DEVELOPED MARKET EQUITIES SECTOR ASSESMENT FRAMEWORK - MONTHLY UPDATE

April 2024

//DWS

SECTOR SPOTLIGHT

Monthly Performance (through April 2024)

Europe	US	World
Basic Resources 9.9%	Utilities 1.8%	Utilities 0.8%
Oil & Gas 4.9%	Energy Sector -0.9%	Energy Sector 0.3%
Health Care 0.9%	Consumer Staples -1.1%	Consumer Staples -1.2%
Utilities 0.5%	Communication -2.1%	Communication -2.4%
Financials -0.1%	Industrial -3.6%	Materials -2.6%
Consumer Staples -0.3%	United States -4.2%	Industrial -3.0%
Stoxx 600 -1.0%	Financials -4.4%	Financials -3.5%
Telecommunications -1.3%	Consumer Discretionary -4.4%	MSCI World -3.7%
Real Estate -1.8%	Materials -5.0%	Health Care -4.0%
Industrial Goods -2.4%	Health Care -5.2%	Consumer Discretionary -4.9%
Consumer Discretionary -4.2%	Information Technology -5.4%	Information Technology -5.7%
Technology -4.4%		Real Estate -7.9%

In April, the broader markets across all regions declined. IT was amongst the worst performing sectors across all regions. Utilities was the only sector which gave positive returns across all regions.

Flows (in €m)
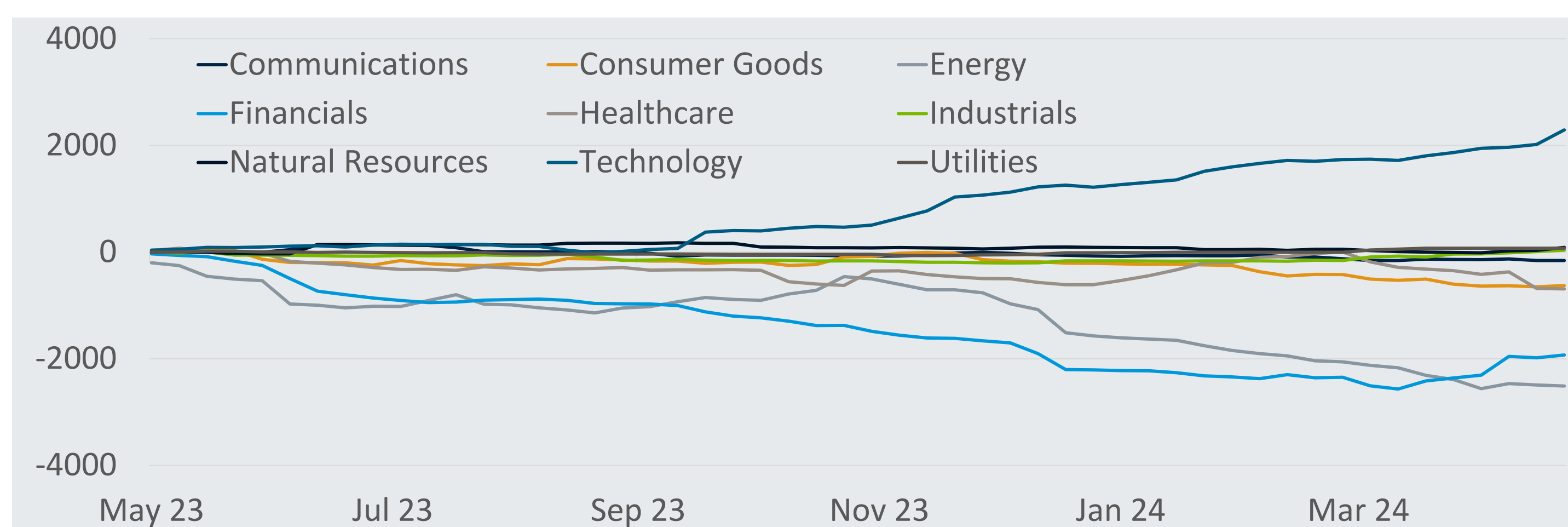
1Y Flows (mEUR)

Technology	2293
Natural Resources	91
Utilities	74
Industrials	36
Communications	-157
Consumer Goods	-628
Healthcare	-689
Financials	-1927
Energy	-2510

Over the past one year, Technology sector ETFs saw the highest inflows with EUR +2293m. Over this period, Energy sector saw an outflow of EUR 2510m and Financials saw an outflow of EUR 1927m.

Sectors for interest rate changes

The Rising (Falling) Rate Basket comprises those three sectors which have shown the highest (lowest) correlation with interest rates over the past 3 years.

World	Europe	US
Rising Rate Baskets		
Financials	Financials	Financials
Industrials	Energy	Industrials
Energy	Basic Materials	Energy
Falling Rate Baskets		
Utilities	Information Tech.	Information Tech.
Health Care	Health Care	Health Care
Consumer Staples.	Utilities	Utilities

Sector Assesment Framework - MSCI World

Introduction

This "Sector Assessment Framework" aims to provide detailed information on a wide range of factors which are deemed to impact sectors' performance. The information is split into multiple categories: macro-economic indicators, valuations, fundamentals, momentum, and sentiment indicators.

Summary

Current Indicator Summary

	Macroeco Long Term	Macroeco Short Term	Valuation	Fundamentals	Momentum	Sentiment
Consumer Discretionary					●	●
Consumer Staples	●	●		●	●	●
Energy Sector	●	●	●	●	●	●
Financials	●	●	●		●	●
Health Care	●	●	●	●	●	●
Industrial	●	●	●		●	●
Information Technology	●	●	●	●	●	
Materials	●	●	●	●	●	
Real Estate	●	●			●	●
Communication	●	●			●	●
Utilities	●	●	●	●	●	●
MSCI World			Unfavourable ●	●		
			Favourable ●			

Return

	1M	6M	1Y	5Y
Consumer Discretionary	-4.9%	18.5%	17.6%	9.5%
Consumer Staples	-1.2%	9.3%	-3.1%	5.2%
Energy Sector	0.3%	10.4%	12.6%	8.9%
Financials	-3.5%	25.2%	22.1%	8.4%
Health Care	-4.0%	14.0%	5.2%	10.0%
Industrial	-3.0%	26.3%	21.6%	9.6%
Information Technology	-5.7%	25.5%	34.2%	19.5%
Materials	-2.6%	17.4%	9.5%	9.2%
Real Estate	-7.9%	10.5%	-2.8%	0.8%
Communication	-2.4%	24.6%	31.7%	9.0%
Utilities	0.8%	12.2%	-1.1%	4.6%
MSCI World	-3.7%	20.3%	18.4%	10.5%

5Y Risk[1]

	Volatility	Max. DD	Beta
Consumer Discretionary	21.8%	-37.2%	109%
Consumer Staples	13.7%	-24.0%	59%
Energy Sector	31.7%	-60.0%	113%
Financials	22.2%	-43.0%	107%
Health Care	15.9%	-27.0%	74%
Industrial	18.8%	-39.3%	94%
Information Technology	26.3%	-36.4%	131%
Materials	20.0%	-36.8%	93%
Real Estate	22.4%	-40.6%	98%
Communication	21.8%	-45.3%	103%
Utilities	18.8%	-34.2%	74%
MSCI World	18.3%	-34.0%	-

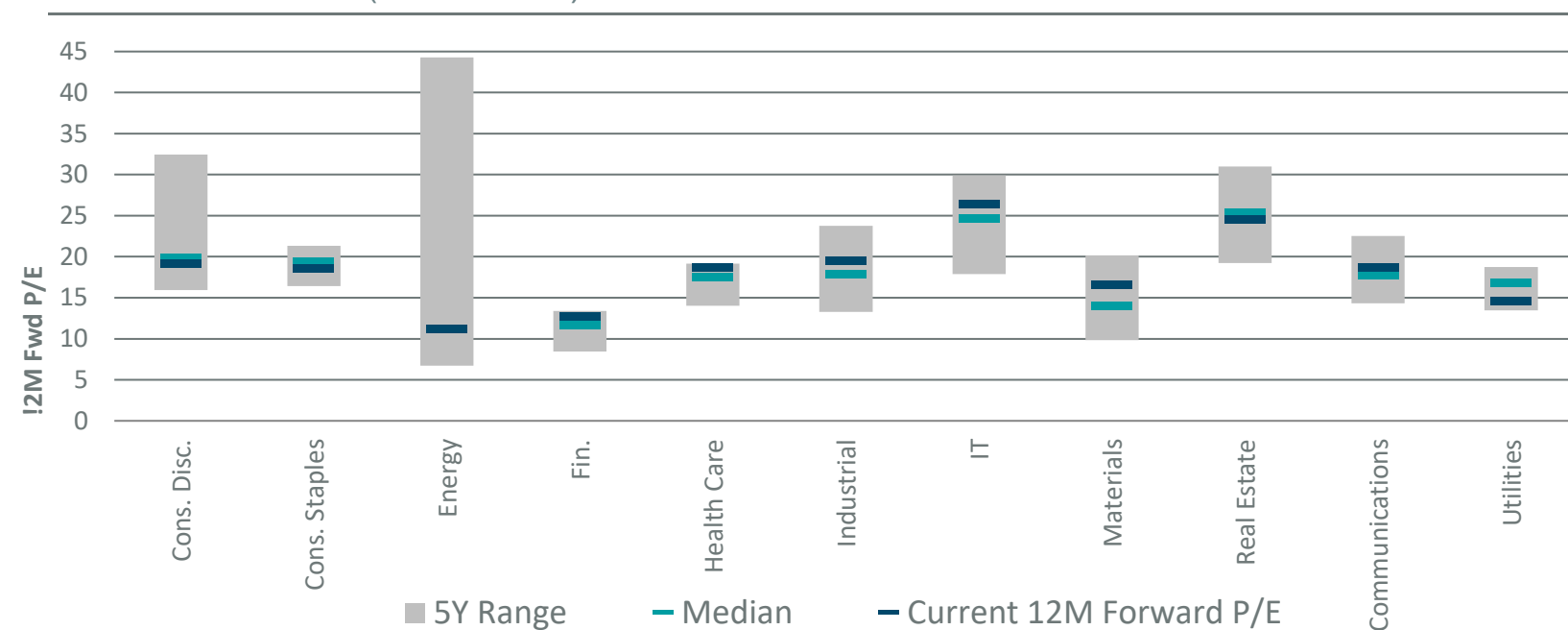## Macro Economy

Macro-economic factors typically provide a long term persepctive on the current business cycle. Some factors like Volatility, Term Spread or CDS provide insights for the short-term, whereas factors like GDP Growth, Industrial production are longer term.
Sectors can be classified as cyclical and defensive. Cyclical sectors tend to outperform the market during economic growth period and underperform during economic slow down.
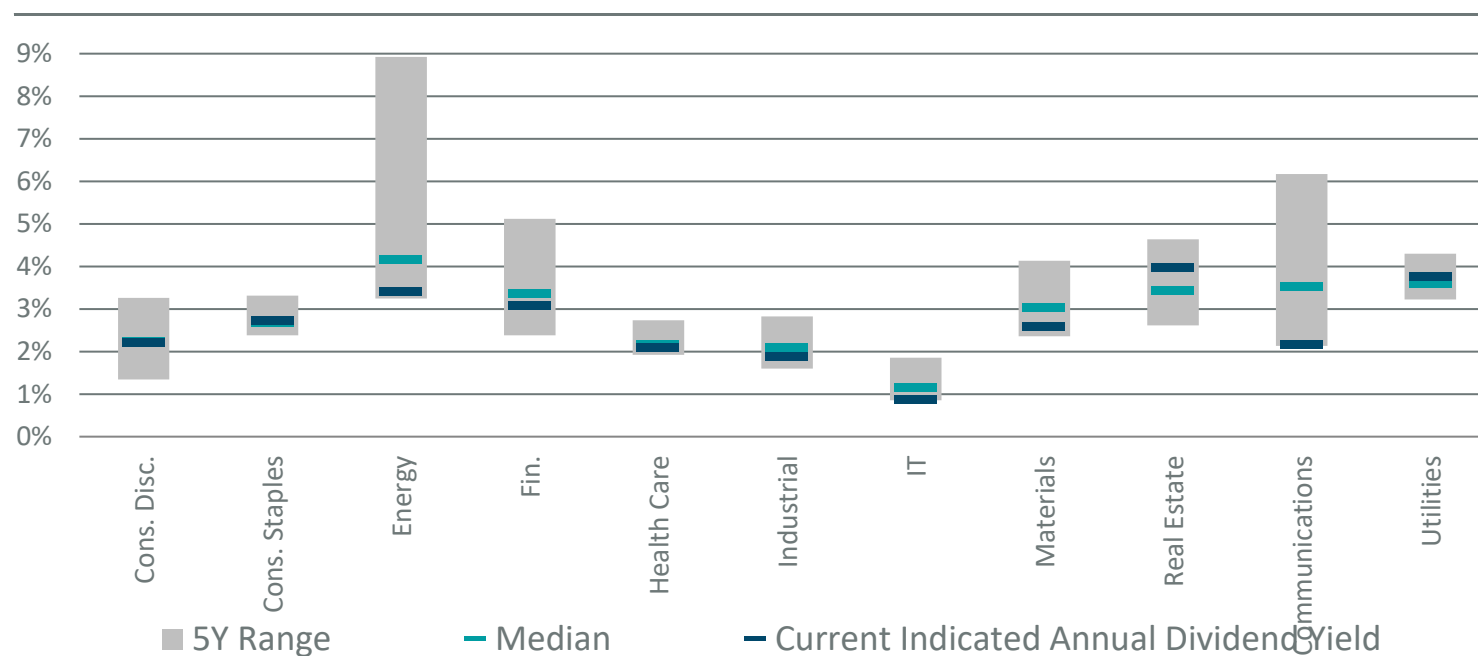
Cyclical Sectors	Consumer Disc.	Financials	Industrials	Info. Tech	Materials
Defensive Sectors	Consumer Stap	Energy	Healthcare	Telecom	Utilities

Factors	Latest	Change[2]	Current value (vs 5Y Highs and Lows)	Current Cycl. Def.
US GDP Growth (QoQ)	1.6%	-1.8%	-28.0% — 34.8%	●
US Inflation	3.5%	0.3%	0.1% — 9.1%	●
Key Interest Rate	5.4%	0.0%	0.1% — 5.4%	●

Factors	Current	Change[2]	Current value (vs 5Y Highs and Lows)	Prevailing Cycl. Def.
Term Spread 10Y-2Y	-0.4%	0.1%	-1.1% — 1.6%	●
Volatility Index	15.7	2.6	11.5 — 82.7	●
Credit Default Spread	53.8	2.3	43.8 — 151.8	●

Valuations (Relative to Historical Averages)

12M Forward P/E (Consensus)

Legend: ■ 5Y Range — Median — Current 12M Forward P/E

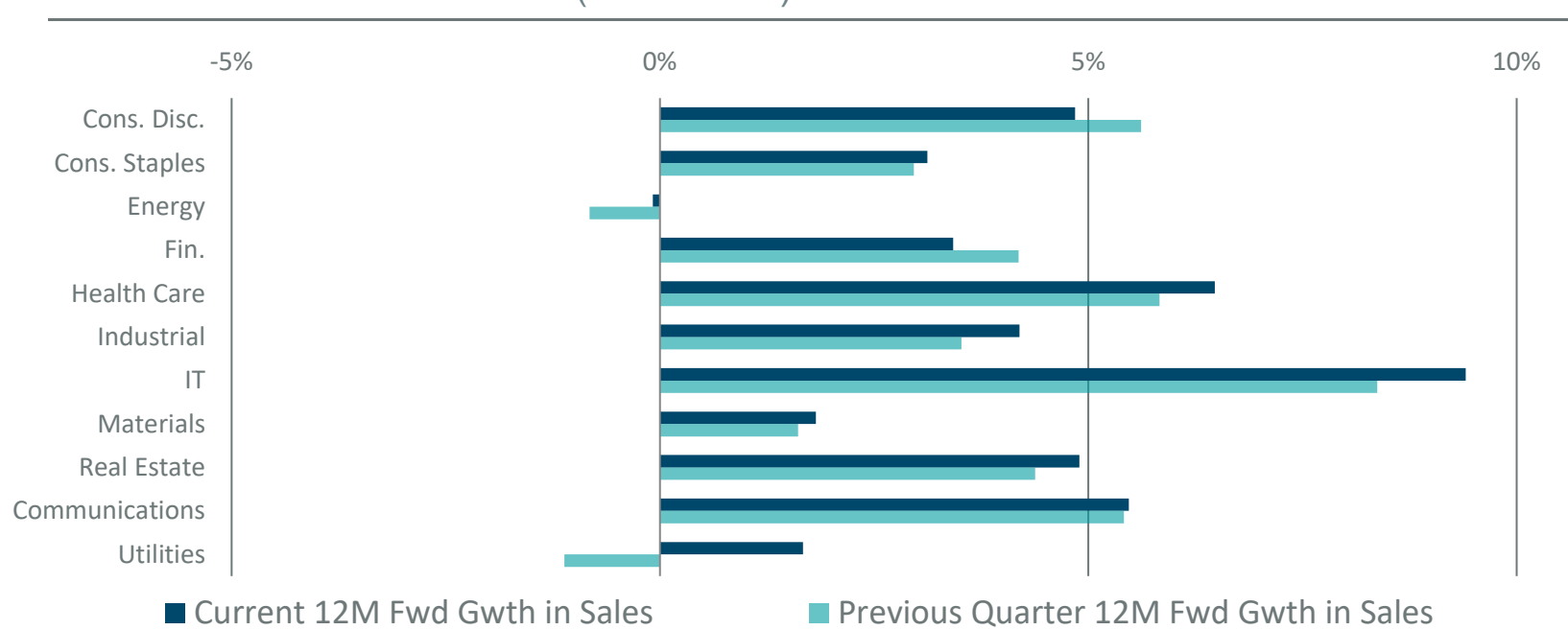### Indicated Annual Dividend Yield

Legend: ■ 5Y Range — Median — Current Indicated Annual Dividend Yield

Fundamental (Relative to Historical Averages)

