# DEVELOPED MARKET EQUITIES SECTOR ASSESMENT FRAMEWORK -MONTHLY UPDATE

April 2024



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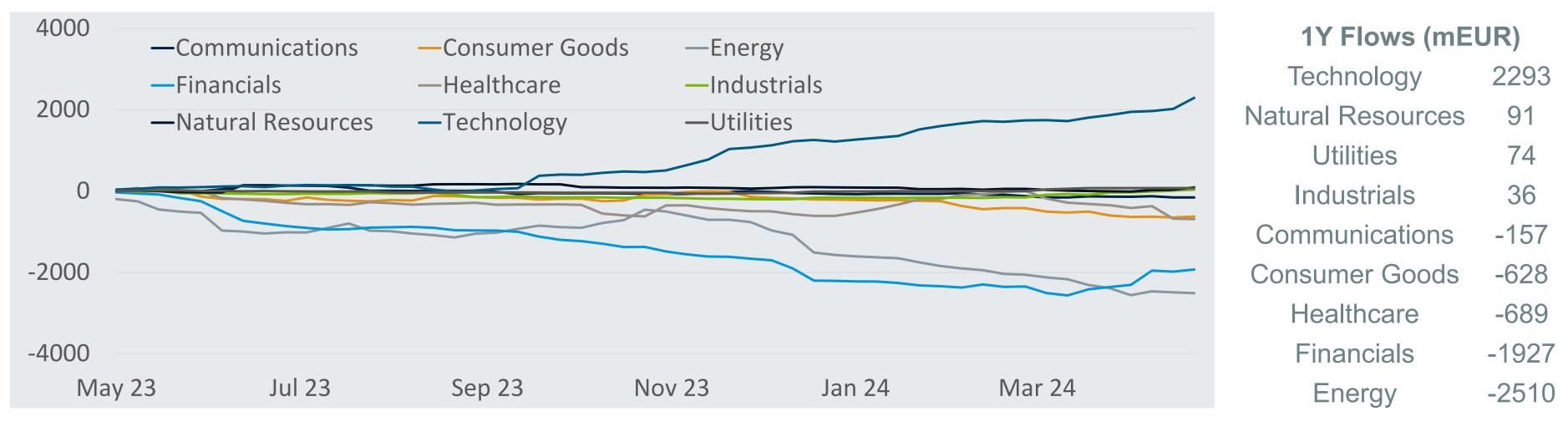
# SECTOR SPOTLIGHT

# 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)



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	<b>Europe</b> Rising Rate Baskets	US
Financials	Financials	Financials
TITATICIAIS	T IIIanciais	ГПАНСІАІЗ
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

Source: Bloomberg LP, MSCI, DWS calculations. As of 30<sup>th</sup> Apr 2024. Performances (in USD for World and USA, in EUR for Europe) and flows are over the previous 1 calendar month. Flows refer to UCITS ETFs only and are in € millions and as per internal DWS classifications. Correlations are calculated using 3yr historical beta-adjusted excess returns. **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

# 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					Retur	Return				5Y Risk <sup>1</sup>			
	Macroeco Long Term	Macroeco Short Term	Valuation	Fundamentals	Momentum	Sentiment	1M	6M	1Y	5Y		Max. DD	Beta
Consumer Discretionary				٠			-4.9%	18.5%	17.6%	9.5%	21.8%	-37.2%	109%
Consumer Staples				٠			-1.2%	9.3%	-3.1%	5.2%	13.7%	-24.0%	59%
Energy Sector				•			0.3%	10.4%	12.6%	8.9%	31.7%	-60.0%	113%
Financials				۲			-3.5%	25.2%	22.1%	8.4%	22.2%	-43.0%	107%
Health Care				۲			-4.0%	14.0%	5.2%	10.0%	15.9%	-27.0%	74%
Industrial				•			-3.0%	26.3%	21.6%	9.6%	18.8%	-39.3%	94%
Information Technology			•	•			-5.7%	25.5%	34.2%	19.5%	26.3%	-36.4%	131%
Materials				۲			-2.6%	17.4%	9.5%	9.2%	20.0%	-36.8%	93%
Real Estate				۲			-7.9%	10.5%	-2.8%	0.8%	22.4%	-40.6%	98%
Communication				•			-2.4%	24.6%	31.7%	9.0%	21.8%	-45.3%	103%
Utilities				۲			0.8%	12.2%	-1.1%	4.6%	18.8%	-34.2%	74%
MSCI World		Unfavo	ourable				-3.7%	20.3%	18.4%	10.5%	18.3%	-34.0%	-
		Favour	able										
Maara Eagnamy													

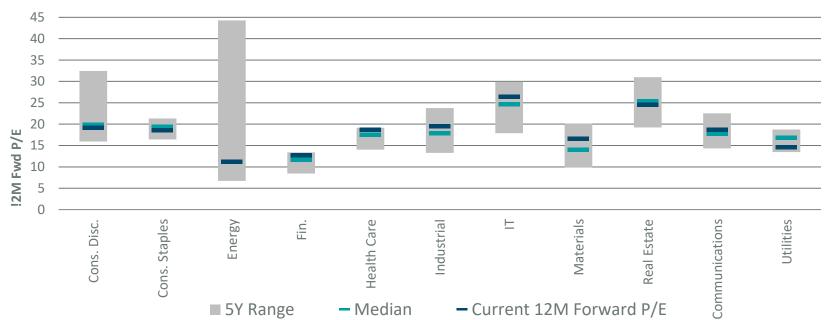
#### Macro Economy

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.

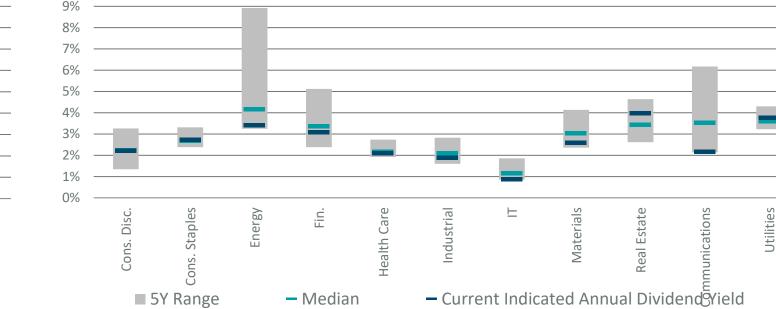
Sectors can be classified as cyclical and defensive. Cyclical sectors tend to outperform the market during economic growth period and underperform during economic slow down.

