

Daily Equity Insights

May 16, 2024 (market close)



Performance and valuations



Regional performance and valuations

Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
MSCI China IMI Index	1.6	4.4	18.5	19.5	9.5	16.6	13.8	1.1	-13.6	-2.6	2.6	1.3	14.1	2.5
MSCI USA IMI Index	-0.2	1.6	5.2	5.9	5.4	0.8	10.8	30.7	8.6	14.3	12.5	4.4	26.7	1.4
MSCI EM Asia IMI Index	1.5	3.9	9.6	10.3	5.2	6.5	9.8	17.6	-2.3	6.4	5.3	1.8	19.5	2.2
MSCI World IMI Index	-0.1	1.7	5.6	6.2	5.2	1.1	9.8	25.4	7.0	12.1	9.7	3.1	22.4	1.8
MSCI ACWI IMI Index	0.1	1.9	5.9	6.4	5.1	1.6	9.6	24.4	6.0	11.3	9.0	2.9	21.7	1.9
MSCI Europe IMI Index	0.1	2.5	8.7	9.4	6.0	4.2	9.4	16.0	4.8	8.8	5.3	2.1	15.7	3.0
MSCI AC Asia ex Japan IMI Index	1.5	3.8	10.1	10.1	5.4	6.9	9.2	15.4	-2.8	5.4	4.9	1.7	19.1	2.4
MSCI EM IMI Index	1.3	3.2	8.7	8.4	4.8	5.5	7.9	16.9	-1.8	5.4	3.8	1.8	17.3	2.6
MSCI EAFE IMI Index	0.3	2.2	6.9	7.2	4.9	2.2	7.8	14.8	3.7	7.9	5.4	1.9	16.3	2.9
MSCI Europe Small Cap Index	0.4	3.4	10.3	9.7	7.1	5.3	6.7	14.0	-2.1	6.6	5.6	1.6	16.1	3.0
MSCI Japan IMI Index	0.3	1.2	1.1	1.9	1.3	-3.6	6.0	15.3	2.9	7.2	6.8	1.5	16.9	2.0
MSCI EM Small Cap Index	1.3	2.6	6.4	5.2	2.3	4.4	5.6	25.5	5.2	11.2	5.8	1.6	22.5	2.4
MSCI EM EMEA IMI Index	0.7	1.0	4.6	2.9	2.7	3.2	4.7	14.3	-3.6	1.0	-0.3	1.7	12.8	3.6
MSCI USA Small Cap Index	-0.7	0.9	6.4	4.0	5.8	-1.2	4.5	23.4	1.9	9.6	9.5	2.3	30.6	1.5
MSCI World Small Cap Index	-0.3	1.2	6.4	5.1	5.3	-0.1	4.4	17.8	0.7	8.2	7.8	1.8	23.7	2.1
MSCI FM IMI Index	0.6	1.4	3.6	2.9	2.9	-0.1	3.9	13.8	0.5	4.3	2.1	1.5	11.7	3.9
MSCI China A Onshore IMI Index	0.2	-1.3	6.5	9.3	0.9	1.9	-2.3	-12.8	-10.2	1.2	4.2	1.7	21.1	1.9
MSCI EM Latin America IMI Index	0.1	0.6	6.3	0.1	3.4	-0.7	-4.3	14.3	6.8	5.3	1.2	1.6	10.8	5.2

Gross returns in USD for the period ending May 16, 2024

Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

Largest 10 DM countries: USD performance

Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Denmark IMI	0.1	4.2	8.1	8.2	4.6	4.1	19.7	32.2	18.7	23.6	14.2	6.1	31.1	1.3
Netherlands IMI	0.7	2.7	4.8	6.6	6.9	3.0	18.3	28.6	6.3	14.6	10.7	3.4	23.8	1.8
USA IMI	-0.2	1.6	5.2	5.9	5.4	0.8	10.8	30.7	8.6	14.3	12.5	4.4	26.7	1.4
United Kingdom IMI	0.3	2.3	10.4	11.6	5.4	6.9	9.9	14.9	5.2	5.9	3.0	1.9	13.2	3.5
MSCI World IMI Index	-0.1	1.7	5.6	6.2	5.2	1.1	9.8	25.4	7.0	12.1	9.7	3.1	22.4	1.8
Germany IMI	-0.4	1.6	8.2	9.8	6.4	2.6	9.0	15.5	0.2	6.2	4.0	1.6	15.9	2.9
France IMI	-0.4	1.2	7.5	8.0	5.3	2.4	8.1	12.4	6.2	9.8	6.8	2.1	17.6	2.8
Japan IMI	0.3	1.2	1.1	1.9	1.3	-3.6	6.0	15.3	2.9	7.2	6.8	1.5	16.9	2.0
Canada IMI	0.2	0.3	4.8	5.2	3.7	0.4	4.6	13.7	4.2	9.7	5.2	2.0	17.3	2.9
Australia IMI	1.9	3.3	8.2	6.8	6.2	2.4	3.4	14.2	3.1	8.0	4.5	2.3	20.3	3.6
Switzerland IMI	0.4	3.3	8.3	5.0	7.3	2.8	1.8	4.1	3.9	8.9	6.3	3.6	18.9	2.9

Gross returns in USD for the period ending May 16, 2024

Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

Largest 10 DM countries: local currency performance

Performance (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr
Denmark IMI	-0.0	3.3	5.7	7.3	2.9	3.4	21.7	32.4	23.2	24.2	16.8
Netherlands IMI	0.5	1.8	2.6	5.7	5.2	2.3	20.1	28.6	10.2	15.2	13.3
Japan IMI	0.3	1.0	1.6	5.3	-0.1	-1.1	16.8	31.1	15.6	14.9	11.4
MSCI World IMI Index	-0.1	1.5	5.1	6.4	4.7	1.2	11.1	26.5	8.8	12.7	10.9
USA IMI	-0.2	1.6	5.2	5.9	5.4	0.8	10.8	30.7	8.6	14.3	12.5
Germany IMI	-0.6	0.8	5.9	8.8	4.6	1.9	10.7	15.4	3.9	6.8	6.4
United Kingdom IMI	0.2	1.1	8.4	10.9	4.2	6.6	10.6	13.4	9.0	6.1	5.9
France IMI	-0.5	0.4	5.1	7.0	3.5	1.7	9.9	12.3	10.2	10.5	9.3
Switzerland IMI	0.3	3.0	7.3	7.8	5.8	3.2	9.4	5.1	3.9	6.5	6.5
Canada IMI	0.1	-0.3	3.2	6.3	2.8	1.0	8.0	15.1	8.4	10.0	7.5
Australia IMI	1.7	2.3	3.8	4.4	3.3	0.0	5.7	14.0	8.5	8.8	8.1

Gross returns in local for the period ending May 16, 2024

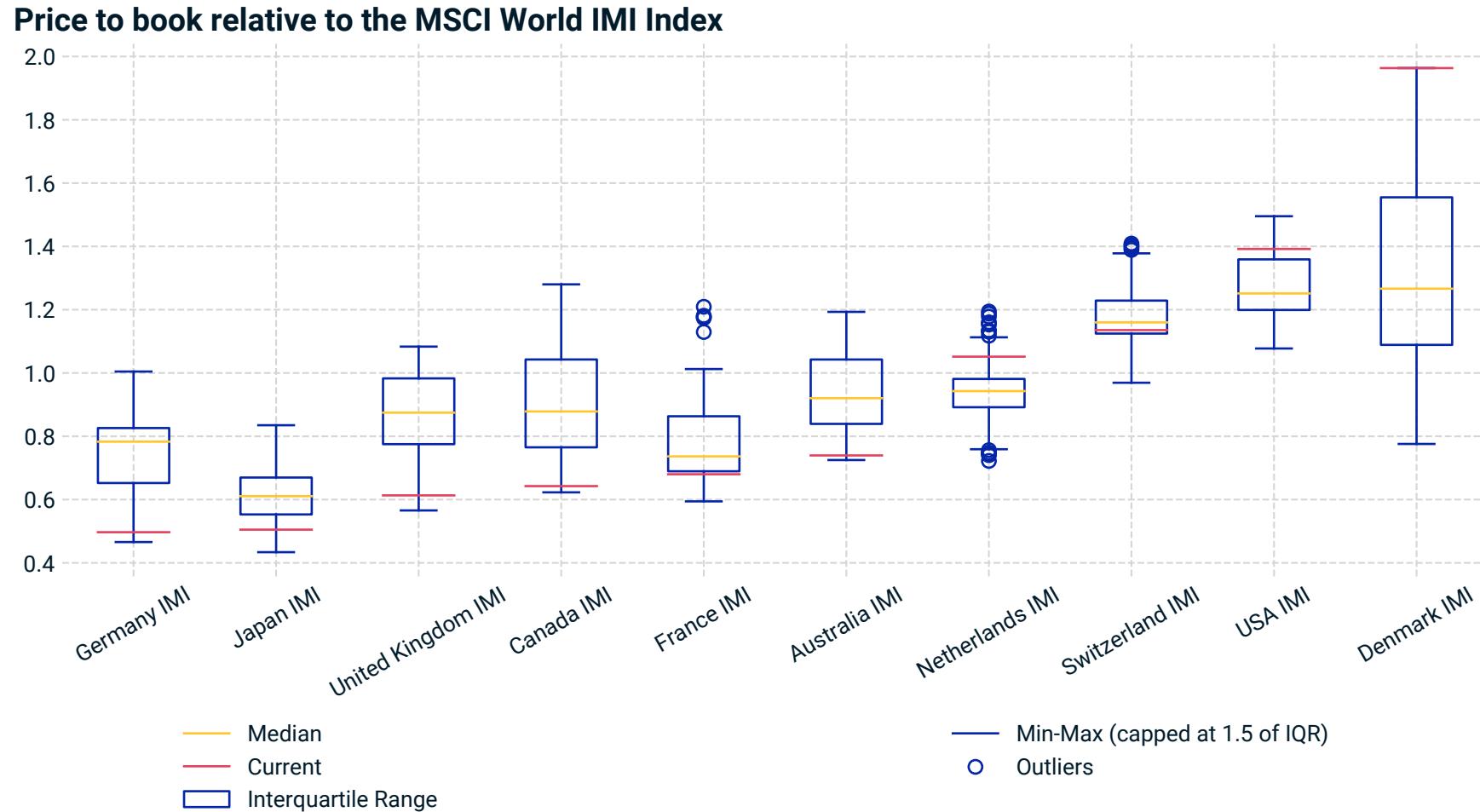
Returns are annualized for periods longer than a year.

Largest 10 DM countries: momentum



As of May 16, 2024.

Largest 10 DM countries: valuations



Period: Dec 29, 2000-Apr 30, 2024.

Largest 10 EM countries: USD performance

Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Taiwan IMI	1.2	4.9	8.1	12.7	6.3	4.3	16.0	39.4	9.6	20.6	13.4	2.8	25.0	2.6
China IMI	1.6	4.4	18.5	19.5	9.5	16.6	13.8	1.1	-13.6	-2.6	2.6	1.3	14.1	2.5
India IMI	1.0	3.0	3.0	3.5	0.1	3.7	8.8	36.4	14.7	14.9	10.2	4.0	27.3	1.0
MSCI EM IMI Index	1.3	3.2	8.7	8.4	4.8	5.5	7.9	16.9	-1.8	5.4	3.8	1.8	17.3	2.6
South Africa IMI	0.8	4.2	13.6	13.0	8.4	11.6	4.5	15.5	-1.1	1.6	0.6	1.6	14.2	3.7
Saudi Arabia IMI	0.7	-1.0	-2.7	-3.7	-1.9	-3.9	1.6	8.1	7.2	8.2	nan	2.4	21.8	3.1
Mexico IMI	0.1	0.7	5.6	2.8	4.0	-0.0	1.2	12.7	16.4	12.6	3.2	2.0	17.0	3.1
Korea IMI	2.8	3.1	8.5	5.4	4.7	-0.7	0.9	16.3	-6.7	7.2	3.4	1.1	21.4	1.9
Indonesia IMI	1.9	3.2	0.2	-7.8	1.0	-7.2	-5.7	-6.7	2.9	2.2	-0.1	2.0	15.7	4.9
Thailand IMI	1.6	2.9	1.1	1.5	3.6	2.3	-6.3	-13.2	-5.7	-4.4	1.0	1.6	19.2	3.1
Brazil IMI	0.3	0.1	5.9	-3.6	2.4	-2.5	-9.2	14.0	2.9	3.5	0.9	1.5	9.0	6.4

Gross returns in USD for the period ending May 16, 2024

Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

Largest 10 EM countries: local currency performance

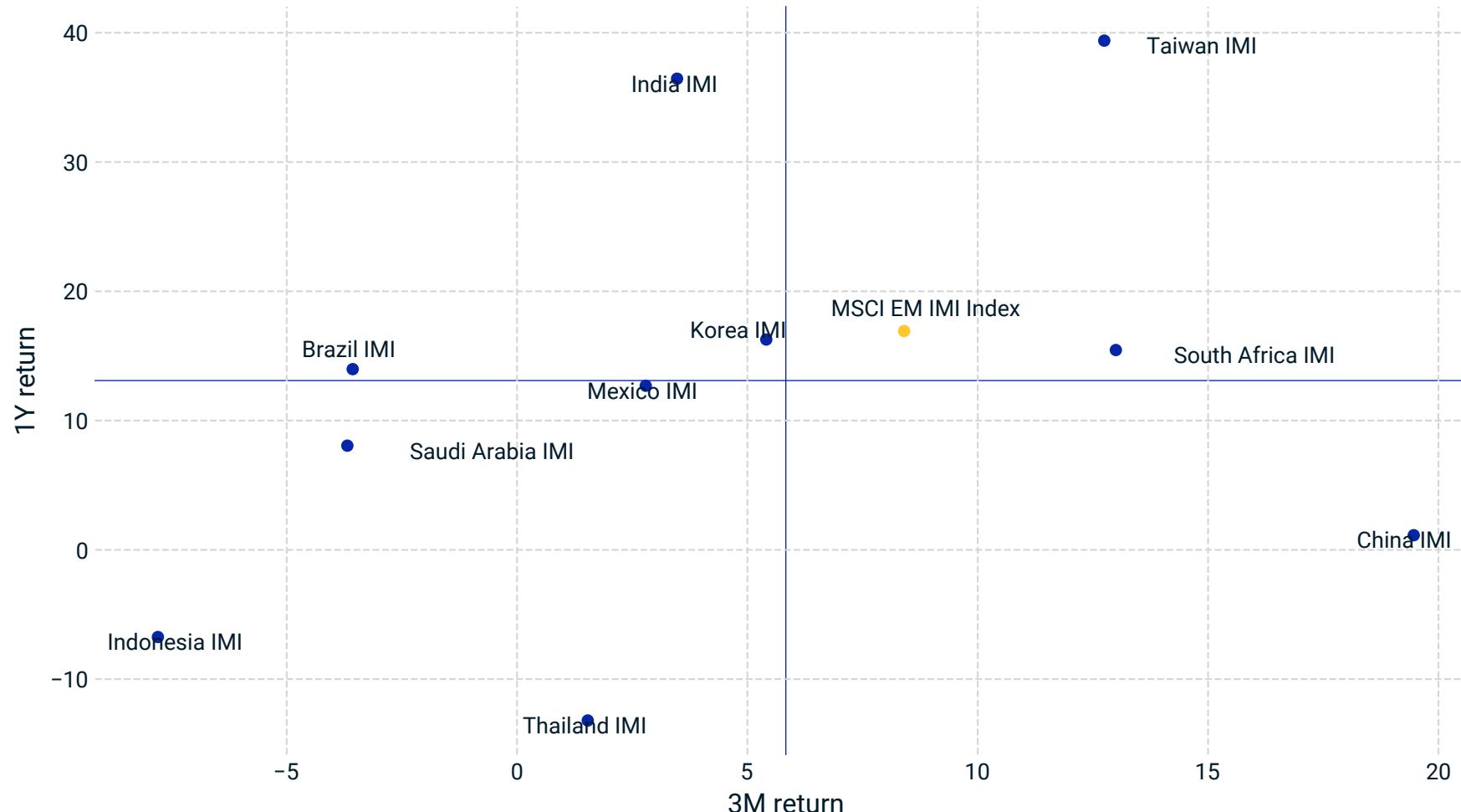
Performance (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr
Taiwan IMI	0.7	3.8	6.8	15.5	4.8	4.7	21.4	45.3	14.7	21.3	14.1
China IMI	1.5	4.2	18.1	19.3	9.2	16.2	13.9	1.3	-13.0	-2.5	2.8
MSCI EM IMI Index	0.9	2.6	7.3	9.1	3.7	5.4	10.1	19.0	1.5	7.5	6.7
India IMI	1.0	3.0	3.0	4.1	0.1	3.8	9.2	38.6	19.8	19.0	14.1
Korea IMI	1.0	1.2	4.6	6.2	1.9	-0.8	5.4	16.8	-1.1	9.9	6.2
South Africa IMI	0.2	2.8	8.7	9.1	4.8	7.3	4.1	10.3	7.6	6.8	6.4
Saudi Arabia IMI	0.7	-1.0	-2.7	-3.7	-1.9	-3.9	1.6	8.1	7.2	8.2	nan
Mexico IMI	-0.0	-0.5	3.2	0.6	1.9	0.4	-0.2	7.7	9.8	9.6	5.9
Thailand IMI	0.5	0.7	-0.2	1.9	1.0	1.4	-0.8	-7.6	-1.2	-1.8	2.1
Indonesia IMI	1.3	2.5	-1.3	-6.0	-1.1	-6.7	-2.5	0.2	6.9	4.2	3.3
Brazil IMI	0.1	-0.4	2.8	-0.4	1.3	-0.2	-4.1	18.9	2.0	8.6	9.7

Gross returns in local for the period ending May 16, 2024

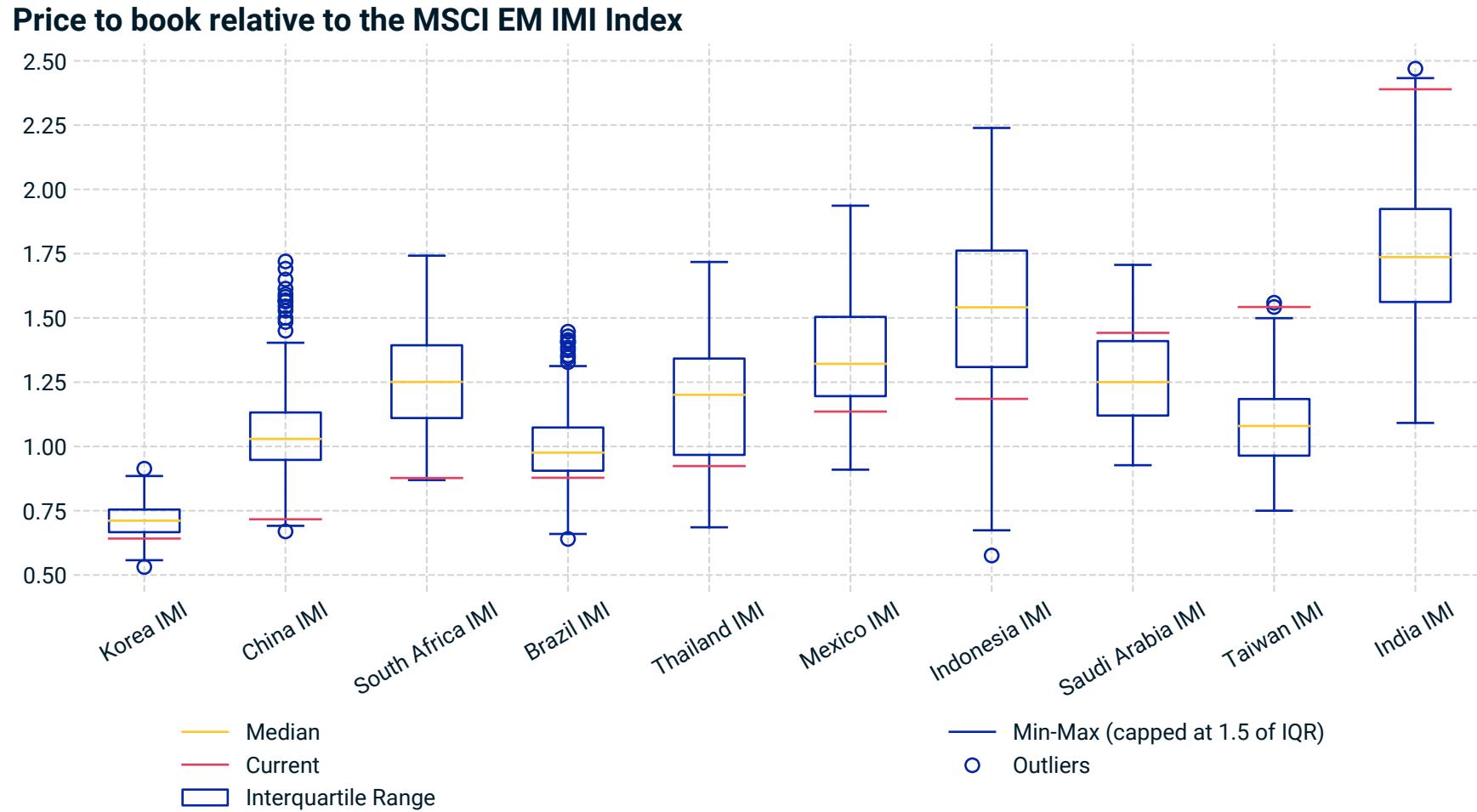
Returns are annualized for periods longer than a year.

Largest 10 EM countries: momentum



As of May 16, 2024.

Largest 10 EM countries: valuations



Period: Sep 30, 2014-Apr 30, 2024.