12M Forward Growth in Sales (Consensus)

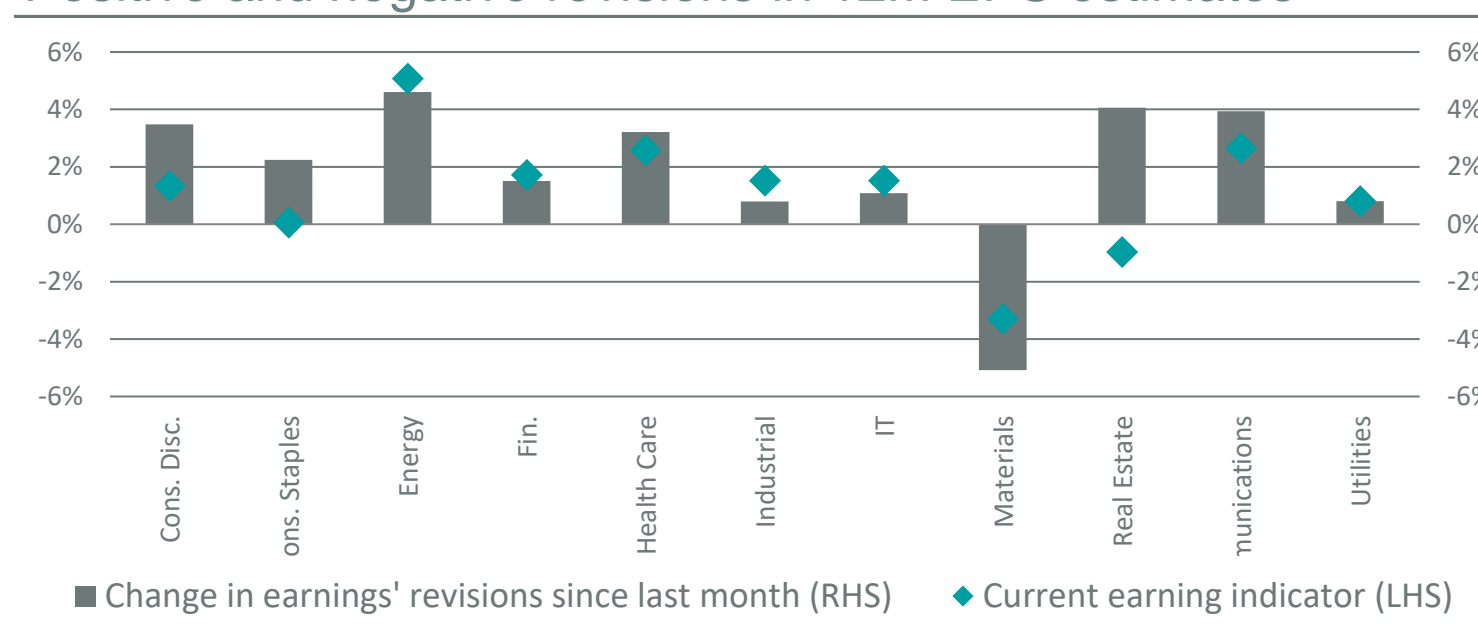Legend: ■ Current 12M Fwd Gwth in Sales ■ Previous Quarter 12M Fwd Gwth in Sales

12M Forward Cash Flow per Share Growth (Consensus)

Legend: ■ Current 12M Fwd CPS Gwth ■ Previous Quarter 12M Fwd CPS Gwth
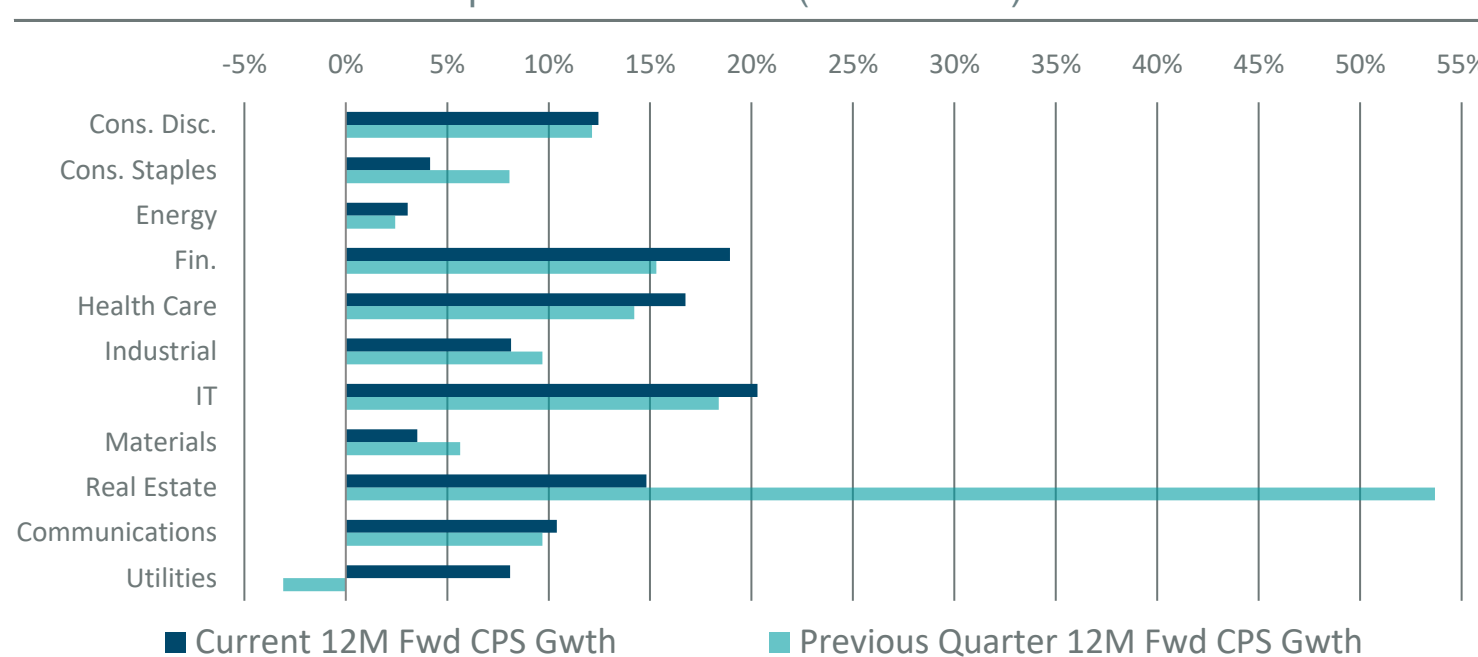
11 Month Momentum[3]

Positive and negative revisions in 12M EPS estimates[4]

Legend: ■ Change in earnings' revisions since last month (RHS) ◆ Current earning indicator (LHS)
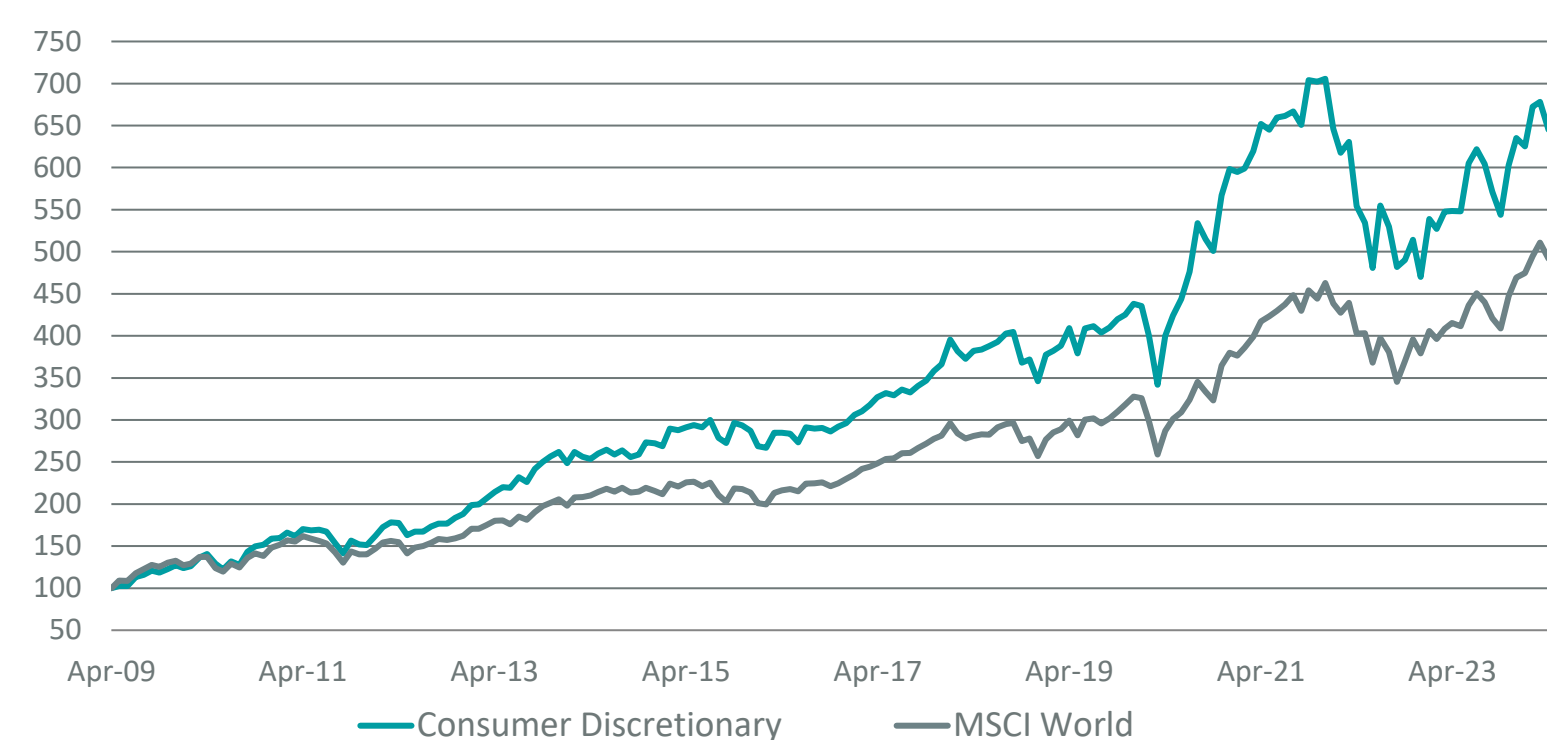
MSCI World Consumer Discretionary

Introduction

The MSCI World Consumer Discretionary Index is designed to capture the large and mid cap segments across Developed Markets around the world.Consumer Discretionary encompasses those businesses that tend to be the most sensitive to economic cycles. Its manufacturing segment includes automotive, household durable goods, leisure equipment and textiles & apparel. The services segment includes hotels, restaurants and other leisure facilities, media production and services, and consumer retailing and services.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Consumer Discretionary	●	●	●	●	●	●

Historical Performance

Legend: Consumer Discretionary — MSCI World

Risk and Return

Return	Cons. Disc.	MSCI World
Last 1M	-4.9%	-3.7%
Last 6M	18.5%	20.3%
Last 1Y	17.6%	18.4%
Last 5Y	9.5%	10.5%

5Y Risk[1]	Cons. Disc.	MSCI World
Vol.	21.8%	18.3%
Max DD	-37.2%	-34.0%
Beta	109%	-
Tracking Error	8.9%	-

Sector Snapshot

Top Four Industry Groups	
Consumer Disc. Distrib.	44.3%
Automobiles & Compts.	21.5%
Consumer Services	18.6%
Cons. Durables & Apparel	15.6%

Top Five Constituents*	
AMZN UW	24.6%
TSLA UW	7.9%
HD UN	5.0%
7203 JT	3.7%
MC FP	3.4%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	19.2	-0.2	15.9 – 32.5
12M Forward P/B (Consensus)	3.5	0.1	2.3 – 4.6
12M Forward P/CF (Consensus)	12.0	0.2	9.2 – 16.6
12M Forward P/EBITDA (Consensus)	9.7	0.1	7.4 – 13.3
Indicated Dividend Yield	2.2%	0.0%	1.3% – 3.3%

Valuations (Relative to MSCI World)

Factor	Cons. Disc.	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	19.2	18.1	1.2	3.5
12M Forward P/B (Consensus)	3.5	2.9	0.6	0.8
12M Forward P/CF (Consensus)	12.0	13.1	-1.2	0.9
12M Forward P/EBITDA (Consensus)	9.7	10.3	-0.5	0.4
Indicated Dividend Yield	2.2%	2.2%	0.0%	-0.3%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	10.6%	0.3%	-13.0% – 70.4%
12M Fwd Growth Sales (Consensus)	4.8%	-0.8%	-1.9% – 14.0%
12M Fwd Growth CPS (Consensus)	12.5%	0.3%	-6.5% – 29.6%
12M Fwd Growth BPS (Consensus)	10.4%	-2.1%	4.1% – 13.2%

Fundamental (Relative to MSCI World)