Cyclical Sectors Defensive Sectors			sumer Disc.	Finan		Industrials			. Tech ecom	Materia Utilitie	
Delensive Sectors		COIL	sumer Stap	Ene	igy	Healthcare		Ter	ecom	Otilitie	5
Factors	Latest	Change <sup>2</sup> C	Current value /s 5Y Highs and Lows)		urrent I. Def.	Factors	Current	Change	<sup>2</sup> Current value (vs 5Y Highs and Lows)		Prevailing Cycl. Def.
US GDP Growth (QoQ)	1.6%	-1.8%	8.0%	34.8%	•	Term Spread 10Y-2Y	-0.4%	0.1%	-1.1%	1.6%	6
US Inflation	3.5%	0.3%	0.1%	9.1%	•	Volatility Index	15.7	2.6	11.5	82.	7
Key Interest Rate	5.4%	0.0%	0.1%	5.4%	•	Credit Default Spread	53.8	2.3	43.8	151.	8

### Valuations (Relative to Historical Averages)



#### 12M Forward P/E (Consensus)



#### Fundamental (Relative to Historical Averages)

#### 12M Forward Growth in Sales (Consensus) -5% 0% 5% 10% Cons. Disc. Cons. Staples Energy Fin. Health Care Industrial IT Materials Real Estate Communications Utilities ■ Current 12M Fwd Gwth in Sales Previous Quarter 12M Fwd Gwth in Sales

# 45% 25% \_\_\_\_

Wor

MSCI

#### 12M Forward Cash Flow per Share Growth (Consensus)

Indicated Annual Dividend Yield



#### Positive and negative revisions in 12M EPS estimates<sup>4</sup>

T



#### 11 Month Momentum<sup>3</sup>

40%

35% 30%

20% 15%

10% 5%

0%

-5%

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#### ■ Change in earnings' revisions since last month (RHS) ◆ Current earning indicator (LHS)

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

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Fin

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

Disc

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2. Except GDP, "Change" refers to the data change of the observed metric since last month observation. For GDP, change refers to the change since last quarter observation.

Energy

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- 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 revisions / Total Number of 12M Fwd EPS estimates.

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# **MSCI World Consumer Discretionary**

#### Introduction

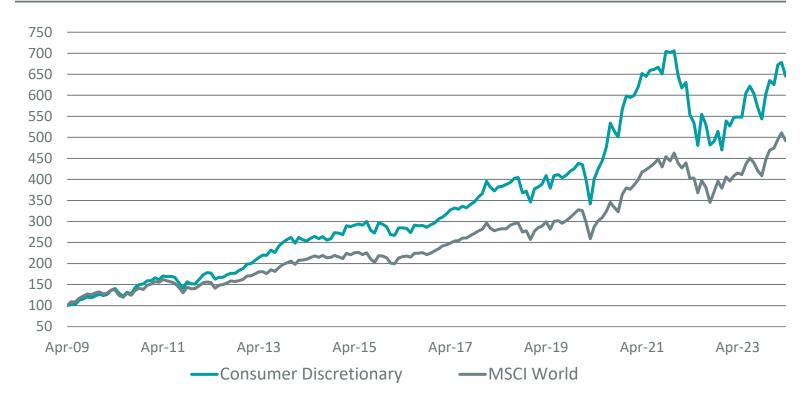
The MSCI World Consumer Discretionary Index is designed to capture the large and mid cap segments across Developed Markets around the world. Consumer Discretionary encompasses those businesses that tend to be the most sensitive to economic cycles. Its manufacturing segment includes automotive, household 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				•		





Risk and Return			Sector Snapshot			
Return	Cons. MSCI Disc. World		Top Four Industry Groups			
Last 1M	-4.9%	-3.7%	Consumer Disc. Distrib.	44.3%		
Last 6M	18.5%	20.3%	Automobiles & Compts.	21.5%		
Last 1Y	17.6%	18.4%	Consumer Services	18.6%		
Last 5Y	9.5%	10.5%	Cons. Durables & Apparel	15.6%		

5Y Risk <sup>1</sup>	Cons. Disc.	MSCI World	Top Five Constituents*	
Vol.	21.8%	18.3%	AMZN UW	24.6%
Max DD	-37.2%	-34.0%	TSLA UW	7.9%
Beta	109%	-	HD UN	5.0%
Tracking Error	8.9%	-	7203 JT	3.7%
			MC FP	3.4%

#### Valuations (Relative to Historical Averages)

		•	,	
Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	19.2	-0.2	15.9	32.5

#### 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	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%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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<sup>3</sup>

## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

Cons. Disc.	23.7%
MSCI World	23.0%

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



- 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

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 revisions / Total Number of 12M Fwd EPS estimates.

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# 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

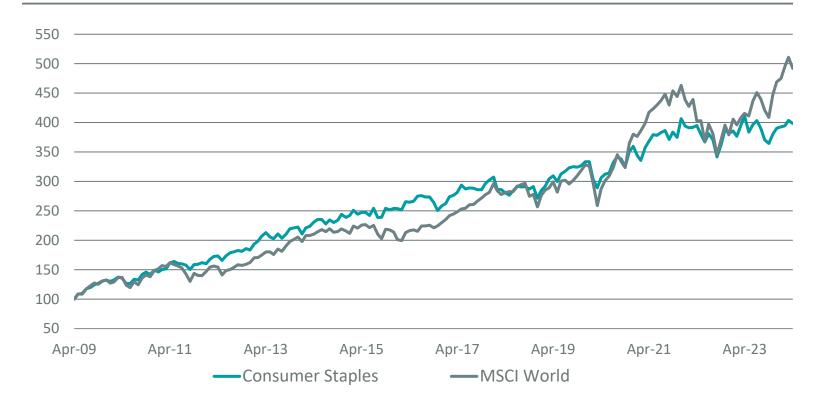
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## Summary

#### **Current Indicator Summary**

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Consumer Staples				•		

#### **Historical Performance**



Risk and	Return		Sector Snapshot	
Return	Cons. Staples	MSCI World	Top Three Industry Groups	
Last 1M	-1.2%	-3.7%	Food, Bvg. & Tobacco	49.8%
Last 6M	9.3%	20.3%	Consumer Staples Distribut	25.7%
Last 1Y	-3.1%	18.4%	Household & Prsnl. Prodts.	24.5%
Last 5Y	5.2%	10.5%		

