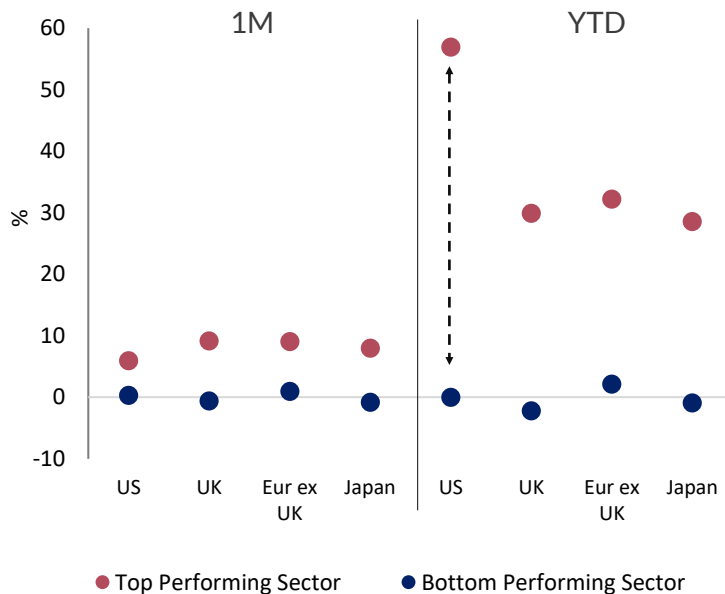


Chart 2: 1M vs YTD sector dispersion-Widest sector performance dispersion in China

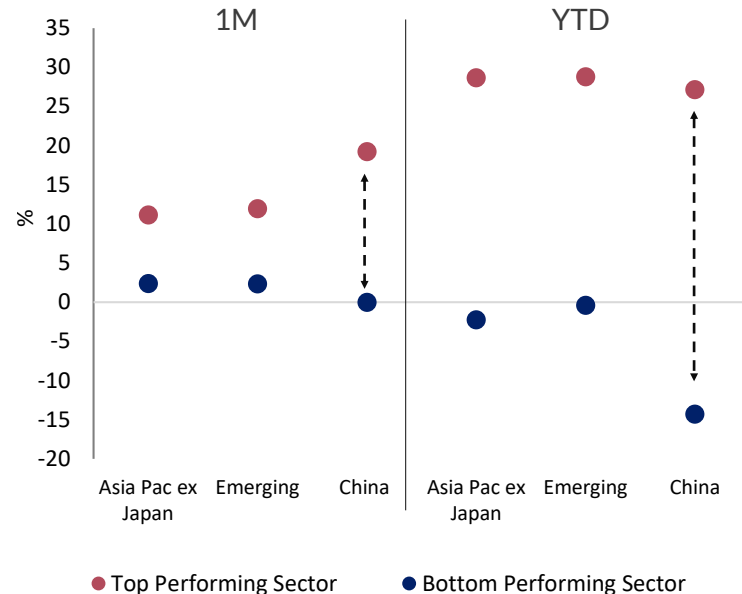


Chart 3: 3M total return (USD) decomposition*-PE re-rating drives returns in US and Japan

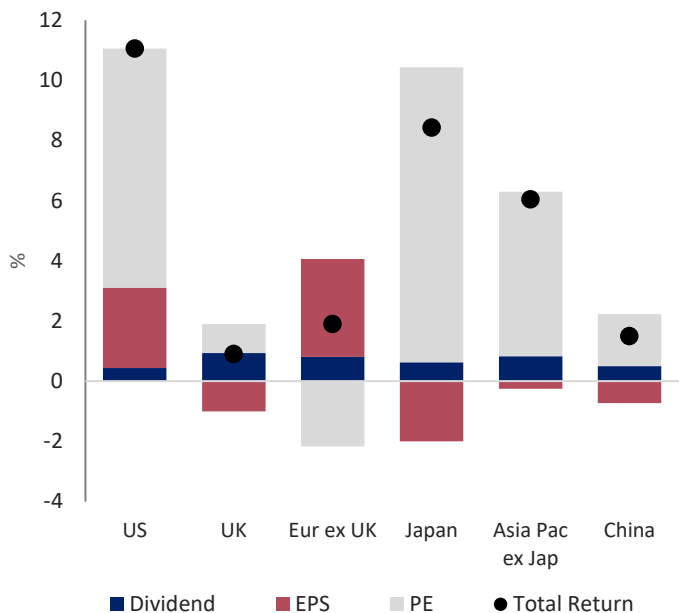
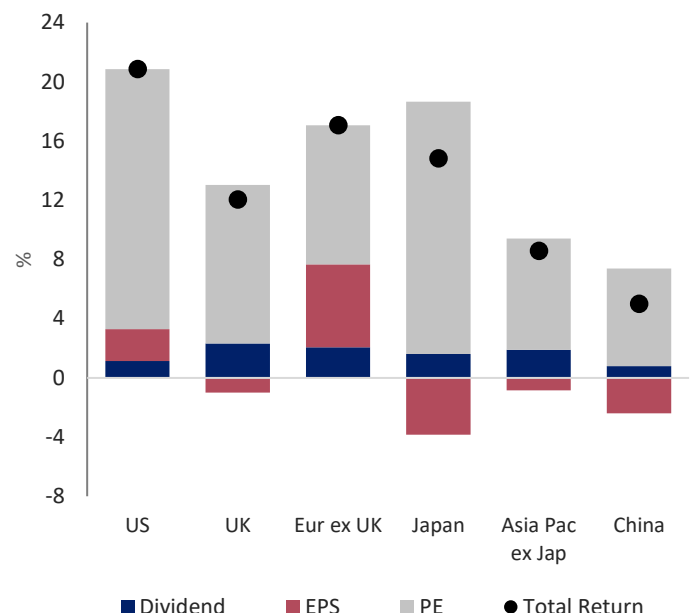


Chart 4: YTD 2023 total return (USD) decomposition*-PE re-rating main driver returns in across the regions



*Based on Refinitiv and Factset data

Technical analysis: FT Wilshire global large cap relative to small cap see positive moving average intersect pattern. EM registering overbought signal near-term

Chart 1: FT Wilshire global large cap relative to small cap saw a positive 'golden cross' moving average intersect on 6 May 2023

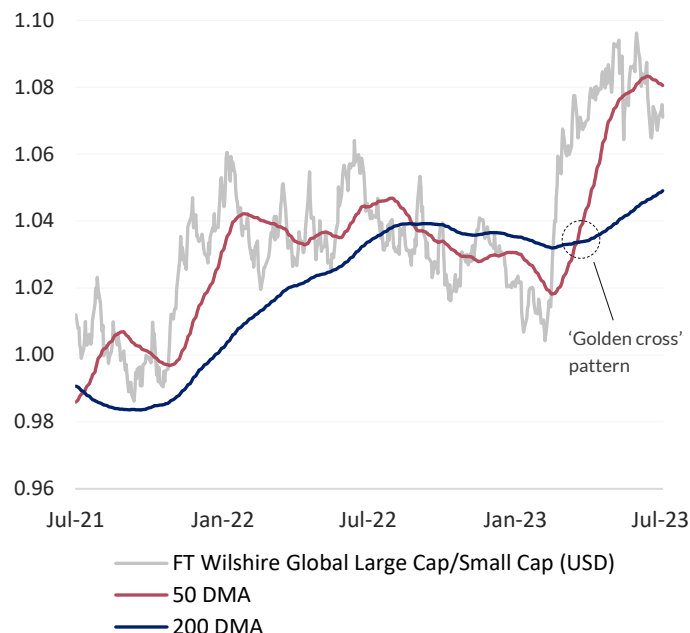


Chart 2: FT Wilshire regional relative RSIs (Relative Strength Index) readings (USD)-absolute and relative- Emerging markets registering overbought signal near-term

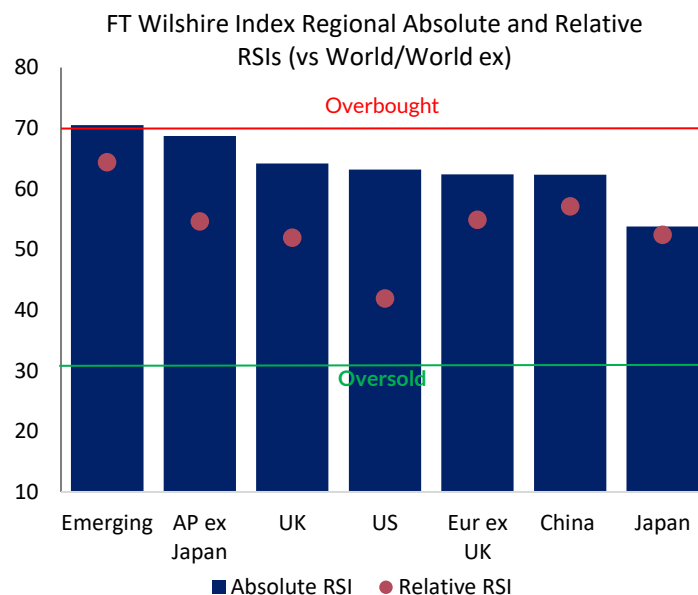


Chart 3: FT Wilshire regional index positioning vs 200DMA-US and EM gaining momentum. UK and Europe ex UK losing momentum