MSCI ACWI IMI sectors: performance

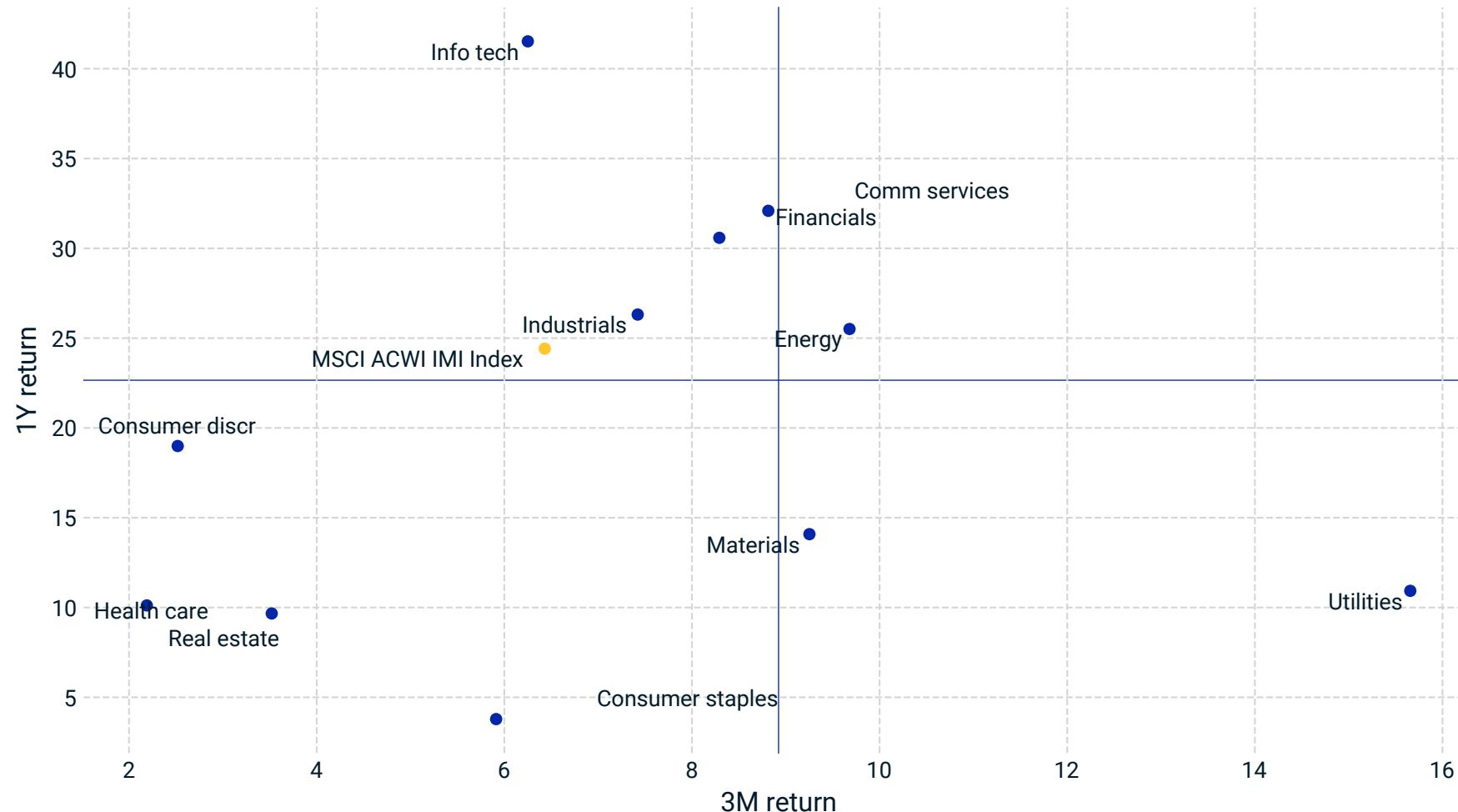
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Comm services	0.4	1.8	6.3	8.8	6.6	4.9	16.2	32.1	1.1	8.8	5.7	3.4	26.2	1.2
Info tech	-0.0	3.7	5.5	6.3	7.7	1.7	13.5	41.5	13.3	21.4	18.8	7.3	39.2	0.8
Financials	0.3	1.9	8.0	8.3	5.1	2.0	11.0	30.6	6.5	9.6	7.7	1.5	13.7	2.9
Energy	-0.2	-0.6	0.5	9.7	0.6	1.0	10.8	25.5	20.2	10.0	2.7	1.8	10.7	3.8
Utilities	0.1	2.2	13.2	15.7	8.0	9.1	10.6	10.9	4.7	7.1	6.7	1.8	17.1	3.6
Industrials	-0.4	0.8	4.8	7.4	4.0	1.0	10.1	26.3	6.8	11.6	8.8	3.3	22.6	1.7
MSCI ACWI IMI Index	0.1	1.9	5.9	6.4	5.1	1.6	9.6	24.4	6.0	11.3	9.0	2.9	21.7	1.9
Health care	-0.0	2.2	6.2	2.2	4.3	0.0	6.9	10.1	3.9	10.2	9.2	4.4	31.0	1.6
Consumer staples	1.0	1.8	8.2	5.9	4.4	3.1	6.0	3.8	2.9	6.1	6.1	4.1	20.9	2.5
Consumer discr	-0.4	0.4	4.1	2.5	3.1	-1.1	4.7	19.0	-0.7	9.0	8.6	3.5	21.2	1.3
Materials	0.1	1.2	4.7	9.3	3.9	2.2	4.0	14.1	1.0	10.6	6.4	2.0	19.3	2.5
Real estate	0.4	2.3	7.7	3.5	6.0	-0.2	-1.3	9.7	-3.1	0.6	nan	1.4	32.3	3.8

Gross returns in USD for the period ending May 16, 2024

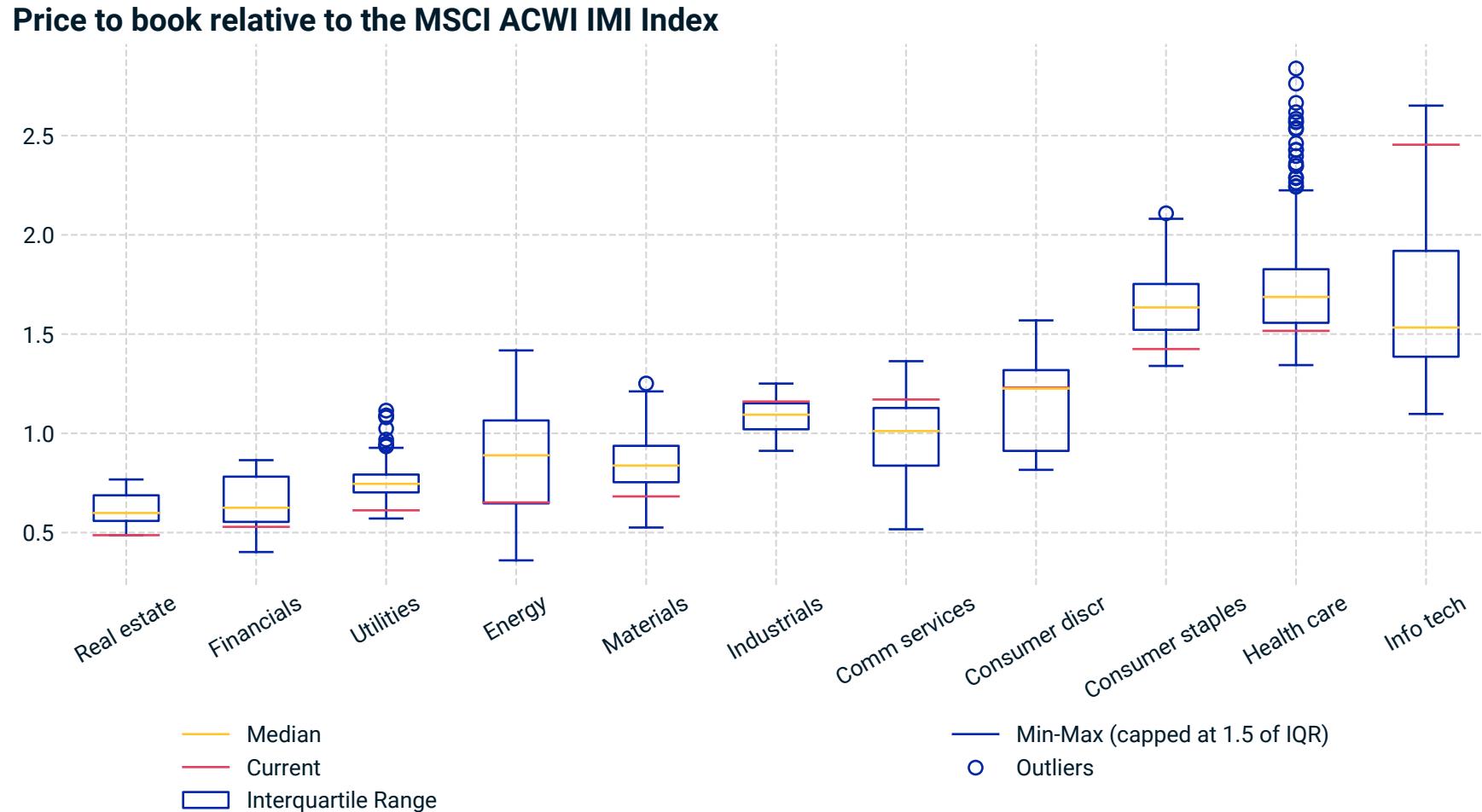
Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

MSCI ACWI IMI sectors: momentum



As of May 16, 2024.

MSCI ACWI IMI sectors: valuations



Period: Sep 30, 2016-Apr 30, 2024.

MSCI ACWI factors: performance

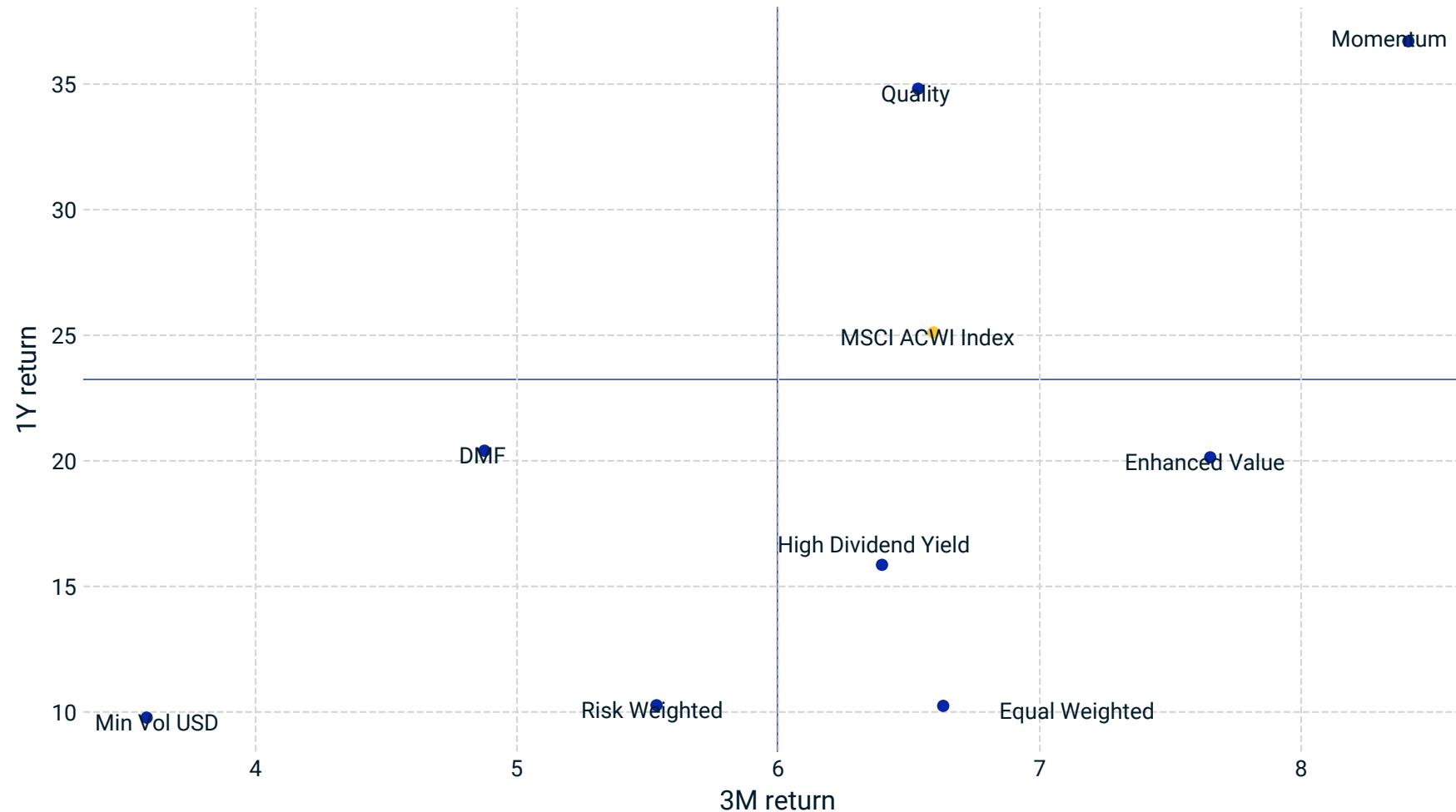
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Momentum	-0.4	2.1	3.8	8.4	5.1	1.0	22.4	36.7	6.8	12.1	11.6	4.0	25.4	1.1
Quality	-0.0	2.7	5.6	6.5	6.2	2.4	14.0	34.8	9.7	15.8	12.7	8.1	27.1	1.4
MSCI ACWI Index	0.1	1.9	5.9	6.6	5.2	1.7	10.2	25.1	6.6	11.7	9.2	3.1	21.5	1.9
DMF	-0.3	1.6	4.6	4.9	4.7	0.2	8.8	20.4	3.9	9.3	8.4	2.3	15.7	2.0
Enhanced Value	0.5	2.3	6.3	7.7	4.2	1.1	6.9	20.1	4.2	8.9	6.0	1.0	10.1	3.9
High Dividend Yield	0.2	1.7	6.5	6.4	4.2	1.5	6.9	15.9	4.4	8.1	6.5	2.4	14.8	3.7
Min Vol USD	0.7	1.7	4.8	3.6	3.4	0.8	5.7	9.8	3.8	6.2	7.7	2.4	17.3	2.5
Equal Weighted	0.4	1.7	6.8	6.6	4.2	2.8	4.9	10.2	-0.8	5.7	4.8	1.8	18.6	2.5
Risk Weighted	0.4	1.7	6.1	5.5	3.9	2.1	4.8	10.3	2.0	6.1	5.6	1.7	16.6	2.9

Gross returns in USD for the period ending May 16, 2024

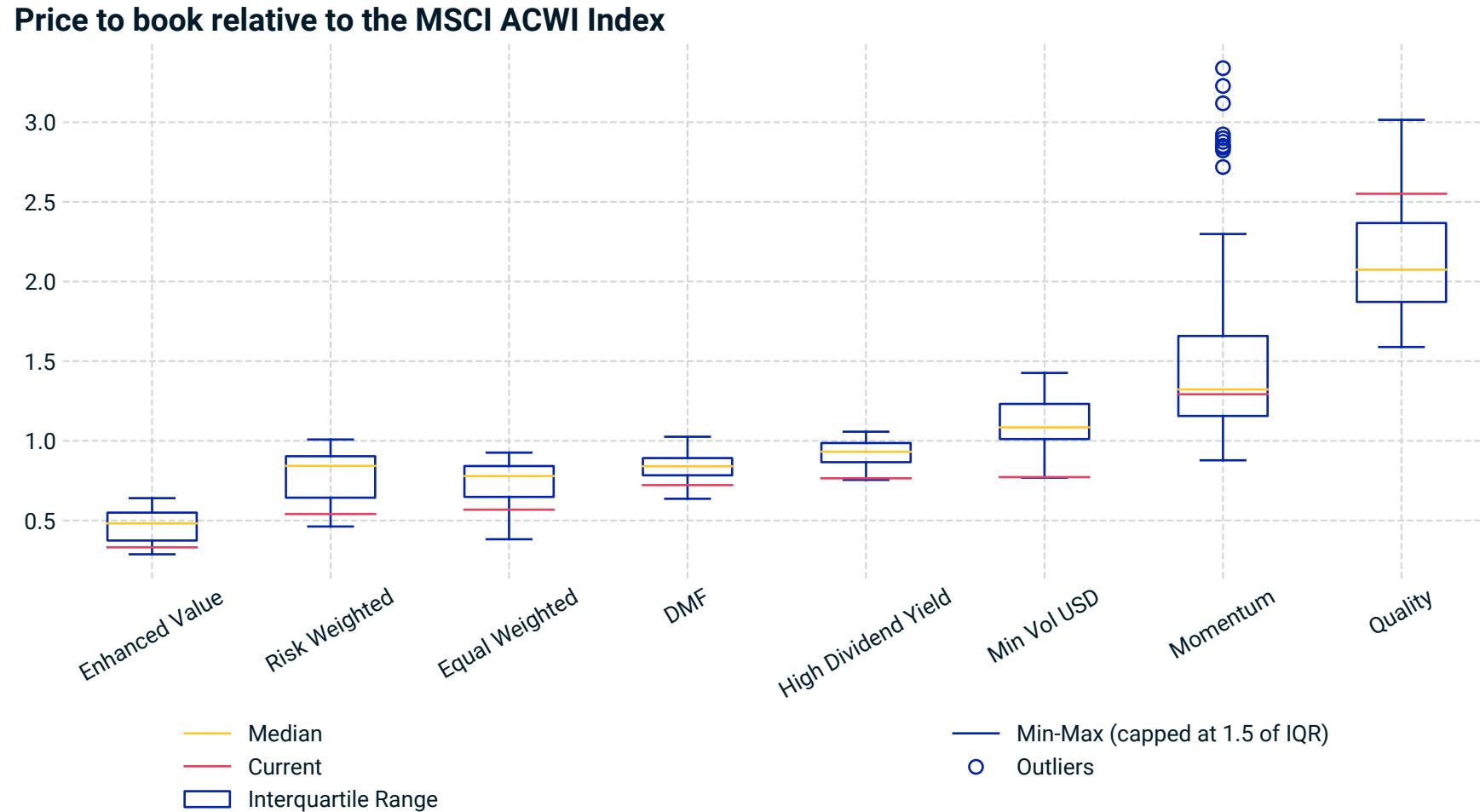
Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

MSCI ACWI factors: momentum



As of May 16, 2024.

MSCI ACWI factors: valuations



Period: Dec 29, 2000-Apr 30, 2024.

Thematic indexes: performance

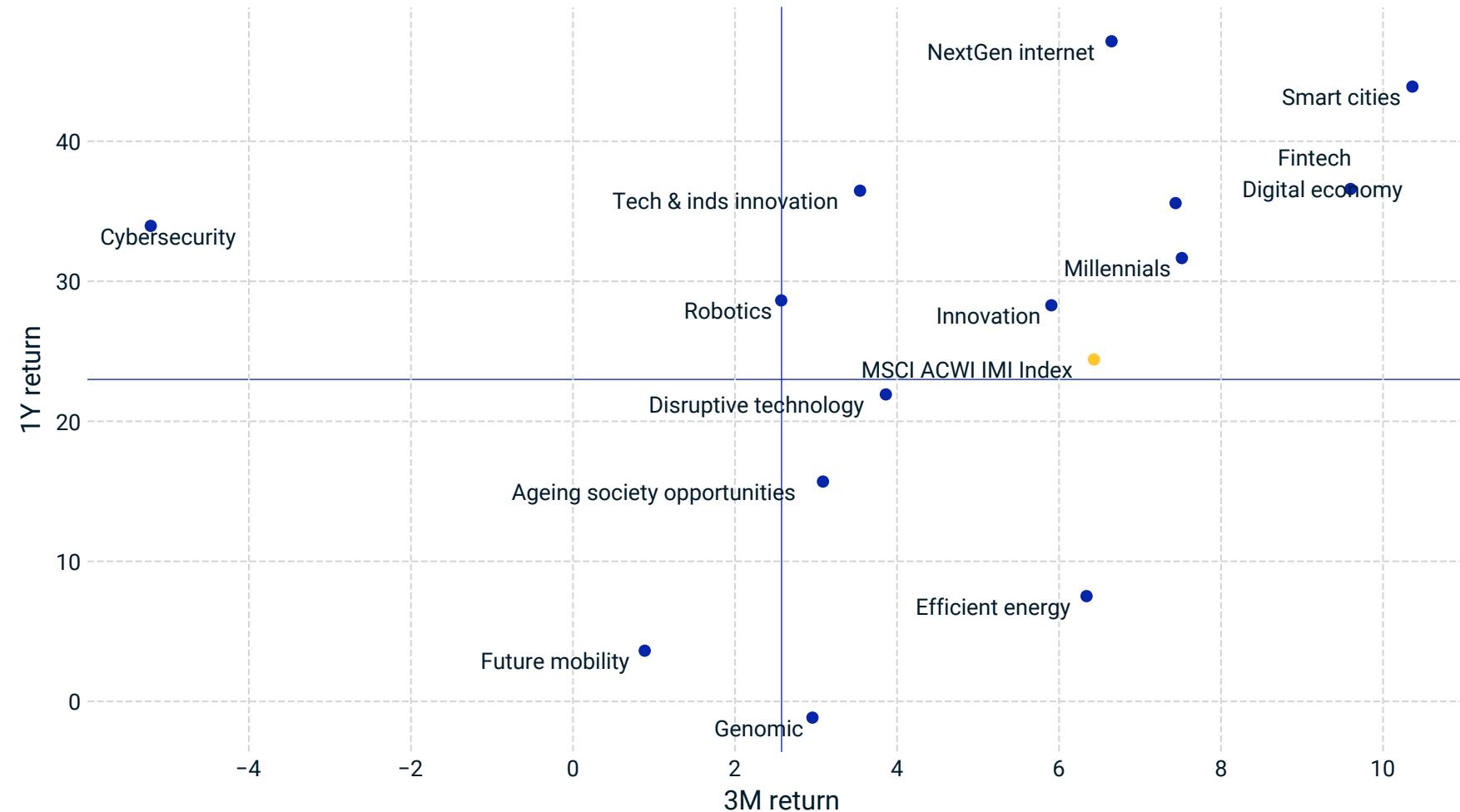
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Smart cities	-0.1	3.3	8.2	10.4	6.6	4.7	16.7	43.9	13.5	17.6	13.8	4.8	30.8	1.3
Fintech	0.3	3.4	8.7	9.6	7.3	3.0	15.7	36.6	0.8	12.5	16.4	4.6	35.0	0.9
NextGen internet	0.1	2.9	5.8	6.6	7.6	2.1	15.6	47.1	8.8	17.5	18.4	6.7	40.2	0.6
Millennials	0.3	2.1	6.7	7.5	6.2	2.9	13.3	31.7	5.4	14.4	15.0	5.3	29.8	1.1
Digital economy	-0.0	3.4	9.1	7.4	7.7	4.0	12.0	35.6	0.4	11.5	15.6	5.4	36.2	0.6
Innovation	0.1	3.1	7.3	5.9	7.1	1.2	10.0	28.3	1.1	12.8	14.4	5.3	58.0	0.7
MSCI ACWI IMI Index	0.1	1.9	5.9	6.4	5.1	1.6	9.6	24.4	6.0	11.3	9.0	2.9	21.7	1.9
Tech & inds innovation	-0.2	2.6	4.8	3.5	5.8	0.2	9.3	36.5	9.1	19.7	16.2	4.5	31.0	1.0
Robotics	0.2	2.5	4.5	2.6	4.8	-1.0	8.1	28.6	8.7	16.2	15.9	4.7	36.8	0.9
Disruptive technology	0.1	3.2	6.4	3.9	6.1	0.6	7.2	21.9	-1.6	10.5	12.2	4.9	41.5	0.9
Ageing society opportunities	0.3	2.1	6.4	3.1	4.1	0.4	7.1	15.7	4.9	9.8	9.7	3.0	23.5	1.8
Efficient energy	0.2	1.1	3.0	6.3	4.3	-1.3	2.4	7.5	2.0	14.5	6.8	2.5	21.2	1.8
Genomic	0.1	3.0	7.2	3.0	6.9	-0.6	2.2	-1.2	-11.0	2.9	5.9	3.8	268.4	0.9
Cybersecurity	0.2	3.3	2.1	-5.2	3.5	-3.7	2.2	34.0	6.6	14.2	16.8	6.9	50.5	0.7
Future mobility	0.1	1.2	4.0	0.9	4.4	-2.5	-0.4	3.6	-3.8	12.2	8.7	2.8	38.4	0.9