5Y Risk <sup>1</sup>	Cons. Staples	MSCI World	Top Five Constituents*	
Vol.	13.7%	18.3%	PG UN	9.2%
Max DD	-24.0%	-34.0%	COST UW	7.7%
Beta	59%	-	NESN SE	6.4%
Tracking Error	11.2%	-	WMT UN	6.3%
			KO UN	6.1%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	18.6	0.6	16.4	21.3

#### Valuations (Relative to MSCI World)

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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	0.2	3.3	4.5
12M Forward P/CF (Consensus)	13.5	0.5	<b>11.8</b>	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%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Fwd Growth EPS (Consensus)	6.0%	-0.2%	2.3%	9.2%
12M Fwd Growth Sales (Consensus)	3.1%	0.2%	<b>1.</b> 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<sup>3</sup>

## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

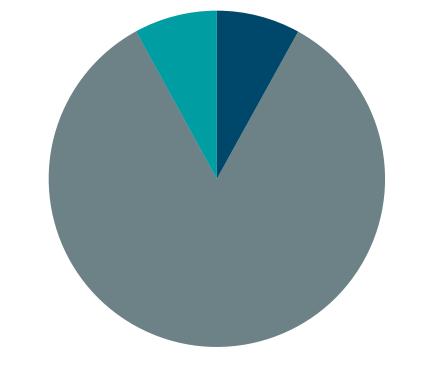
#### 11 Month Performance (1M Removed)

Cons. Staples	-1.9%
MSCI World	23.0%

	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

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 revisions / Total Number of 12M Fwd EPS estimates.

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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.

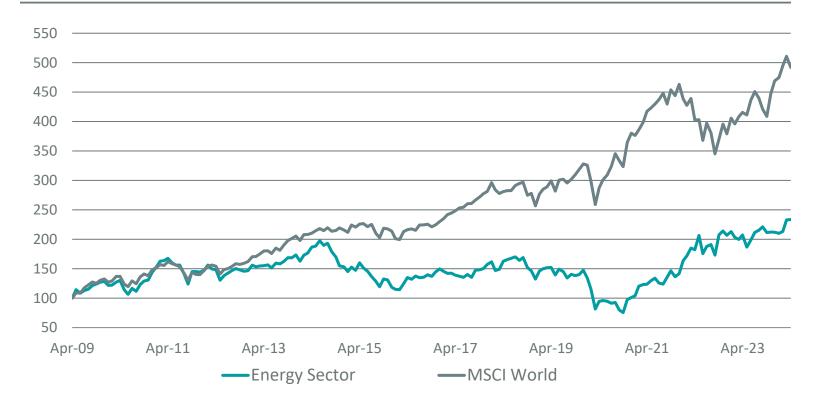
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# Summary

### **Current Indicator Summary**

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Energy Sector				•		

#### **Historical Performance**



Return		Sector Snapshot	
Energy	MSCI World	Top Industry Group	
0.3%	-3.7%	Energy	100.0%
10.4%	20.3%		
12.6%	18.4%		
8.9%	10.5%		
	0.3% 10.4% 12.6%	Energy         MSCI World           0.3%         -3.7%           10.4%         20.3%           12.6%         18.4%	Energy         MSCI World         Top Industry Group           0.3%         -3.7%         Energy           10.4%         20.3%         18.4%

5Y Risk <sup>1</sup>	Energy	MSCI World	Top Five Constituents*	
Vol.	31.7%	18.3%	XOM UN	16.3%
Max DD	-60.0%	-34.0%	CVX UN	9.9%
Beta	113%	-	SHEL LN	8.0%
Tracking Error	24.1%	-	TTE FP	5.5%
			COP UN	5.1%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	11.2	1.3	6.7	44.3

#### 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	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%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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<sup>3</sup>

## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

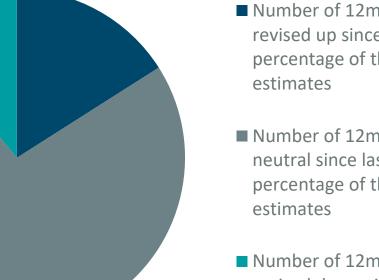
#### 11 Month Performance (1M Removed)

	121270
MSCI World	23.0%

	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

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

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

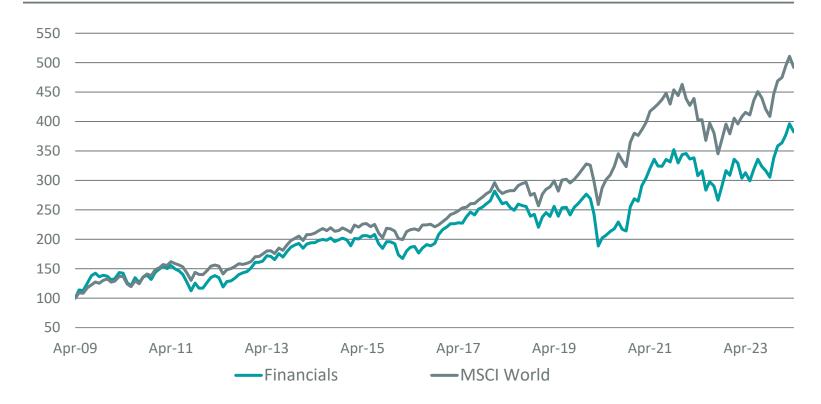
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## Summary

#### **Current Indicator Summary**

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Financials						

#### **Historical Performance**



Risk and	Return		Sector Snapshot	
Return	Fin.	MSCI World	Top Three Industry Groups	
Last 1M	-3.5%	-3.7%	Financial Services	41.9%
Last 6M	25.2%	20.3%	Banks	37.6%
Last 1Y	22.1%	18.4%	Insurance	20.4%
Last 5Y	8.4%	10.5%		

5Y Risk <sup>1</sup>	Fin.	MSCI World	Top Five Constituents*	
Vol.	22.2%	18.3%	JPM UN	5.8%
Max DD	-43.0%	-34.0%	BRK/B UN	5.4%
Beta	107%	-	V UN	4.4%
Tracking Error	10.5%	-	MAUN	3.9%
			BAC UN	2.7%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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	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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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<sup>3</sup>

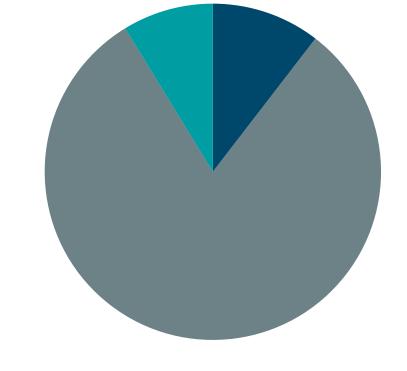
## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

Fin.	26.5%
MSCI World	23.0%

	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

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 revisions / 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 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.