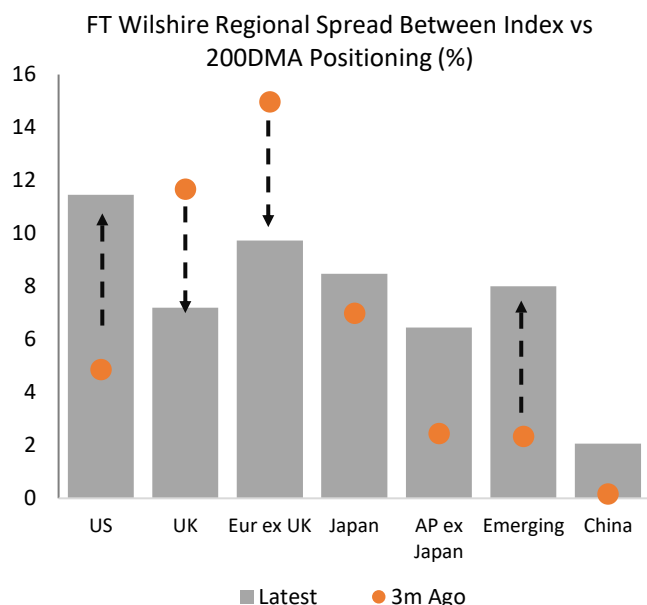
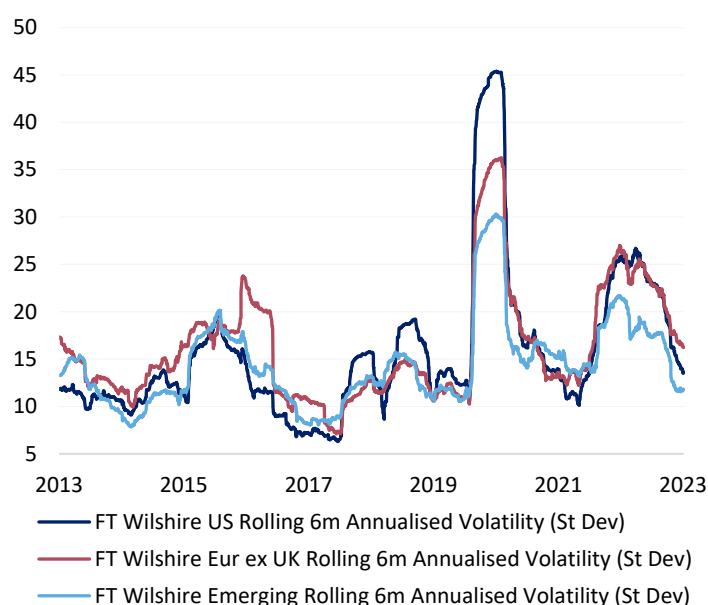
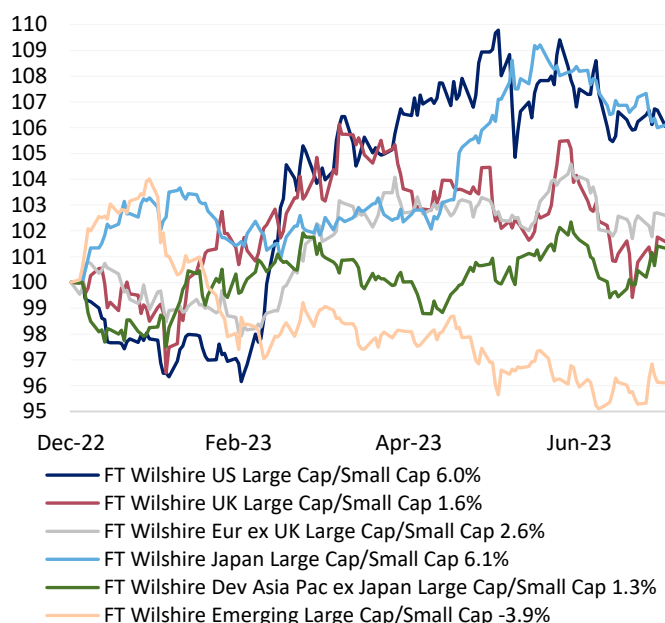


Chart 4: Volatility (rolling 6m annualised) declined further in July back towards pre-Covid levels

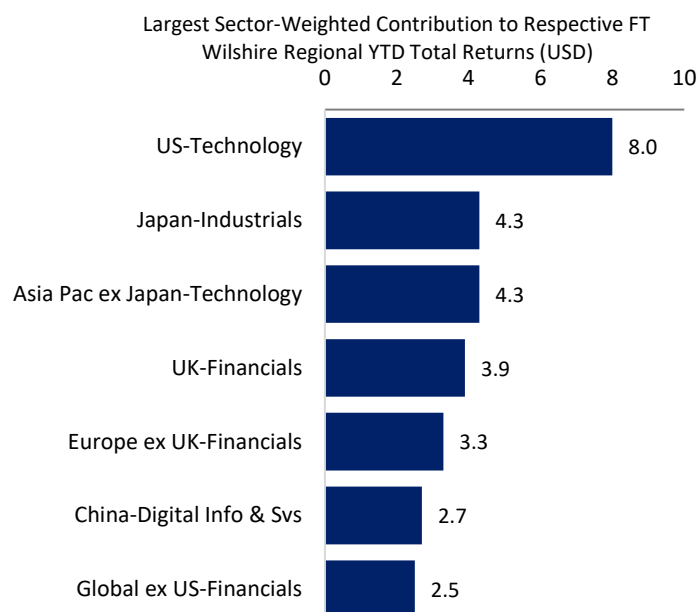


Perspectives: A deeper dive into regional size and sector-weighted contributions, and comparing regional EPS profiles and sector EPS growth forecasts

Regional large cap relative to small cap performance (USD)-US and Japan have seen more pronounced large cap outperformance YTD

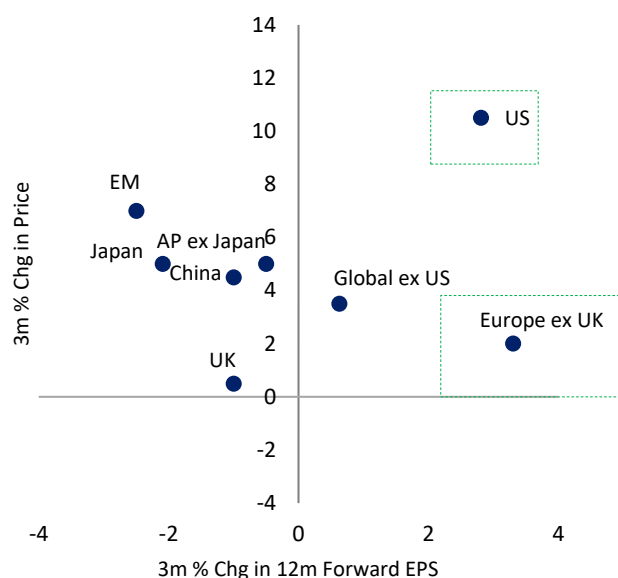


Regional largest sector-weighted contributions to respective FT Wilshire regional YTD total returns- US technology by far the largest contributor in 2023



Comparing regional 3 month price change vs 3m revisions to 12m forward EPS estimates-US has seen the best price and EPS profile over the last 3 months

Regional 3m % Chg in Price vs 12m Forward EPS*



*Based on Factset data

Comparing the 2023 and 2024 EPS growth forecasts across the regions for the largest respective sectors

Regional Largest Sector 2023 and 2024 EPS Growth Forecasts (%)*				
	2023	% Chg vs Dec	2024	% Chg vs Dec
US Technology Services	25.0	9.8	18.8	-1.5
UK Financials	23.7	11.5	6.0	-3.4
Europe ex UK Finance	36.7	20.6	6.4	-5.3
Japan Industrials	-0.3	-5.3	12.4	2.1
Asia Pac ex Japan Financials	10.8	-1.2	11.4	-0.1
Emerging Financials	10.8	-1.2	11.4	-0.1
China Cons Goods	11.2	3.5	7.7	-1.8
Global ex US Financials	14.1	2.3	8.5	-1.9

*Based on Factset data

Market Capitalization of major markets and Regional sector weighting comparisons

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

	Latest	% Global Index	10Y Ago	% Global Index
USA	43,805	58.7	17,899	48.1
Japan	4,979	6.7	2,717	7.3
UK	2,649	3.6	2,750	7.4
India	2,540	3.4	457	1.2
Canada	2,236	3.0	1,480	4.0
China	2,201	3.0	651	1.8
Switzerland	1,942	2.6	1,148	3.1
France	1,892	2.5	1,159	3.1
Australia	1,404	1.9	1,135	3.1
Germany	1,387	1.9	1,103	3.0
Taiwan	1,311	1.8	516	1.4
Korea	1,023	1.4	622	1.7
Global	74,568		37,194	