Gross returns in USD for the period ending May 16, 2024

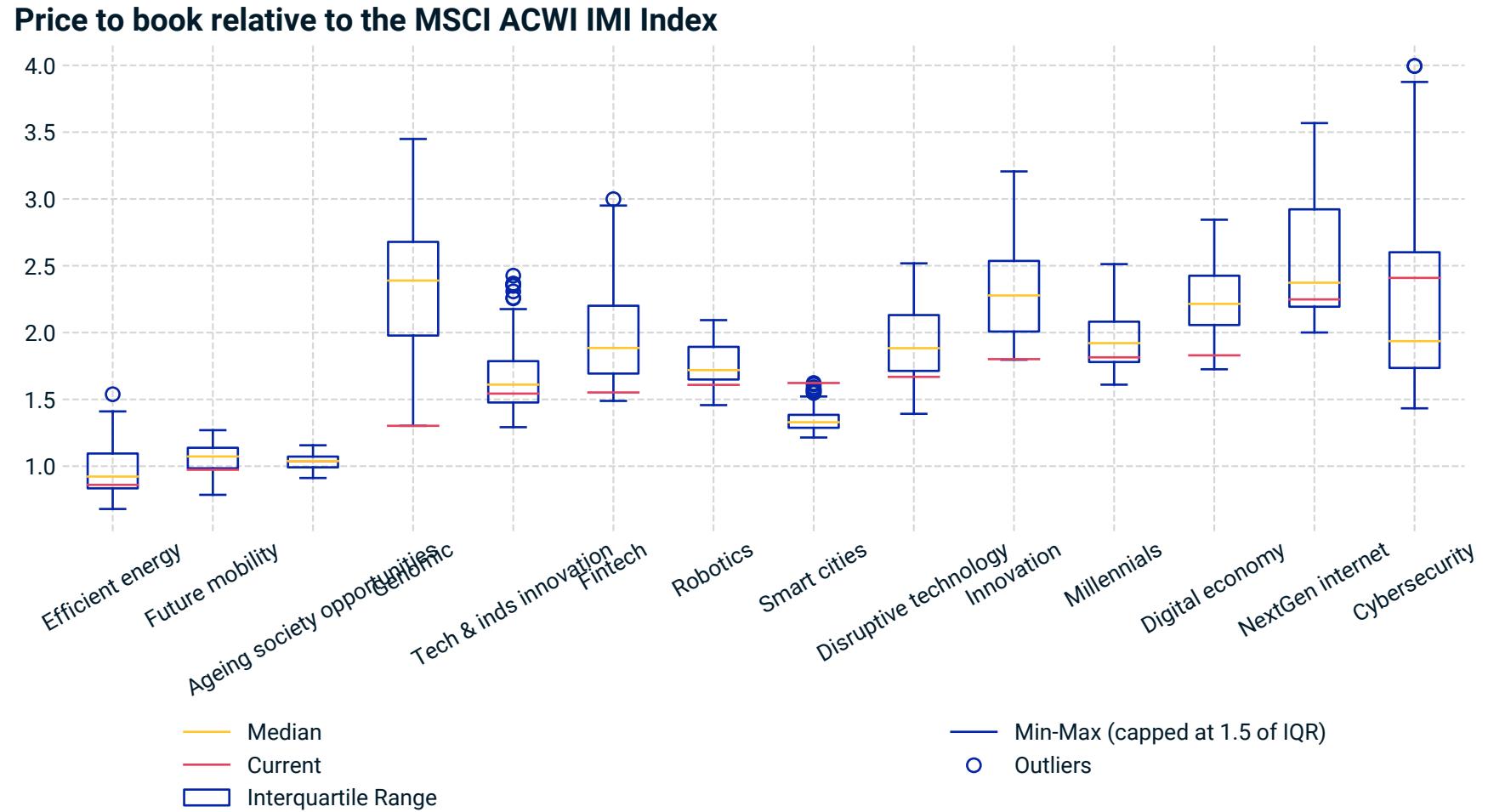
Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

Thematic indexes: momentum



As of May 16, 2024.

Thematic indexes: valuations



Period: Nov 29, 2013-Apr 30, 2024.

MSCI World ESG indexes: performance

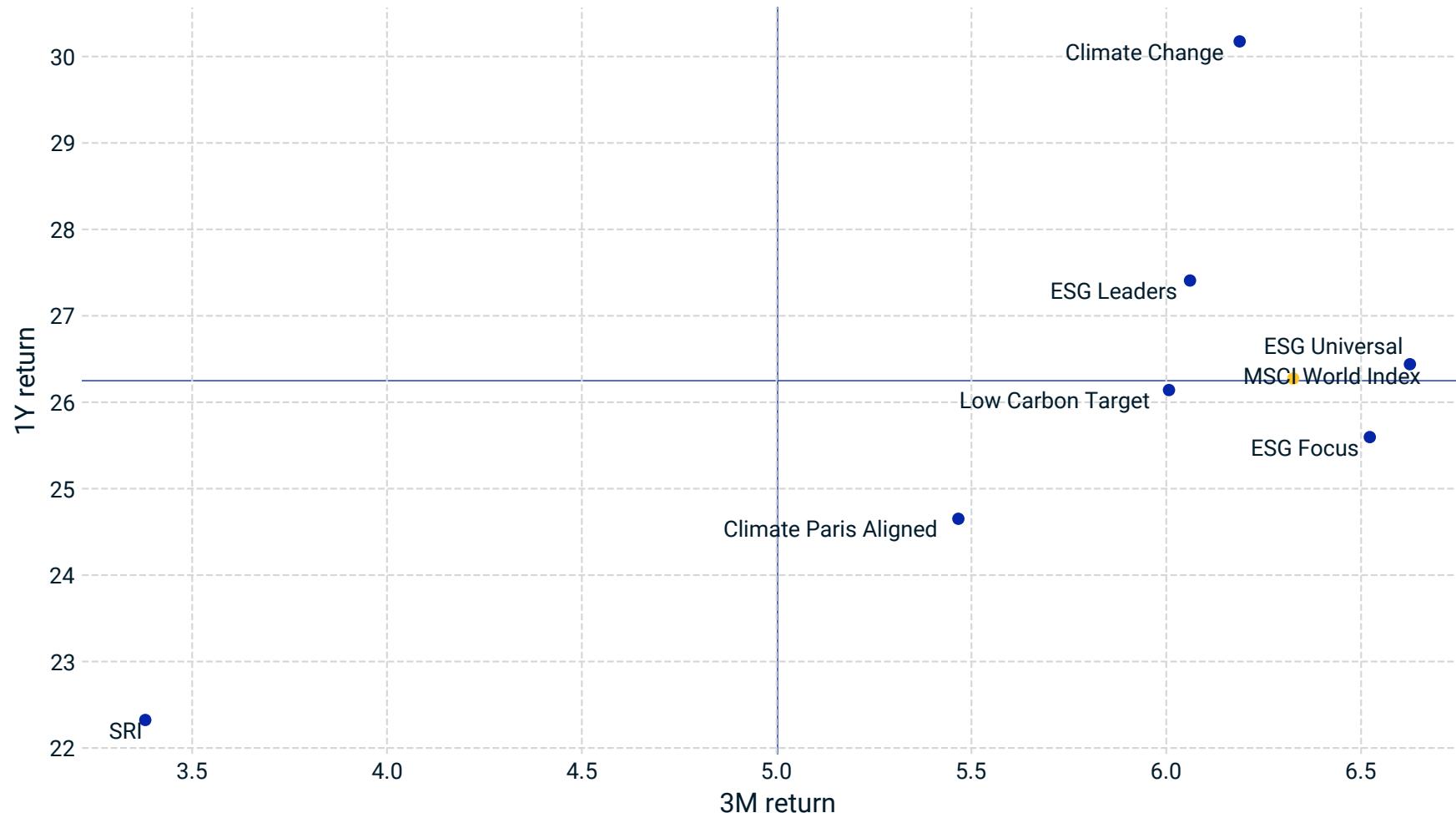
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Climate Change	-0.1	2.3	5.9	6.2	5.6	1.2	11.2	30.2	8.9	14.1	11.2	4.0	26.3	1.5
ESG Leaders	0.0	2.0	5.5	6.1	4.9	0.9	10.8	27.4	8.5	13.1	10.1	4.1	24.5	1.7
ESG Universal	-0.0	2.0	5.8	6.6	5.2	1.3	10.8	26.4	8.0	13.1	10.2	3.3	21.9	1.9
MSCI World Index	-0.1	1.8	5.5	6.3	5.1	1.3	10.4	26.3	7.9	12.6	10.0	3.4	22.3	1.8
Low Carbon Target	-0.0	2.0	5.8	6.0	5.5	1.2	10.3	26.1	7.5	12.6	10.0	3.5	22.7	1.8
ESG Focus	-0.1	1.8	5.7	6.5	5.3	1.4	10.1	25.6	7.1	12.6	10.0	3.5	22.6	1.9
Climate Paris Aligned	-0.0	2.1	6.0	5.5	5.8	1.5	9.0	24.7	7.0	12.3	10.6	3.9	25.6	1.6
SRI	-0.0	1.7	4.9	3.4	4.6	-0.2	5.9	22.3	7.5	13.3	10.5	4.0	24.4	1.8

Gross returns in USD for the period ending May 16, 2024

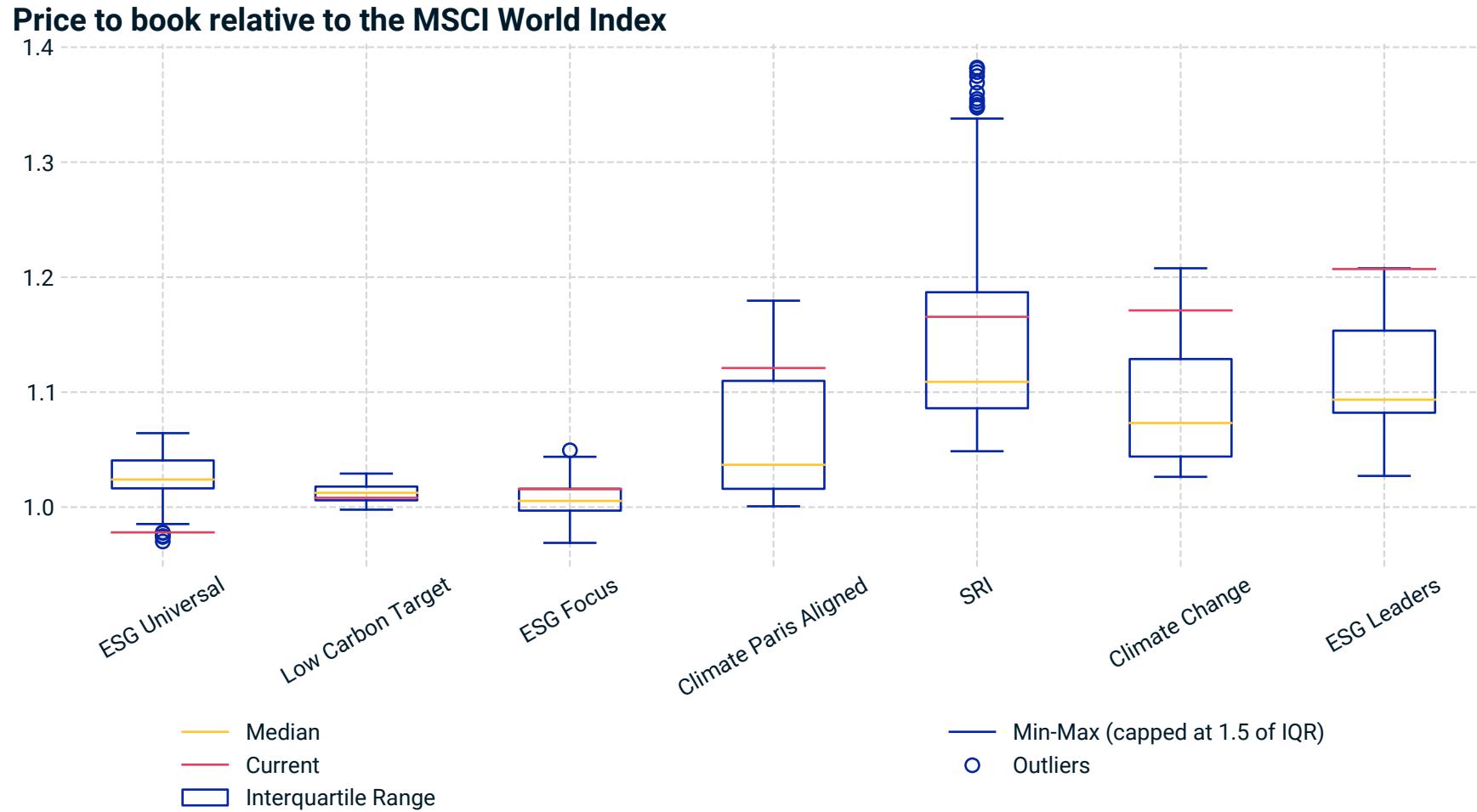
Returns are annualized for periods longer than a year. Valuation ratios as of end of month adjusted by month to date returns.

MSCI World ESG indexes: momentum



As of May 16, 2024.

MSCI World ESG indexes: valuations



Period: Dec 29, 2000-Apr 30, 2024.

Currency



Currencies: Performance

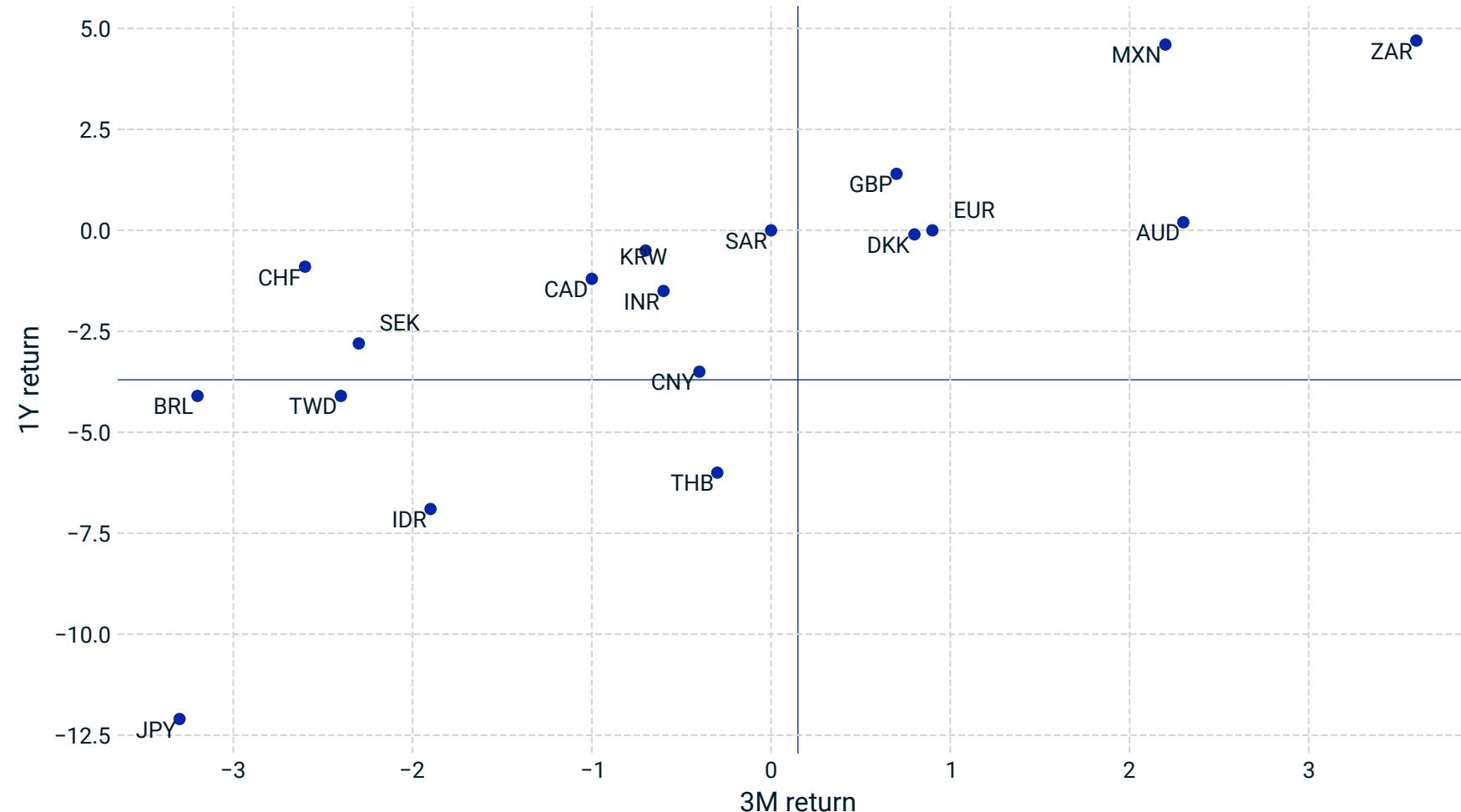
	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr
MXN	0.1	1.2	2.3	2.2	2.1	-0.4	1.4	4.6	5.9	2.7	-2.5
ZAR	0.6	1.4	4.5	3.6	3.4	4.0	0.4	4.7	-8.1	-4.8	-5.5
SAR	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0
INR	-0.0	0.0	0.1	-0.6	-0.1	-0.1	-0.3	-1.5	-4.2	-3.5	-3.4
GBP	0.2	1.2	1.8	0.7	1.2	0.3	-0.6	1.4	-3.5	-0.2	-2.8
EUR	0.1	0.9	2.2	0.9	1.7	0.6	-1.6	0.0	-3.6	-0.6	-2.3
DKK	0.1	0.9	2.2	0.8	1.6	0.6	-1.7	-0.1	-3.7	-0.5	-2.3
CNY	0.0	0.1	0.3	-0.4	0.3	0.1	-1.8	-3.5	-3.8	-1.0	-1.5
AUD	0.2	1.1	4.3	2.3	2.8	2.3	-2.2	0.2	-4.9	-0.7	-3.3
CAD	0.1	0.6	1.6	-1.0	0.9	-0.6	-3.2	-1.2	-3.9	-0.3	-2.2
IDR	0.6	0.8	1.6	-1.9	2.1	-0.4	-3.3	-6.9	-3.7	-1.9	-3.3
KRW	1.8	1.9	3.7	-0.7	2.8	0.1	-4.2	-0.5	-5.7	-2.4	-2.7
TWD	0.5	1.1	1.2	-2.4	1.4	-0.3	-4.4	-4.1	-4.4	-0.6	-0.6
BRL	0.1	0.6	3.0	-3.2	1.1	-2.4	-5.3	-4.1	0.9	-4.8	-8.1
THB	1.1	2.2	1.3	-0.3	2.6	1.0	-5.5	-6.0	-4.6	-2.6	-1.1
SEK	0.1	1.4	2.2	-2.3	2.5	-0.1	-5.8	-2.8	-7.9	-2.1	-4.8
CHF	0.0	0.3	0.9	-2.6	1.4	-0.4	-6.9	-0.9	-0.1	2.2	-0.1
JPY	-0.0	0.2	-0.5	-3.3	1.3	-2.6	-9.2	-12.1	-11.0	-6.7	-4.2

Source: WM Reuters. Returns in USD for the period ending May 16, 2024.

Returns are annualized for periods longer than a year.

Disclaimer: Reuse of WM Reuters data requires additional permission and may require an additional license.