Factor	Cons. Disc.	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	10.6%	9.6%	0.9%	11.0%
12M Fwd Growth Sales (Consensus)	4.8%	4.2%	0.6%	3.7%
12M Fwd Growth CPS (Consensus)	12.5%	11.2%	1.2%	7.0%
12M Fwd Growth BPS (Consensus)	10.4%	5.9%	4.5%	2.4%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Cons. Disc.	23.7%
MSCI World	23.0%
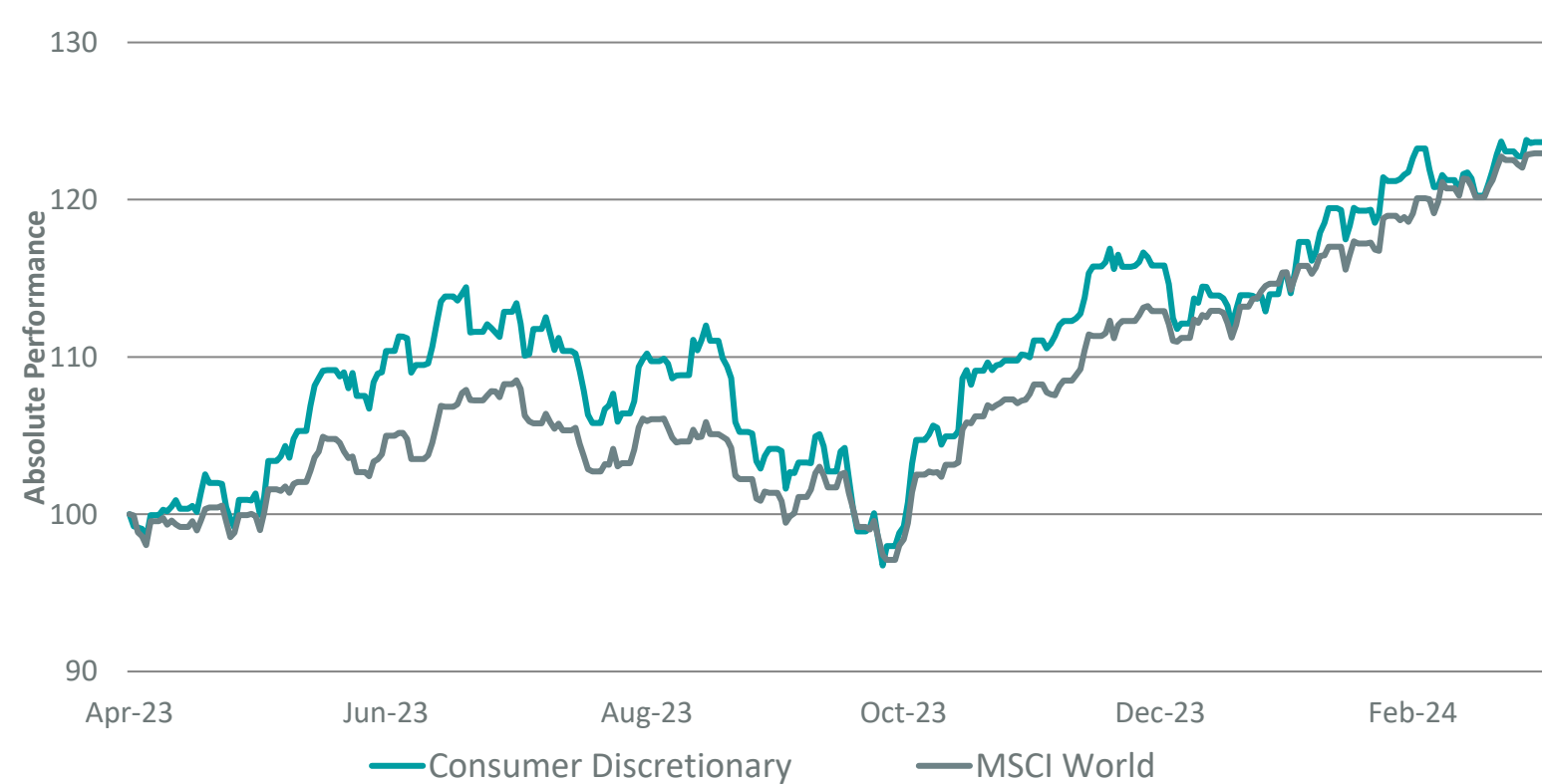
Legend: Consumer Discretionary — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	227	211
Neutral	2352	2272
Downward Revisions	190	270

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates
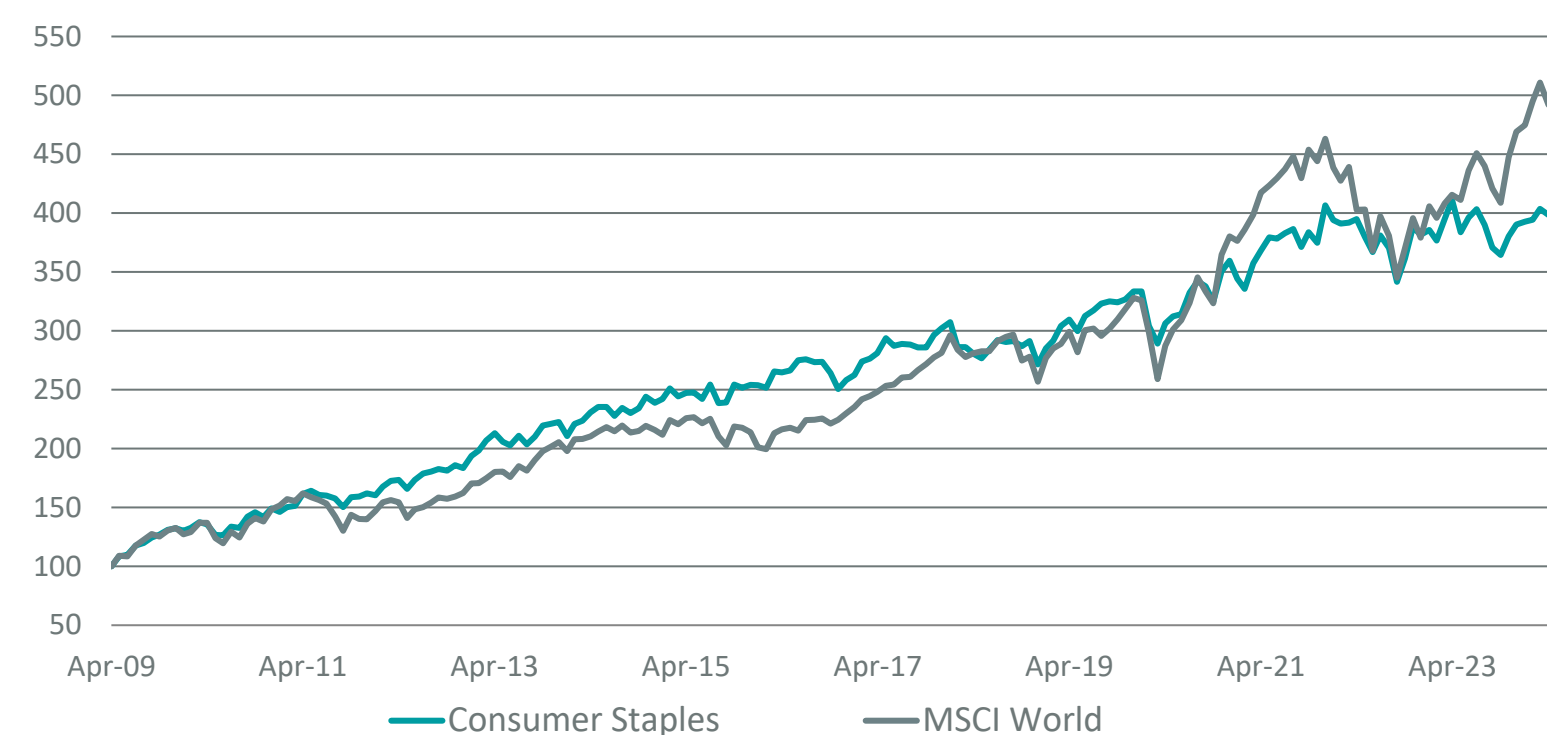
MSCI World Consumer Staples

Introduction

The MSCI World Consumer Staples Index is designed to capture the large and mid cap segments across Developed Markets around the world. Consumer Staples comprises companies whose businesses are less sensitive to economic cycles. It includes manufacturers and distributors of food, beverages and tobacco and producers of non-durable household goods and personal products. It also includes food & drug retailing companies as well as hypermarkets and consumer super centers

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Consumer Staples	🟢	🟢	🔴	🔴	🔴	🟢

Historical Performance

Consumer Staples — MSCI World

Risk and Return

Return	Cons. Staples	MSCI World
Last 1M	-1.2%	-3.7%
Last 6M	9.3%	20.3%
Last 1Y	-3.1%	18.4%
Last 5Y	5.2%	10.5%

5Y Risk[1]	Cons. Staples	MSCI World
Vol.	13.7%	18.3%
Max DD	-24.0%	-34.0%
Beta	59%	-
Tracking Error	11.2%	-

Sector Snapshot

Top Three Industry Groups	
Food, Bvg. & Tobacco	49.8%
Consumer Staples Distribut	25.7%
Household & Prsnl. Prodts.	24.5%

Top Five Constituents*	
PG UN	9.2%
COST UW	7.7%
NESN SE	6.4%
WMT UN	6.3%
KO UN	6.1%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	18.6	0.6	16.4 — 21.3
12M Forward P/B (Consensus)	4.0	0.2	3.3 — 4.5
12M Forward P/CF (Consensus)	13.5	0.5	11.8 — 15.6
12M Forward P/EBITDA (Consensus)	10.2	0.4	8.5 — 11.7
Indicated Dividend Yield	2.7%	-0.1%	2.4% — 3.3%

Valuations (Relative to MSCI World)

Factor	Cons. Staples	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	18.6	18.1	0.5	1.7
12M Forward P/B (Consensus)	4.0	2.9	1.1	1.4
12M Forward P/CF (Consensus)	13.5	13.1	0.4	2.0
12M Forward P/EBITDA (Consensus)	10.2	10.3	-0.1	0.6
Indicated Dividend Yield	2.7%	2.2%	0.5%	0.2%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	6.0%	-0.2%	2.3% — 9.2%
12M Fwd Growth Sales (Consensus)	3.1%	0.2%	1.3% — 5.2%
12M Fwd Growth CPS (Consensus)	4.2%	-3.9%	2.9% — 12.8%
12M Fwd Growth BPS (Consensus)	5.4%	-0.9%	-1.5% — 7.4%

Fundamental (Relative to MSCI World)

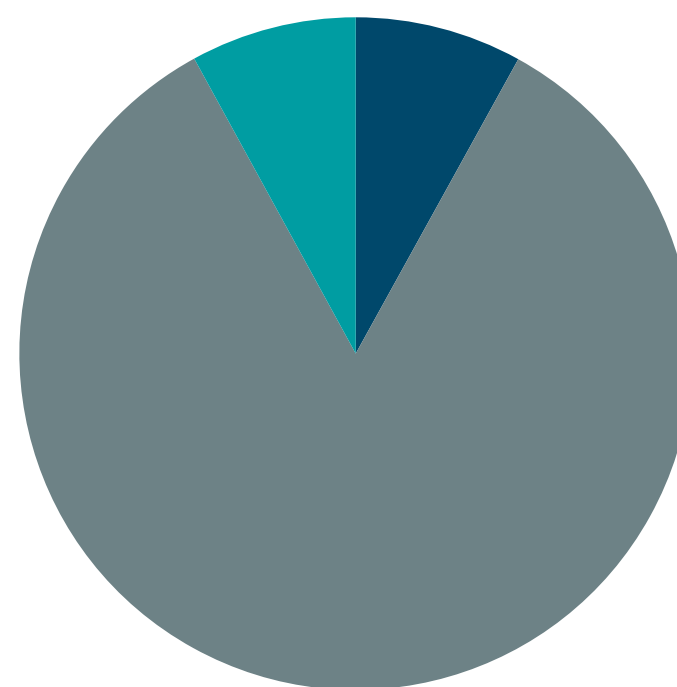| Factor	Cons. Staples	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	6.0%	9.6%	-3.6%	-1.4%
12M Fwd Growth Sales (Consensus)	3.1%	4.2%	-1.1%	-0.9%
12M Fwd Growth CPS (Consensus)	4.2%	11.2%	-7.1%	-0.4%
12M Fwd Growth BPS (Consensus)	5.4%	5.9%	-0.5%	-1.0%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Cons. Staples	-1.9%
MSCI World	23.0%

Consumer Staples — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	135	110
Neutral	1412	1394
Downward Revisions	134	146

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

Source Bloomberg LP, Thomson Reuters Datastream, DWS Calculations. As of 30 Apr 2024

1. Risk measures (Volatility, Drawdown, Beta) are calculated over the last five years period using daily frequency observations.

2. "Change" refers to the change of the observed metric since last quarter observation.

3. 11M Momentum is defined as the 11M performance of the index calculated as of 1 month ago (often referred in the literature as "1M removed").

4. This earning revision indicator, often referred as "Sentiment" is calculated as: positive minus negative revisons / Total Number of 12M Fwd EPS estimates.

5. Based on end of month observations over the last 5 years. * This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

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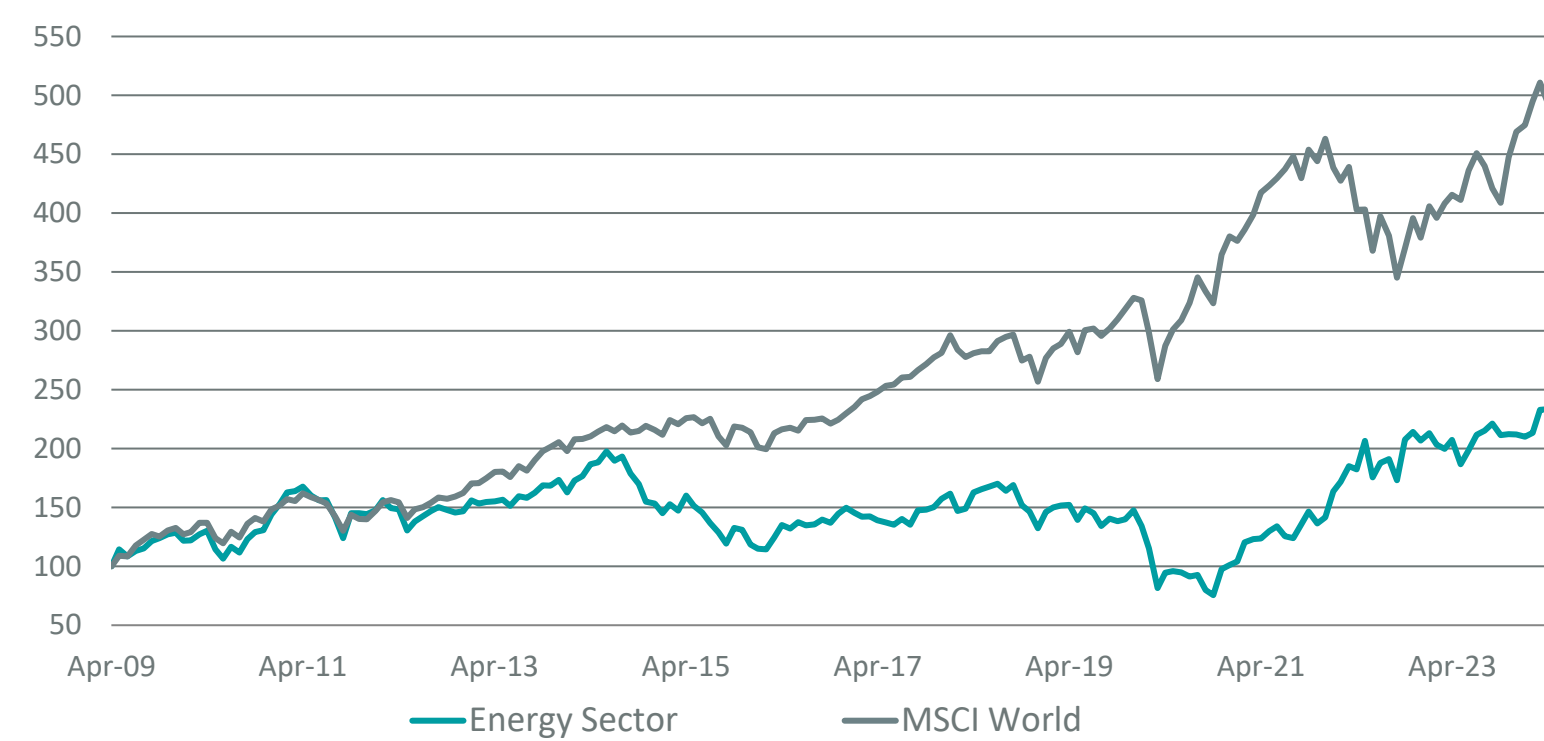
MSCI World Energy

Introduction

The MSCI World Energy Index is designed to capture the large and mid cap segments across Developed Markets around the world.Energy Sector comprises companies engaged in exploration & production, refining & marketing and storage & transportation of oil & gas and coal & consumable fuels. It also includes companies that offer oil & gas equipment and services.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Energy Sector	🟢	🟢	🟢	🔴	🟢	🟢

Historical Performance

Legend: Energy Sector, MSCI World

Risk and Return

Return	Energy	MSCI World
Last 1M	0.3%	-3.7%
Last 6M	10.4%	20.3%
Last 1Y	12.6%	18.4%
Last 5Y	8.9%	10.5%

5Y Risk[1]	Energy	MSCI World
Vol.	31.7%	18.3%
Max DD	-60.0%	-34.0%
Beta	113%	-
Tracking Error	24.1%	-

Sector Snapshot

Top Industry Group	
Energy	100.0%

Top Five Constituents*	
XOM UN	16.3%
CVX UN	9.9%
SHEL LN	8.0%
TTE FP	5.5%
COP UN	5.1%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	11.2	1.3	6.7 — 44.3
12M Forward P/B (Consensus)	1.8	0.2	0.8 — 1.8
12M Forward P/CF (Consensus)	6.2	0.6	3.9 — 6.2
12M Forward P/EBITDA (Consensus)	4.8	0.6	3.2 — 5.1
Indicated Dividend Yield	3.4%	-0.6%	3.2% — 8.9%

Valuations (Relative to MSCI World)