Chart 2: Markets size (USD, Bn) and weights - Regions as % of Global Index

	Latest	% Global Index	10Y Ago	% Global Index
Developed	65,057	87.2	33,250	89.4
USA	43,805	58.7	18,436	49.6
Asia Pacific ex Japan	9,782	13.1	4,582	12.3
Emerging	9,510	12.8	3,944	10.6
Europe ex UK	9,198	12.3	6,149	16.5
Japan	4,979	6.7	2,751	7.4
UK	2,649	3.6	2,772	7.5
China	2,201	3.0	626	1.7
Global	74,568		37,194	

Chart 3: Markets size (USD, Bn) and weights - Developed and Emerging markets

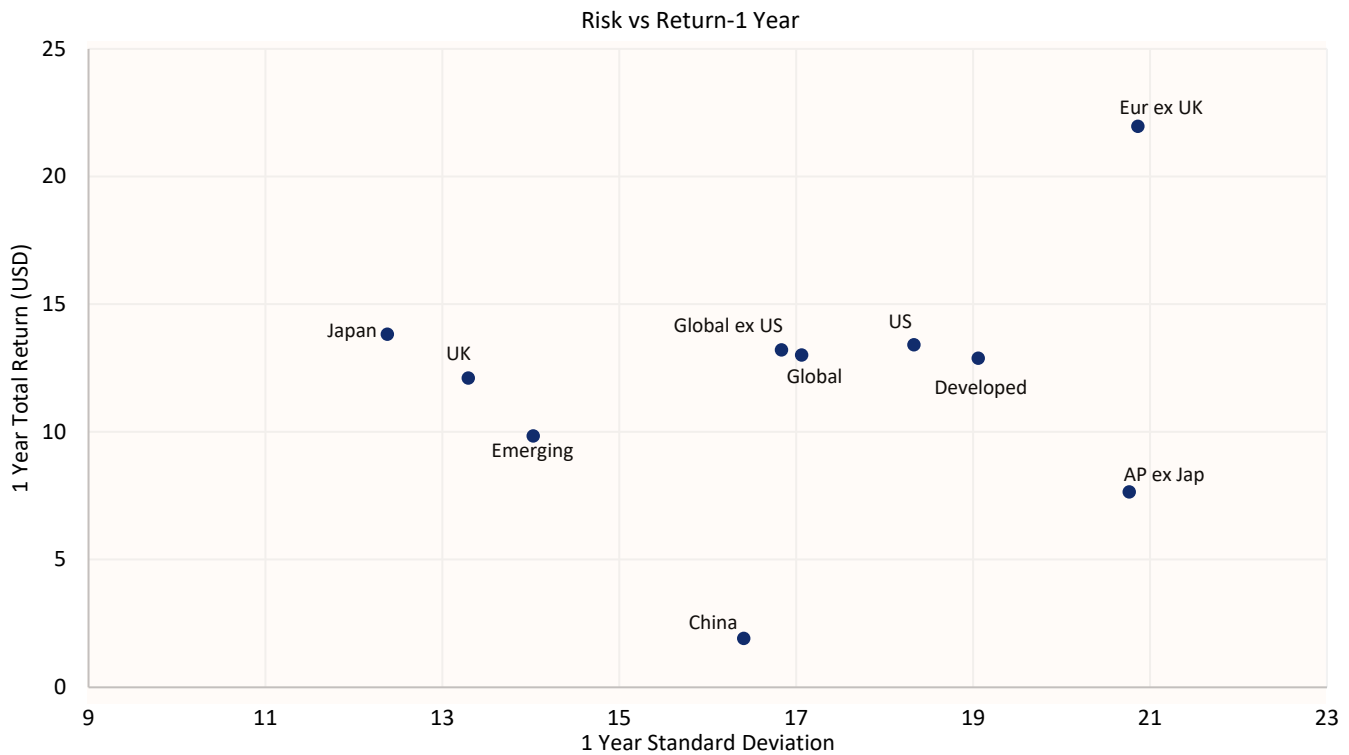
Developed	Latest	% Developed	10Y Ago	% Developed
USA	43,805	67.3	43,805	131.7
Japan	4,979	7.7	4,979	15.0
UK	2,649	4.1	2,649	8.0
Canada	2,236	3.4	2,236	6.7
Switzerland	1,942	3.0	1,942	5.8
Developed	55,610		43,805	

Emerging	Latest	% Emerging	10Y Ago	% Emerging
India	2,540	26.7	386	9.8
China	2,201	23.1	626	15.9
Taiwan	1,311	13.8	496	12.6
Korea	1,023	10.8	600	15.2
Brazil	446	4.7	391	9.9
Emerging	7,521		2,498	

Chart 4: Markets size (USD, Bn) - US vs Global ex US sectors

Sector	US		Global ex US	
	Latest	%	Latest	%
Digital Info	8,400	19.2	2,467	8.0
Technology	6,845	15.6	3,273	10.6
Financials	6,393	14.6	6,867	22.3
Cons Goods & Sv	5,132	11.7	3,347	10.9
Health Care	4,956	11.3	2,493	8.1
Energy	3,026	6.9	2,603	8.5
Industrials	3,022	6.9	2,948	9.6
Transportation	1,716	3.9	1,887	6.1
Res & Materials	1,641	3.7	2,616	8.5
Agriculture	1,399	3.2	1,419	4.6
	42,529		29,919	

Risk vs Return: Regional equities 1 year and 10 years



Source: Wilshire and Refinitiv. Data as of July 31, 2023

Fixed Income and FX

1

53bps

3 month rise in US 10-year yield

2

-57bps

3 month decline in US high yield corporate spread

3

-1.0%

Decline in DXY dollar index in July

4

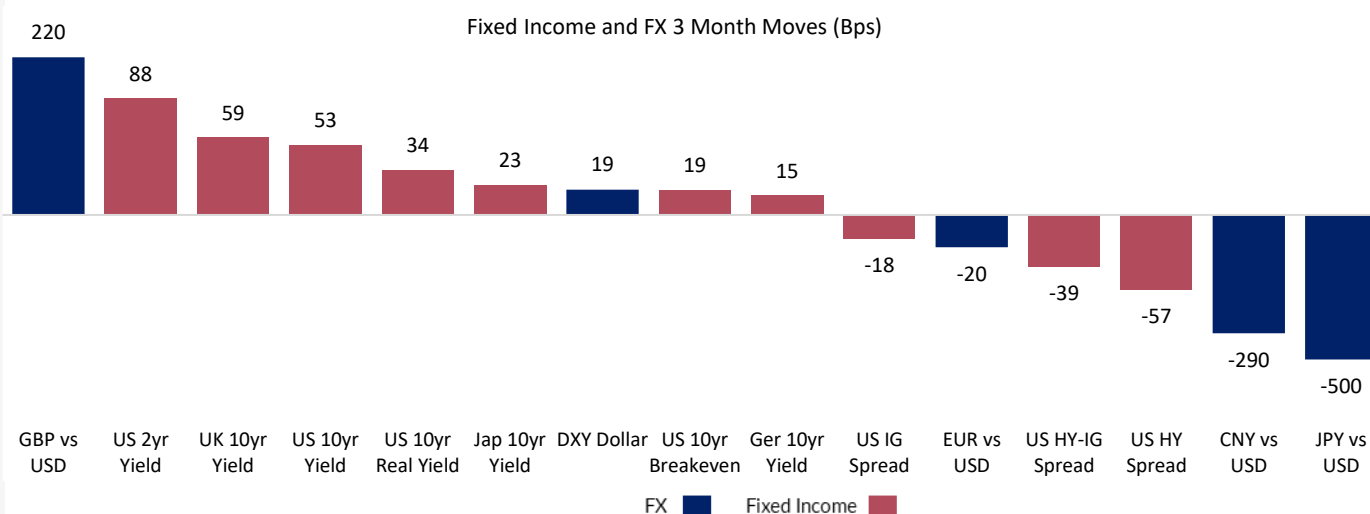
2.8%

Rise in JPY vs USD in July

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- 29 Fixed income performance
- 30 Fixed income market commentary
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Moves in key FX and fixed income markets over the last 3 months



Source: Refinitiv and Factset. Data as of July 31, 2023

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

Chart 1: 1-3 year government bond returns

USD (TR, %)	Yields			Returns	
	Latest	1M	31-Dec-22	1M	YTD
UK (1-3yr)	5.0	5.2	3.6	2.2	6.6
China (1-3yr)	2.0	2.1	2.3	2.0	-0.8
Aus (1-3yr)	4.1	4.1	3.3	1.9	0.0
Italy (1-3yr)	3.7	3.6	3.2	1.8	4.9
Japan (1-3yr)	-0.1	-0.1	0.0	1.6	-7.0
EURO* (1-3yr)	3.1	3.1	2.4	1.5	3.8
Can (1-3yr)	4.8	4.6	3.9	0.6	3.6
US (1-3yr)	5.0	4.8	4.4	0.4	1.3