Currencies: Momentum

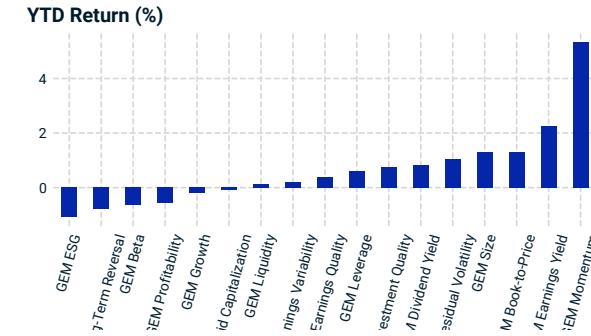
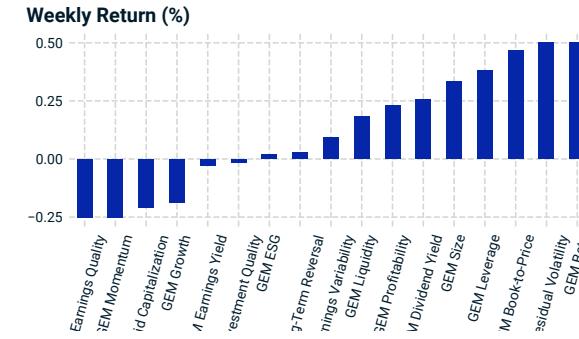
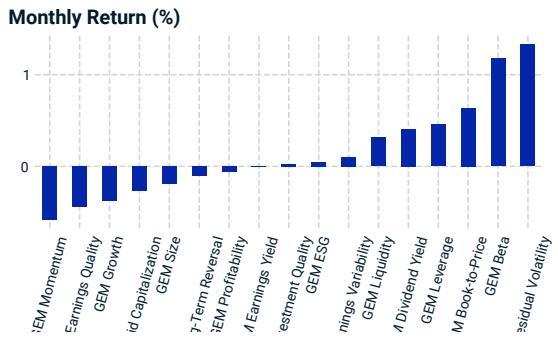
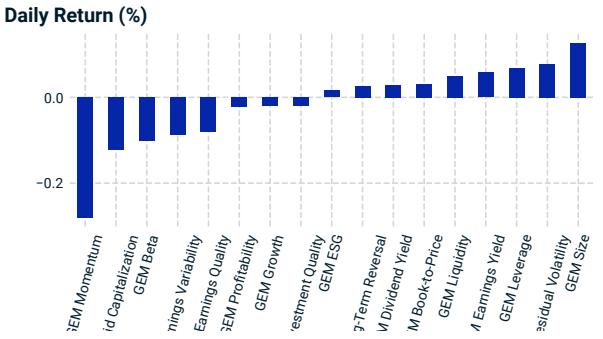


Source: WM Reuters. As of May 16, 2024. Disclaimer: Reuse of WM Reuters data requires additional permission and may require an additional license.

Risk model style factors

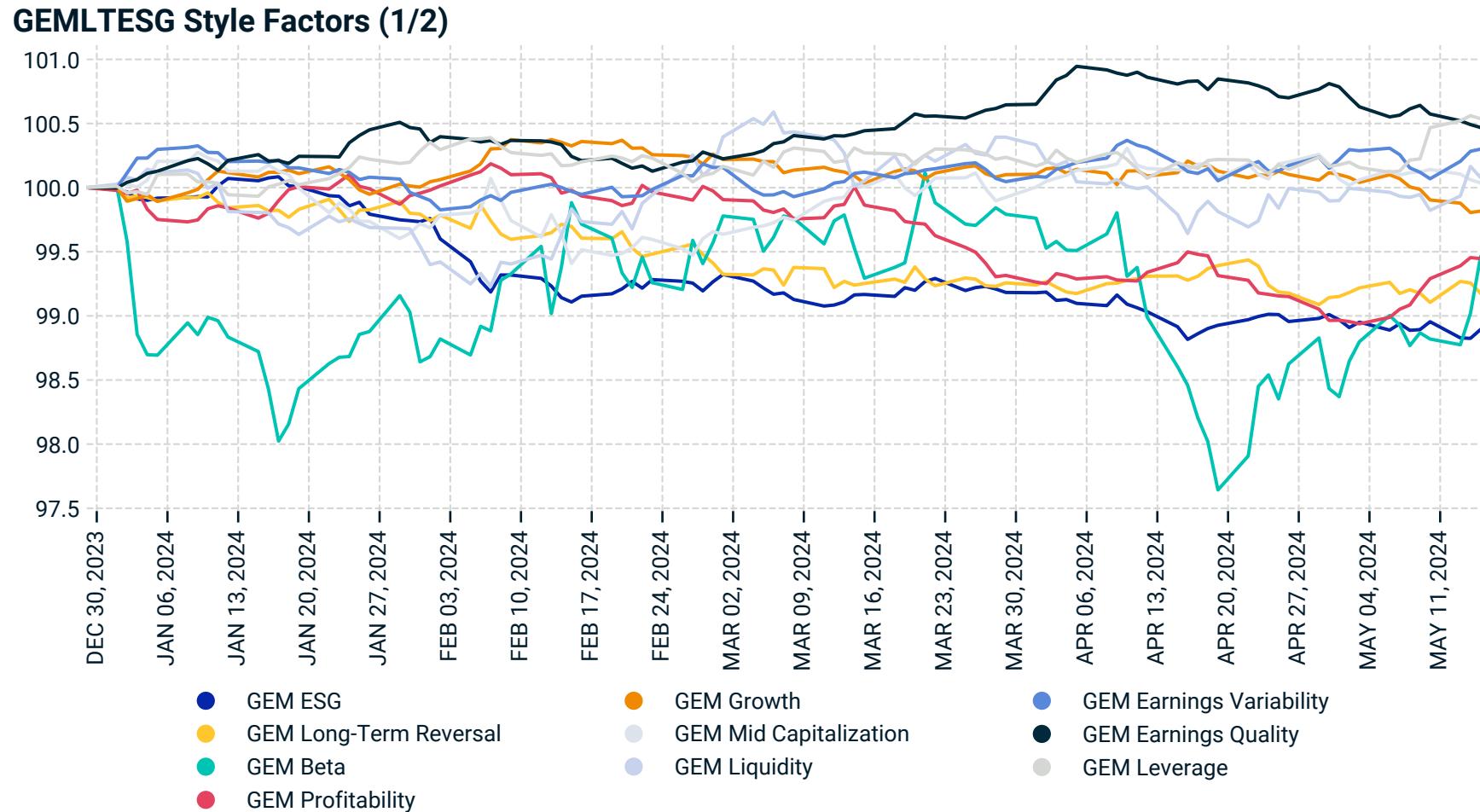


MSCI Barra Global Equity Model + ESG



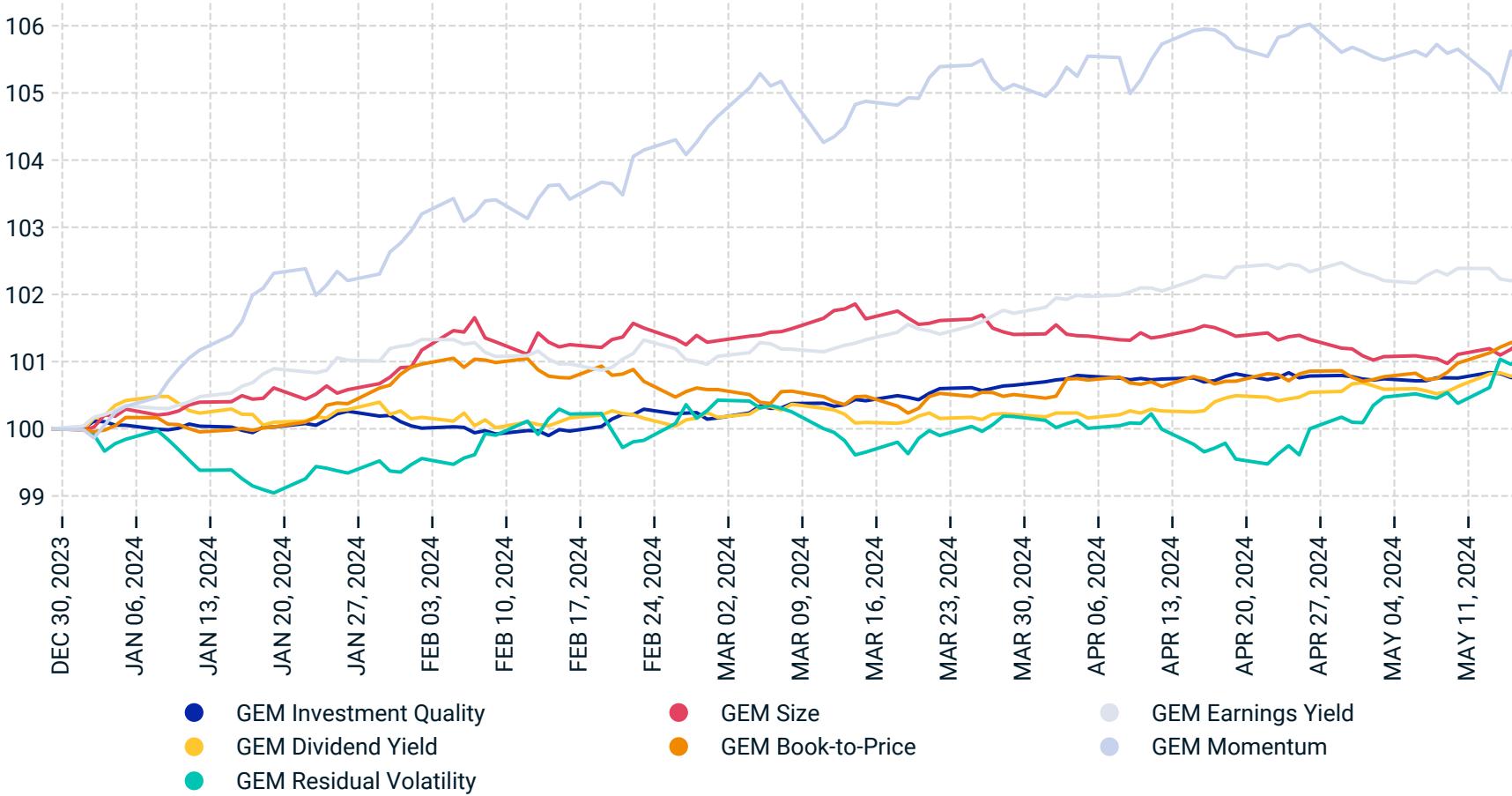
As of May 16, 2024.

MSCI Barra Global Equity Model + ESG



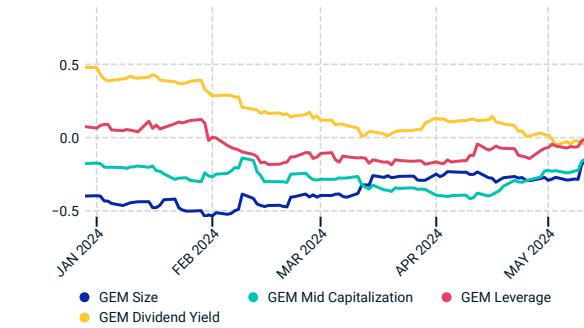
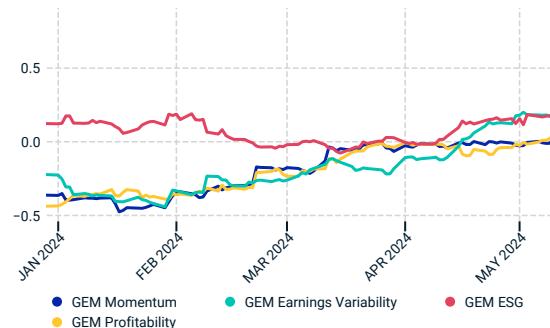
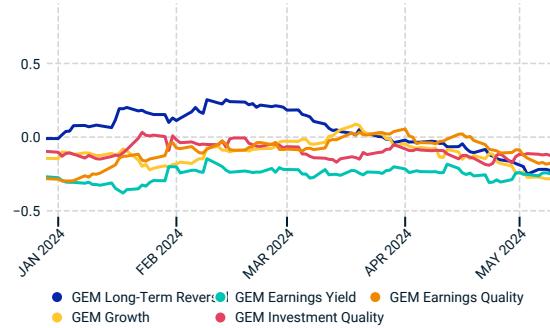
MSCI Barra Global Equity Model + ESG

GEMLTESG Style Factors (2/2)



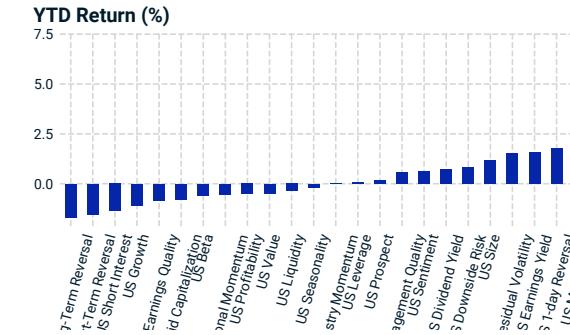
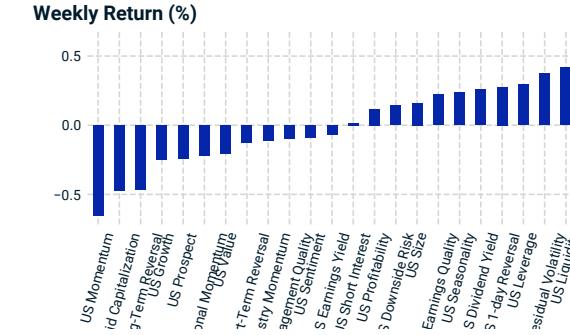
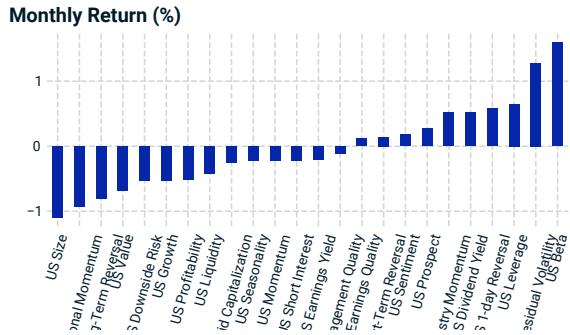
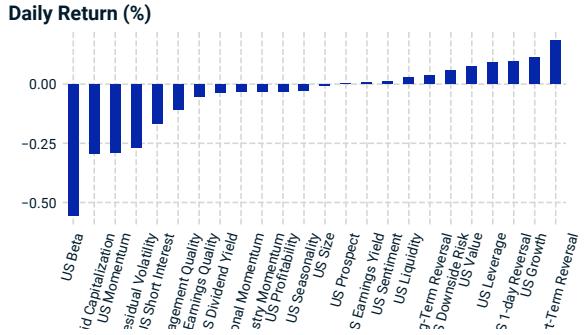
MSCI Barra Global Equity Model + ESG

Style factors 3 months rolling correlations with Market factor



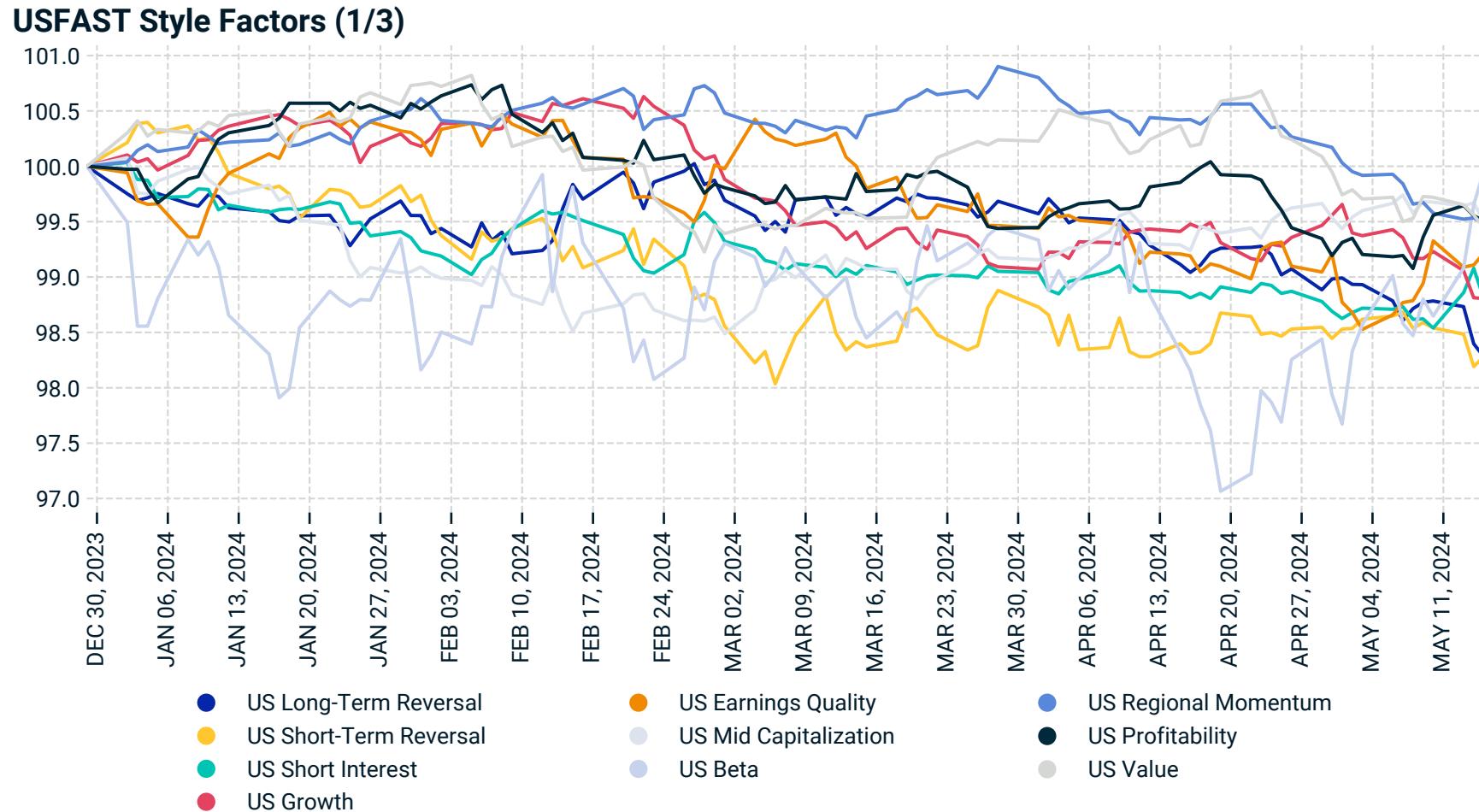
As of May 16, 2024.

MSCI Barra US Total Market Equity Trading Model

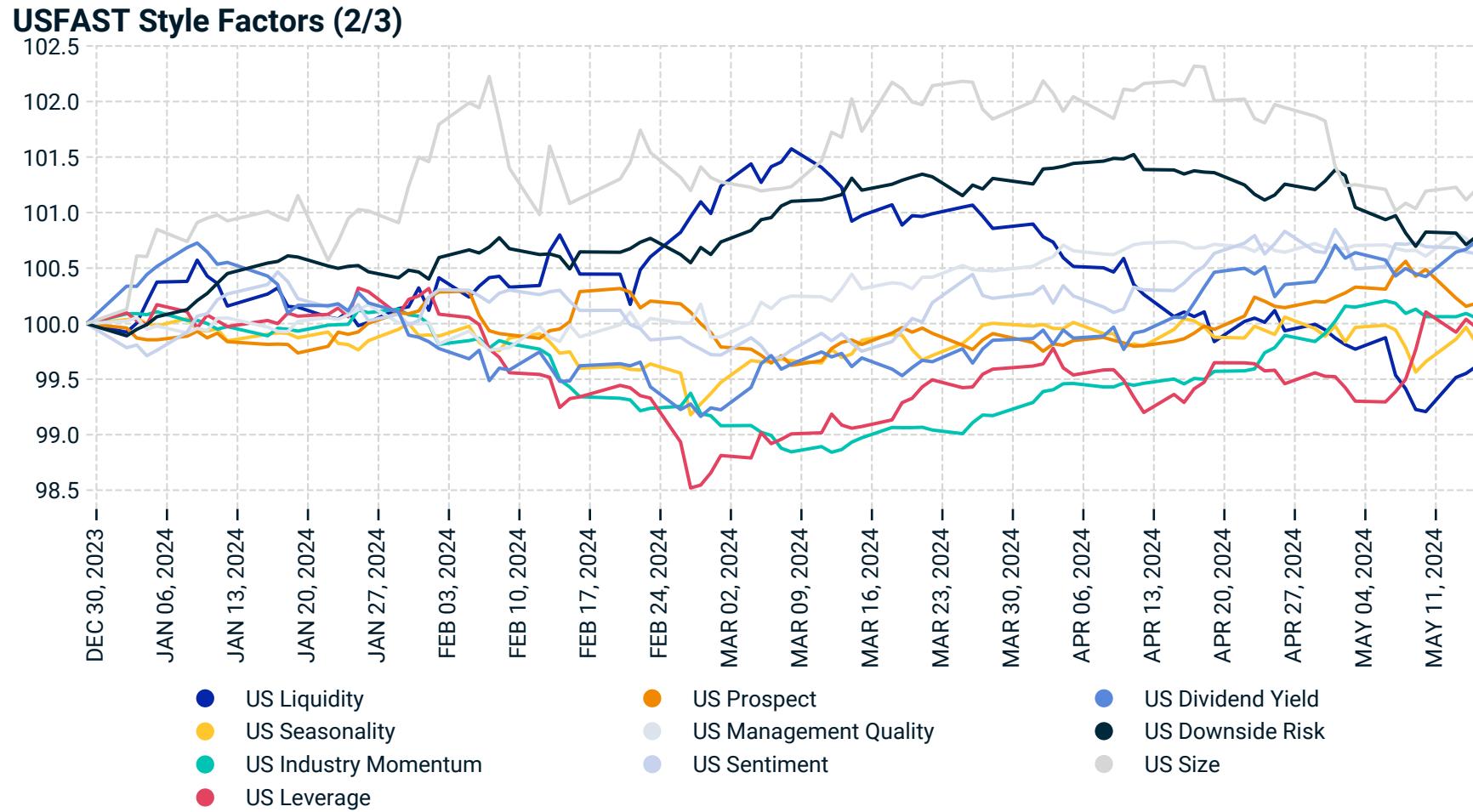


As of May 16, 2024.