Factor	Energy	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	11.2	18.1	-6.8	-6.8
12M Forward P/B (Consensus)	1.8	2.9	-1.2	-1.1
12M Forward P/CF (Consensus)	6.2	13.1	-7.0	-6.4
12M Forward P/EBITDA (Consensus)	4.8	10.3	-5.5	-5.4
Indicated Dividend Yield	3.4%	2.2%	1.2%	1.7%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	-1.5%	2.9%	-61.4% — 662.6%
12M Fwd Growth Sales (Consensus)	-0.1%	0.7%	-14.7% — 24.5%
12M Fwd Growth CPS (Consensus)	3.1%	0.6%	-17.2% — 44.1%
12M Fwd Growth BPS (Consensus)	5.2%	-2.7%	-8.4% — 12.9%

Fundamental (Relative to MSCI World)

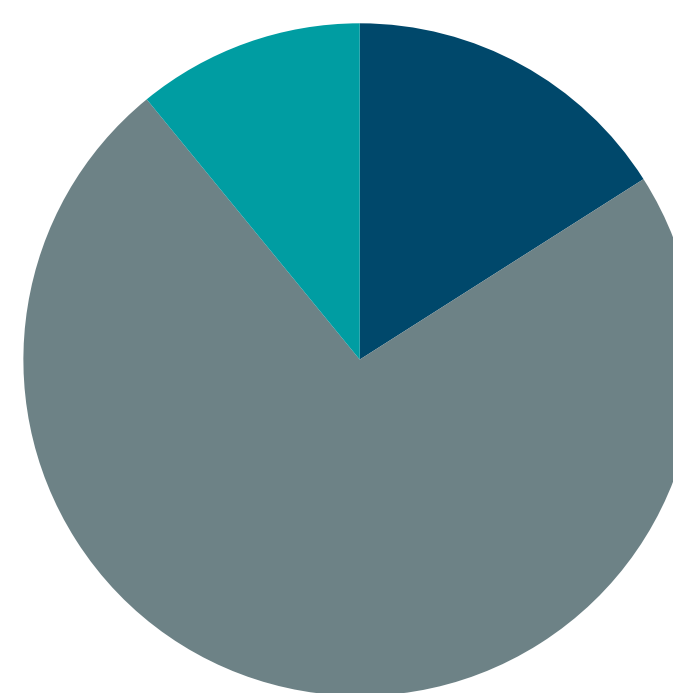| Factor	Energy	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	-1.5%	9.6%	-11.2%	3.3%
12M Fwd Growth Sales (Consensus)	-0.1%	4.2%	-4.3%	-2.1%
12M Fwd Growth CPS (Consensus)	3.1%	11.2%	-8.2%	-0.3%
12M Fwd Growth BPS (Consensus)	5.2%	5.9%	-0.7%	-1.8%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Energy	12.2%
MSCI World	23.0%
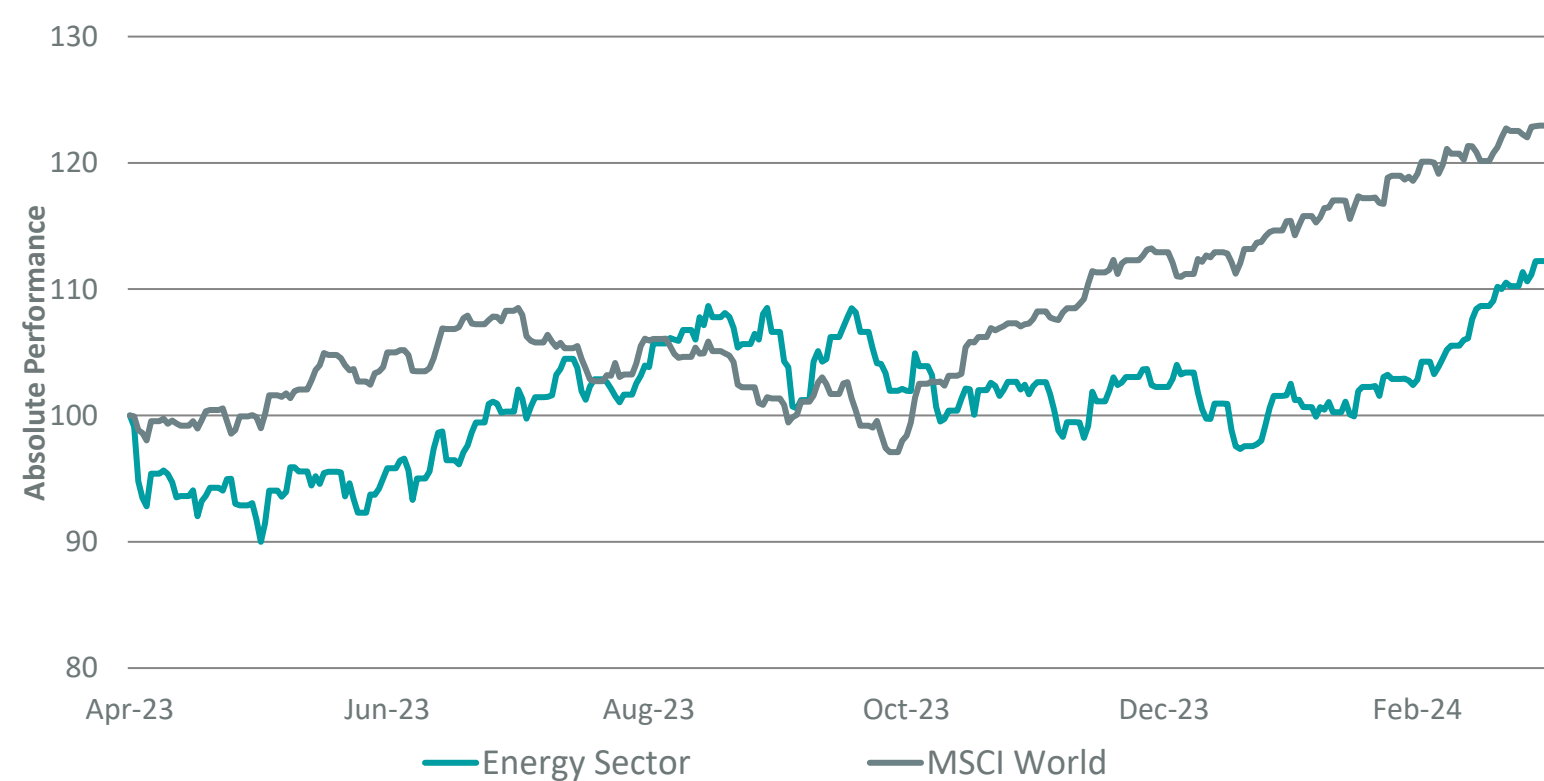
Legend: Energy Sector, MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	145	93
Neutral	663	667
Downward Revisions	99	89

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

Source Bloomberg LP, Thomson Reuters Datastream, DWS Calculations. As of 30 Apr 2024

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2. "Change" refers to the change of the observed metric since last quarter observation.
3. 11M Momentum is defined as the 11M performance of the index calculated as of 1 month ago (often referred in the literature as "1M removed").
4. This earning revision indicator, often referred as "Sentiment" is calculated as: positive minus negative revisons / Total Number of 12M Fwd EPS estimates.
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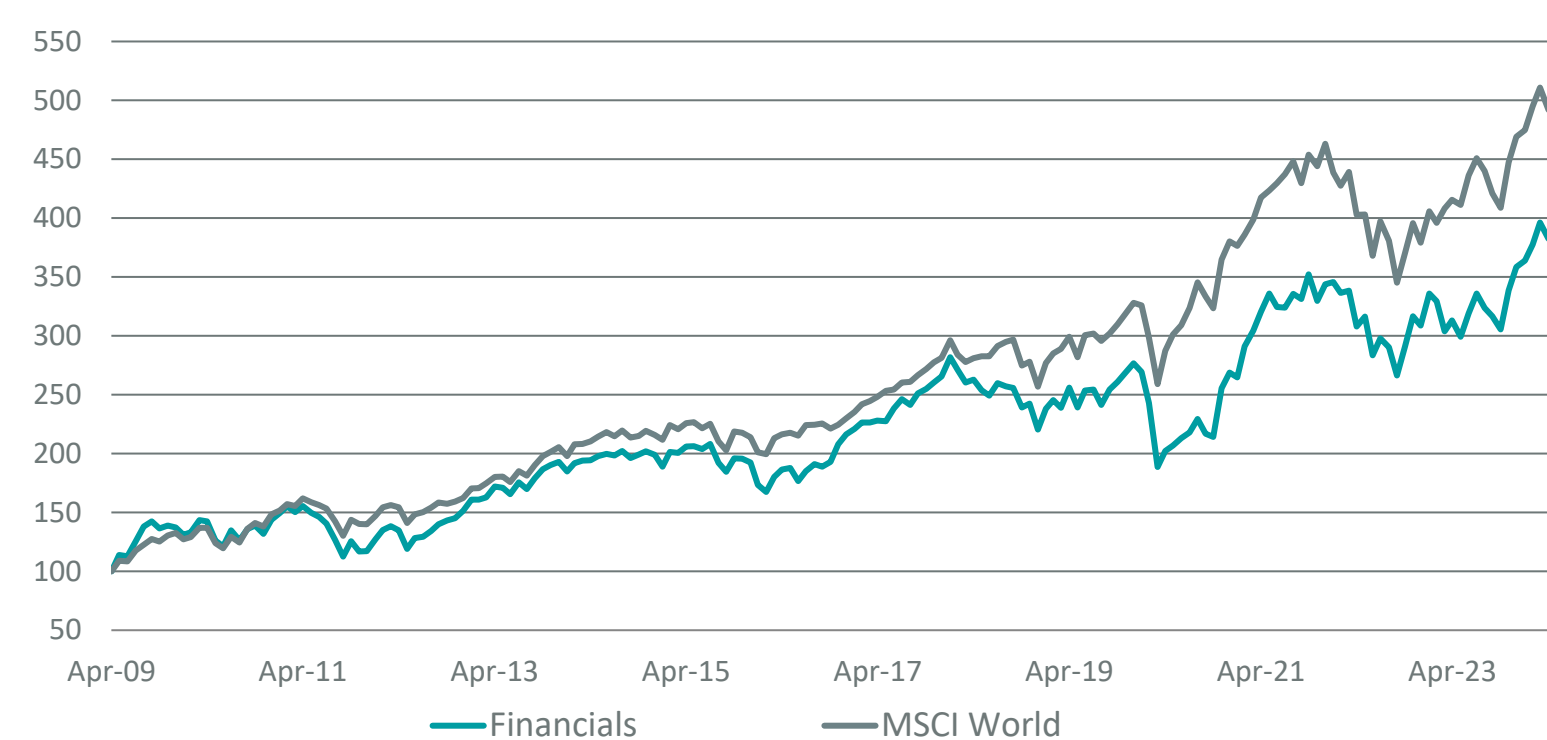# MSCI World Financials

Introduction

The MSCI World Financials Index is designed to capture the large and mid cap segments across Developed Markets around the world. Financials contains companies involved in banking, thrifts & mortgage finance, specialized finance, consumer finance, asset management and custody banks, investment banking and brokerage and insurance.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Financials	🔴	🔴	🟢	🟢	🟢	🟢

Historical Performance

Legend: — Financials — MSCI World

Risk and Return

Return	Fin.	MSCI World
Last 1M	-3.5%	-3.7%
Last 6M	25.2%	20.3%
Last 1Y	22.1%	18.4%
Last 5Y	8.4%	10.5%

5Y Risk[1]	Fin.	MSCI World
Vol.	22.2%	18.3%
Max DD	-43.0%	-34.0%
Beta	107%	-
Tracking Error	10.5%	-

Sector Snapshot

Top Three Industry Groups	
Financial Services	41.9%
Banks	37.6%
Insurance	20.4%

Top Five Constituents*	
JPM UN	5.8%
BRK/B UN	5.4%
V UN	4.4%
MA UN	3.9%
BAC UN	2.7%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	12.7	0.6	8.5 — 13.4
12M Forward P/B (Consensus)	1.5	0.1	0.8 — 1.6
12M Forward P/CF (Consensus)	13.9	0.9	6.3 — 14.2
12M Forward P/EBITDA (Consensus)	10.9	0.1	7.4 — 11.2
Indicated Dividend Yield	3.1%	0.0%	2.4% — 5.1%

Valuations (Relative to MSCI World)

Factor	Fin.	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	12.7	18.1	-5.4	-5.5
12M Forward P/B (Consensus)	1.5	2.9	-1.4	-1.4
12M Forward P/CF (Consensus)	13.9	13.1	0.7	-3.0
12M Forward P/EBITDA (Consensus)	10.9	10.3	0.6	0.1
Indicated Dividend Yield	3.1%	2.2%	0.9%	0.8%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	8.2%	1.6%	-12.2% — 23.9%
12M Fwd Growth Sales (Consensus)	3.4%	-0.8%	-1.9% — 8.5%
12M Fwd Growth CPS (Consensus)	18.9%	3.6%	-48.5% — 23.0%
12M Fwd Growth BPS (Consensus)	5.3%	-1.1%	-1.8% — 7.2%

Fundamental (Relative to MSCI World)

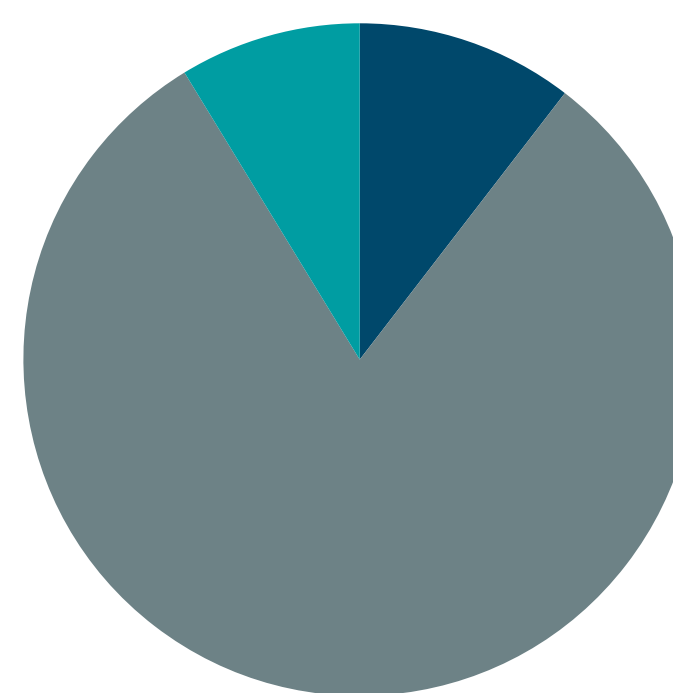| Factor	Fin.	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	8.2%	9.6%	-1.4%	-2.6%
12M Fwd Growth Sales (Consensus)	3.4%	4.2%	-0.8%	-1.7%
12M Fwd Growth CPS (Consensus)	18.9%	11.2%	7.7%	-11.1%
12M Fwd Growth BPS (Consensus)	5.3%	5.9%	-0.6%	-1.8%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Fin.	26.5%
MSCI World	23.0%
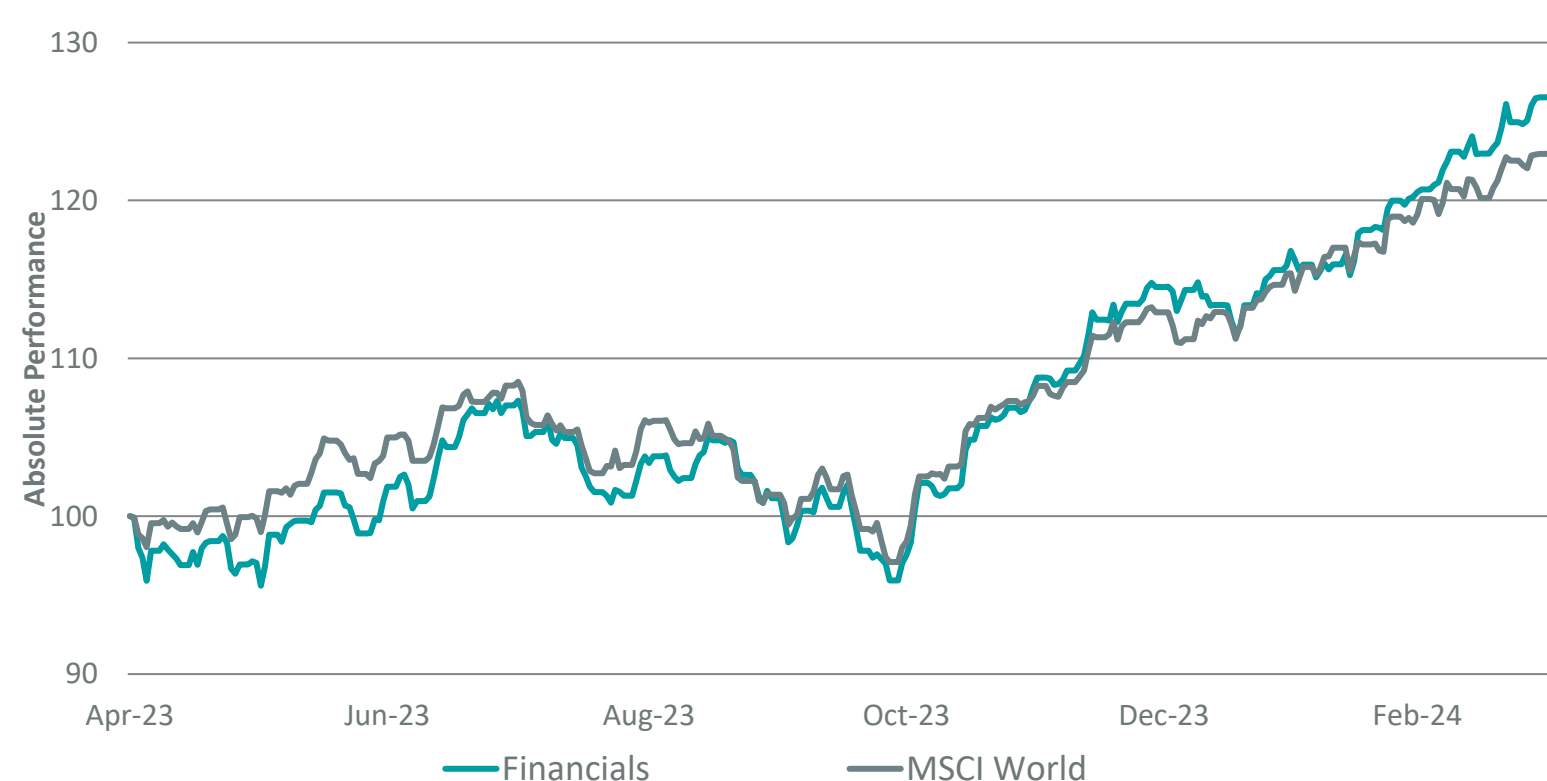
Legend: — Financials — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	334	249
Neutral	2585	2762
Downward Revisions	279	242