Chart 2: 7-10 year government bond returns

USD (TR, %)	Yields			Returns	
	Latest	1M	31-Dec-22	1M	YTD
UK (7-10yr)	4.2	4.3	3.6	2.5	4.8
China (3-5yr)	2.3	2.4	2.6	2.1	-0.1
Aus (7-10yr)	4.0	3.9	3.8	1.5	1.4
Italy (7-10yr)	3.9	3.8	4.3	1.5	10.0
EURO* (7-10yr)	2.4	2.3	2.4	0.9	5.1
Japan (7-10yr)	0.3	0.2	0.4	0.2	-6.8
US (7-10yr)	3.9	3.7	3.7	-0.6	1.0
Can (7-10yr)	3.6	3.4	3.2	-0.9	2.7

Chart 3: Inflation Linked bond returns

USD (TR, %)	Yields			Returns	
	Latest	1M	31-Dec-22	1M	YTD
Aus IL (All)	1.3	0.9	0.6	2.3	4.3
Italy IL (All)	1.7	1.6	1.9	2.1	10.7
UK IL (5-10yr)	0.7	0.7	0.2	2.1	8.6
EURO* IL (5-10yr)	0.9	0.8	0.8	1.7	7.3
Japan* IL (5-10yr)	-0.9	-0.9	-0.6	1.1	-4.1
US IL (5-10yr)	1.7	1.6	1.6	0.5	2.2
Can IL (All)	1.8	1.6	1.3	-2.3	-0.9

Chart 4: Investment grade & high yield returns

USD (TR, %)	Yields			Returns	
	Latest	1M	31-Dec-22	1M	YTD
UK IG (All)	6.2	6.5	5.7	3.6	8.5
UK HY (All)	10.3	10.6	10.3	3.4	14.3
EURO HY (All)	7.4	7.5	7.6	2.2	9.0
EURO IG (All)	4.3	4.3	4.1	2.1	6.5
Japan BBB (All)	1.3	1.3	1.6	1.5	-5.3
US HY (All)	8.4	8.8	8.7	1.4	6.9
Japan IG (All)	0.7	0.7	0.9	1.3	-6.0
US IG (All)	5.6	5.5	5.4	0.4	3.7

Fixed Income key observations: Japanese 10-year yield hits the highest level in nearly nine years on BoJ policy change. US corporate spreads continue to narrow (decline) .

Chart 1: Most regional 10yr yields remain close to their 12 month highs. The Japanese 10-year has hit the highest level October 2014.

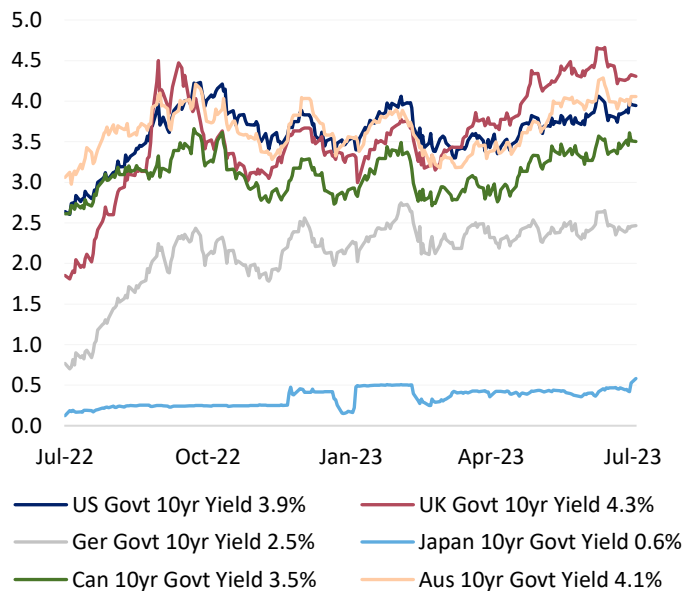


Chart 2: 10-2yr curves have steepened modestly from the early July lows but remain deeply inverted

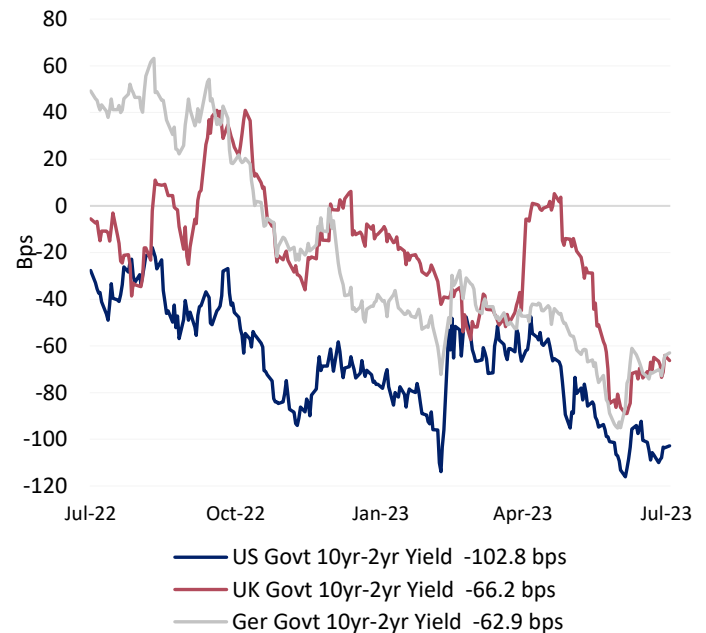


Chart 3: Over the past 12 months the rise in nominal bond yields has almost entirely been driven by the back up in real yields in the US, UK and Europe

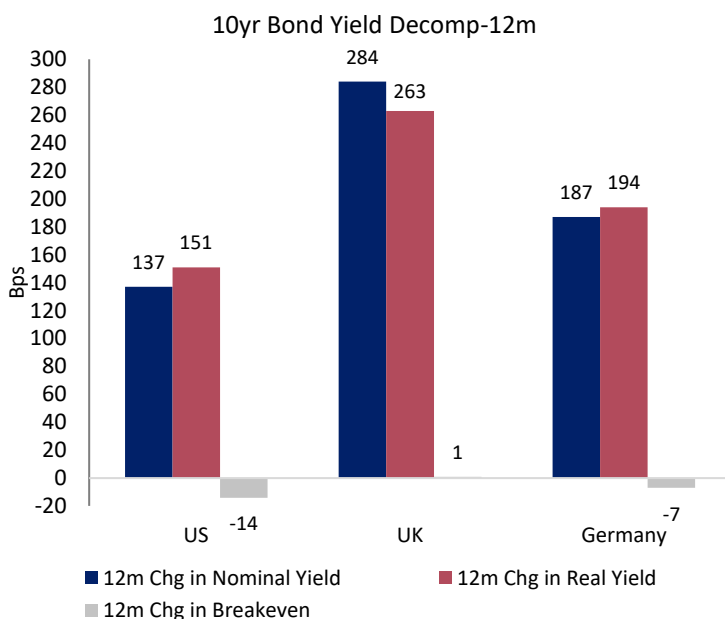
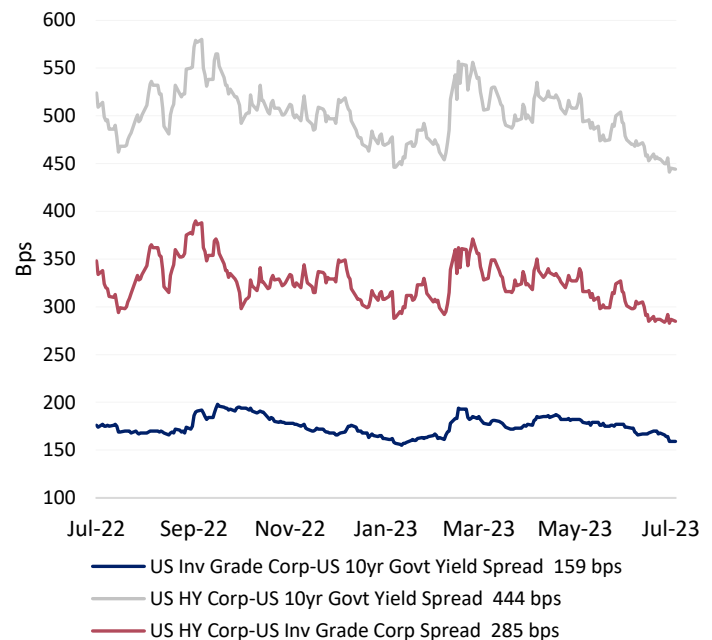


Chart 4: US corporate spreads have continued to trend lower in recent months.



FX return perspectives: Japanese Yen initially spikes higher on Bank of Japan policy tweak. Dollar rallies from the lows in the second half of July.