MSCI Barra US Total Market Equity Trading Model

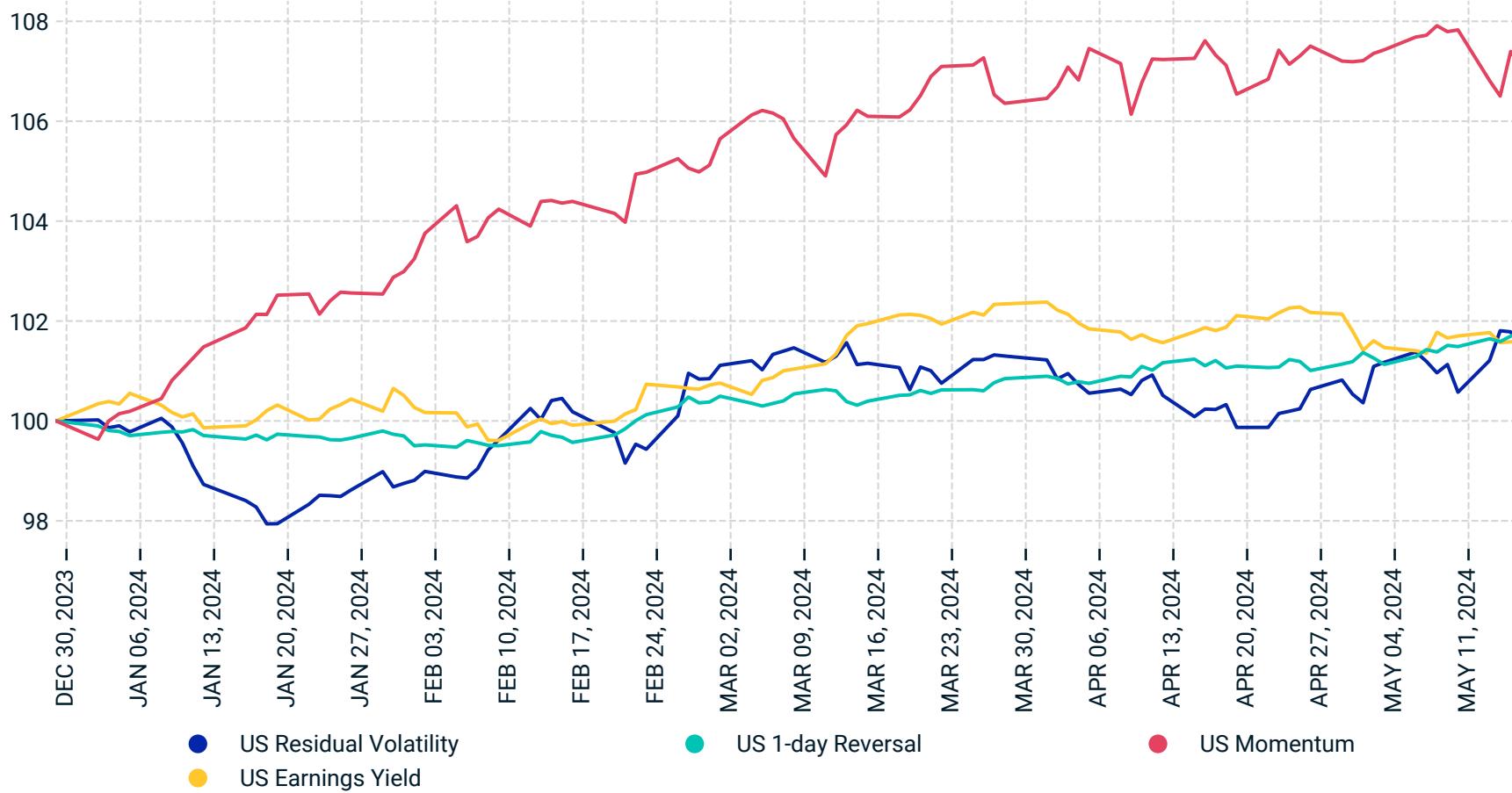


MSCI Barra US Total Market Equity Trading Model



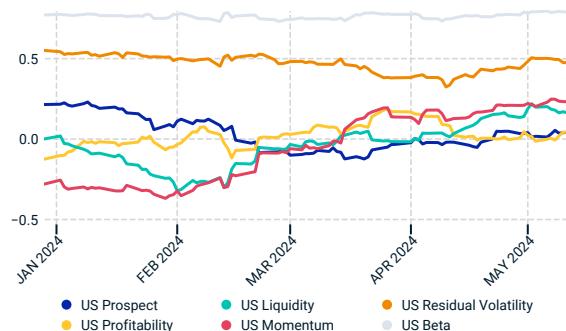
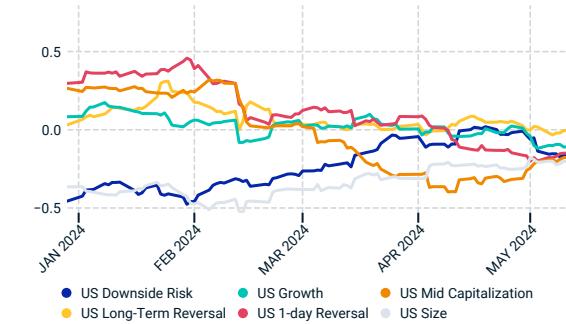
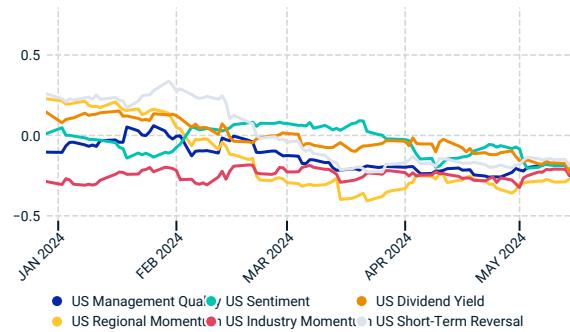
MSCI Barra US Total Market Equity Trading Model

USFAST Style Factors (3/3)



MSCI Barra US Total Market Equity Trading Model

Style factors 3 months rolling correlations with Market factor



As of May 16, 2024.

MSCI Barra Europe Total Market Equity Model

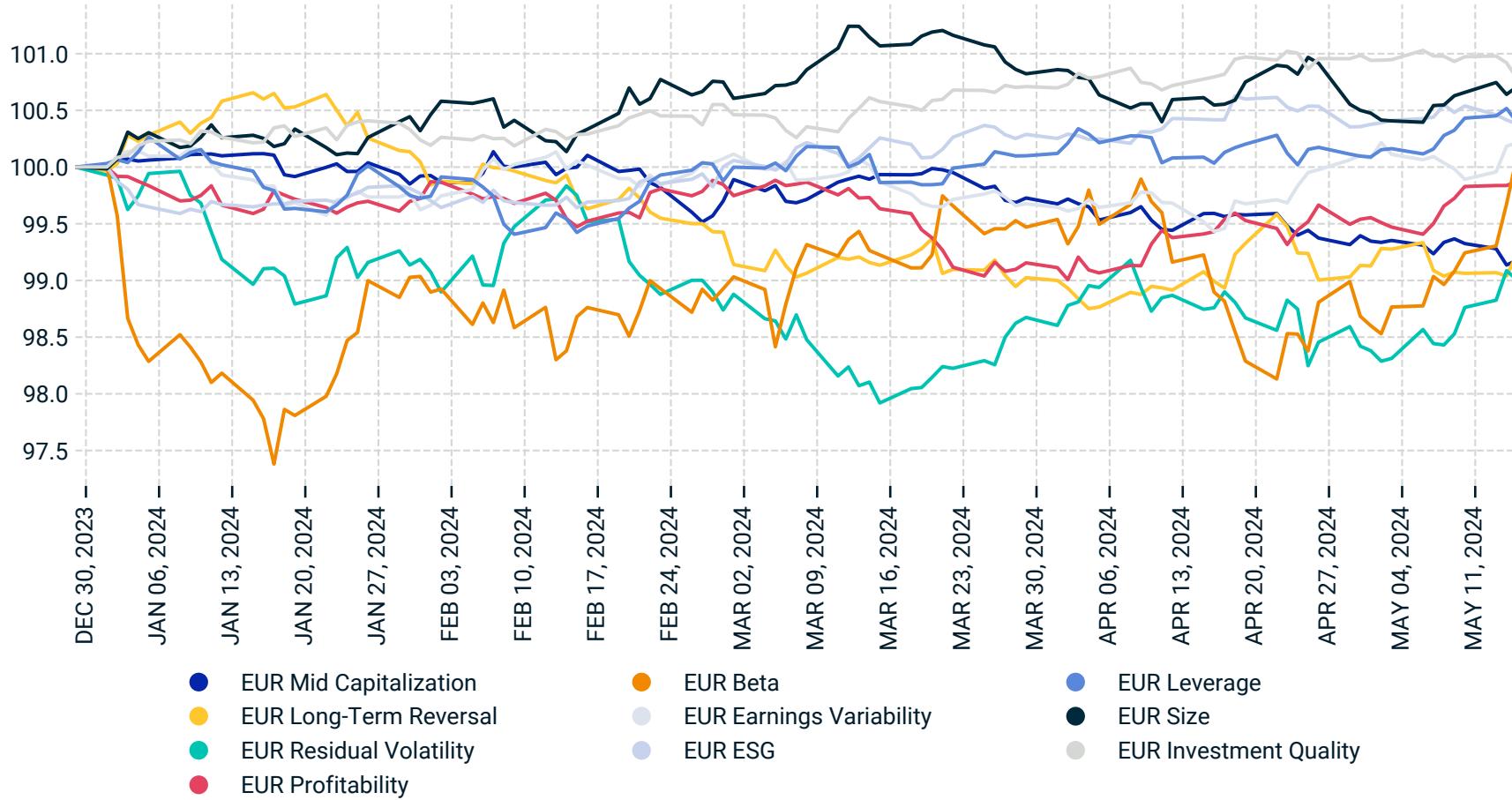


As of May 16, 2024.



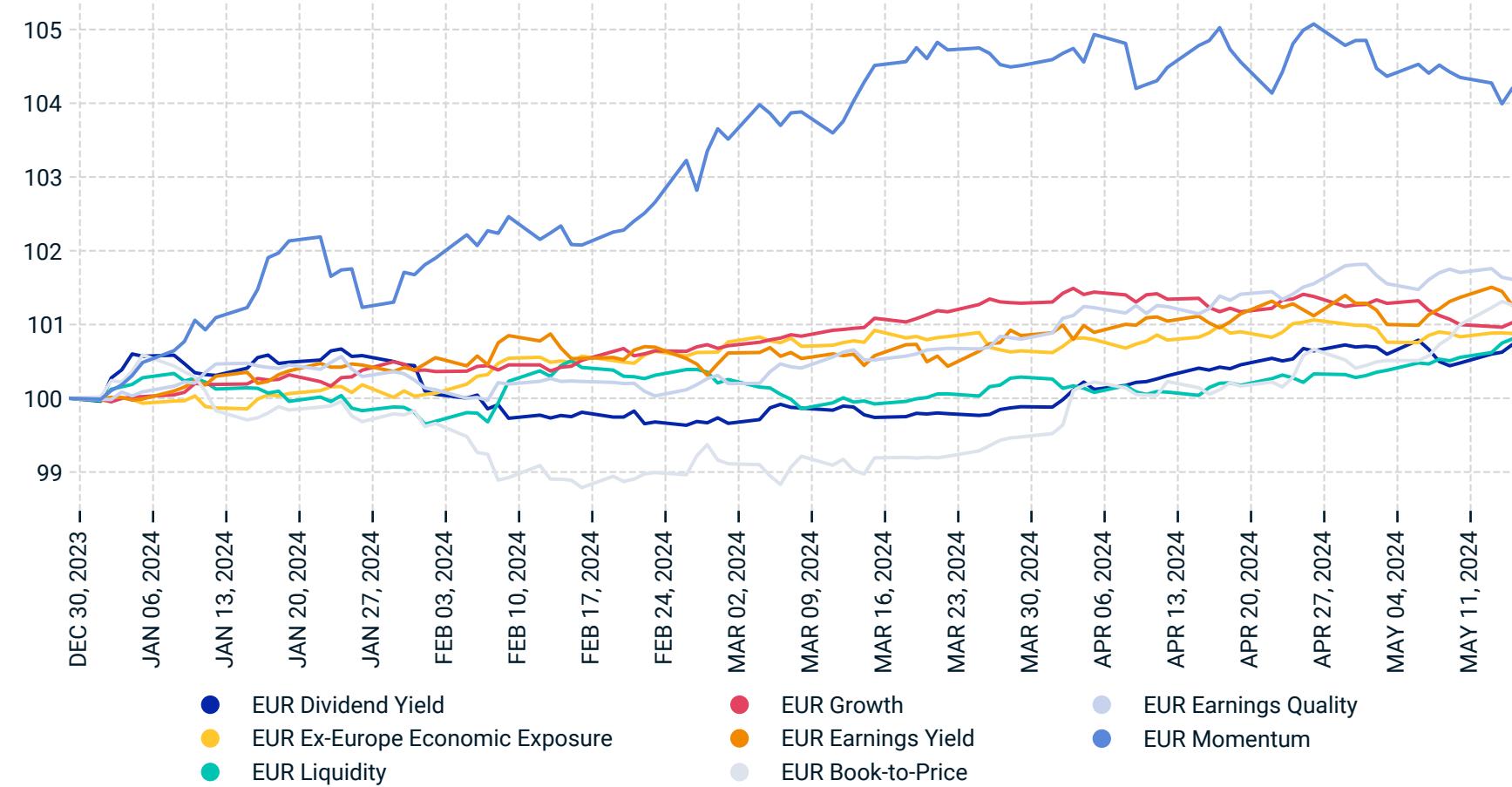
MSCI Barra Europe Total Market Equity Model

EULT Style Factors (1/2)



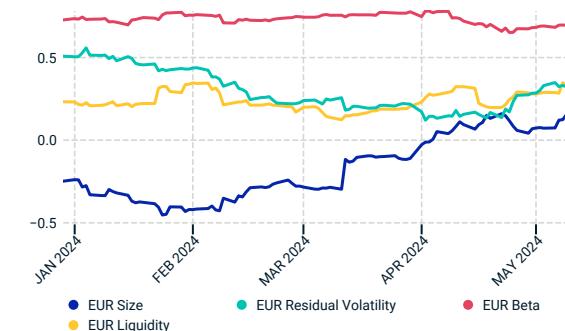
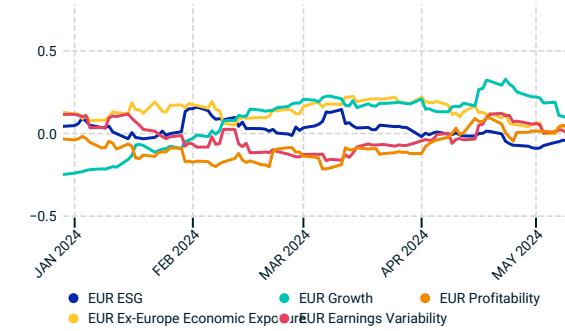
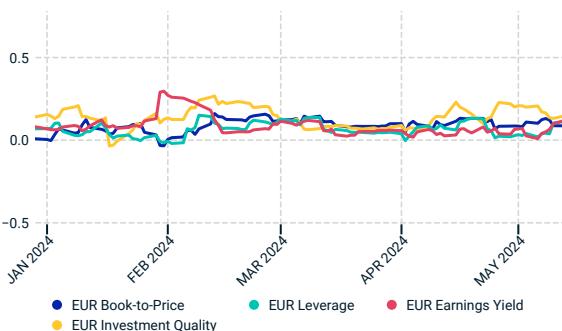
MSCI Barra Europe Total Market Equity Model

EULT Style Factors (2/2)



MSCI Barra Europe Total Market Equity Model

Style factors 3 months rolling correlations with Market factor

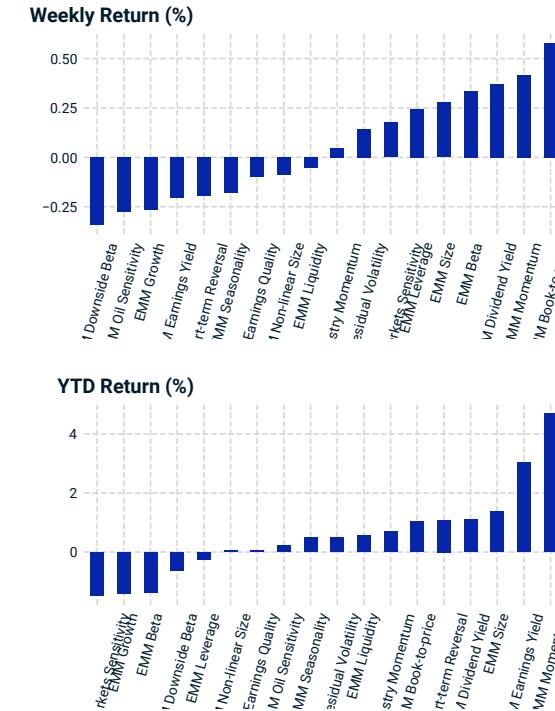


As of May 16, 2024.

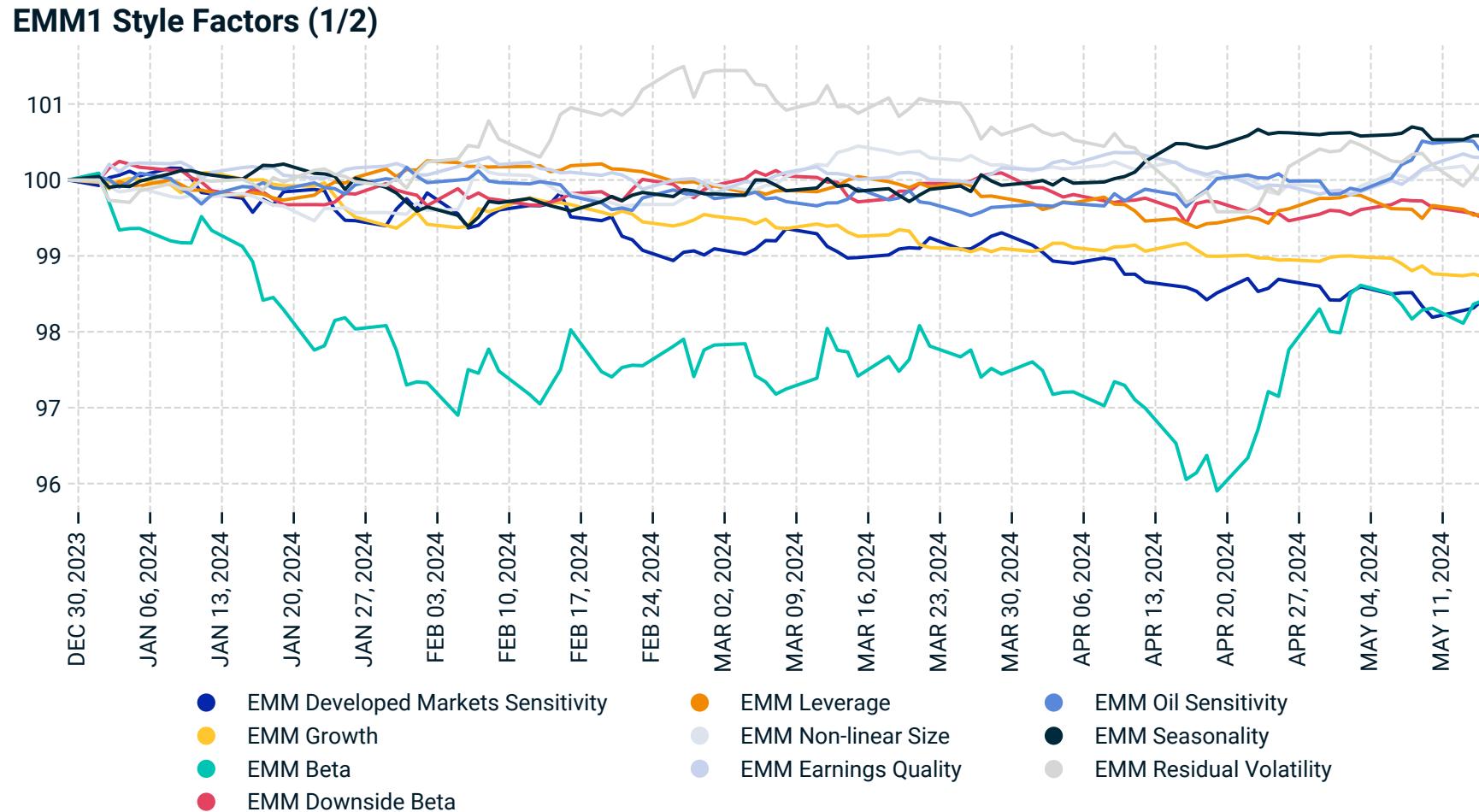
MSCI Barra Emerging Markets Model



As of May 16, 2024.