- ■ Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- ■ Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- ■ Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates
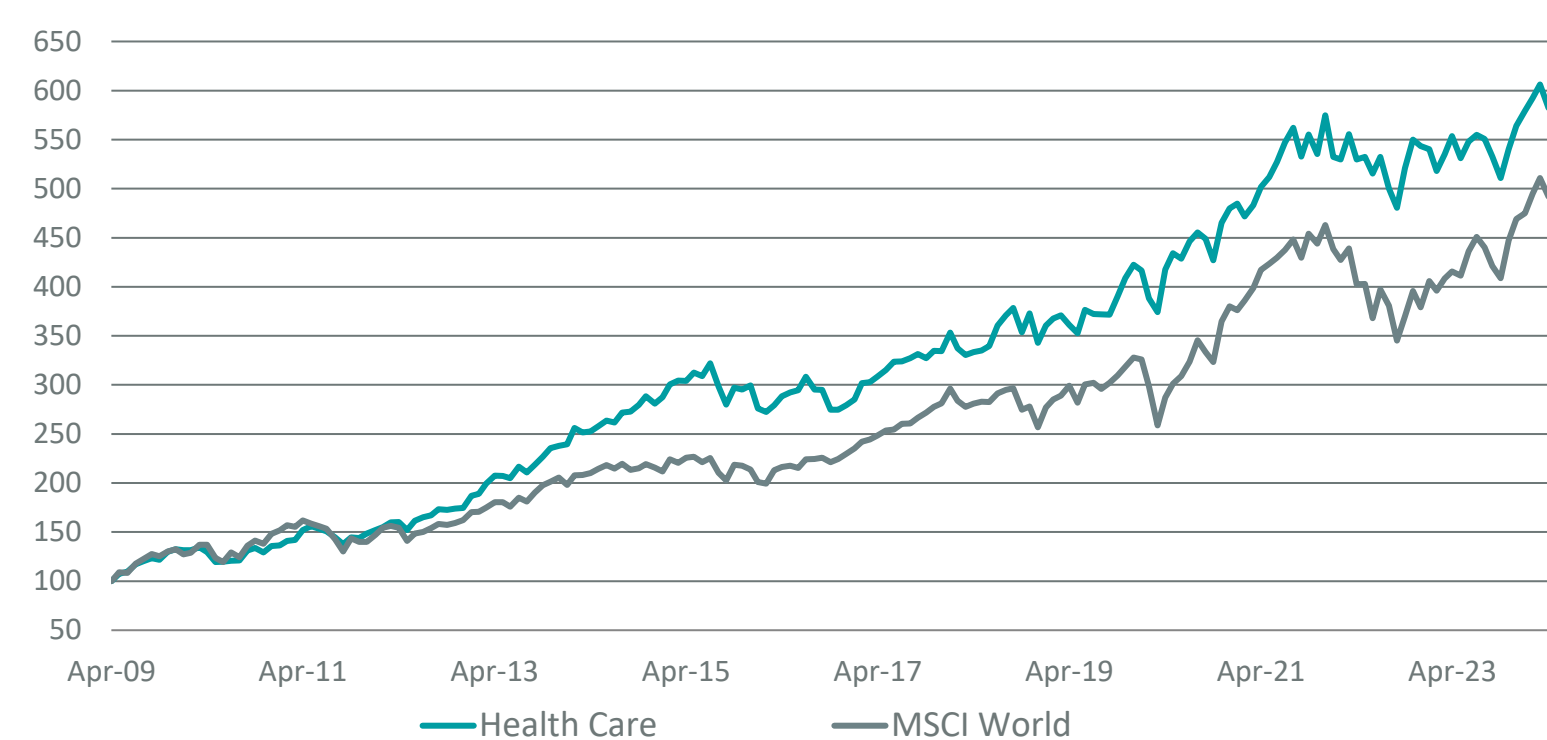
MSCI World Health Care

Introduction

The MSCI World Health Care Index is designed to capture the large and mid cap segments across Developed Markets around the world.Health Careincludes health care providers & services, companies that manufacture and distribute health care equipments & supplies and health care technology companies. It also includes companies involved in the research, development, production and marketing of pharmaceuticals and biotechnology products.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Health Care	●	●	●	●	●	●

Historical Performance

Health Care — MSCI World

Risk and Return

Return	Health Care	MSCI World
Last 1M	-4.0%	-3.7%
Last 6M	14.0%	20.3%
Last 1Y	5.2%	18.4%
Last 5Y	10.0%	10.5%

5Y Risk[1]	Health Care	MSCI World
Vol.	15.9%	18.3%
Max DD	-27.0%	-34.0%
Beta	74%	-
Tracking Error	9.7%	-

Sector Snapshot

Top Two Industry Groups	
Pharmaceuticals, Biotech.	65.3%
Health Care Equip. & Servic	34.7%

Top Five Constituents*	
LLY UN	8.4%
UNH UN	6.0%
NOVOB DC	5.6%
JNJ UN	4.6%
MRK UN	4.4%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	18.7	0.5	14.0 – 19.2
12M Forward P/B (Consensus)	4.0	0.1	3.0 – 4.4
12M Forward P/CF (Consensus)	15.3	0.2	11.4 – 16.4
12M Forward P/EBITDA (Consensus)	12.1	0.3	8.9 – 12.7
Indicated Dividend Yield	2.1%	0.0%	1.9% – 2.7%

Valuations (Relative to MSCI World)

Factor	Health Care	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	18.7	18.1	0.6	0.3
12M Forward P/B (Consensus)	4.0	2.9	1.0	1.2
12M Forward P/CF (Consensus)	15.3	13.1	2.2	2.7
12M Forward P/EBITDA (Consensus)	12.1	10.3	1.8	1.8
Indicated Dividend Yield	2.1%	2.2%	-0.1%	-0.3%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	11.6%	-2.8%	-2.3% – 14.6%
12M Fwd Growth Sales (Consensus)	6.5%	0.6%	3.1% – 8.7%
12M Fwd Growth CPS (Consensus)	16.7%	2.5%	2.0% – 17.2%
12M Fwd Growth BPS (Consensus)	7.4%	-1.9%	7.4% – 12.6%

Fundamental (Relative to MSCI World)

Factor	Health Care	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	11.6%	9.6%	2.0%	-1.9%
12M Fwd Growth Sales (Consensus)	6.5%	4.2%	2.3%	1.7%
12M Fwd Growth CPS (Consensus)	16.7%	11.2%	5.5%	2.8%
12M Fwd Growth BPS (Consensus)	7.4%	5.9%	1.5%	3.0%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Health Care	9.5%
MSCI World	23.0%

Health Care — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	269	103
Neutral	1855	2104
Downward Revisions	209	118

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates
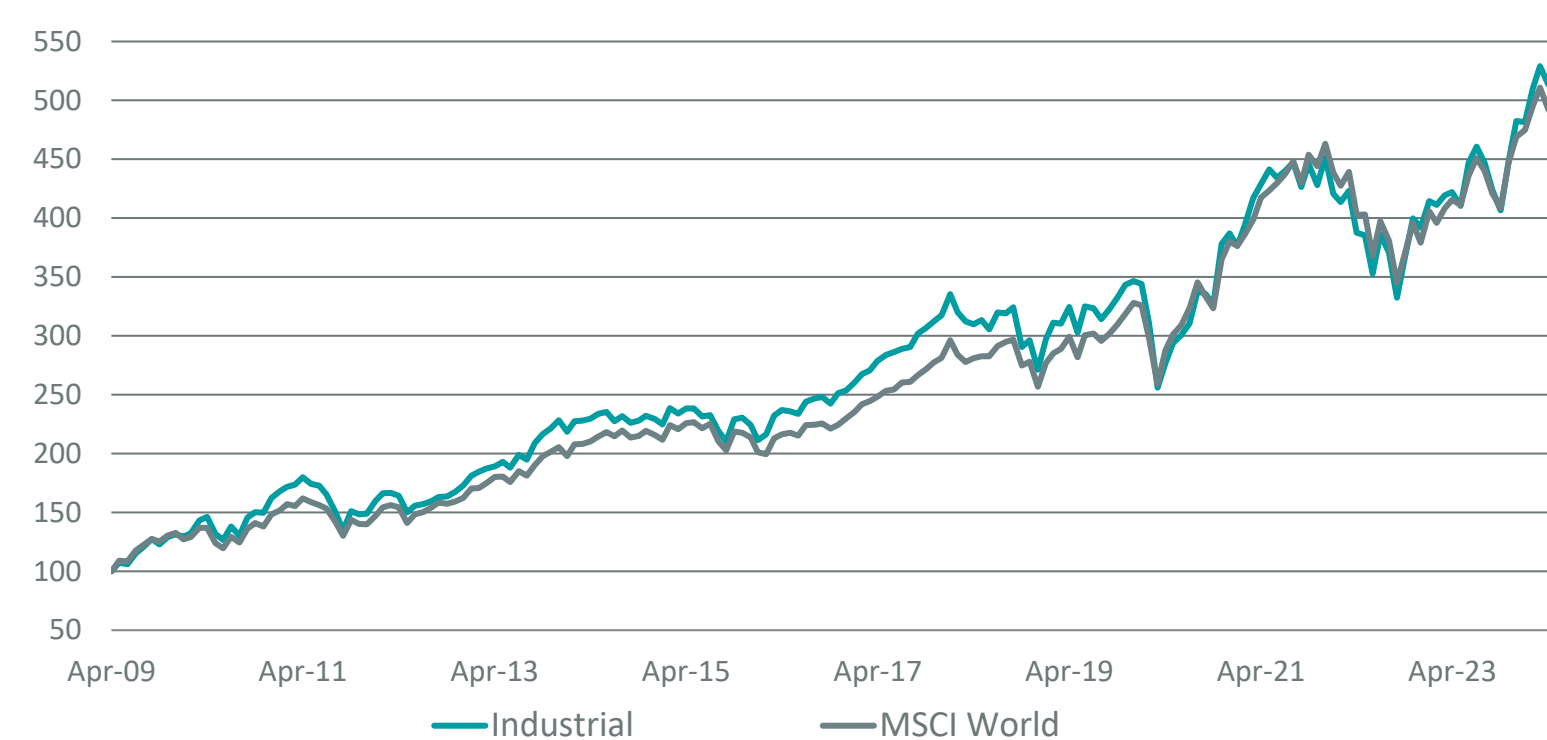
MSCI World Industrial

Introduction

The MSCI World Industrial Index is designed to capture the large and mid cap segments across Developed Markets around the world.Industrial includes manufacturers and distributors of capital goods such as aerospace & defense, building products, electrical equipment and machinery and companies that offer construction & engineering services. It also includes providers of commercial & professional services and companies that provide transportation services.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Industrial	●	●	●	●	●	●

Historical Performance

Industrial — MSCI World

Risk and Return

Return	Industrial	MSCI World
Last 1M	-3.0%	-3.7%
Last 6M	26.3%	20.3%
Last 1Y	21.6%	18.4%
Last 5Y	9.6%	10.5%

5Y Risk[1]	Industrial	MSCI World
Vol.	18.8%	18.3%
Max DD	-39.3%	-34.0%
Beta	94%	-
Tracking Error	7.5%	-

Sector Snapshot

Top Three Industry Groups	
Capital Goods	69.8%
Transportation	15.7%
Commercial & Prof. Serv	14.6%

Top Five Constituents*	
GE UN	2.5%
CAT UN	2.4%
RTX UN	2.1%
UNP UN	2.0%
SIE GY	2.0%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	19.5	1.0	13.3 – 23.8
12M Forward P/B (Consensus)	3.4	0.2	2.0 – 3.6
12M Forward P/CF (Consensus)	14.1	1.0	8.7 – 15.0
12M Forward P/EBITDA (Consensus)	10.7	0.6	6.7 – 11.6
Indicated Dividend Yield	1.9%	-0.1%	1.6% – 2.8%

Valuations (Relative to MSCI World)

Factor	Industrial	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	19.5	18.1	1.4	0.8
12M Forward P/B (Consensus)	3.4	2.9	0.5	0.4
12M Forward P/CF (Consensus)	14.1	13.1	1.0	0.5
12M Forward P/EBITDA (Consensus)	10.7	10.3	0.4	0.0
Indicated Dividend Yield	1.9%	2.2%	-0.3%	-0.4%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	9.1%	0.5%	-6.3% – 50.5%
12M Fwd Growth Sales (Consensus)	4.2%	0.7%	-2.6% – 8.4%
12M Fwd Growth CPS (Consensus)	8.1%	-1.5%	-5.7% – 28.5%
12M Fwd Growth BPS (Consensus)	6.5%	-2.2%	4.9% – 9.3%

Fundamental (Relative to MSCI World)

Factor	Industrial	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	9.1%	9.6%	-0.6%	2.2%
12M Fwd Growth Sales (Consensus)	4.2%	4.2%	0.0%	-0.2%
12M Fwd Growth CPS (Consensus)	8.1%	11.2%	-3.1%	5.7%
12M Fwd Growth BPS (Consensus)	6.5%	5.9%	0.6%	0.9%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Industrial	25.3%
MSCI World	23.0%

Industrial — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	355	234
Neutral	3112	3321
Downward Revisions	298	207

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

Source Bloomberg LP, Thomson Reuters Datastream, DWS Calculations. As of 30 Apr 2024

1. Risk measures (Volatility, Drawdown, Beta) are calculated over the last five years period using daily frequency observations.

2. "Change" refers to the change of the observed metric since last quarter observation.

3. 11M Momentum is defined as the 11M performance of the index calculated as of 1 month ago (often referred in the literature as "1M removed").

4. This earning revision indicator, often referred as "Sentiment" is calculated as: positive minus negative revisons / Total Number of 12M Fwd EPS estimates.