Chart 1: The DXY dollar regained some ground in the latter half of July but still declined –1.0% on the month

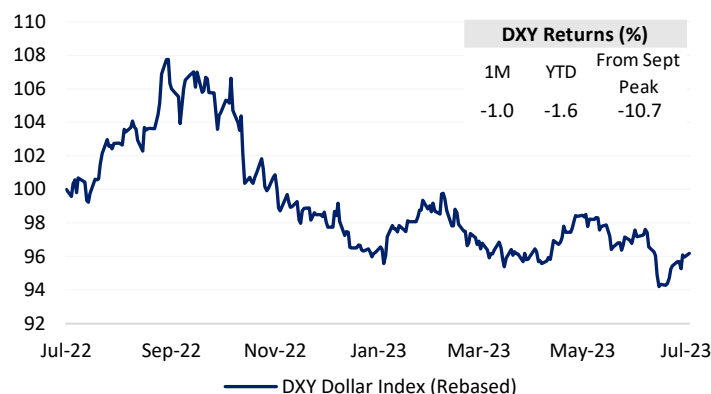


Chart 2: Long term view of the DXY Dollar Index

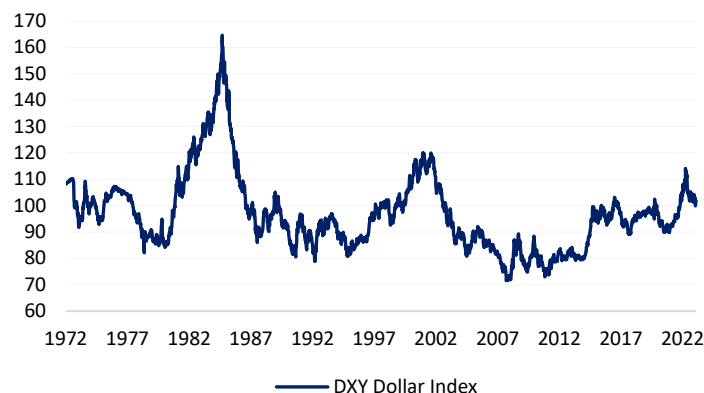


Chart 3: Regional Real Effective Exchange Rate returns-12 months (rebased)

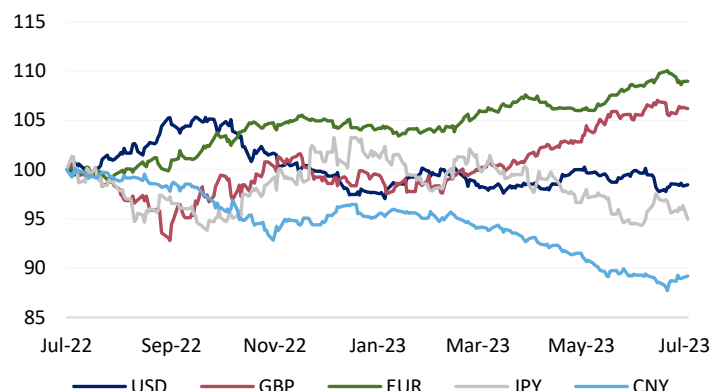


Chart 4: Regional Real Effective Exchange Rate returns over 10 years (rebased)

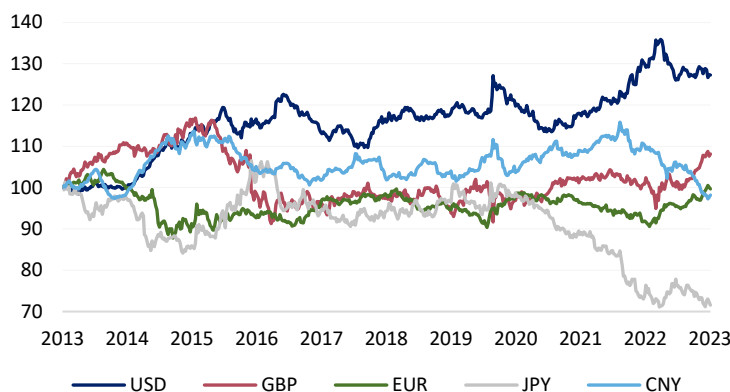


Chart 5: USD returns vs JPY, Euro, GBP and Renminbi spot rate-12 months (rebased)

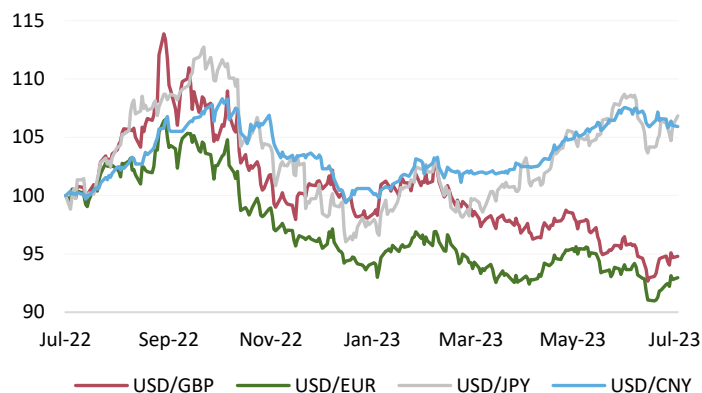
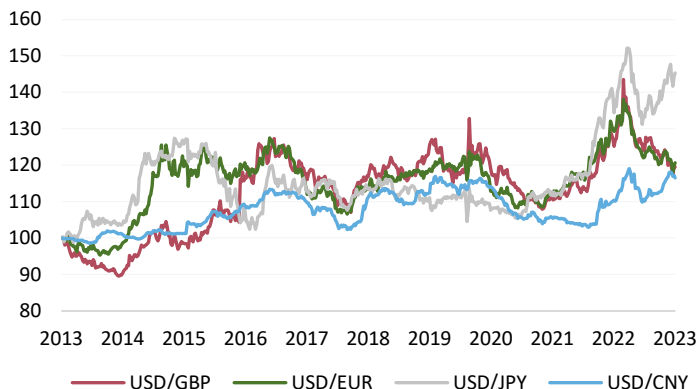


Chart 6: USD returns vs JPY, Euro, GBP and Renminbi spot rate returns over 10 years (rebased)



FX spot rate returns from a regional perspective

Most major currencies continued to make ground against the dollar in July. The Japanese Yen spiked higher as the Bank of Japan made changes to its government bond yield control policy. The Yen has still seen significant declines YTD.

Moves vs USD (TR, %)	1M	3M	YTD	12M
JPY	2.8	-5.0	-6.0	-4.6
CHF	2.7	2.6	6.1	9.1
CNY	1.3	-2.9	-2.3	-5.4
GBP	1.0	2.2	6.1	5.5
AUD	0.8	1.7	-1.4	-3.8
EUR	0.8	-0.2	2.7	7.6
CAD	0.4	2.8	2.8	-3.0

Moves vs EUR (TR, %)	1M	3M	YTD	12M
CHF	2.1	2.8	3.3	1.6
JPY	1.6	-5.9	-9.9	-12.3
CNY	0.7	-3.0	-6.4	-12.6
AUD	0.2	2.1	-3.8	-10.7
GBP	0.2	2.5	3.5	-2.2
CAD	-0.4	3.0	0.0	-9.9
USD	-0.8	0.2	-2.7	-7.6

Moves vs CNY (TR, %)	1M	3M	YTD	12M
CHF	1.4	5.8	10.2	16.0
CAD	1.2	-5.8	-6.0	-2.6
GBP	0.6	6.3	9.6	12.0
JPY	-0.1	-1.0	-4.8	-0.9
AUD	-0.5	5.1	2.9	2.1
EUR	-0.7	3.1	6.8	14.4
USD	-1.3	2.9	2.3	5.4

Moves vs AUD (TR, %)	1M	3M	YTD	12M
JPY	1.9	-5.6	-4.9	0.3
CNY	0.5	-5.1	-2.9	-2.1
GBP	0.0	0.4	7.1	8.7
EUR	-0.2	-2.1	3.8	10.7
CAD	-0.4	1.2	4.2	0.9
USD	-0.8	-1.7	1.4	3.8

Moves vs GBP (TR, %)	1M	3M	YTD	12M
CHF	2.0	0.3	-0.2	3.9
JPY	0.9	-7.4	-11.7	-9.5
AUD	0.0	-0.4	-7.1	-8.7
EUR	-0.2	-2.4	-3.4	2.3
CNY	-0.6	-6.0	-8.7	-10.8
CAD	-0.7	0.6	-3.2	-8.1
USD	-1.0	-2.2	-6.1	-5.5

Moves vs JPY (TR, %)	1M	3M	YTD	12M
CHF	0.5	7.9	12.7	14.8
CNY	0.1	1.0	4.8	0.9
GBP	-0.9	7.4	11.7	9.5
CAD	-1.1	7.3	11.5	3.6
EUR	-1.6	5.9	9.9	12.3
AUD	-1.9	5.6	4.9	-0.3
USD	-2.8	5.0	6.0	4.6