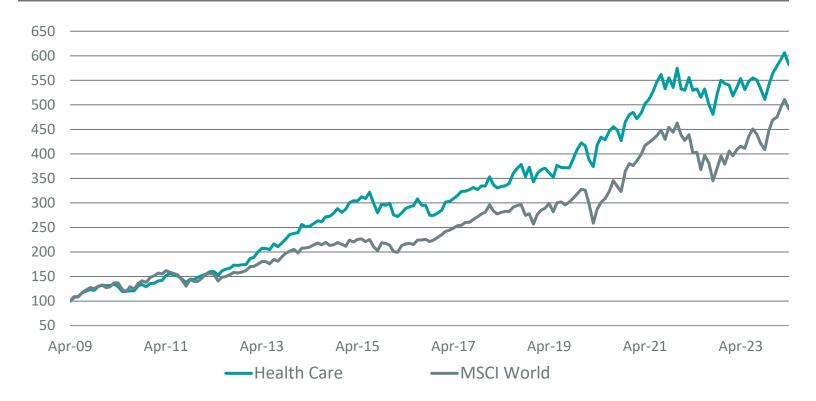
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# Summary

### **Current Indicator Summary**

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





Risk and Return		Sector Snapshot		
Health Care	MSCI World	Top Two Industry Groups		
-4.0%	-3.7%	Pharmaceuticals, Biotech.	65.3%	
14.0%	20.3%	Health Care Equip. & Servic	34.7%	
5.2%	18.4%			
10.0%	10.5%			
	Health Care -4.0% 14.0% 5.2%	Health Care         MSCI World           -4.0%         -3.7%           14.0%         20.3%           5.2%         18.4%	Health CareMSCI WorldTop Two Industry Groups-4.0%-3.7%Pharmaceuticals, Biotech.14.0%20.3%Health Care Equip. & Servic5.2%18.4%	

5Y Risk <sup>1</sup>	Health Care	MSCI World	Top Five Constituents*	
Vol.	15.9%	18.3%	LLY UN	8.4%
Max DD	-27.0%	-34.0%	UNH UN	6.0%
Beta	74%	-	NOVOB DC	5.6%
Tracking Error	9.7%	-	JNJ UN	4.6%
			MRK UN	4.4%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	18.7	0.5	14.0	19.2

#### 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	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%

Indicated Dividend Yield	2.1%	2.2%	-0.1%	-0.3%
12M Forward P/EBITDA (Consensus)	12.1	10.3	1.8	1.8
12M Forward P/CF (Consensus)	15.3	13.1	2.2	2.7
12M Forward P/B (Consensus)	4.0	2.9	1.0	1.2

#### Fundamental (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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%

**Current Month** 

269

1855

209

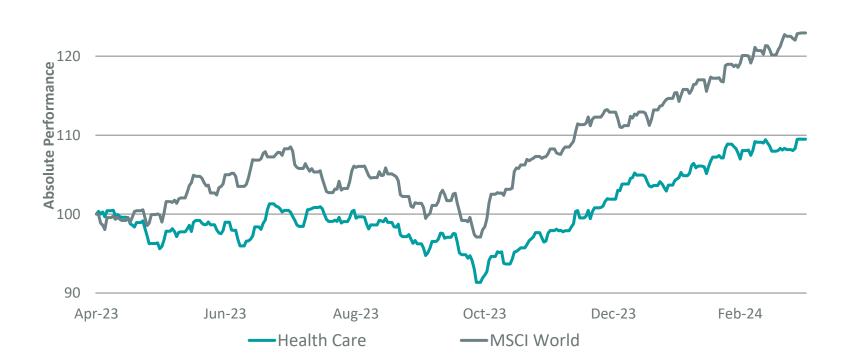
## 11 Month Momentum<sup>3</sup>

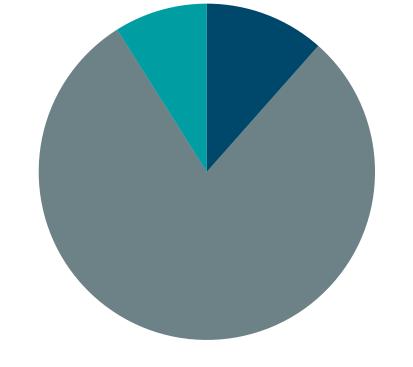
## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

Health Care	9.5%
MSCI World	23.0%

1	3	0	





Upward Revisions

**Downward Revisions** 

Neutral

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

Last Month

103 2104

118

- 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

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 revisions / 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 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**



Risk and	Return		Sector Snapshot	
Return	Industrial	MSCI World	Top Three Industry Groups	
Last 1M	-3.0%	-3.7%	Capital Goods	69.8%
Last 6M	26.3%	20.3%	Transportation	15.7%
Last 1Y	21.6%	18.4%	Commercial & Prof. Serv	14.6%
Last 5Y	9.6%	10.5%		

5Y Risk <sup>1</sup>	Industrial	MSCI World	Top Five Constituents*	
Vol.	18.8%	18.3%	GE UN	2.5%
Max DD	-39.3%	-34.0%	CAT UN	2.4%
Beta	94%	-	RTX UN	2.1%
Tracking Error	7.5%	-	UNP UN	2.0%
			SIE GY	2.0%

#### Valuations (Relative to MSCI World)

\_\_\_\_\_

Valuations (Relative to	Historical	Average	es)
Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>
12M Forward P/E (Consensus)	19.5	1.0	13.3 23.8

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	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%

12M Forward P/B (Consensus)	3.4		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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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<sup>3</sup>

## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

MSCI World 23.0%	Industrial	25.3%
	MSCI World	23.0%

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







- 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

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 revisions / 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 Information Technology