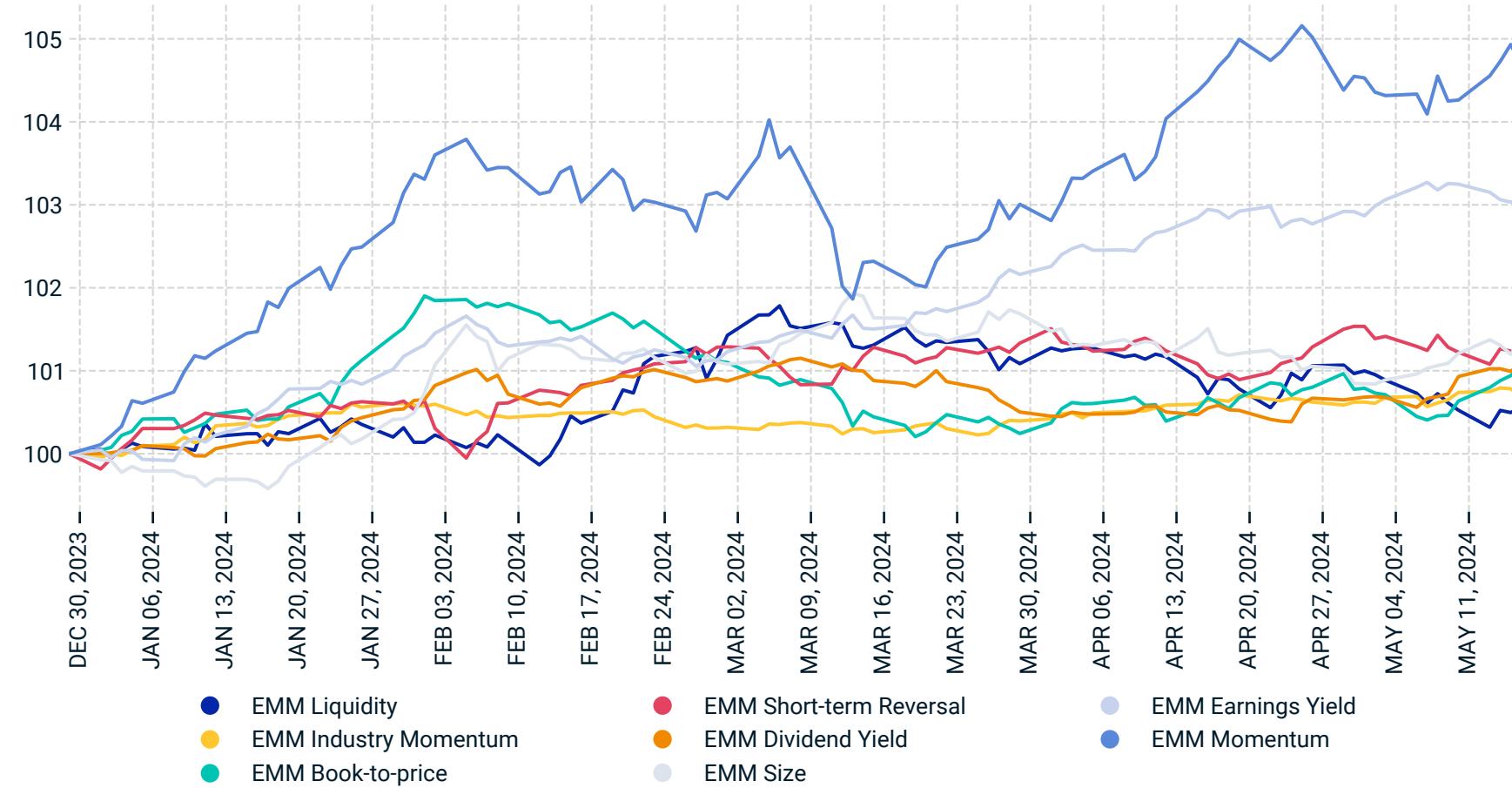


MSCI Barra Emerging Markets Model



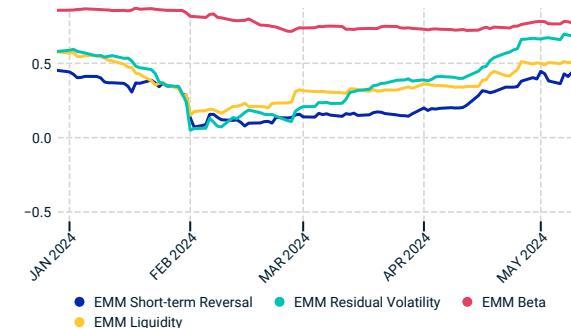
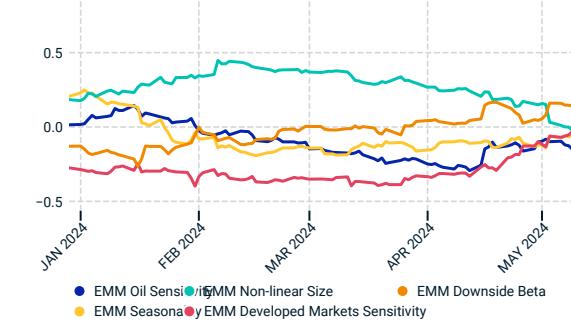
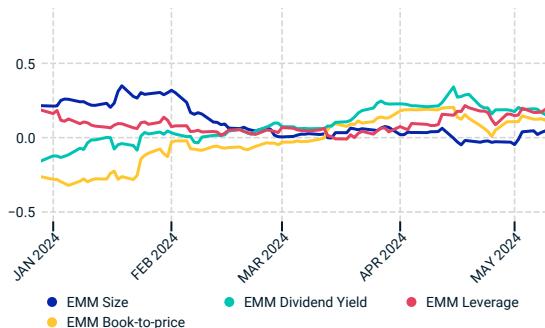
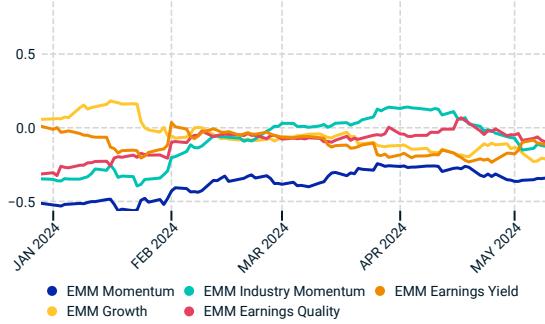
MSCI Barra Emerging Markets Model

EMM1 Style Factors (2/2)



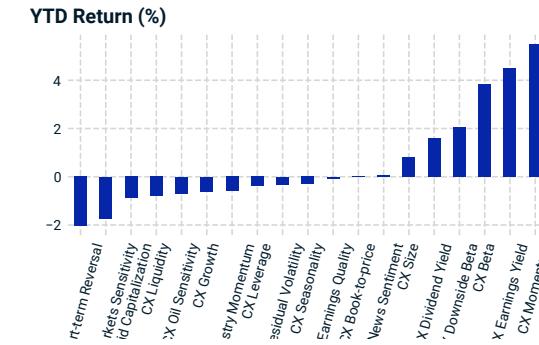
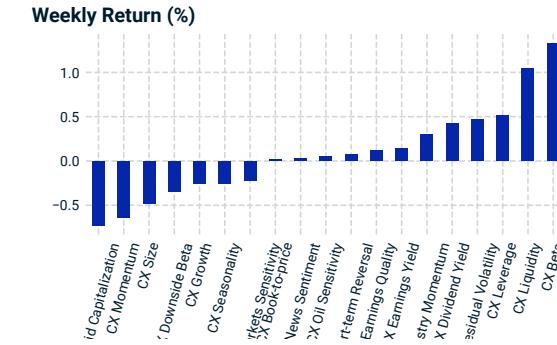
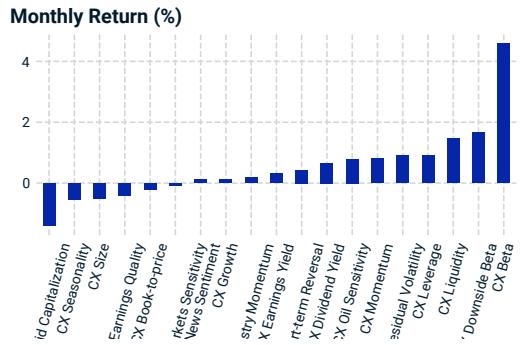
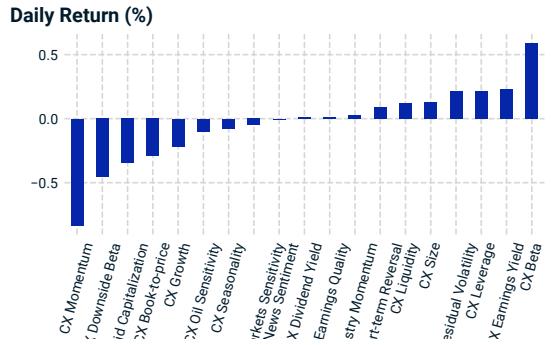
MSCI Barra Emerging Markets Model

Style factors 3 months rolling correlations with Market factor



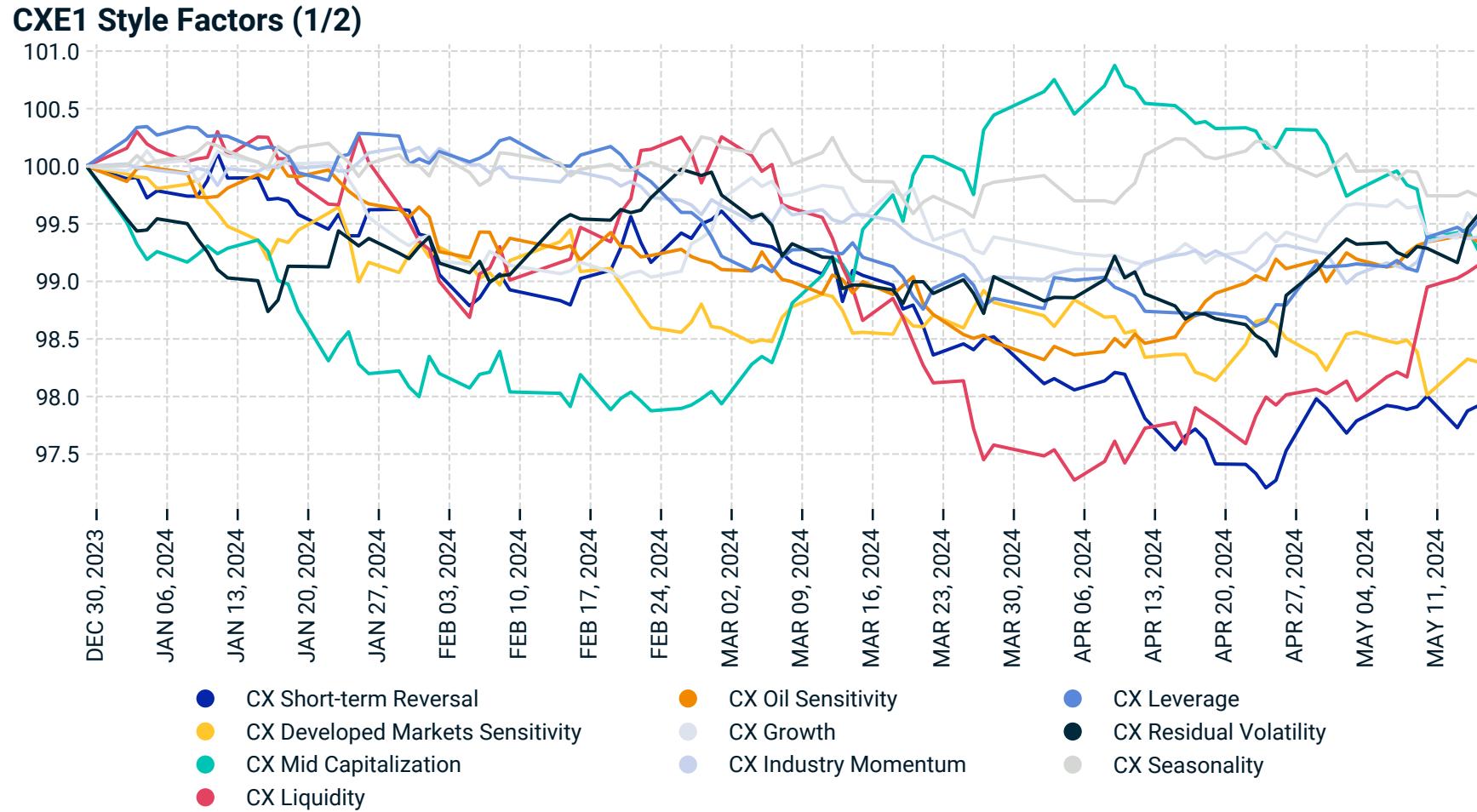
As of May 16, 2024.

MSCI Barra China International Equity Model



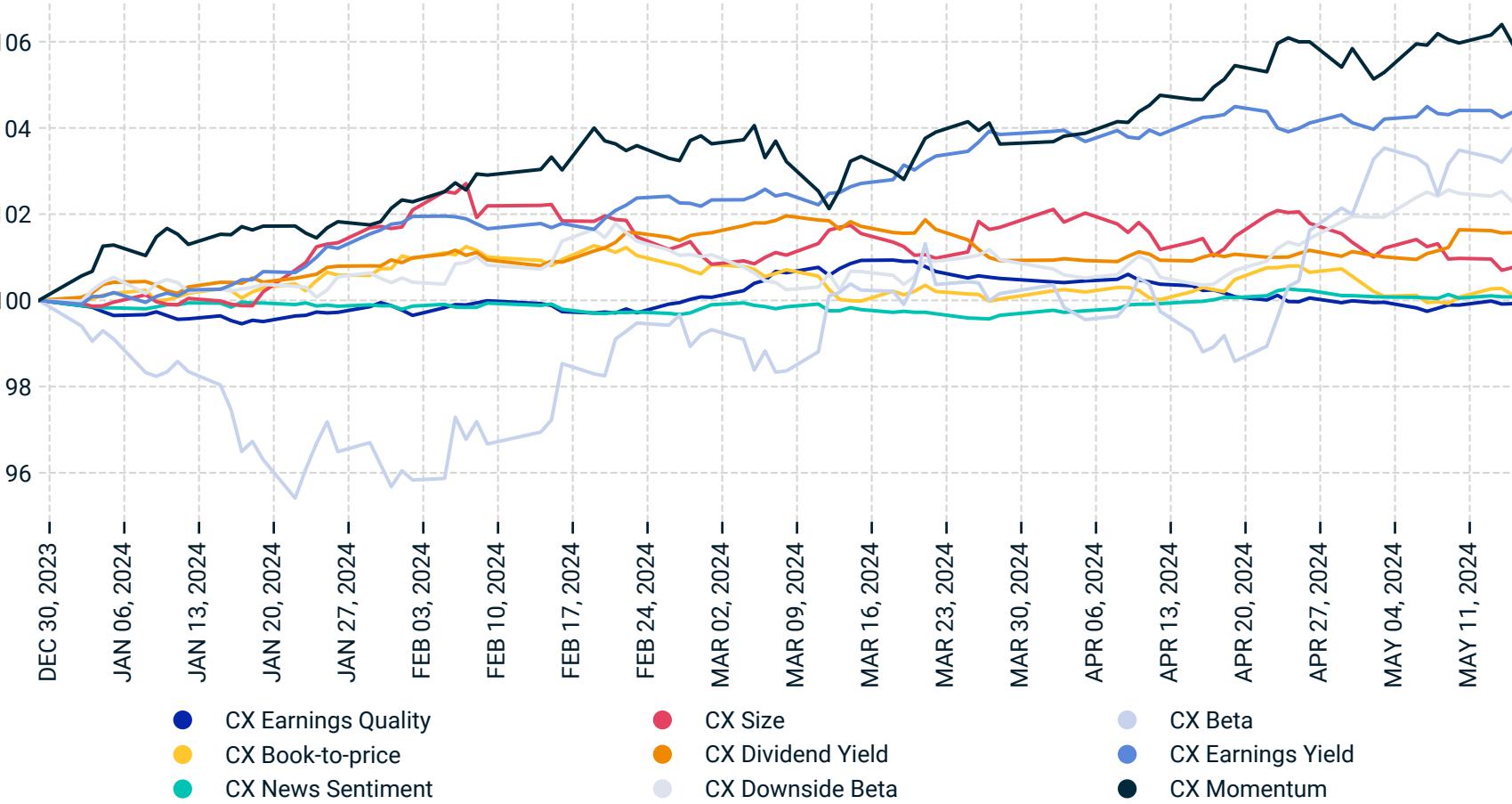
As of May 16, 2024.

MSCI Barra China International Equity Model



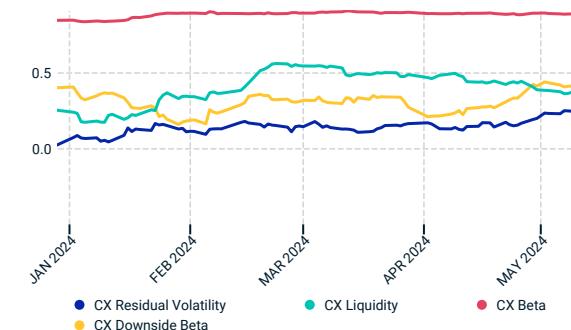
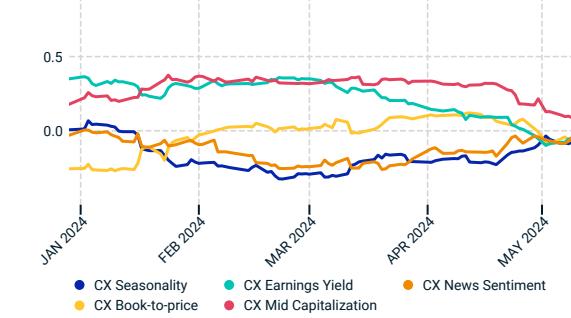
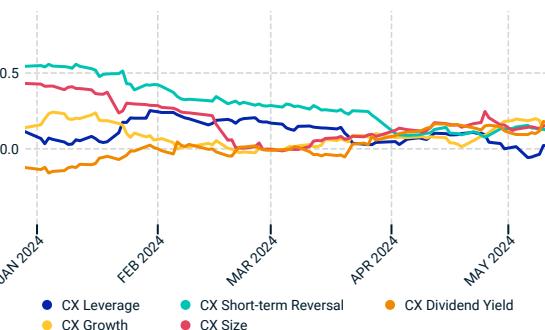
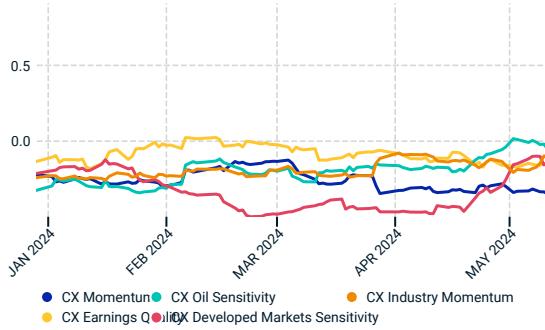
MSCI Barra China International Equity Model

CXE1 Style Factors (2/2)



MSCI Barra China International Equity Model

Style factors 3 months rolling correlations with Market factor



As of May 16, 2024.

MSCI Japan Equity Model

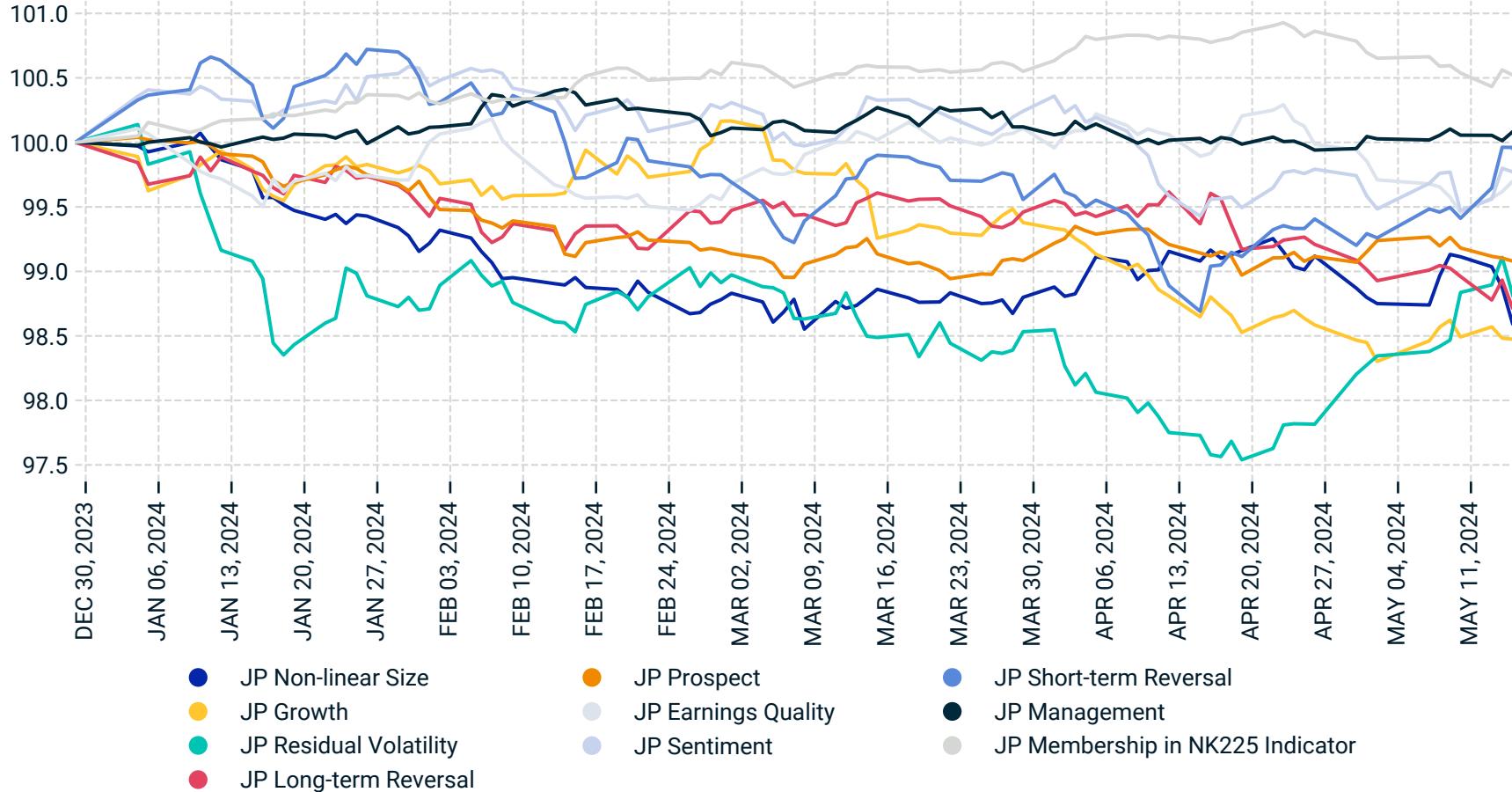


As of May 16, 2024.