5. Based on end of month observations over the last 5 years. * This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

Past performance, actual or simulated, is not a reliable indicator of future results. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

DWS Research House (House of Data) - Sector Assessment Framework - Monthly Update - April 2024
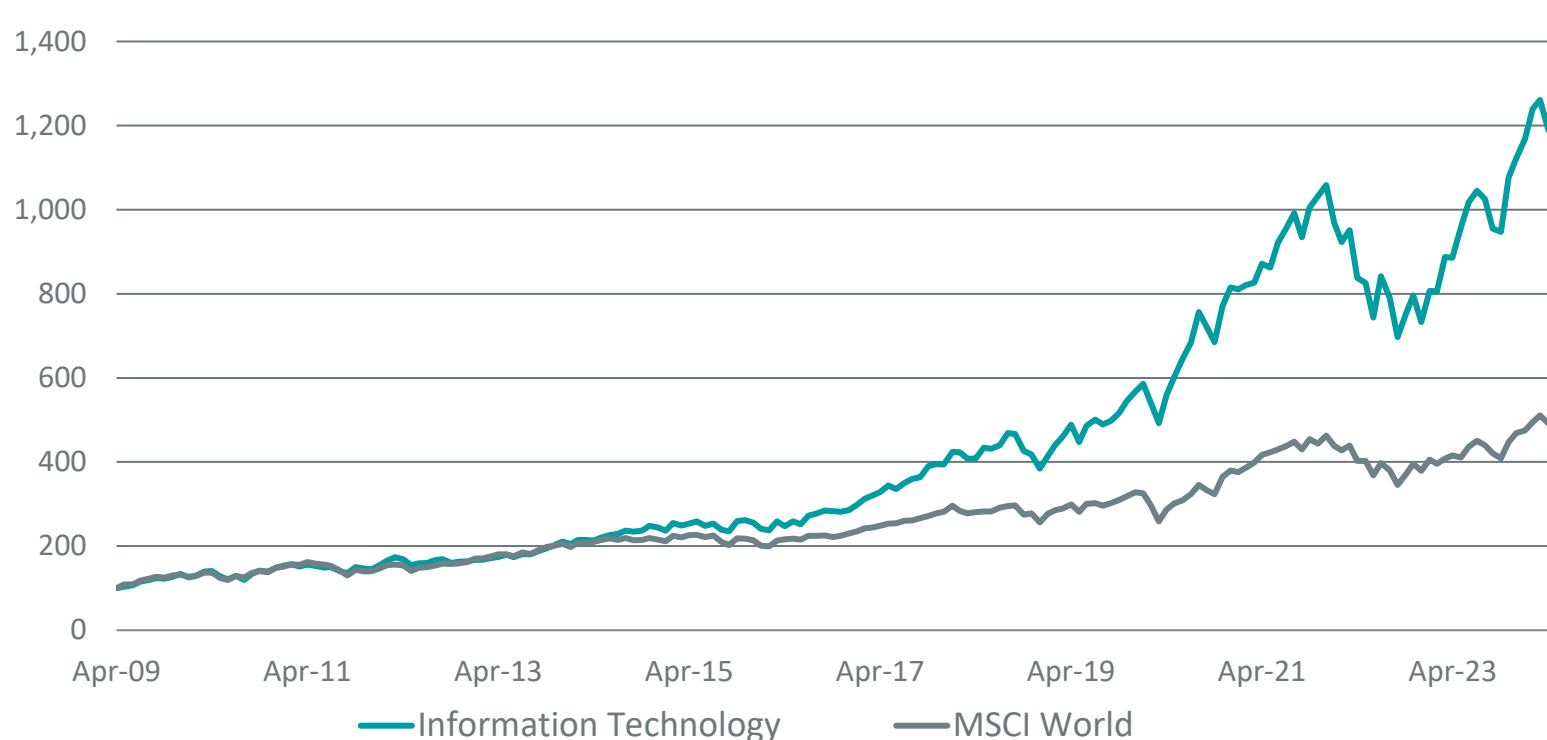
MSCI World Information Technology

Introduction

The MSCI World Information Technology Index is designed to capture the large and mid cap segments across Developed Markets around the world.Information Technology comprises companies that offer software and information technology services, manufacturers and distributors of technology hardware& equipments such as communications equipment, cellular phones, computers & peripherals, electronic equipment and related instruments and semiconductors.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Information Technology	●	●	●	●	●	●

Historical Performance

— Information Technology — MSCI World

Risk and Return

Return	IT	MSCI World
Last 1M	-5.7%	-3.7%
Last 6M	25.5%	20.3%
Last 1Y	34.2%	18.4%
Last 5Y	19.5%	10.5%

5Y Risk[1]	IT	MSCI World
Vol.	26.3%	18.3%
Max DD	-36.4%	-34.0%
Beta	131%	-
Tracking Error	12.2%	-

Sector Snapshot

Top Two Industry Groups

Software & Services	61.6%
Tech. Hardware & Equipt.	38.4%

Top Five Constituents*

MSFT UW	19.0%
AAPL UW	17.3%
NVDA UW	14.7%
AVGO UW	4.0%
ASML NA	2.5%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	26.4	-1.6	17.9 – 29.9
12M Forward P/B (Consensus)	7.6	-0.5	4.7 – 8.9
12M Forward P/CF (Consensus)	22.0	-0.9	13.4 – 24.0
12M Forward P/EBITDA (Consensus)	18.1	-1.1	11.4 – 20.1
Indicated Dividend Yield	0.9%	0.0%	0.9% – 1.9%

Valuations (Relative to MSCI World)

Factor	IT	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	26.4	18.1	8.4	6.9
12M Forward P/B (Consensus)	7.6	2.9	4.7	4.3
12M Forward P/CF (Consensus)	22.0	13.1	8.9	7.6
12M Forward P/EBITDA (Consensus)	18.1	10.3	7.8	6.6
Indicated Dividend Yield	0.9%	2.2%	-1.3%	-1.2%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	17.8%	2.4%	4.3% – 17.8%
12M Fwd Growth Sales (Consensus)	9.4%	1.0%	3.5% – 10.2%
12M Fwd Growth CPS (Consensus)	20.3%	1.9%	8.6% – 20.3%
12M Fwd Growth BPS (Consensus)	16.5%	0.7%	5.5% – 16.5%

Fundamental (Relative to MSCI World)

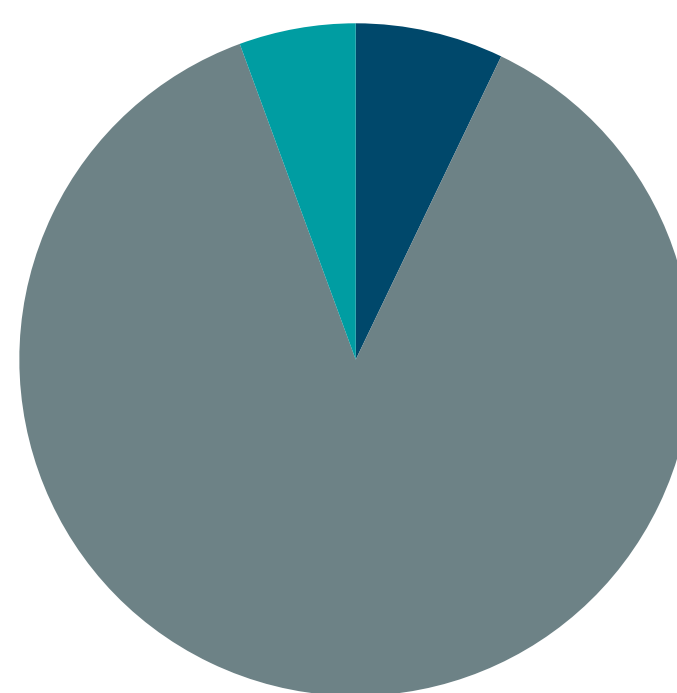| Factor	IT	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	17.8%	9.6%	8.2%	2.1%
12M Fwd Growth Sales (Consensus)	9.4%	4.2%	5.2%	2.1%
12M Fwd Growth CPS (Consensus)	20.3%	11.2%	9.1%	5.7%
12M Fwd Growth BPS (Consensus)	16.5%	5.9%	10.6%	6.2%

11 Month Momentum[3]

11 Month Performance (1M Removed)

IT	42.3%
MSCI World	23.0%
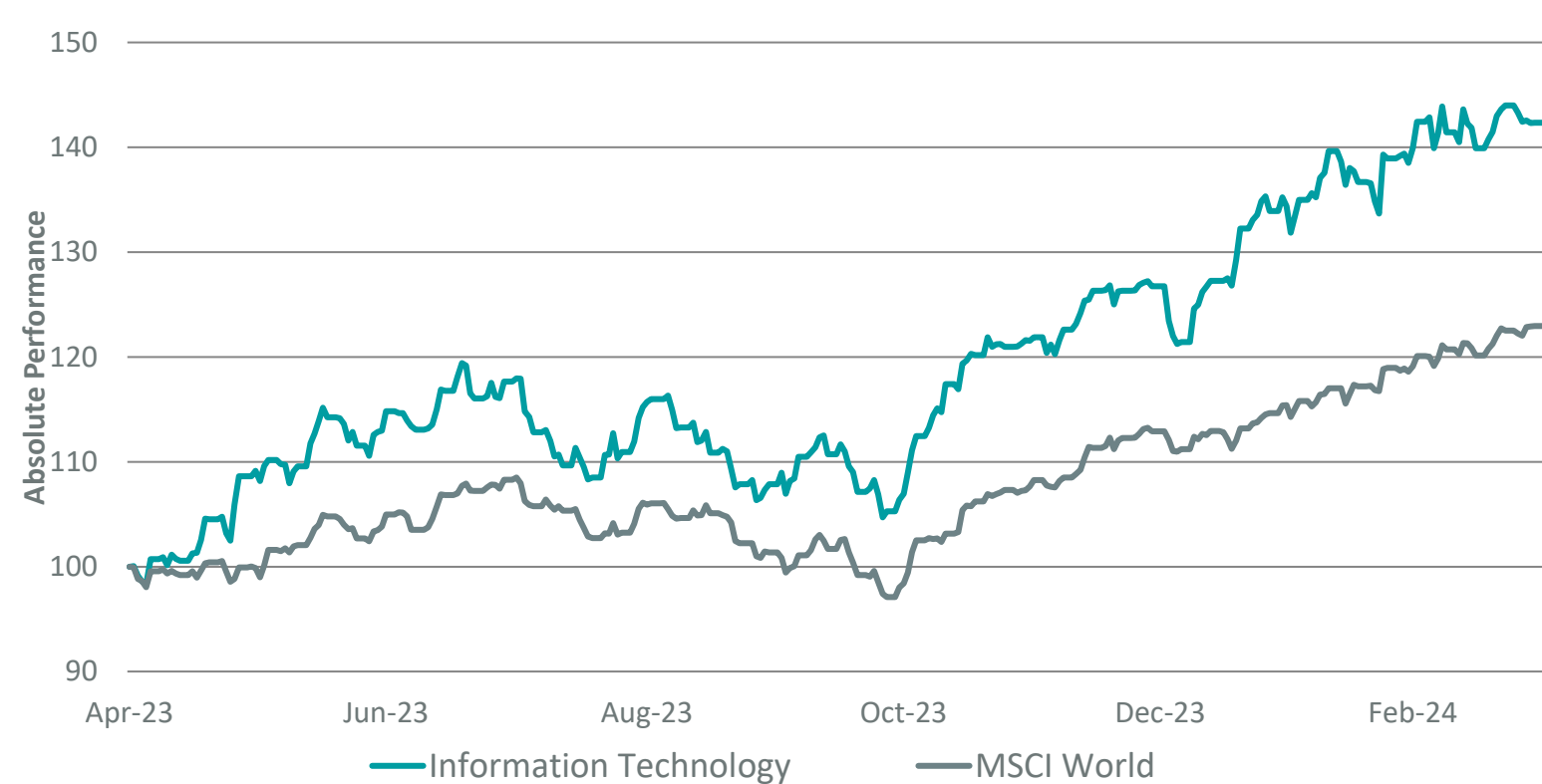
— Information Technology — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	216	119
Neutral	2648	2746
Downward Revisions	170	106

■ Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates

■ Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates

■ Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

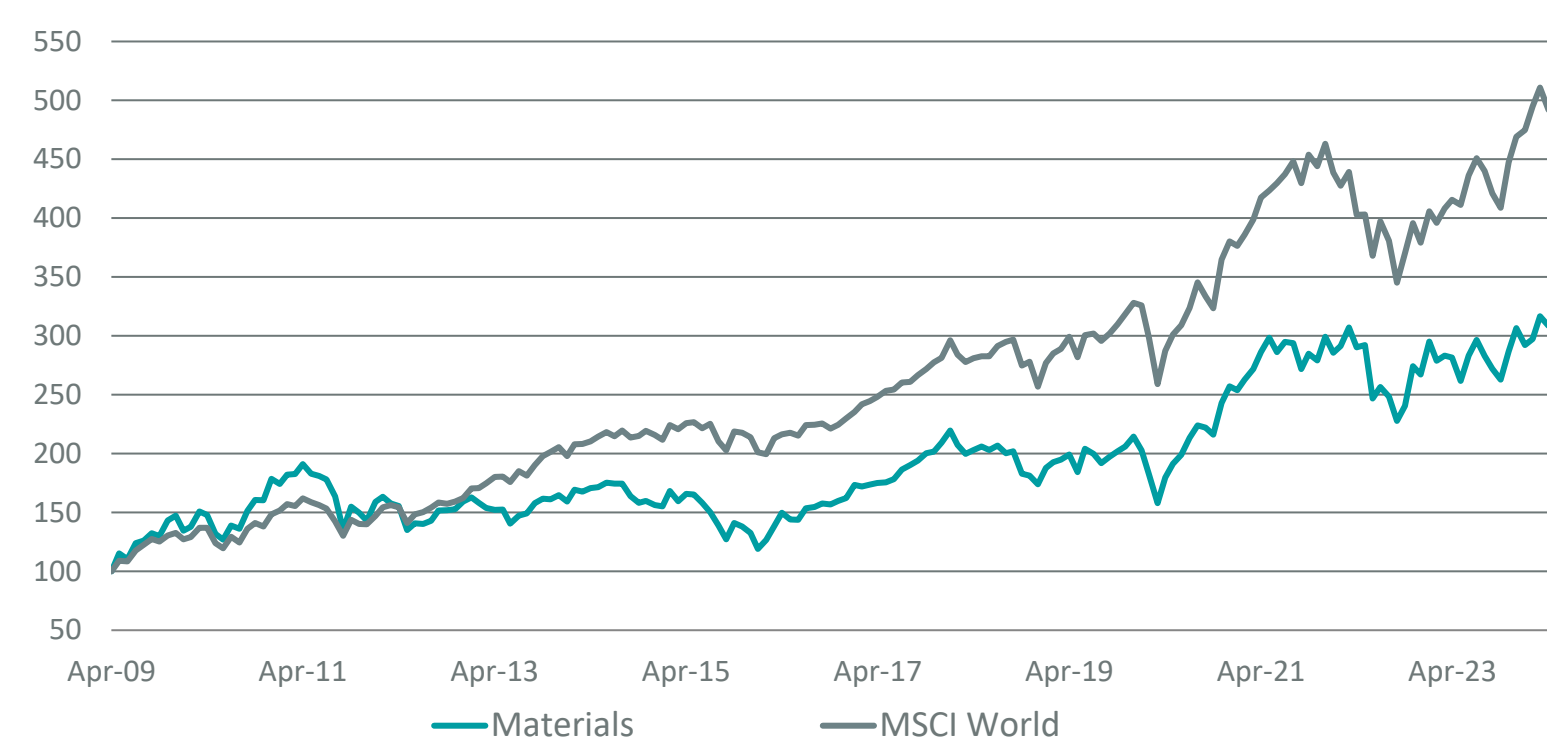# MSCI World Materials

Introduction

The MSCI World Materials Index is designed to capture the large and mid cap segments across Developed Markets around the world. Materials includes companies that manufacture chemicals, construction materials, glass, paper, forest products and related packaging products, and metals, minerals and mining companies, including producers of steel.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Materials	🔴	🔴	🟢	🔴	🟢	🔴

Historical Performance

Materials — MSCI World

Risk and Return

Return	Materials	MSCI World
Last 1M	-2.6%	-3.7%
Last 6M	17.4%	20.3%
Last 1Y	9.5%	18.4%
Last 5Y	9.2%	10.5%

5Y Risk[1]	Materials	MSCI World
Vol.	20.0%	18.3%
Max DD	-36.8%	-34.0%
Beta	93%	-
Tracking Error	10.7%	-