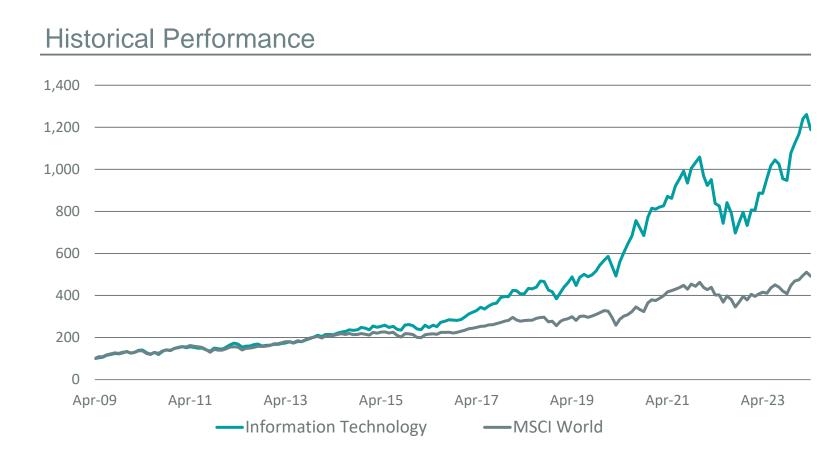
#### Introduction

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			•	•		



Risk and	Return		Sector Snapshot	
Return	ІТ	MSCI World	Top Two Industry Groups	
Last 1M	-5.7%	-3.7%	Software & Services	61.6%
Last 6M	25.5%	20.3%	Tech. Hardware & Equipt.	38.4%
Last 1Y	34.2%	18.4%		
Last 5Y	19.5%	10.5%		

5Y Risk <sup>1</sup>	IT	MSCI World	Top Five Constituents*	
Vol.	26.3%	18.3%	MSFT UW	19.0%
Max DD	-36.4%	-34.0%	AAPL UW	17.3%
Beta	131%	-	NVDA UW	14.7%
Tracking Error	12.2%	-	AVGO UW	4.0%
			ASML NA	2.5%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	26.4	-1.6	17.9	29.9

#### 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	-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	<b>11.</b> 4	20.1
Indicated Dividend Yield	0.9%	0.0%	0.9%	1.9%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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<sup>3</sup>

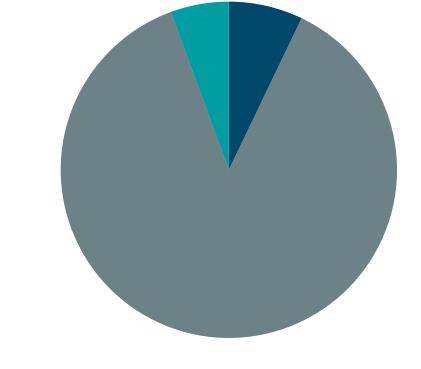
## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

IT	42.3%
MSCI World	23.0%

	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

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 revisions / 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 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.

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## Summary

#### **Current Indicator Summary**

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Materials				•		





Risk and	Return		Sector Snapshot	
Return	Materials	MSCI World	Top Industry Group	
Last 1M	-2.6%	-3.7%	Materials	100.0%
Last 6M	17.4%	20.3%		
Last 1Y	9.5%	18.4%		
Last 5Y	9.2%	10.5%		

5Y Risk <sup>1</sup>	Materials	MSCI World	Top Five Constituents*	
Vol.	20.0%	18.3%	LIN UW	8.7%
Max DD	-36.8%	-34.0%	BHP AT	5.8%
Beta	93%	-	AI FP	4.2%
Tracking Error	10.7%	-	RIO LN	3.1%
			SHW UN	3.0%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	16.6	1.5		
			9.8	20.2

#### Valuations (Relative to MSCI World)

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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	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%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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%

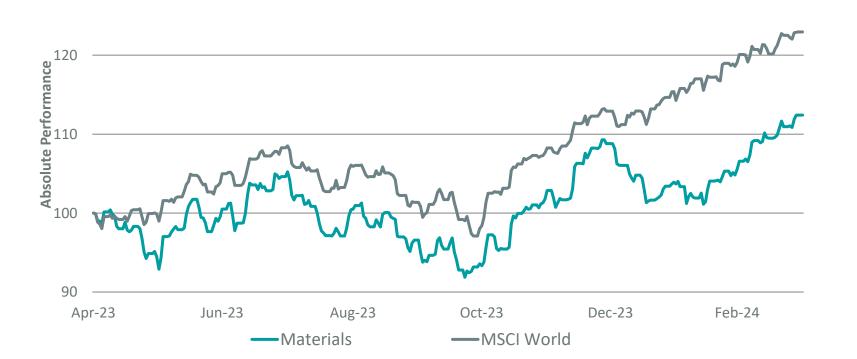
## 11 Month Momentum<sup>3</sup>

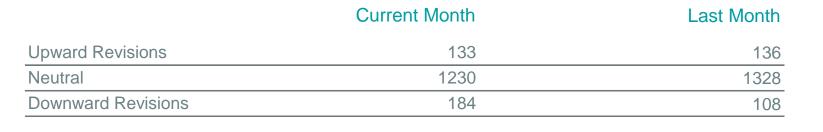
## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

Materials	12.4%
MSCI World	23.0%

130	







- 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

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 revisions / 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 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 that are involved in real estate.

## Summary

#### **Current Indicator Summary**

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





Risk and	Return		Sector Snapshot	
Return	Real Estate	MSCI World	Top Two Industry Groups	
Last 1M	-7.9%	-3.7%	Equity Real Estate Invest.	80.2%
Last 6M	10.5%	20.3%	Real Estate Management &	19.8%
Last 1Y	-2.8%	18.4%		
Last 5Y	0.8%	10.5%		

5Y Risk <sup>1</sup>	Real Estate	MSCI World	Top Five Constituents*	
Vol.	22.4%	18.3%	PLD UN	7.0%
Max DD	-40.6%	-34.0%	AMT UN	6.0%
Beta	98%	-	EQIX UW	5.0%
Tracking Error	13.6%	-	WELL UN	3.5%
			SPG UN	3.4%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	24.6	-0.5	19.2	31.0

#### 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	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%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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	o 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<sup>3</sup>

## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

Real Estate	5.6%
MSCI World	23.0%

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







- 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

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 revisions / 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 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.