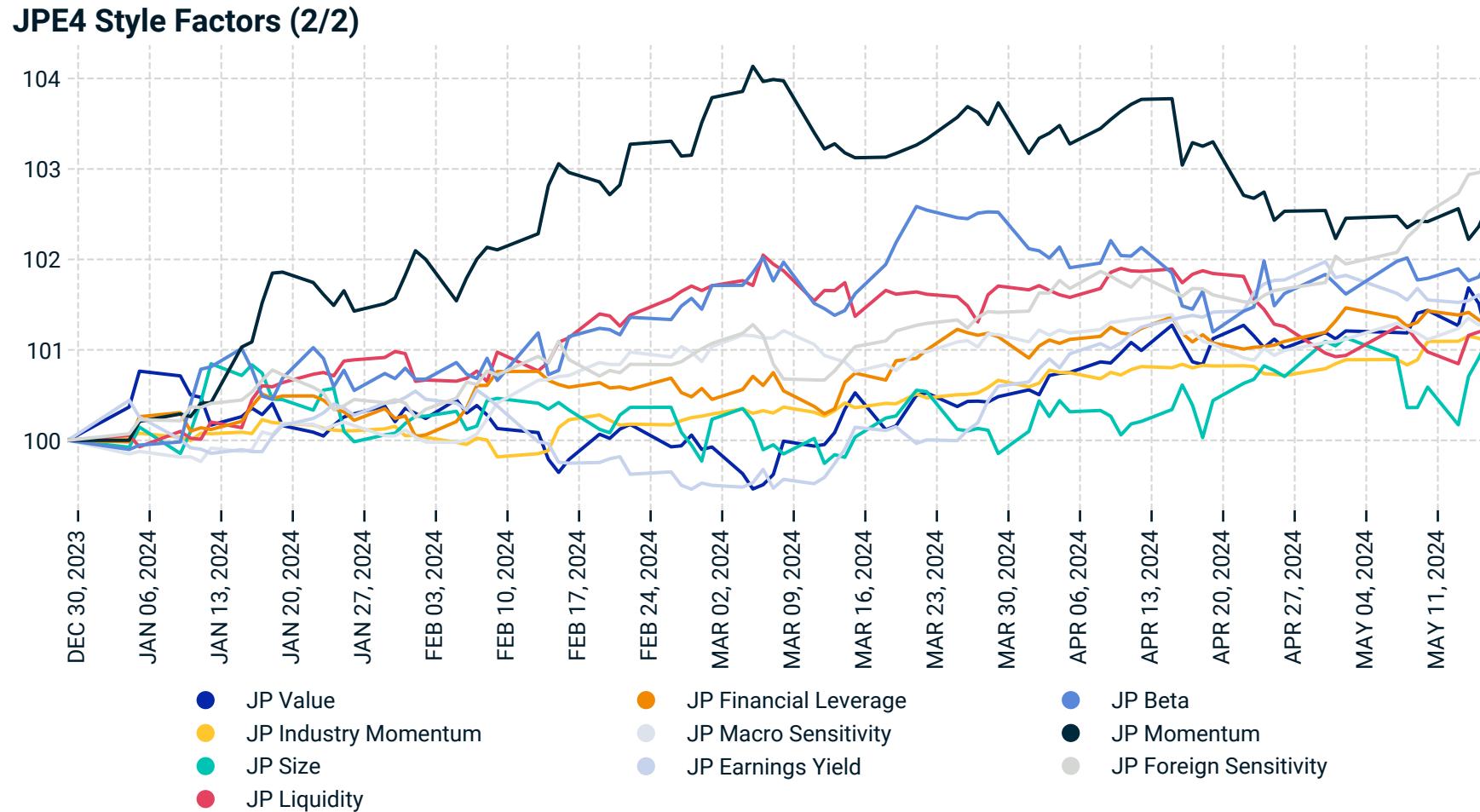


MSCI Japan Equity Model

JPE4 Style Factors (1/2)

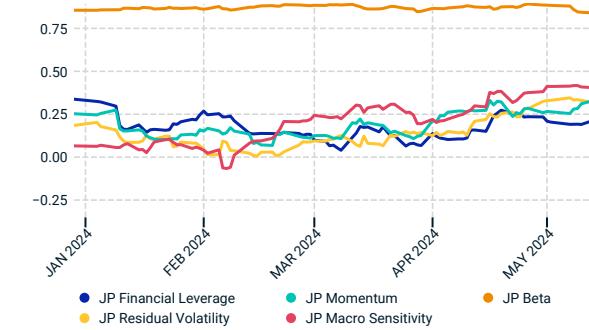
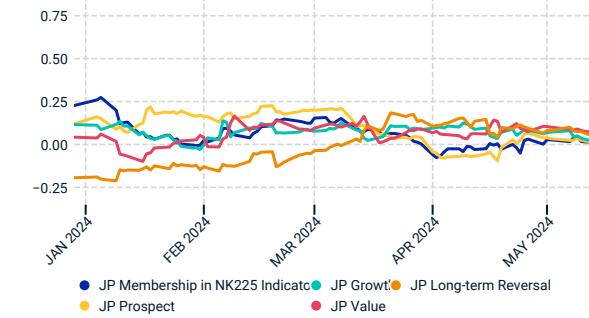
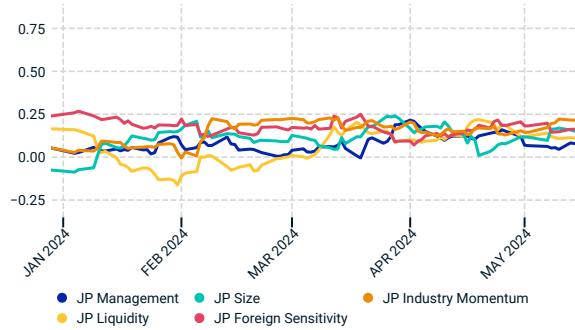
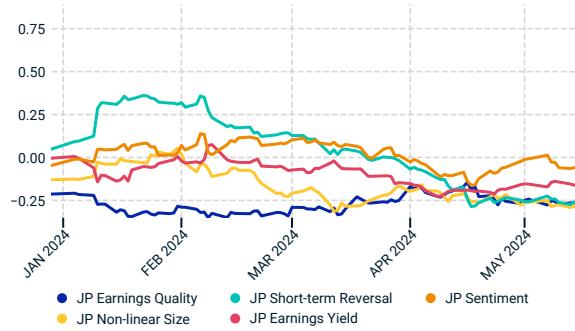


MSCI Japan Equity Model



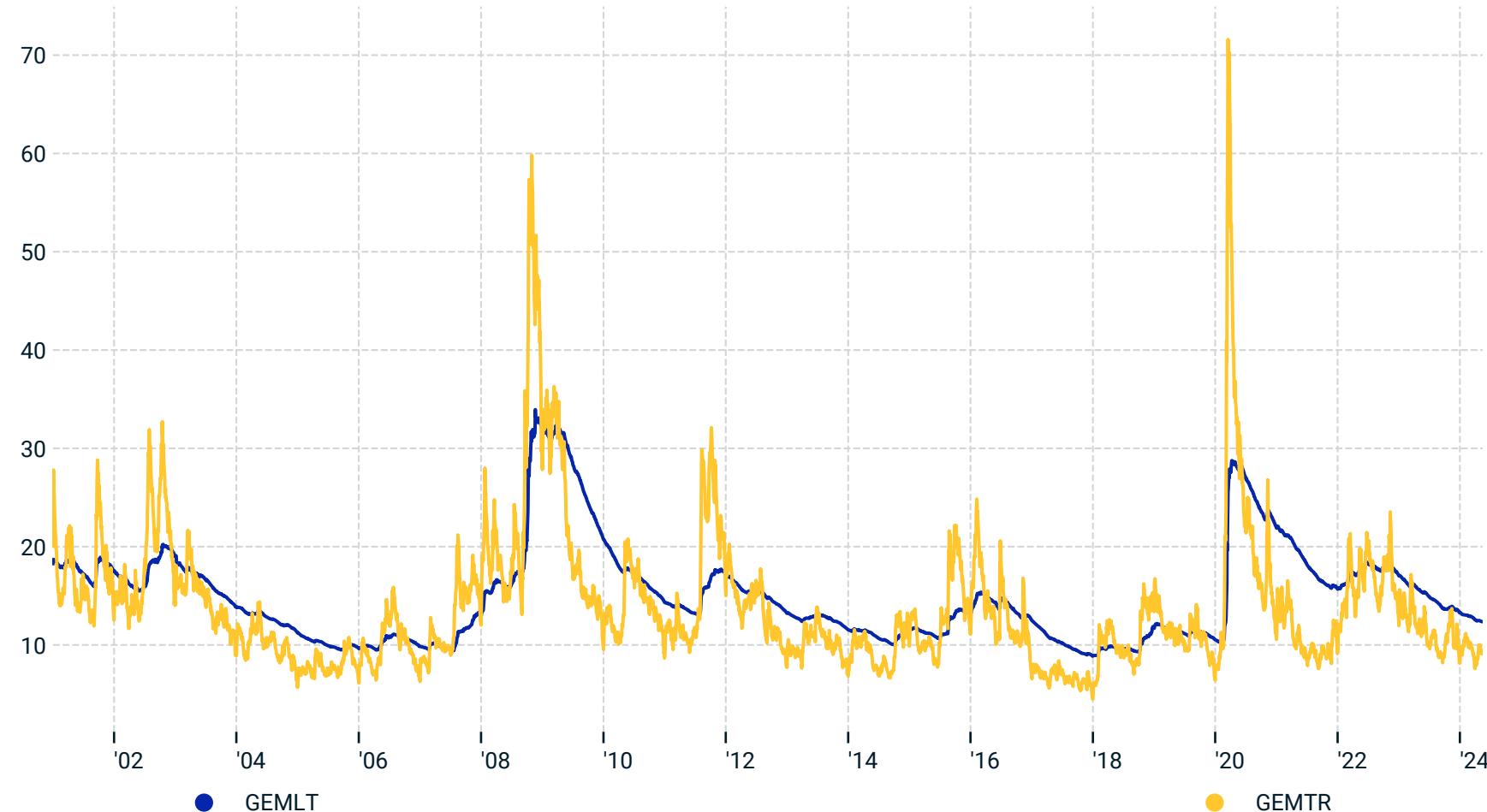
MSCI Japan Equity Model

Style factors 3 months rolling correlations with Market factor



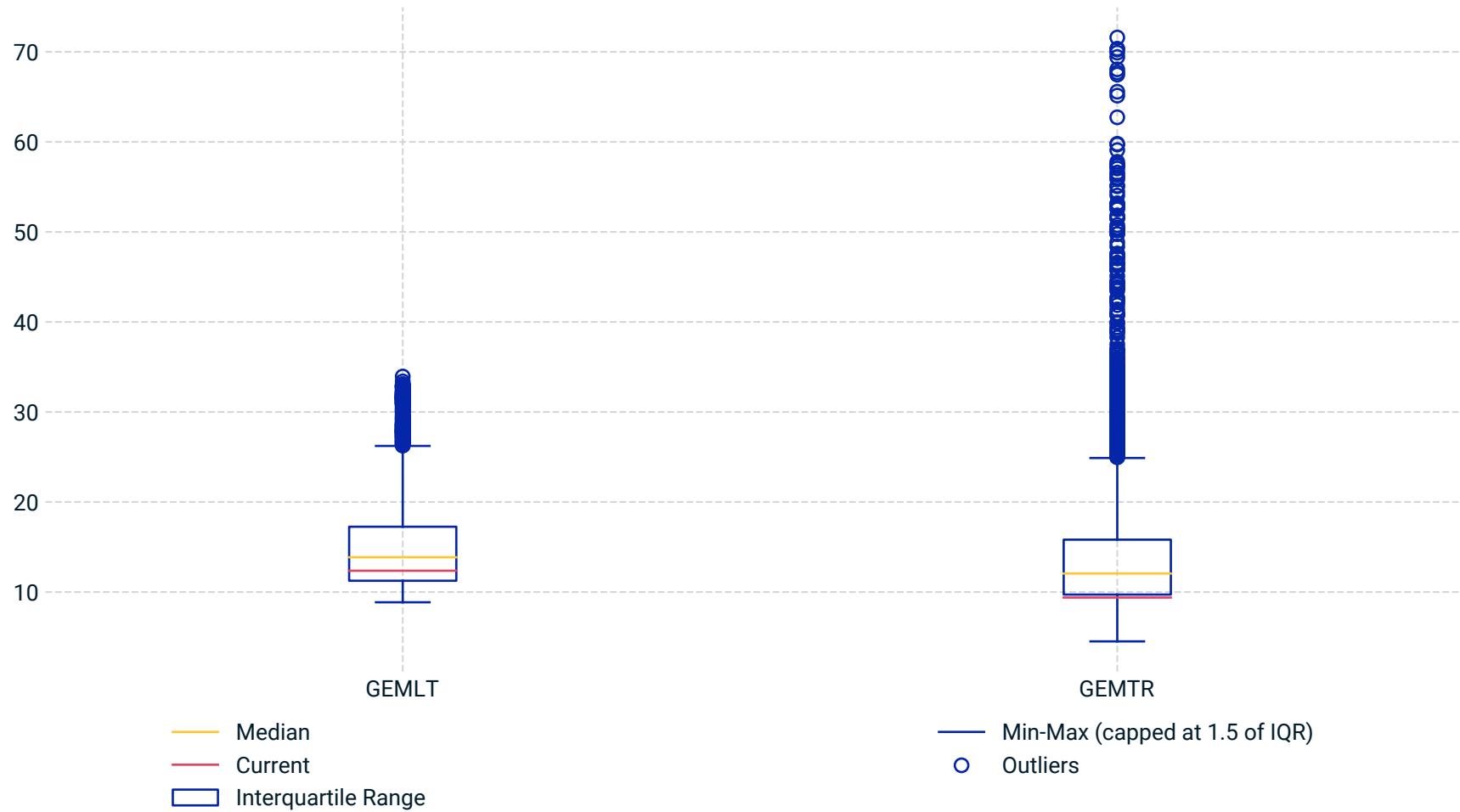
As of May 16, 2024.

Risk model volatility forecast



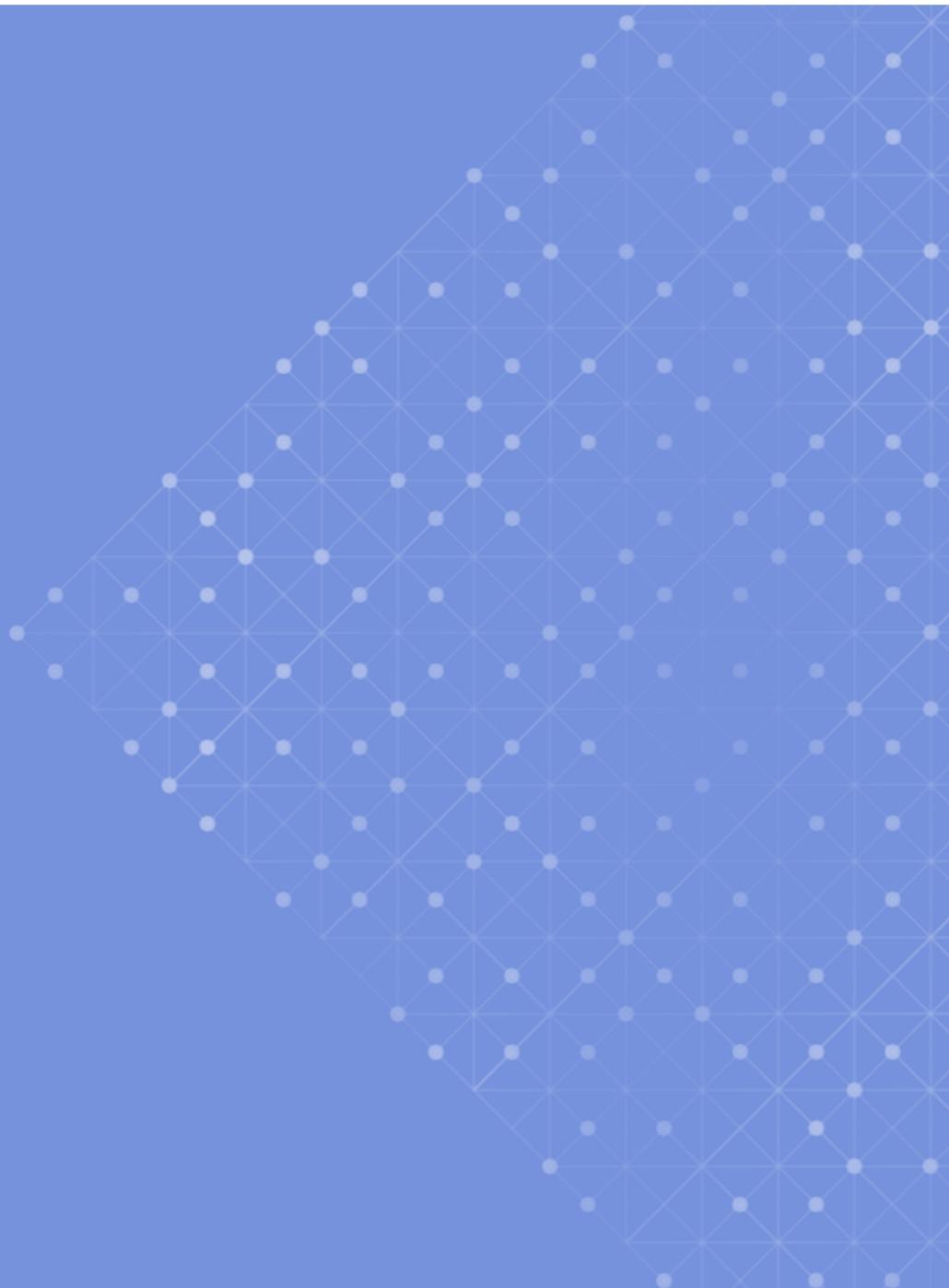
Period: Dec 29, 2000-May 16, 2024.

Risk model volatility forecast

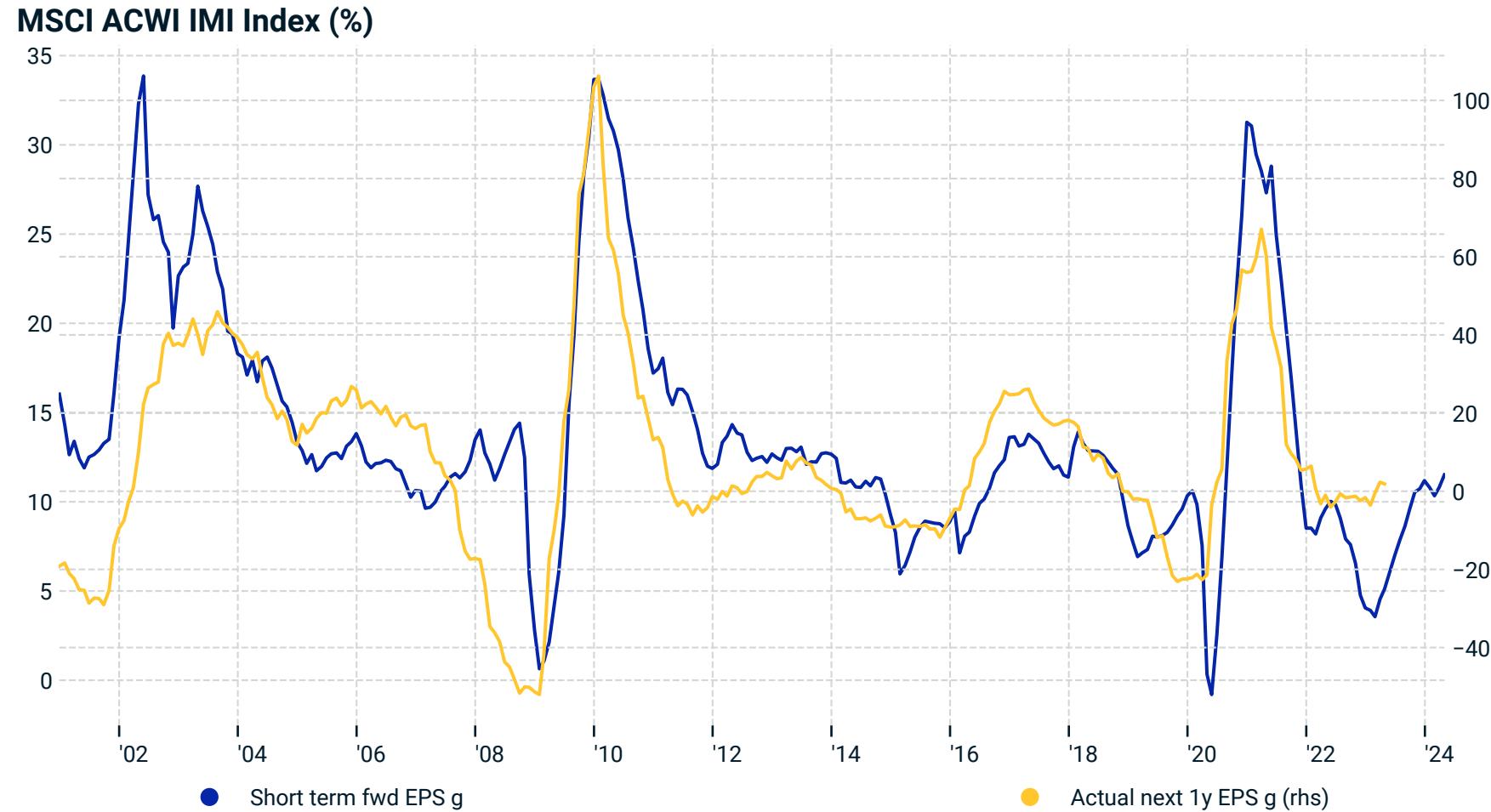


Period: Dec 29, 2000-May 16, 2024.