Sector Snapshot

Top Industry Group	
Materials	100.0%

Top Five Constituents*	
LIN UW	8.7%
BHP AT	5.8%
AI FP	4.2%
RIO LN	3.1%
SHW UN	3.0%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	16.6	1.5	9.8 — 20.2
12M Forward P/B (Consensus)	2.0	0.2	1.3 — 2.3
12M Forward P/CF (Consensus)	9.8	0.8	6.5 — 10.3
12M Forward P/EBITDA (Consensus)	6.8	0.5	4.5 — 7.2
Indicated Dividend Yield	2.6%	-0.5%	2.4% — 4.1%

Valuations (Relative to MSCI World)

Factor	Materials	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	16.6	18.1	-1.5	-2.6
12M Forward P/B (Consensus)	2.0	2.9	-0.9	-0.6
12M Forward P/CF (Consensus)	9.8	13.1	-3.3	-3.2
12M Forward P/EBITDA (Consensus)	6.8	10.3	-3.4	-3.6
Indicated Dividend Yield	2.6%	2.2%	0.4%	0.6%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	5.9%	-0.9%	-16.4% — 34.1%
12M Fwd Growth Sales (Consensus)	1.8%	0.2%	-4.0% — 10.5%
12M Fwd Growth CPS (Consensus)	3.5%	-2.1%	-0.8% — 15.8%
12M Fwd Growth BPS (Consensus)	5.1%	-0.3%	2.0% — 9.3%

Fundamental (Relative to MSCI World)

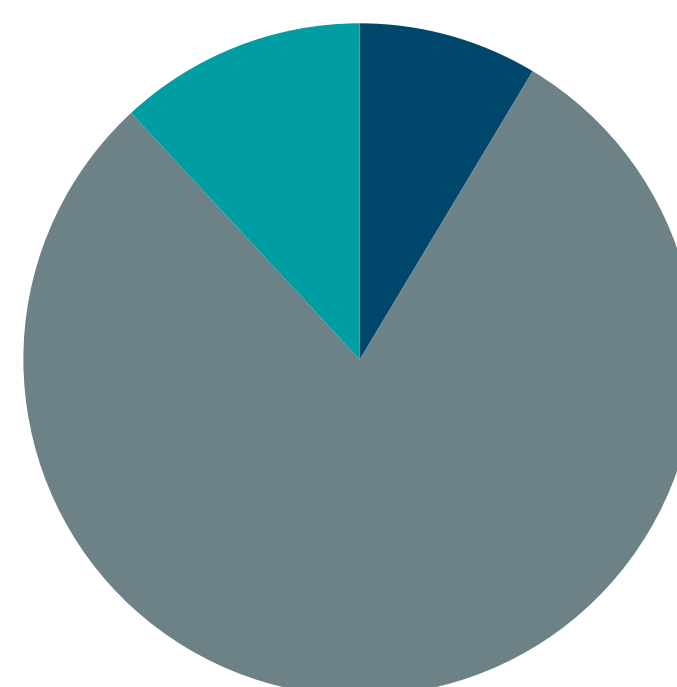| Factor	Materials	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	5.9%	9.6%	-3.8%	-4.1%
12M Fwd Growth Sales (Consensus)	1.8%	4.2%	-2.4%	-2.6%
12M Fwd Growth CPS (Consensus)	3.5%	11.2%	-7.7%	-1.8%
12M Fwd Growth BPS (Consensus)	5.1%	5.9%	-0.8%	-0.1%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Materials	12.4%
MSCI World	23.0%

Materials — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	133	136
Neutral	1230	1328
Downward Revisions	184	108

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

Source Bloomberg LP, Thomson Reuters Datastream, DWS Calculations. As of 30 Apr 2024

1. Risk measures (Volatility, Drawdown, Beta) are calculated over the last five years period using daily frequency observations.

2. "Change" refers to the change of the observed metric since last quarter observation.

3. 11M Momentum is defined as the 11M performance of the index calculated as of 1 month ago (often referred in the literature as "1M removed").

4. This earning revision indicator, often referred as "Sentiment" is calculated as: positive minus negative revisons / Total Number of 12M Fwd EPS estimates.

5. Based on end of month observations over the last 5 years. * This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

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DWS Research House (House of Data) - Sector Assessment Framework - Monthly Update - April 2024

MSCI World Real Estate

Introduction

The MSCI World Real Estate Index is designed to capture the large and mid cap segments across Developed Markets around the world.Real Estate includes companies thatare invovled in real estate.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Real Estate	●	●	●	●	●	●

Historical Performance

Legend: Real Estate, MSCI World

Risk and Return

Return	Real Estate	MSCI World
Last 1M	-7.9%	-3.7%
Last 6M	10.5%	20.3%
Last 1Y	-2.8%	18.4%
Last 5Y	0.8%	10.5%

5Y Risk[1]	Real Estate	MSCI World
Vol.	22.4%	18.3%
Max DD	-40.6%	-34.0%
Beta	98%	-
Tracking Error	13.6%	-

Sector Snapshot

Top Two Industry Groups	
Equity Real Estate Invest.	80.2%
Real Estate Management &	19.8%

Top Five Constituents*	
PLD UN	7.0%
AMT UN	6.0%
EQIX UW	5.0%
WELL UN	3.5%
SPG UN	3.4%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	24.6	-0.5	19.2 — 31.0
12M Forward P/B (Consensus)	1.6	0.0	1.2 — 2.0
12M Forward P/CF (Consensus)	13.3	2.0	7.7 — 18.5
12M Forward P/EBITDA (Consensus)	11.2	-0.2	9.3 — 15.1
Indicated Dividend Yield	4.0%	0.2%	2.6% — 4.6%

Valuations (Relative to MSCI World)

Factor	Real Estate	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	24.6	18.1	6.5	8.1
12M Forward P/B (Consensus)	1.6	2.9	-1.4	-1.0
12M Forward P/CF (Consensus)	13.3	13.1	0.1	2.8
12M Forward P/EBITDA (Consensus)	11.2	10.3	0.9	2.4
Indicated Dividend Yield	4.0%	2.2%	1.8%	0.9%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	2.8%	2.0%	-7.4% — 10.0%
12M Fwd Growth Sales (Consensus)	4.9%	0.5%	0.5% — 7.4%
12M Fwd Growth CPS (Consensus)	14.8%	-38.9%	3.0% — 156.3%
12M Fwd Growth BPS (Consensus)	1.9%	2.6%	-2.0% — 4.5%

Fundamental (Relative to MSCI World)

Factor	Real Estate	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	2.8%	9.6%	-6.9%	-7.7%
12M Fwd Growth Sales (Consensus)	4.9%	4.2%	0.7%	0.0%
12M Fwd Growth CPS (Consensus)	14.8%	11.2%	3.6%	7.1%
12M Fwd Growth BPS (Consensus)	1.9%	5.9%	-4.0%	-4.0%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Real Estate	5.6%
MSCI World	23.0%
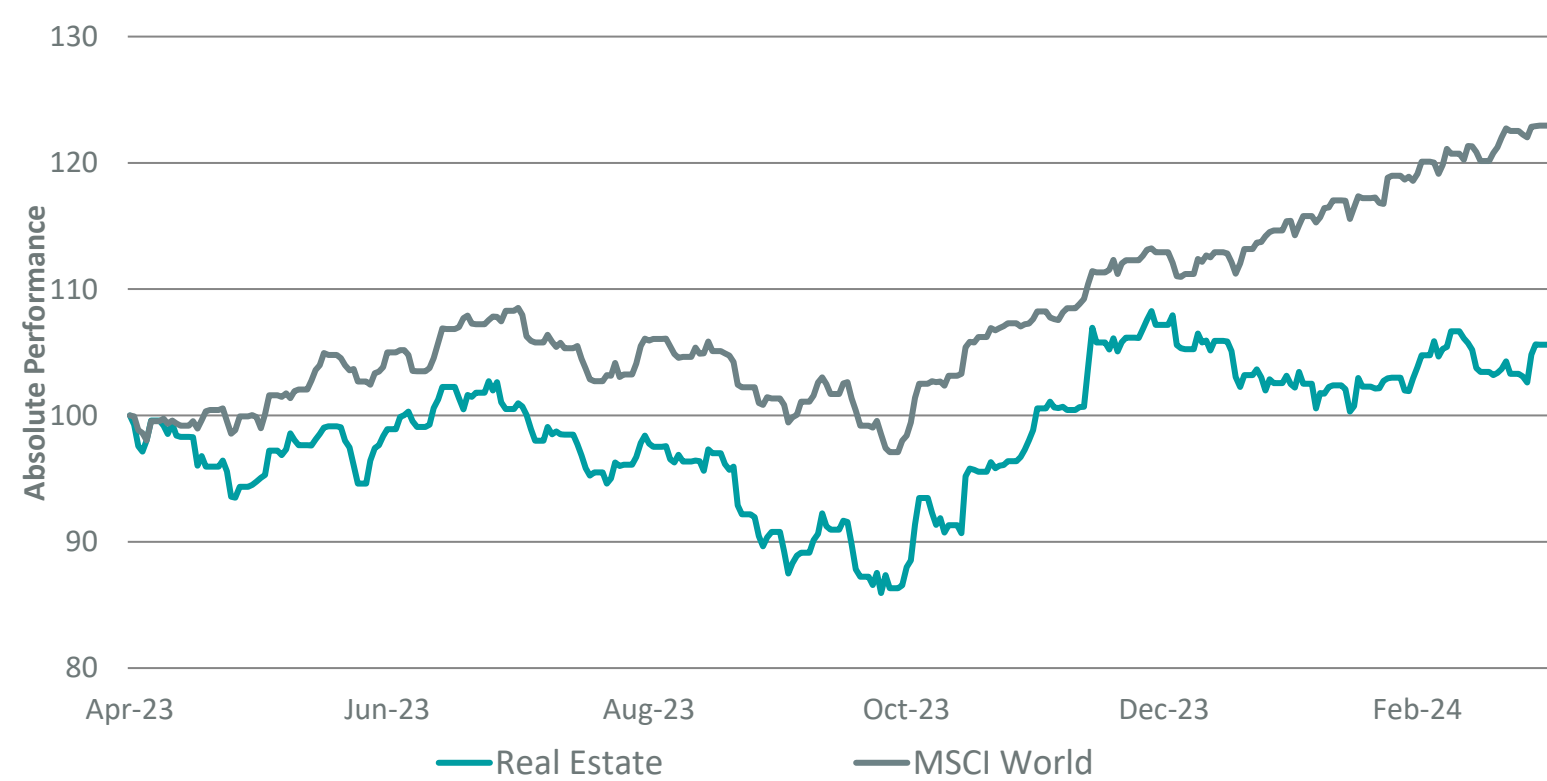
Legend: Real Estate, MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	24	38
Neutral	870	793
Downward Revisions	33	84

- ■ Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- ■ Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- ■ Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates
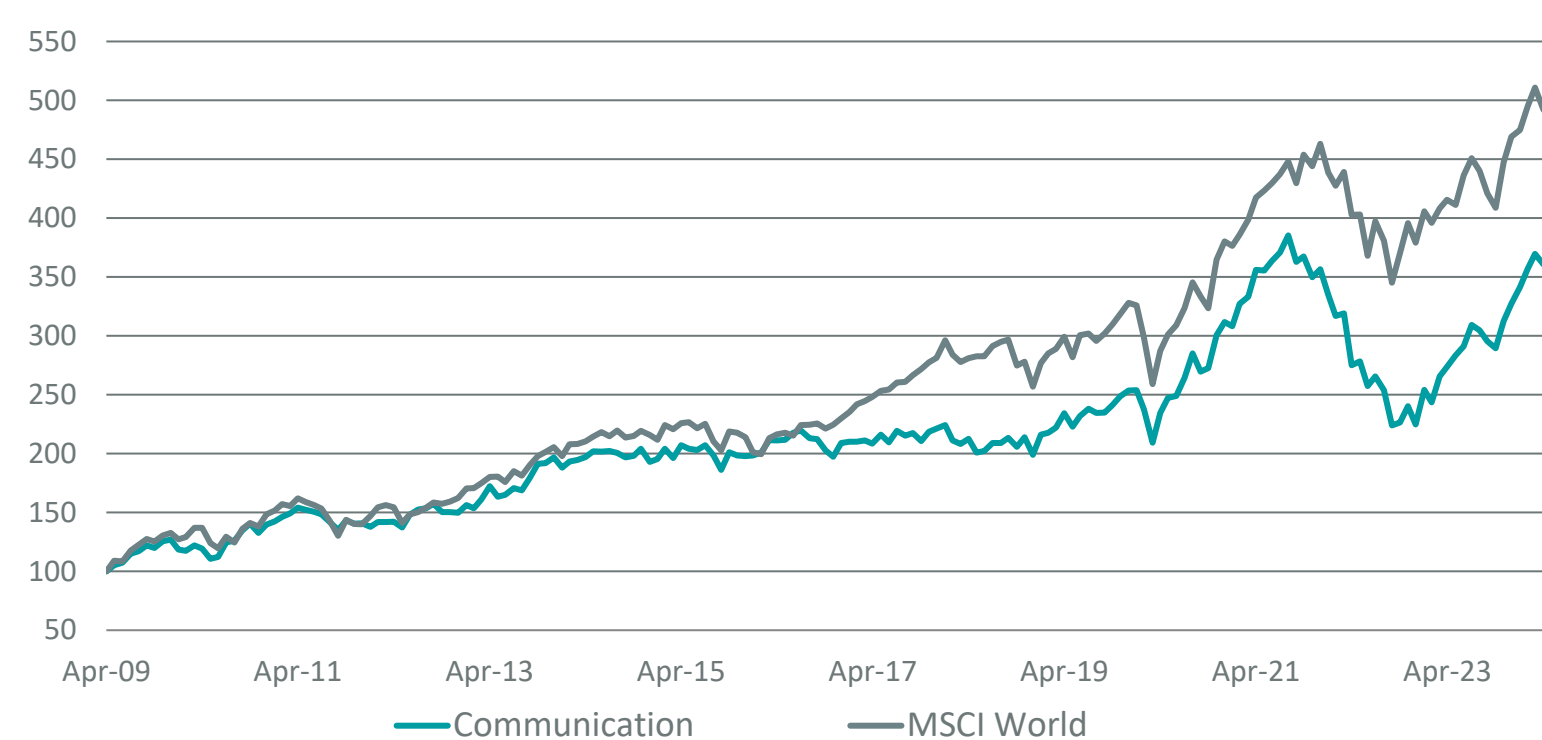
MSCI World Communication

Introduction

The MSCI World Communication Index is designed to capture the large and mid cap segments across Developed Markets around the world.Communication contains companies that provide communications services primarily through a fixed-line, cellular or wireless, high bandwidth and/or fiber optic cable network.

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Communication	●	●	●	●	●	●

Historical Performance

Communication — MSCI World

Risk and Return

Return	Communications	MSCI World
Last 1M	-2.4%	-3.7%
Last 6M	24.6%	20.3%
Last 1Y	31.7%	18.4%
Last 5Y	9.0%	10.5%

5Y Risk[1]	Communications	MSCI World
Vol.	21.8%	18.3%
Max DD	-45.3%	-34.0%
Beta	103%	-
Tracking Error	11.1%	-

Sector Snapshot

Top Two Industry Groups

Media & Entertainment	82.7%
Telecom. Services	17.3%

Top Five Constituents*

GOOGL UW	20.5%
META UW	20.3%
GOOG UW	18.0%
NFLX UW	5.1%
DIS UN	4.3%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	18.7	0.2	14.3 — 22.5
12M Forward P/B (Consensus)	3.1	0.2	2.0 — 3.4
12M Forward P/CF (Consensus)	10.0	0.3	7.1 — 12.9
12M Forward P/EBITDA (Consensus)	7.8	0.3	5.5 — 8.9
Indicated Dividend Yield	2.2%	-1.2%	2.1% — 6.2%

Valuations (Relative to MSCI World)

Factor	Communications	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	18.7	18.1	0.6	0.6
12M Forward P/B (Consensus)	3.1	2.9	0.2	0.2
12M Forward P/CF (Consensus)	10.0	13.1	-3.1	-2.3
12M Forward P/EBITDA (Consensus)	7.8	10.3	-2.5	-2.4
Indicated Dividend Yield	2.2%	2.2%	0.0%	1.1%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	16.4%	0.8%	0.4% — 19.3%
12M Fwd Growth Sales (Consensus)	5.5%	0.1%	2.3% — 8.8%
12M Fwd Growth CPS (Consensus)	10.4%	0.7%	-5.4% — 11.6%
12M Fwd Growth BPS (Consensus)	-5.5%	-16.8%	-6.8% — 11.2%

Fundamental (Relative to MSCI World)

Factor	Communications	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	16.4%	9.6%	6.8%	0.9%
12M Fwd Growth Sales (Consensus)	5.5%	4.2%	1.3%	1.5%
12M Fwd Growth CPS (Consensus)	10.4%	11.2%	-0.8%	-1.3%
12M Fwd Growth BPS (Consensus)	-5.5%	5.9%	-11.5%	2.2%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Communications	35.0%
MSCI World	23.0%

Communication — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	138	65
Neutral	1075	1189
Downward Revisions	103	82

- Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates
- Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

Source Bloomberg LP, Thomson Reuters Datastream, DWS Calculations. As of 30 Apr 2024

1. Risk measures (Volatility, Drawdown, Beta) are calculated over the last five years period using daily frequency observations.