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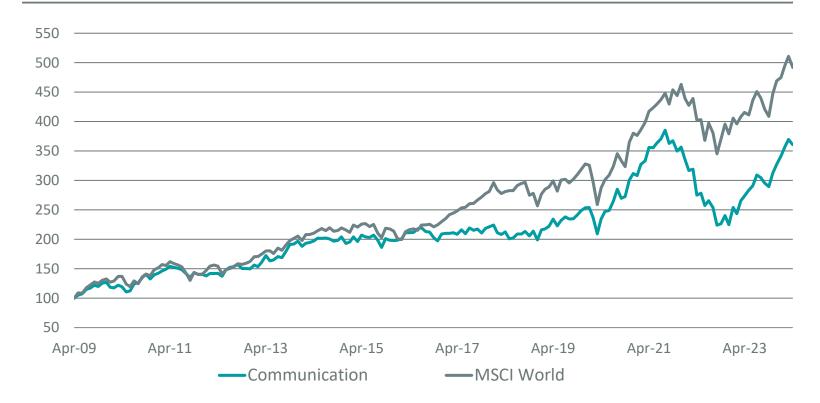
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## Summary

#### **Current Indicator Summary**

	Macro Long Term	Macro Short Term	Valuation	Fundamentals	Momentum	Sentiment
Communication						

#### **Historical Performance**



Risk and	d Return		Sector Snapshot	
Return	Communi cations	MSCI World	Top Two Industry Groups	
Last 1M	-2.4%	-3.7%	Media & Entertainment	82.7%
Last 6M	24.6%	20.3%	Telecom. Services	17.3%
Last 1Y	31.7%	18.4%		
Last 5Y	9.0%	10.5%		

5Y Risk <sup>1</sup>	Communi cations	MSCI World	Top Five Constituents*	
Vol.	21.8%	18.3%	GOOGL UW	20.5%
Max DD	-45.3%	-34.0%	META UW	20.3%
Beta	103%	-	GOOG UW	18.0%
Tracking Error	11.1%	-	NFLX UW	5.1%
			DIS UN	4.3%

#### Valuations (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
12M Forward P/E (Consensus)	18.7	0.2	14.3	22.5

#### Valuations (Relative to MSCI World)

Factor	Communicati ons	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	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%

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 <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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	Communicati ons	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<sup>3</sup>

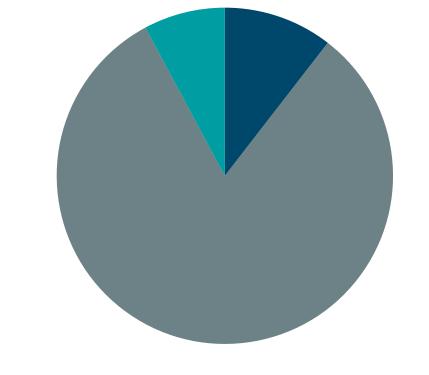
## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

#### 11 Month Performance (1M Removed)

	Communications	35.0%
1013CT WOTU 23.0	MSCI World	23.0%

	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

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 revisions / 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 Utilities

#### Introduction

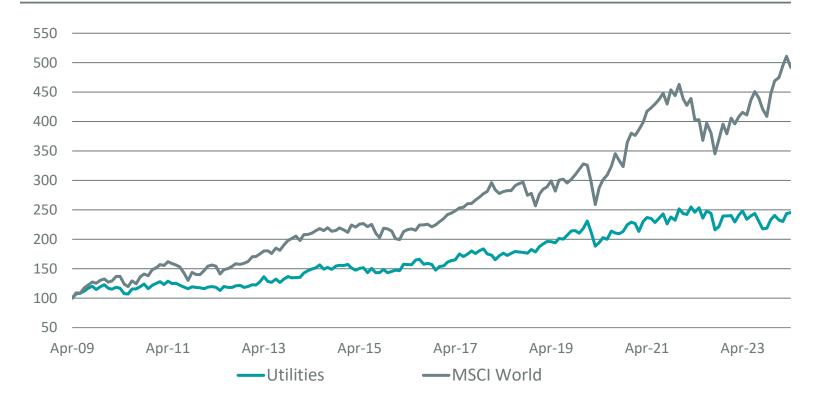
The MSCI World Utilities Index is designed to capture the large and mid cap segments across Developed Markets around the world. Utilities comprises utility companies such as electric, gas and water utilities. It also includes independent power producers & energy traders and companies that engage in generation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

## Summary

#### **Current Indicator Summary**

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

#### **Historical Performance**



Return		Sector Snapshot	
Utilities	MSCI World	Top Industry Group	
0.8%	-3.7%	Utilities	100.0%
12.2%	20.3%		
-1.1%	18.4%		
4.6%	10.5%		
	0.8% 12.2% -1.1%	Utilities         MSCI World           0.8%         -3.7%           12.2%         20.3%           -1.1%         18.4%	UtilitiesMSCI WorldTop Industry Group0.8%-3.7%Utilities12.2%20.3%-1.1%18.4%

Utilities	MSCI World	Top Five Constituents*	
18.8%	18.3%	NEE UN	8.6%
-34.2%	-34.0%	SO UN	5.0%
74%	-	DUK UN	4.8%
13.8%	-	IBE SQ	4.7%
		CEG UW	3.7%
	18.8% -34.2% 74%	Utilities         World           18.8%         18.3%           -34.2%         -34.0%           74%         -	Utilities         World         Top Five Constituents*           18.8%         18.3%         NEE UN           -34.2%         -34.0%         SO UN           74%         -         DUK UN           13.8%         -         IBE SQ

#### Valuations (Relative to Historical Averages)

		0	,
Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>
12M Forward P/E (Consensus)	14.6	1.0	13.5 18.8

#### 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	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%

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 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%

### Fundamental (Relative to Historical Averages)

Factor	Current	Change <sup>2</sup>	Current value (vs 5Y Highs and Lows) <sup>5</sup>	
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%