Earnings outlook

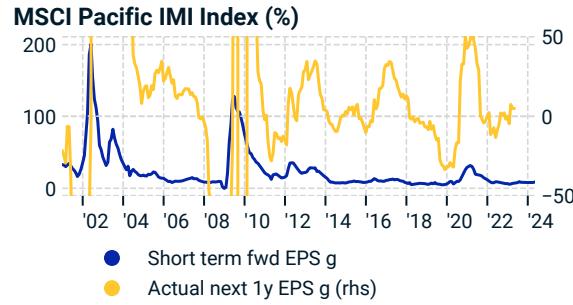
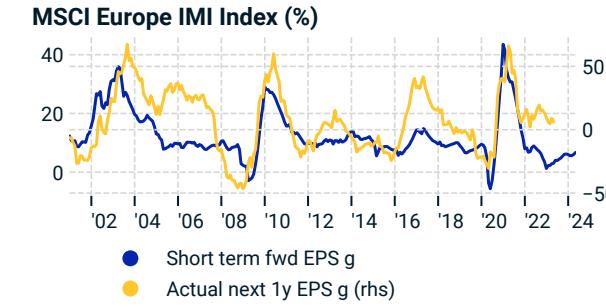
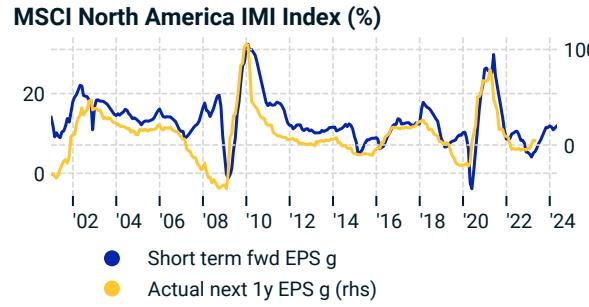


Earnings outlook: Fwd vs actual EPS g



Period: Dec 29, 2000-Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

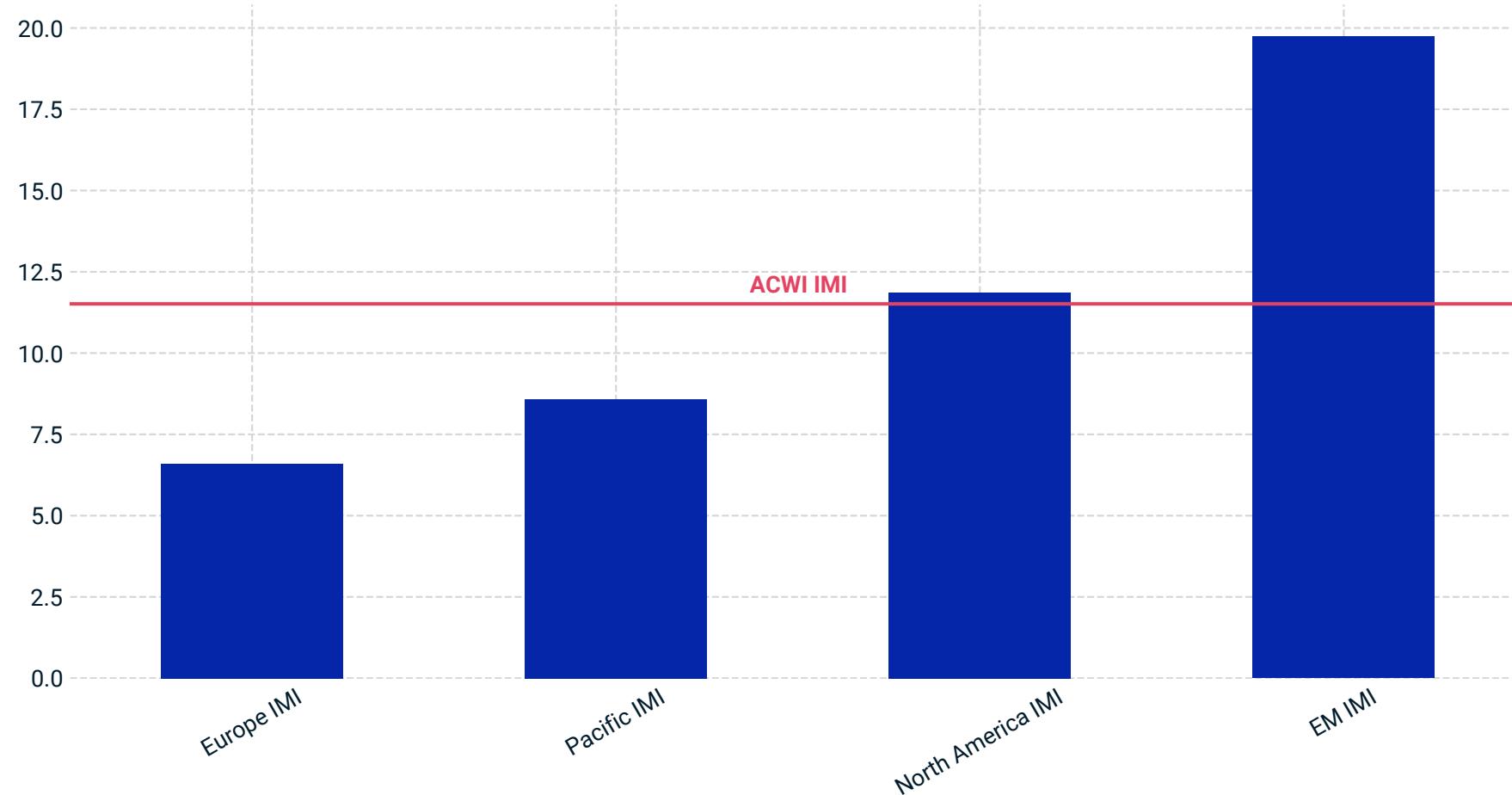
Earnings outlook: Fwd vs actual EPS g



Period: Dec 29, 2000-Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

Earnings outlook

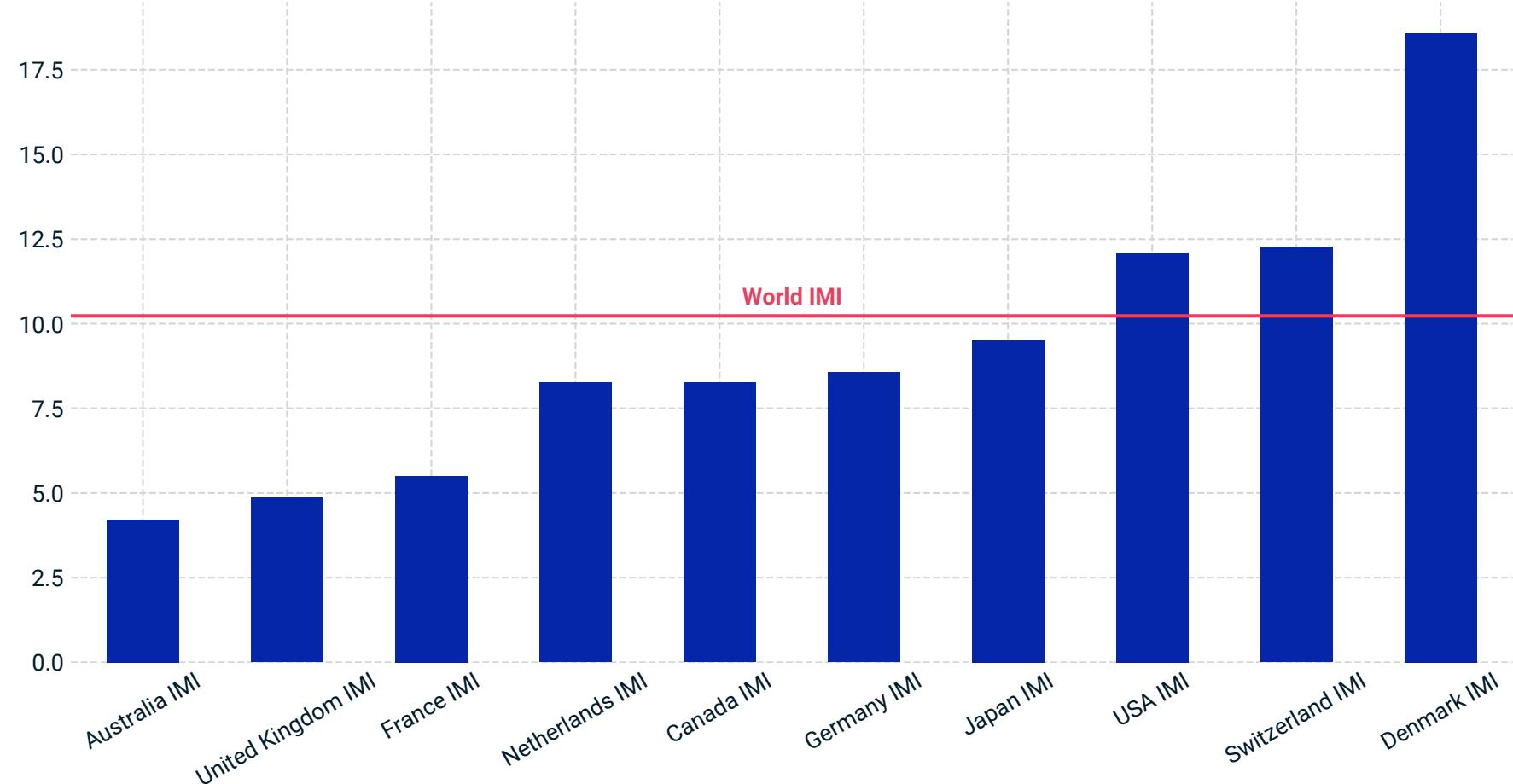
Regions: short term forward EPS growth rate (%)



As of Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

Earnings outlook

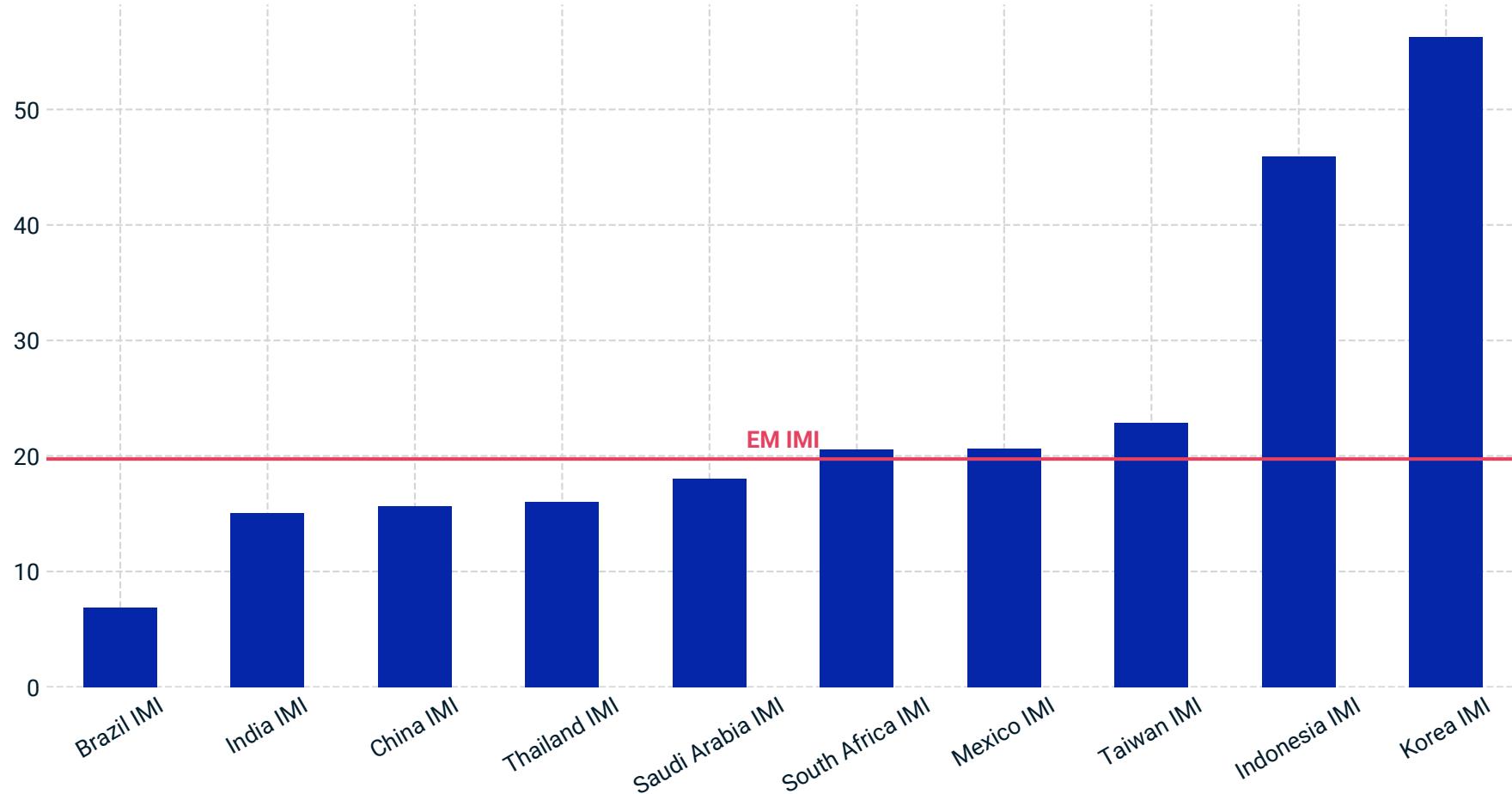
Largest 10 DM countries: short term forward EPS growth rate (%)



As of Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

Earnings outlook

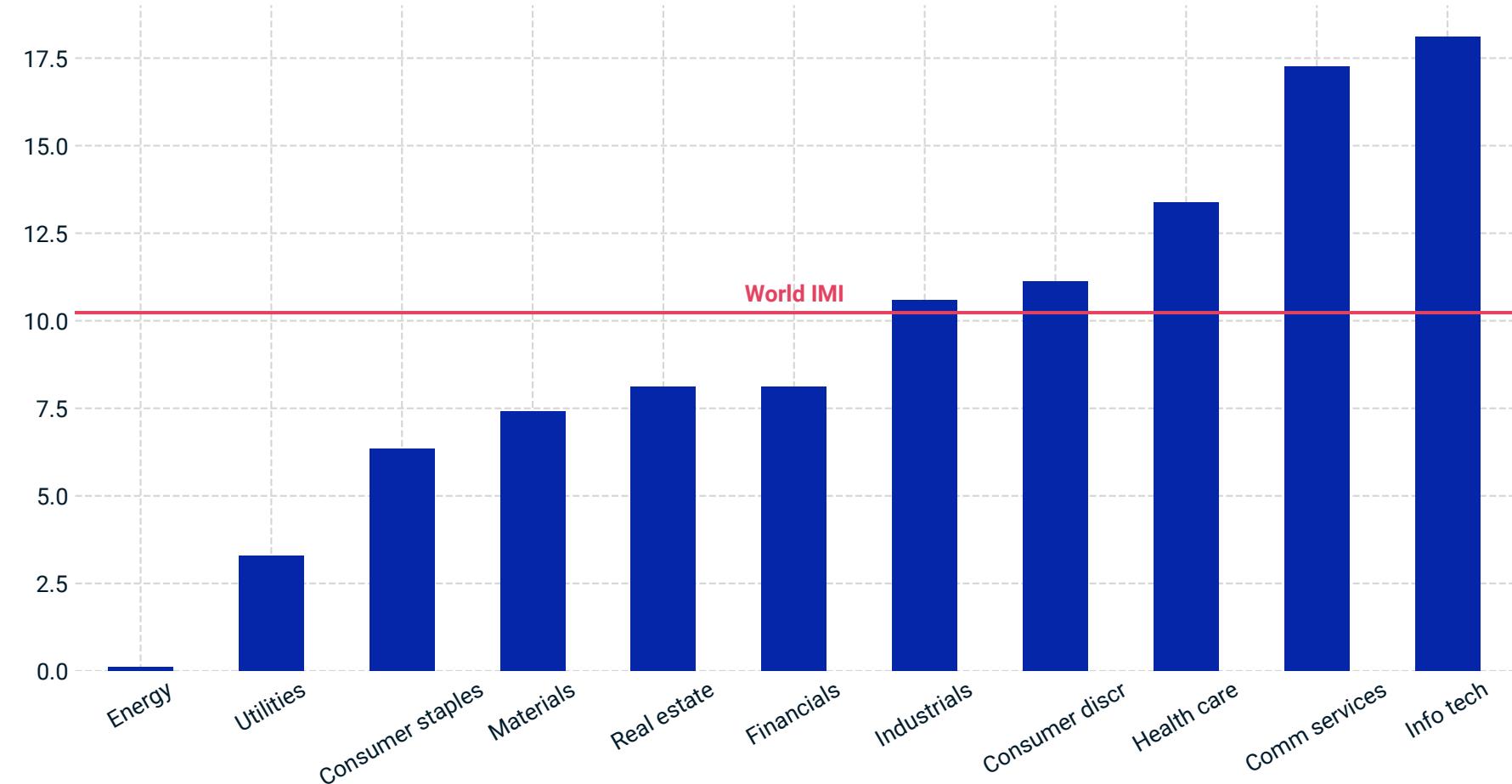
Largest 10 EM countries: short term forward EPS growth rate (%)



As of Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

Earnings outlook

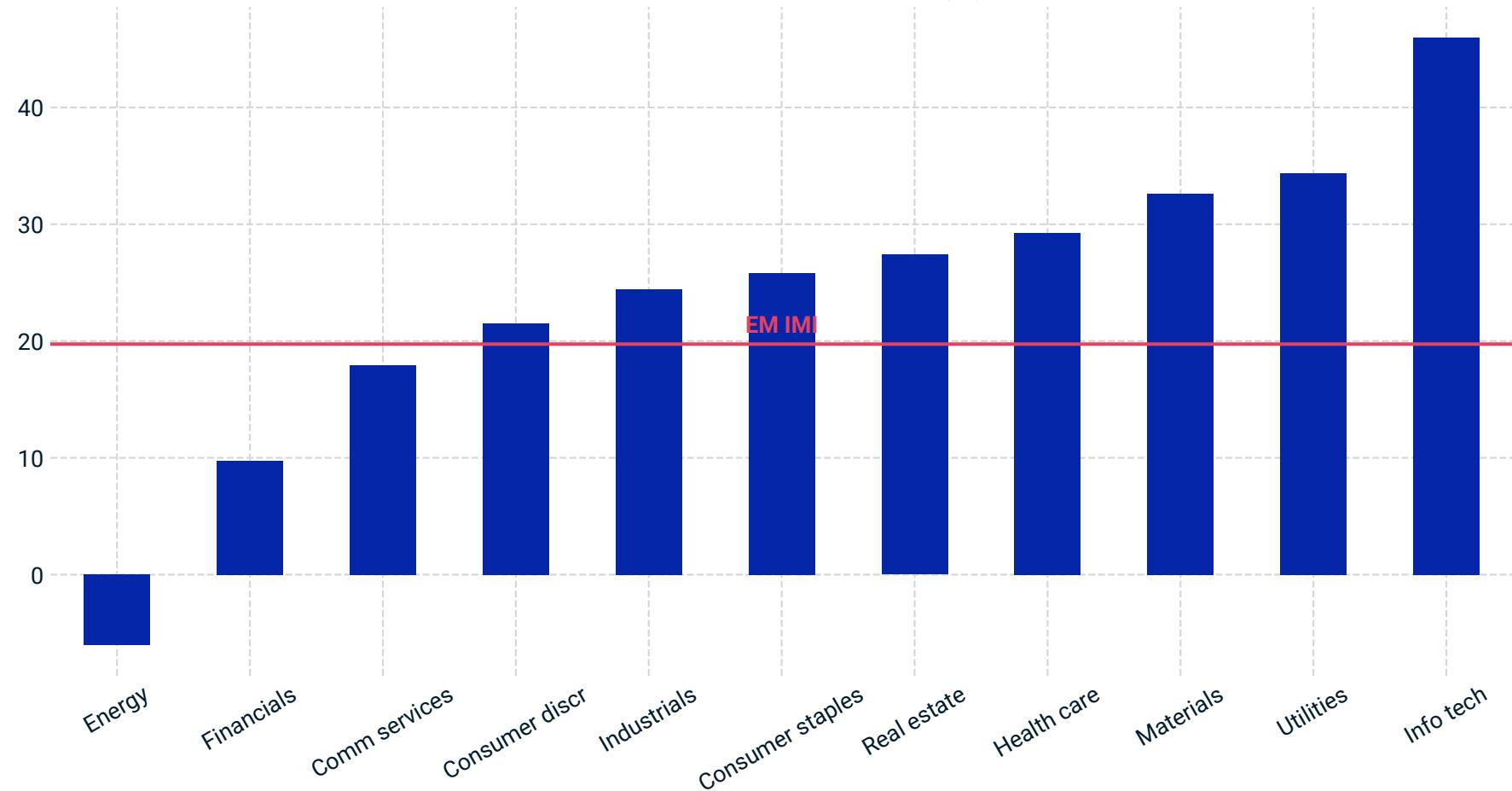
MSCI World IMI Index sectors: short term forward EPS growth rate (%)



As of Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

Earnings outlook

MSCI EM IMI Index sectors: short term forward EPS growth rate (%)



As of Apr 30, 2024. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. To learn more, please visit www.msci.com.

Contact us

AMERICAS		EUROPE, MIDDLE EAST & AFRICA		ASIA PACIFIC	
Americas	+ 1 888 588 4567 *	Cape Town	+ 27 21 673 0100	China North	10800 852 1032 *
Atlanta	+ 1 404 551 3212	Frankfurt	+ 49 69 133 859 00	China South	10800 152 1032 *
Boston	+ 1 617 532 0920	Geneva	+ 41 22 817 9777	Hong Kong	+ 852 2844 9333
Chicago	+ 1 312 675 0545	London	+ 44 20 7618 2222	Mumbai	+ 91 22 6784 9160
Monterrey	+ 52 81 1253 4020	Milan	+ 39 02 5849 0415	Seoul	00798 8521 3392 *
New York	+ 1 212 804 3901	Paris	0800 91 59 17 *	Singapore	800 852 3749 *
San Francisco	+ 1 415 836 8800			Sydney	+ 61 2 9033 9333
São Paulo	+ 55 11 3706 1360			Taipei	008 0112 7513 *
Toronto	+ 1 416 628 1007			Thailand	0018 0015 6207 7181 *
* = toll free msci.com clientservice@msci.com esgclientservice@msci.com				Tokyo	+ 81 3 5290 1555

Notice & Disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redistributed in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not be applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI Index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.