Moves vs CHF (TR, %)	1M	3M	YTD	12M
JPY	-0.5	-7.9	-12.7	-14.8
CNY	-1.4	-5.8	-10.2	-16.0
GBP	-2.0	-0.3	0.2	-3.9
EUR	-2.1	-2.8	-3.3	-1.6
CAD	-2.3	0.2	-3.1	-11.1
USD	-2.7	-2.6	-6.1	-9.1

Trade Weighted (TR, %)	1M	3M	YTD	12M
JPY	1.3	-2.7	-5.9	-4.4
EUR	0.7	0.7	2.2	5.4
AUD	0.2	3.3	0.0	-2.8
GBP	-0.1	3.6	6.0	3.1
CNY	-0.2	-3.8	-4.0	-7.1
DXY	-1.0	0.2	-1.6	-3.8

Source: Refinitiv. Data as of July 31, 2023

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

1

+14.1%

Rise in the oil price in July

2

+8.4%

YTD rise in gold price

3

+12.6%

Return of the Wilshire US Office REITS in July

4

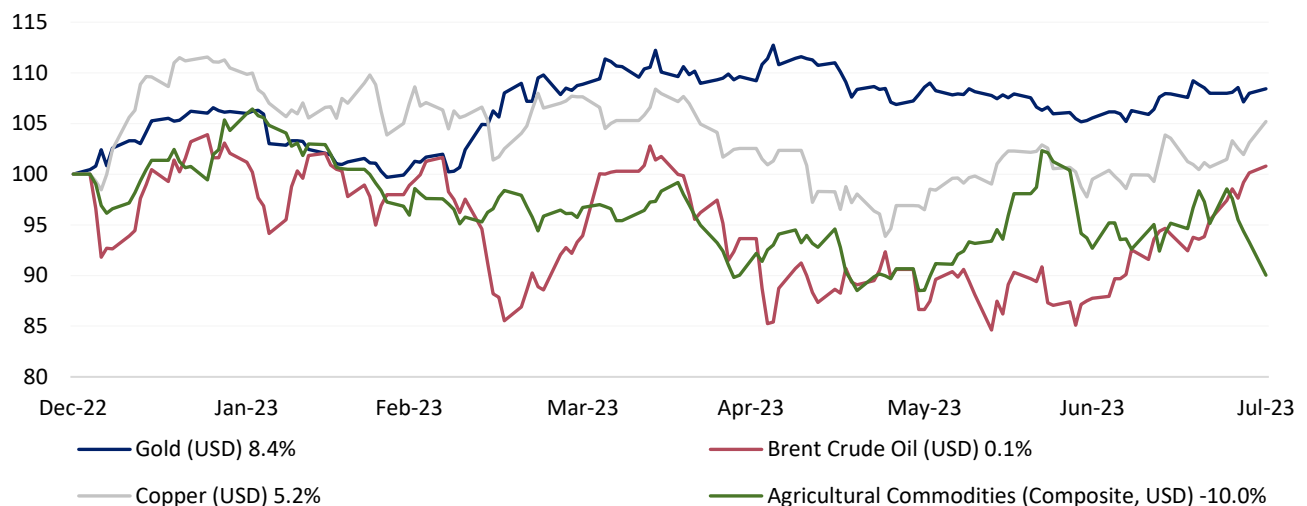
+66.6%

Rise in the FT Wilshire Digital assets index in YTD

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- 34 Commodities
- 35 Property (Wilshire REIT indexes)
- 36 Absolute Return (Wilshire Liquid Alt)
- 37 Digital Assets
- 38 Risk/return analysis

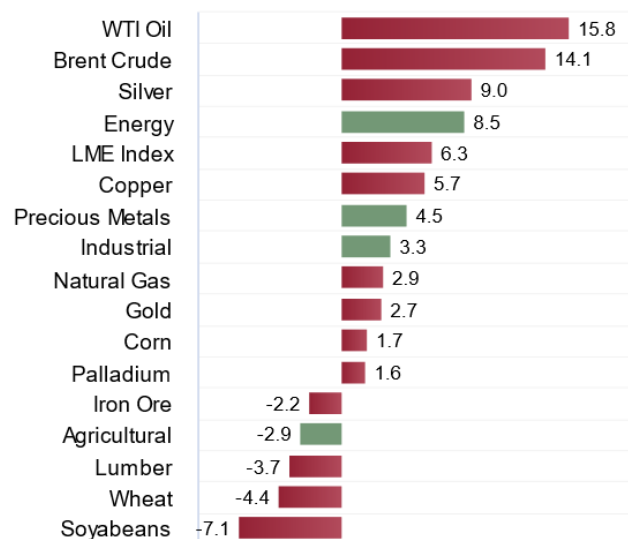
Commodity prices (rebased): Year to date movements in gold, copper, oil and agricultural commodities



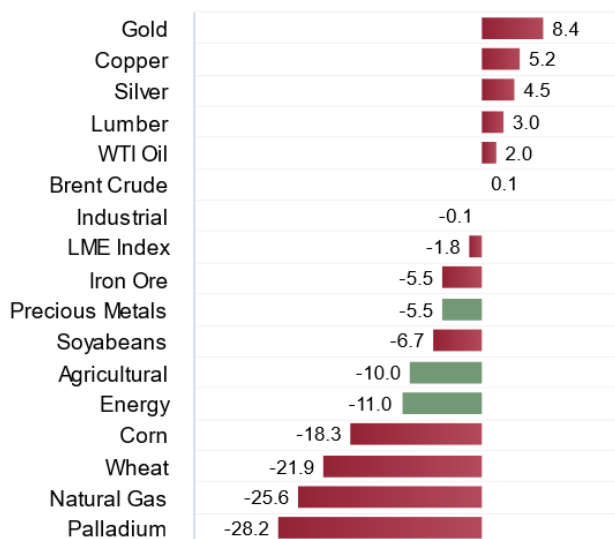
Commodities: Oil continues to rebound on the back of supply restrictions and potential economic stimulus in China

The oil price made strong gains in July, building on the momentum gathered in recent months. The rise has largely been driven by supply restrictions from the world's largest producers (Saudi Arabia and Russia), as well as the potential for stimulus in China to help boost the economy.

1M USD (TR, %)

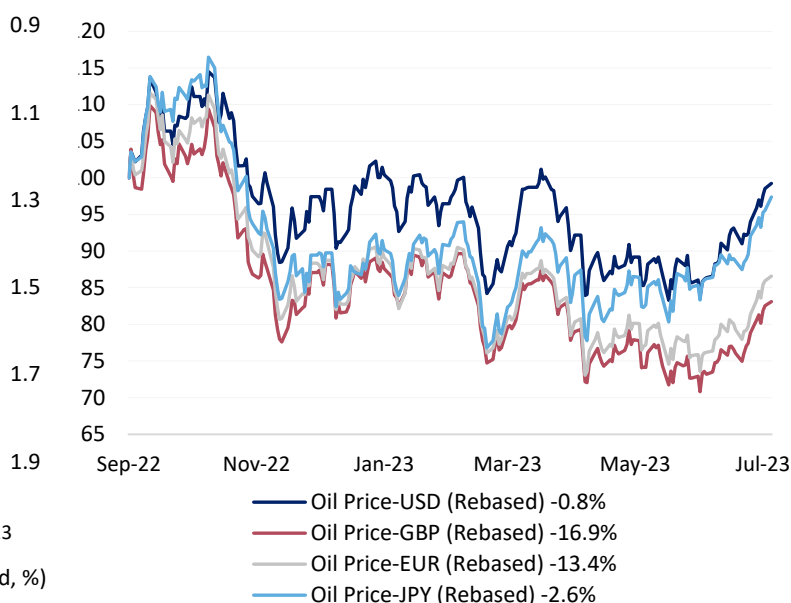
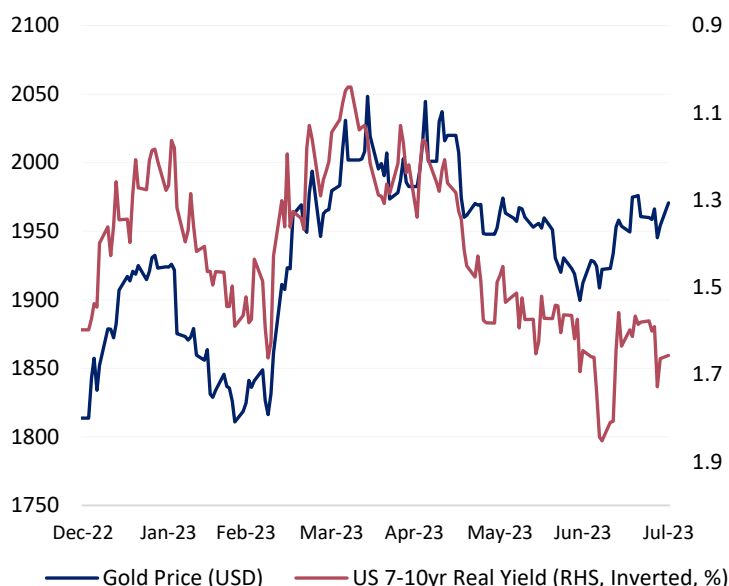


YTD USD (TR, %)



So far in 2023 the gold price has largely followed shifts in the US real yield

Oil price move adjusted for different FX impact since the peak in the dollar on 27 September 2022



Property (Wilshire REIT indexes): US REITS underperform non-US REITS in July but US office REITS see a strong rebound

July witnessed a strong rebound in US office REITS, however the sector has still significantly underperformed YTD. Non-US REITS regained some ground against US REITS in July but the US has still outperformed in so far in 2023.