### 11 Month Momentum<sup>3</sup>

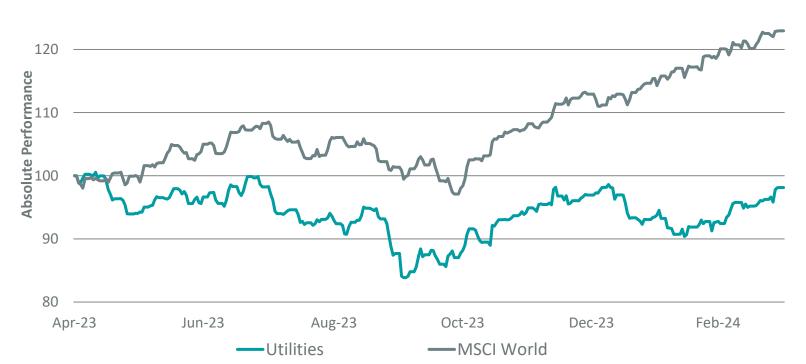
## Positive and negative revisions in 12M EPS estimates<sup>4</sup>

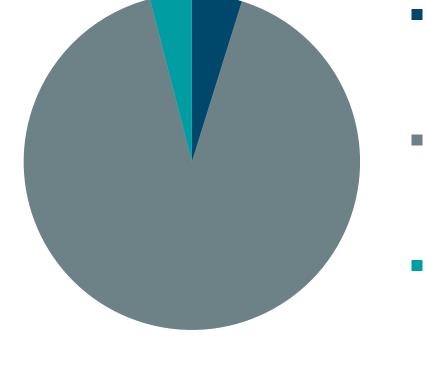
#### 11 Month Performance (1M Removed)

Utilities	-1.9%
MSCI World	23.0%

	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

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 revisions / 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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## Sector Assesment Framework - Glossary

## How to read the "Current Indicator Summary"

Macroeconomic Long Term	This composite indicator is based on 3 metrics ( <b>GDP Growth</b> , <b>Inflation and Short Term interest rate</b> ). It shows a positive signal for cyclical sectors when the average of the <b>5 Years Historical Z-Score of 1 month change (3M for GDP)</b> 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 <b>VIX Index</b> , the <b>Term Structure</b> and the <b>CDS</b> <b>Spreads</b> ). It is calculated as the average of the <b>5 Years Historical Z-Score of 1 month change</b> 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 ( <b>12m Forward P/E</b> , <b>12m Forward P/B</b> , <b>12m</b> <b>Forward P/CF</b> , <b>12m Forward P/EBITDA</b> and <b>Indicated Dividend Yield</b> ). It shows a positive signal when the average of the <b>Cross sectional Z-Score</b> 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 ( <b>12m Forward Growth in EPS</b> , <b>12m</b> <b>Forward Growth in Sales 12m ForwardGrowth in BPS</b> , <b>12m Forward Growth in CPS</b> ). It shows a positive signal when the average of the <b>Cross sectional Z-Score</b> 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 <b>11m momentum</b> 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 <b>Sentiment</b> exhibited by analysts is stronger than usual (as defined by a <b>5 Year Historical Z-Score</b> ).
Definitions	

V	ol	at	il	ity

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.

Beta

#### **Tracking Error**

12m Forward P/E (Consensus) 12m Forward P/B (Consensus)

12m Forward P/CF (Consensus)

12m Forward P/EBITDA (Consensus)

Indicated Dividend Yield (Consensus)

12M Fwd Growth EPS (Consensus)

12M Fwd Growth Sales (Consensus)

12M Fwd Growth CPS (Consensus)

12M Fwd Growth BPS (Consensus)

**11 Month Momentum** 

#### Sentiment

**12M Forward EPS Estimates** 

**Revisions to 12M Forward EPS Estimates** 

**Historical Median** 

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

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 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.

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

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

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

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

Weighted Average Dividend Yield based on the Indicated Annual Dividend

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

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

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

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

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.

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.