2. "Change" refers to the change of the observed metric since last quarter observation.

3. 11M Momentum is defined as the 11M performance of the index calculated as of 1 month ago (often referred in the literature as "1M removed").

4. This earning revision indicator, often referred as "Sentiment" is calculated as: positive minus negative revisons / Total Number of 12M Fwd EPS estimates.

5. Based on end of month observations over the last 5 years. * This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

Past performance, actual or simulated, is not a reliable indicator of future results. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

DWS Research House (House of Data) - Sector Assessment Framework - Monthly Update - April 2024
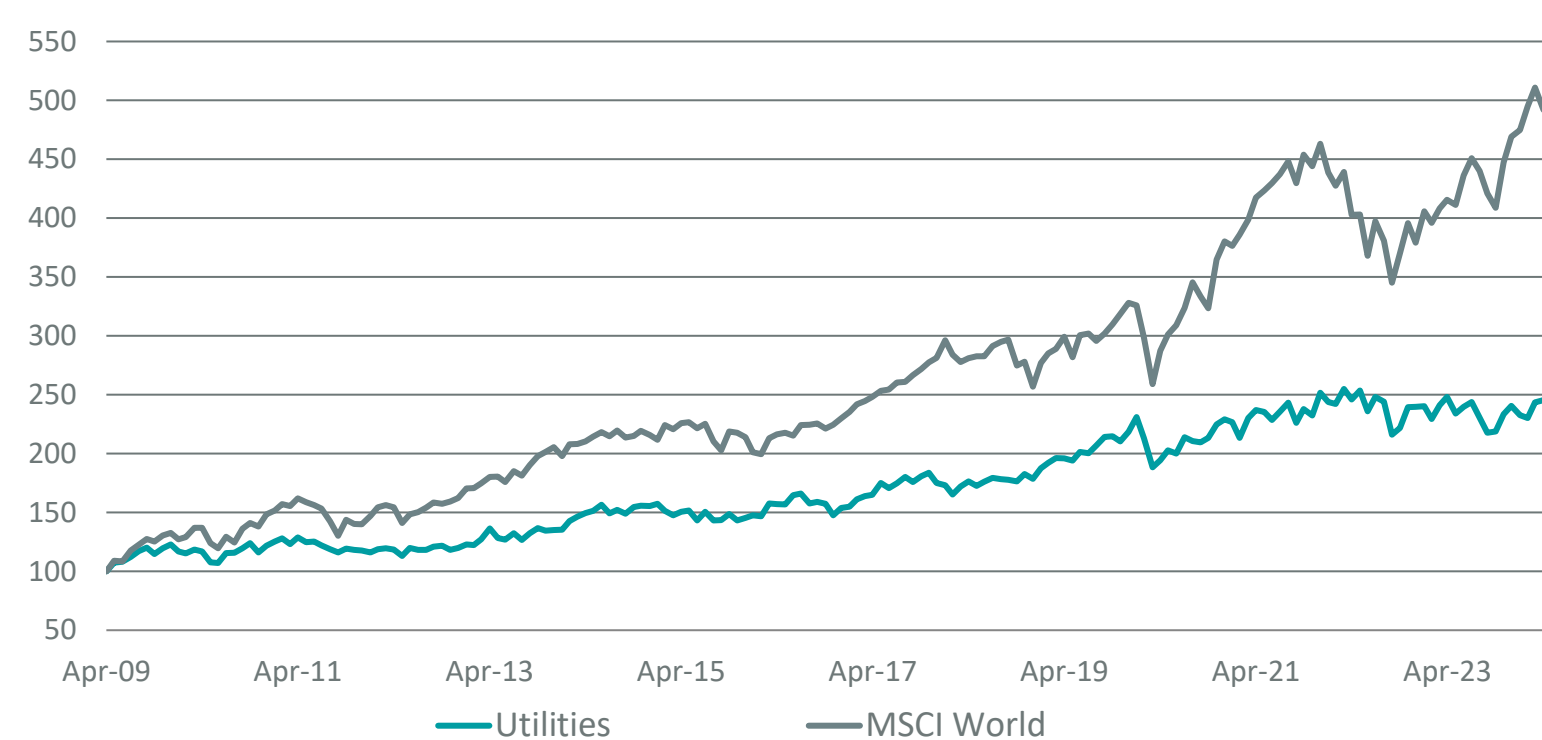
MSCI World Utilities

Introduction

The MSCI World Utilities Index is designed to capture the large and mid cap segments across Developed Markets around the world. Utilities comprises utility companies such as electric, gas and water utilities. It also includes independent power producers & energy traders and companies that engage in generation and distribution of electricity using renewable sources

Summary

Current Indicator Summary

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Utilities	●	●	●	●	●	●

Historical Performance

Utilities — MSCI World

Risk and Return

Return	Utilities	MSCI World
Last 1M	0.8%	-3.7%
Last 6M	12.2%	20.3%
Last 1Y	-1.1%	18.4%
Last 5Y	4.6%	10.5%

5Y Risk[1]	Utilities	MSCI World
Vol.	18.8%	18.3%
Max DD	-34.2%	-34.0%
Beta	74%	-
Tracking Error	13.8%	-

Sector Snapshot

Top Industry Group	
Utilities	100.0%

Top Five Constituents*	
NEE UN	8.6%
SO UN	5.0%
DUK UN	4.8%
IBE SQ	4.7%
CEG UW	3.7%

Valuations (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Forward P/E (Consensus)	14.6	1.0	13.5 — 18.8
12M Forward P/B (Consensus)	1.6	0.1	1.5 — 1.9
12M Forward P/CF (Consensus)	7.0	0.4	5.9 — 8.5
12M Forward P/EBITDA (Consensus)	5.2	0.3	4.8 — 6.5
Indicated Dividend Yield	3.8%	-0.4%	3.2% — 4.3%

Valuations (Relative to MSCI World)

Factor	Utilities	MSCI World	Difference	Historical Median
12M Forward P/E (Consensus)	14.6	18.1	-3.4	-1.2
12M Forward P/B (Consensus)	1.6	2.9	-1.3	-0.8
12M Forward P/CF (Consensus)	7.0	13.1	-6.2	-4.4
12M Forward P/EBITDA (Consensus)	5.2	10.3	-5.0	-4.1
Indicated Dividend Yield	3.8%	2.2%	1.6%	1.2%

Fundamental (Relative to Historical Averages)

Factor	Current	Change[2]	Current value (vs 5Y Highs and Lows)[5]
12M Fwd Growth EPS (Consensus)	5.0%	1.3%	2.1% — 12.9%
12M Fwd Growth Sales (Consensus)	1.7%	2.8%	-5.6% — 6.9%
12M Fwd Growth CPS (Consensus)	8.1%	11.2%	-3.1% — 24.8%
12M Fwd Growth BPS (Consensus)	6.5%	1.6%	2.5% — 6.5%

Fundamental (Relative to MSCI World)

Factor	Utilities	MSCI World	Difference	Historical Median
12M Fwd Growth EPS (Consensus)	5.0%	9.6%	-4.6%	-1.9%
12M Fwd Growth Sales (Consensus)	1.7%	4.2%	-2.5%	-3.7%
12M Fwd Growth CPS (Consensus)	8.1%	11.2%	-3.1%	5.4%
12M Fwd Growth BPS (Consensus)	6.5%	5.9%	0.5%	-2.2%

11 Month Momentum[3]

11 Month Performance (1M Removed)

Utilities	-1.9%
MSCI World	23.0%

Utilities — MSCI World

Positive and negative revisions in 12M EPS estimates[4]

	Current Month	Last Month
Upward Revisions	48	76
Neutral	909	811
Downward Revisions	40	76

■ Number of 12m Fwd EPS estimates revised up since last month as a percentage of the number of estimates

■ Number of 12m Fwd EPS estimates neutral since last month as a percentage of the number of estimates

■ Number of 12m Fwd EPS estimates revised down since last month as a percentage of the number of estimates

Source Bloomberg LP, Thomson Reuters Datastream, DWS Calculations. As of 30 Apr 2024

1. Risk measures (Volatility, Drawdown, Beta) are calculated over the last five years period using daily frequency observations.

2. "Change" refers to the change of the observed metric since last quarter observation.

3. 11M Momentum is defined as the 11M performance of the index calculated as of 1 month ago (often referred in the literature as "1M removed").

4. This earning revision indicator, often referred as "Sentiment" is calculated as: positive minus negative revisons / Total Number of 12M Fwd EPS estimates.

5. Based on end of month observations over the last 5 years. * This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

Past performance, actual or simulated, is not a reliable indicator of future results. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

DWS Research House (House of Data) - Sector Assessment Framework - Monthly Update - April 2024

Sector Assesment Framework - Glossary

How to read the "Current Indicator Summary"

Macroeconomic Long Term

This composite indicator is based on 3 metrics (**GDP Growth, Inflation and Short Term interest rate**). It shows a positive signal for cyclical sectors when the average of the **5 Years Historical Z-Score of 1 month change (3M for GDP)** calculated for each metrics is significantly below zero. Such a signal indicates that risk indicator are calming down which may be positive for cyclical sectors.

Macroeconomic Short Term

This composite indicator is based on 3 metrics (the **VIX Index**, the **Term Structure** and the **CDS Spreads**). It is calculated as the average of the **5 Years Historical Z-Score of 1 month change** calculated for each metrics. A positive Z Score for GDP and Short Term Interest Rate is considered positive for cyclical sectors, a positive Z Score in inflation is considered negative for cyclical sectors.

Valuation

This composite indicator is based on 5 valuation metrics (*12m Forward P/E*, *12m Forward P/B*, *12m Forward P/CF*, *12m Forward P/EBITDA* and *Indicated Dividend Yield*). It shows a positive signal when the average of the *Cross sectional Z-Score* calculated for each metrics is significantly below zero. Such a signal indicates that a sector is cheap compared to other sectors.

Fundamentals

This composite indicator is based on 4 fundamental metrics (*12m Forward Growth in EPS*, *12m Forward Growth in Sales 12m ForwardGrowth in BPS*, *12m Forward Growth in CPS*). It shows a positive signal when the average of the *Cross sectional Z-Score* calculated for each metrics is above zero. Such a signal indicates that a sector is experiencing high growth compared to other sectors. Note that as highlighted in the Passive Insight #12, this indicator did not show any significant statistical relevance as indicator for rotation.

Momentum

This indicator shows a positive signal when the *11m momentum* of the sector is positive. Such a signal indicates that the sector currently exhibits positive momentum.

Sentiment

This indicator shows a positive signal when the *Sentiment* exhibited by analysts is stronger than usual (as defined by a *5 Year Historical Z-Score*).

Definitions

Volatility

Historical volatility is an indicator of risk. It measures the degree of variation of a trading price series over time, as measured by the standard deviation of returns. In this case, it is calculated over the last 5 years using daily returns.

Maximum Drawdown

Maximum drawdown is an indicator of risk. It measures the largest drop from peak to trough in the price of an asset.

Beta

Beta is a measure of the risk compared to a given benchmark (here the large cap index). Beta is calculated using regression analysis. A beta of less than 1 means that the small cap index will be less volatile than the large cap index.

Tracking Error

Tracking error is a measure of relative risk versus a given benchmark. It is defined as the annualized divergence between the price behavior of an index and the price behavior of a benchmark calculated as the standard deviation of the difference between their returns. Here, it is calculated over the last 5 years using daily returns.

12m Forward P/E (Consensus)

Weighted Average Price/Earnings per Share ratio based nn 12-month-forward Earnings

12m Forward P/B (Consensus)

Weighted Average Price/Book Value per Share ratio based on 12 month forward Book Value per Share

12m Forward P/CF (Consensus)

Weighted Average Price/Cash Flow per Share ratio based on 12 month forward Cash Flow per Share

12m Forward P/EBITDA (Consensus)

Weighted Average Price/EBITDA ratio based on 12 month forward EBITDA

Indicated Dividend Yield (Consensus)

Weighted Average Dividend Yield based on the Indicated Annual Dividend

12M Fwd Growth EPS (Consensus)

Weighted 12-month-forward Year-over-Year Growth In Earnings per Share

12M Fwd Growth Sales (Consensus)

Weighted 12-month-forward Year-over-Year Growth In Sales

12M Fwd Growth CPS (Consensus)

Weighted 12-month-forward Year-over-Year Growth In Cash Flow per Share

12M Fwd Growth BPS (Consensus)

Weighted 12-month-forward Year-over-Year Growth In Book Value per Share

11 Month Momentum

Momentum refers to the rate of change of price movements for a particular index – that is, the speed at which the price is changing. In this case, the traditional measure of momentum is used i.e. the 11 Month performance of the index calculated a month ago.

Sentiment

Standardized score calculated as the number of upward revisions of 12m Fwd EPS estimates minus the number of downward revisions divided by the number of unchanged estimates. This scores provides an insight into how analysts' view of a given group of stocks are shifting.

12M Forward EPS Estimates

12-month-forward Earnings per Share estimates by analysts

Revisions to 12M Forward EPS Estimates

Number of revisions to 12-month-forward Earnings per Share estimates by analysts over the last month.

Historical Median

Value lying at the midpoint of a frequency distribution of observed values, such that there is an equal probability of falling above or below it.

5 Years Historical Z-Score

A z-score (aka, a standard score) indicates how many standard deviations an element is from the mean. It is a dimensionless quantity obtained by subtracting the population mean from an individual raw score and then dividing the difference by the population's standard deviation. Here, the last 5 year data observed on a monthly basis is used.

Rolling 12 Months Performance as of 30-Apr-2024

Name	Currency	30-Apr-23-30-Apr-24	30-Apr-22-30-Apr-23	30-Apr-21-30-Apr-22	30-Apr-20-30-Apr-21	30-Apr-19-30-Apr-20	30-Apr-18-30-Apr-19	30-Apr-17-30-Apr-18	30-Apr-16-30-Apr-17	30-Apr-15-30-Apr-16	30-Apr-14-30-Apr-15
MSCI World Consumer Discretionary	USD	17.6%	-1.1%	-15.0%	63.0%	-2.3%	7.1%	16.9%	14.8%	-2.2%	14.8%
MSCI World Consumer Staples	USD	-3.1%	4.2%	7.2%	20.2%	-1.0%	10.4%	-0.2%	6.2%	7.1%	7.2%
MSCI World Energy	USD	12.6%	13.7%	47.5%	30.6%	-37.8%	-6.6%	17.0%	3.1%	-15.6%	-14.3%
MSCI World Financials	USD	22.1%	1.7%	-3.9%	58.4%	-21.0%	-2.5%	15.2%	22.3%	-9.4%	5.9%
MSCI World Health Care	USD	5.2%	4.5%	5.6%	20.1%	15.6%	8.3%	8.1%	7.0%	-5.1%	20.4%
MSCI World Industrial	USD	21.6%	8.9%	-9.6%	55.2%	-14.8%	4.7%	11.2%	17.5%	-0.5%	3.7%
MSCI World Information Technology	USD	34.2%	5.7%	-3.8%	55.9%	14.4%	19.8%	24.4%	32.5%	-2.4%	19.0%
MSCI World Materials	USD	9.5%	-2.9%	1.4%	59.4%	-9.8%	-2.0%	16.1%	16.9%	-9.6%	-2.9%
MSCI World	USD	18.4%	3.2%	-3.5%	45.3%	-4.0%	6.5%	13.2%	14.7%	-4.2%	7.4%
MSCI World Real Estate	USD	-2.8%	-16.1%	8.0%	29.5%	-8.7%	15.4%	1.2%	1.8%	7.5%	10.4%
MSCI World Communication	USD	31.7%	-0.4%	-22.8%	51.8%	0.2%	10.2%	2.0%	-1.3%	1.9%	5.2%
MSCI World Utilities	USD	-1.1%	0.9%	3.7%	22.0%	-0.9%	11.1%	6.9%	5.0%	4.4%	0.7%