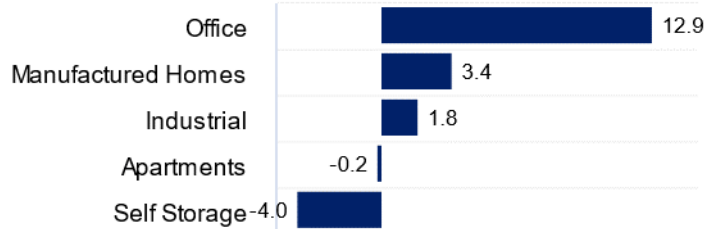
1M USD (TR, %)



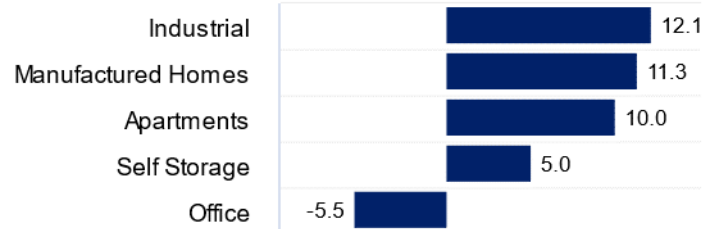
YTD USD (TR, %)



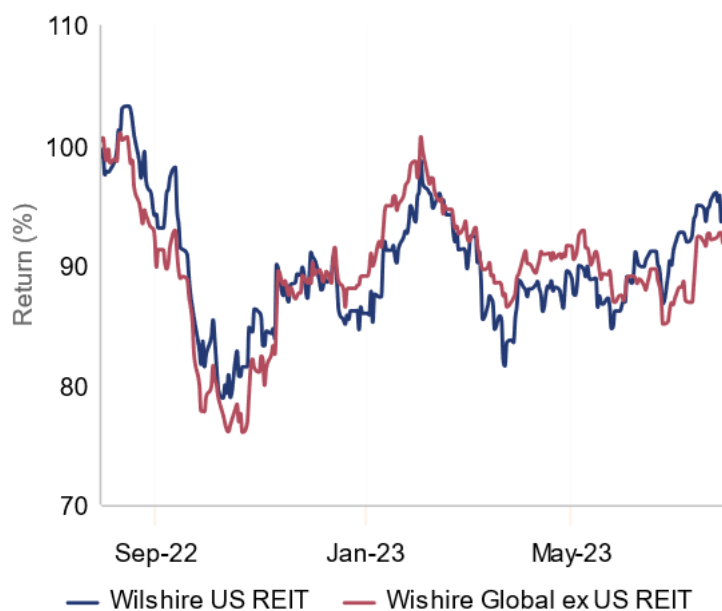
1M USD (TR, %)



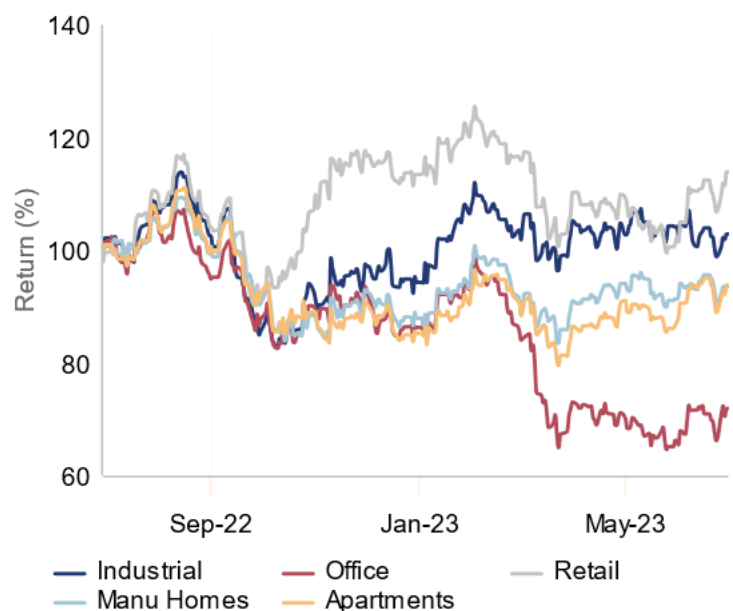
YTD USD (TR, %)



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



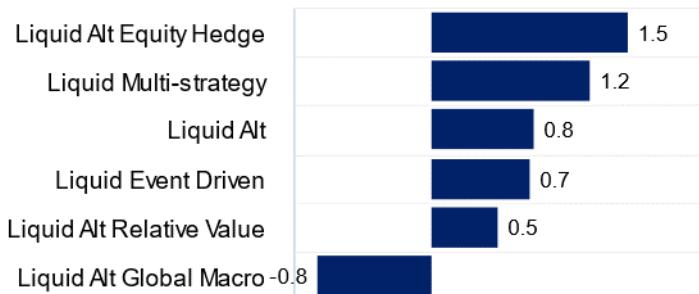
Wilshire US REIT sector performance - 12M (Rebased, TR)



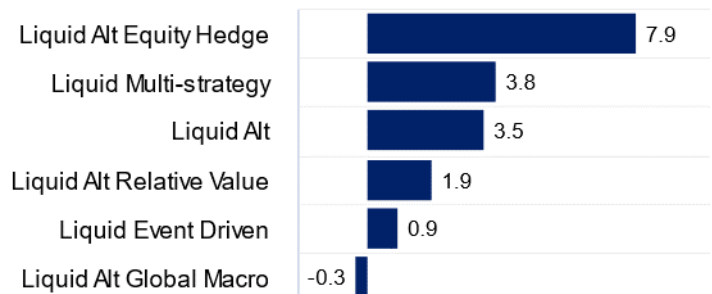
Wilshire Liquid Alternative Indexes (Absolute Return): Equity Hedge outperforms in July as Global Macro loses momentum

Equity Hedge continues to be the strongest performer amongst the Wilshire Liquid Alternative series, delivering further gains in July. After regaining some ground in recent months Global Macro lost momentum in July, declining over the month. The index has seen a modest negative YTD return

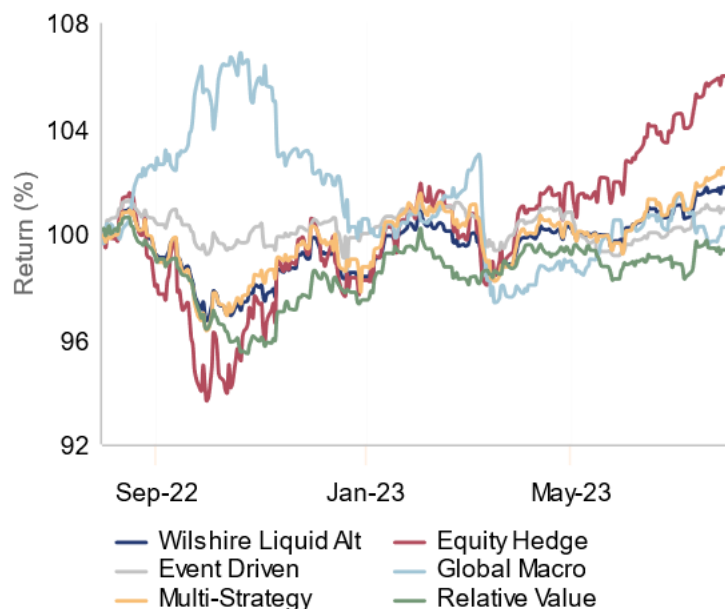
1M USD (TR, %)



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)

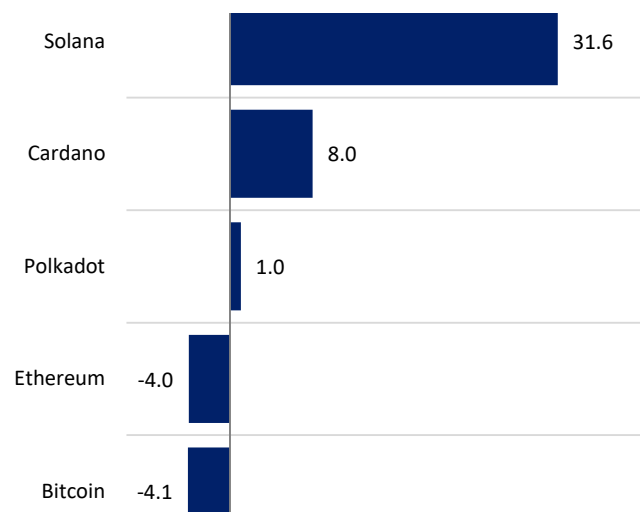


Digital Assets Index: Declines in July but the index still sees significant gains YTD