12-month-forward Earnings per Share estimates by analysts

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

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

Currency	30-Apr-23-	30-Apr-22-	30-Apr-21-	30-Apr-20-	30-Apr-19-	30-Apr-18-	30-Apr-17-	30-Apr-16-	30-Apr-15-	30-Apr-14-
ourrenoy	30-Apr-24	30-Apr-23	30-Apr-22	30-Apr-21	30-Apr-20	30-Apr-19	30-Apr-18	30-Apr-17	30-Apr-16	30-Apr-15
USD	17.6%	-1.1%	-15.0%	63.0%	-2.3%	7.1%	16.9%	14.8%	-2.2%	14.8%
USD	-3.1%	4.2%	7.2%	20.2%	-1.0%	10.4%	-0.2%	6.2%	7.1%	7.2%
USD	12.6%	13.7%	47.5%	30.6%	-37.8%	-6.6%	17.0%	3.1%	-15.6%	-14.3%
USD	22.1%	1.7%	-3.9%	58.4%	-21.0%	-2.5%	15.2%	22.3%	-9.4%	5.9%
USD	5.2%	4.5%	5.6%	20.1%	15.6%	8.3%	8.1%	7.0%	-5.1%	20.4%
USD	21.6%	8.9%	-9.6%	55.2%	-14.8%	4.7%	11.2%	17.5%	-0.5%	3.7%
USD	34.2%	5.7%	-3.8%	55.9%	14.4%	19.8%	24.4%	32.5%	-2.4%	19.0%
USD	9.5%	-2.9%	1.4%	59.4%	-9.8%	-2.0%	16.1%	16.9%	-9.6%	-2.9%
USD	18.4%	3.2%	-3.5%	45.3%	-4.0%	6.5%	13.2%	14.7%	-4.2%	7.4%
USD	-2.8%	-16.1%	8.0%	29.5%	-8.7%	15.4%	1.2%	1.8%	7.5%	10.4%
USD	31.7%	-0.4%	-22.8%	51.8%	0.2%	10.2%	2.0%	-1.3%	1.9%	5.2%
USD	-1.1%	0.9%	3.7%	22.0%	-0.9%	11.1%	6.9%	5.0%	4.4%	0.7%
	USD USD USD USD USD USD USD USD	Currency         30-Apr-24           USD         17.6%           USD         -3.1%           USD         12.6%           USD         22.1%           USD         5.2%           USD         21.6%           USD         9.5%           USD         18.4%           USD         -2.8%           USD         31.7%	Currency         17.6%         -1.1%           USD         17.6%         -1.1%           USD         -3.1%         4.2%           USD         12.6%         13.7%           USD         22.1%         1.7%           USD         22.1%         1.7%           USD         22.1%         5.2%           USD         21.6%         8.9%           USD         34.2%         5.7%           USD         9.5%         -2.9%           USD         18.4%         3.2%           USD         -2.8%         -16.1%           USD         31.7%         -0.4%	Currency         30-Apr-24         30-Apr-23         30-Apr-22           USD         17.6%         -1.1%         -15.0%           USD         -3.1%         4.2%         7.2%           USD         12.6%         13.7%         47.5%           USD         22.1%         1.7%         -3.9%           USD         22.1%         1.7%         -3.9%           USD         21.6%         8.9%         -9.6%           USD         34.2%         5.7%         -3.8%           USD         9.5%         -2.9%         1.4%           USD         18.4%         3.2%         -3.5%           USD         -2.8%         -16.1%         8.0%	Currency         30-Apr-24         30-Apr-23         30-Apr-22         30-Apr-21           USD         17.6%         -1.1%         -15.0%         63.0%           USD         -3.1%         4.2%         7.2%         20.2%           USD         12.6%         13.7%         47.5%         30.6%           USD         22.1%         1.7%         -3.9%         58.4%           USD         22.1%         1.7%         -3.9%         58.4%           USD         22.1%         1.7%         -3.9%         58.4%           USD         21.6%         8.9%         -9.6%         55.2%           USD         34.2%         5.7%         -3.8%         55.9%           USD         9.5%         -2.9%         1.4%         59.4%           USD         18.4%         3.2%         -3.5%         45.3%           USD         -2.8%         -16.1%         8.0%         29.5%           USD         31.7%         -0.4%         -22.8%         51.8%	Currency30-Apr-2430-Apr-2330-Apr-2230-Apr-2130-Apr-20USD17.6%-1.1%-15.0%63.0%-2.3%USD-3.1%4.2%7.2%20.2%-1.0%USD12.6%13.7%47.5%30.6%-37.8%USD22.1%1.7%-3.9%58.4%-21.0%USD5.2%4.5%5.6%20.1%15.6%USD21.6%8.9%-9.6%55.2%-14.8%USD34.2%5.7%-3.8%55.9%14.4%USD9.5%-2.9%1.4%59.4%-9.8%USD18.4%3.2%-3.5%45.3%-4.0%USD-2.8%-16.1%8.0%29.5%-8.7%USD31.7%-0.4%-22.8%51.8%0.2%	Currency30-Apr-2430-Apr-2330-Apr-2230-Apr-2130-Apr-2030-Apr-20USD17.6%-1.1%-15.0%63.0%-2.3%7.1%USD-3.1%4.2%7.2%20.2%-1.0%10.4%USD12.6%13.7%47.5%30.6%-37.8%-6.6%USD22.1%1.7%-3.9%58.4%-21.0%-2.5%USD5.2%4.5%5.6%20.1%15.6%8.3%USD21.6%8.9%-9.6%55.2%-14.8%4.7%USD34.2%5.7%-3.8%55.9%14.4%19.8%USD9.5%-2.9%1.4%59.4%-9.8%-2.0%USD18.4%3.2%-3.5%45.3%-4.0%6.5%USD-2.8%-16.1%8.0%29.5%-8.7%15.4%USD31.7%-0.4%-22.8%51.8%0.2%10.2%	Currency30-Apr-2430-Apr-2330-Apr-2230-Apr-2030-Apr-2030-Apr-1930-Apr-18USD17.6%-1.1%-15.0%63.0%-2.3%7.1%16.9%USD-3.1%4.2%7.2%20.2%-1.0%10.4%-0.2%USD12.6%13.7%47.5%30.6%-37.8%-6.6%17.0%USD22.1%1.7%-3.9%58.4%-21.0%-2.5%15.2%USD5.2%4.5%5.6%20.1%15.6%8.3%8.1%USD21.6%8.9%-9.6%55.2%-14.8%4.7%11.2%USD34.2%5.7%-3.8%55.9%14.4%19.8%24.4%USD9.5%-2.9%1.4%59.4%-9.8%-2.0%16.1%USD18.4%3.2%-3.5%45.3%-4.0%6.5%13.2%USD21.8%-16.1%8.0%29.5%-8.7%15.4%1.2%USD31.7%-0.4%-22.8%51.8%0.2%10.2%2.0%	Currency30-Apr-2430-Apr-2330-Apr-2330-Apr-2230-Apr-2130-Apr-2030-Apr-1930-Apr-1830-Apr-17USD17.6%-1.1%-15.0%63.0%-2.3%7.1%16.9%14.8%USD-3.1%4.2%7.2%20.2%-1.0%10.4%-0.2%6.2%USD12.6%13.7%47.5%30.6%-37.8%-6.6%17.0%3.1%USD22.1%1.7%-3.9%58.4%-21.0%-2.5%15.2%22.3%USD5.2%4.5%5.6%20.1%15.6%8.3%8.1%7.0%USD21.6%8.9%-9.6%55.2%-14.8%4.7%11.2%17.5%USD34.2%5.7%-3.8%55.9%14.4%19.8%24.4%32.5%USD9.5%-2.9%1.4%59.4%-9.8%-2.0%16.1%16.9%USD18.4%3.2%-3.5%45.3%-4.0%6.5%13.2%14.7%USD31.7%-0.4%-22.8%51.8%0.2%10.2%2.0%-1.3%	30-Apr-2430-Apr-2330-Apr-2230-Apr-2230-Apr-2130-Apr-2030-Apr-1930-Apr-1830-Apr-1730-Apr-16USD17.6%-1.1%-15.0%63.0%-2.3%7.1%16.9%14.8%-2.2%USD-3.1%4.2%7.2%20.2%-1.0%10.4%-0.2%6.2%7.1%USD12.6%13.7%47.5%30.6%-37.8%-6.6%17.0%3.1%-15.6%USD22.1%1.7%-3.9%58.4%-21.0%-2.5%15.2%22.3%-9.4%USD22.1%1.7%-3.9%58.4%-21.0%-2.5%15.2%22.3%-9.4%USD22.1%1.7%-3.9%55.2%-14.8%4.7%11.2%17.5%-0.5%USD34.2%5.7%-3.8%55.9%14.4%19.8%24.4%32.5%-2.4%USD9.5%-2.9%1.4%59.4%-9.8%-2.0%16.1%16.9%-9.6%USD18.4%3.2%-3.5%45.3%-4.0%6.5%13.2%14.7%-4.2%USD-2.8%-16.1%8.0%29.5%-8.7%15.4%1.2%1.8%7.5%USD31.7%-0.4%-22.8%51.8%0.2%10.2%2.0%-1.3%1.9%

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