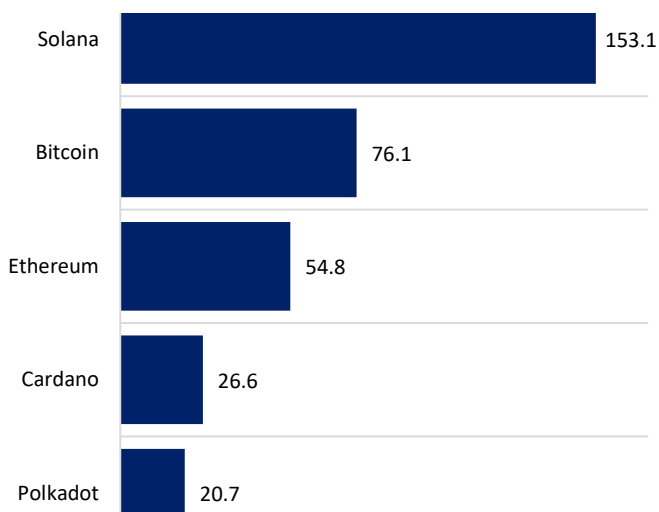
The FT Wilshire Digital Assets Index declined –3.4% in July but has still made significant gains YTD, up 66.6% in 2023 so far.



FT Wilshire Digital Assets Index selected constituent performance - 1M (% ,USD)

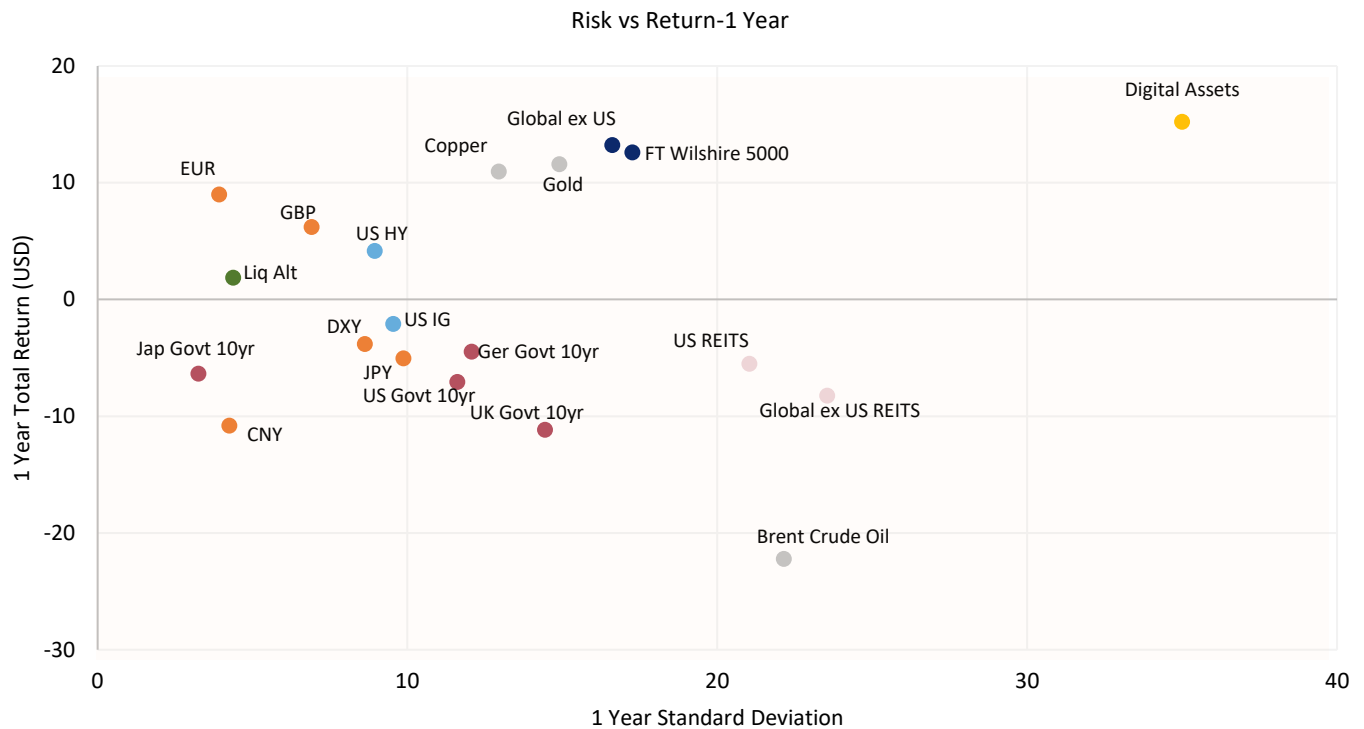


FT Wilshire Digital Assets Index selected constituent performance - YTD 2023 (% ,USD)

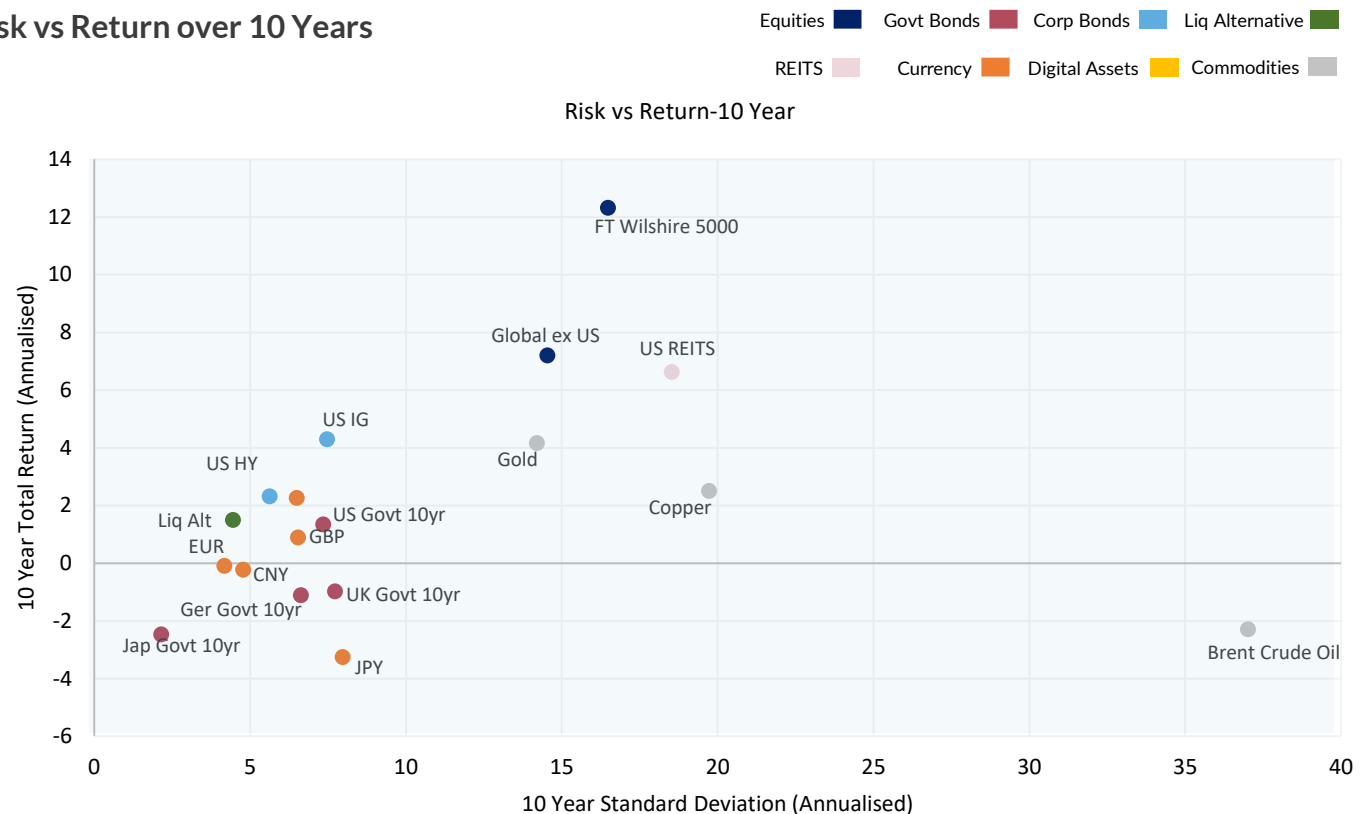


Multi Asset Class: Risk vs Return

Risk vs Return over 1 Year



Risk vs Return over 10 Years



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