

▀ Daily Equity Insights

April 29, 2020 (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	1.2	2.0	7.8	-2.6	6.6	6.6	-4.4	-2.5	7.8	1.1	5.1	1.7	14.2	2.0
MSCI China A Onshore IMI Index	0.3	-1.3	2.8	-4.9	4.1	4.1	-4.6	-3.1	-2.6	-8.7	2.6	1.9	19.1	1.7
MSCI USA IMI Index	2.9	5.9	16.5	-10.6	14.7	14.7	-9.3	0.2	8.5	8.4	11.3	3.0	20.9	2.0
MSCI EM Asia IMI Index	1.4	2.9	9.5	-11.0	8.6	8.6	-11.9	-7.7	2.6	1.1	4.1	1.5	15.0	2.5
MSCI AC Asia ex Japan IMI Index	1.2	2.8	9.1	-11.3	8.4	8.4	-12.3	-9.3	2.2	0.8	4.2	1.4	14.6	2.7
MSCI World IMI Index	2.5	5.8	14.0	-12.9	12.3	12.3	-12.5	-3.8	5.2	5.2	8.2	2.1	17.8	2.6
MSCI ACWI IMI Index	2.4	5.5	13.5	-13.3	11.9	11.9	-13.1	-4.9	4.6	4.6	7.4	2.0	17.2	2.7
MSCI Japan IMI Index	0.3	4.2	2.3	-12.0	4.7	4.7	-13.4	-3.6	2.2	2.2	5.0	1.1	13.3	2.7
MSCI EM IMI Index	1.9	3.6	9.9	-16.4	9.0	9.0	-17.6	-13.2	-0.0	-0.5	1.6	1.5	13.7	3.0
MSCI EAFE IMI Index	1.5	5.3	8.5	-16.8	7.4	7.4	-17.8	-10.5	-0.1	0.5	4.3	1.4	13.8	3.8
MSCI USA Small Cap Index	4.7	13.0	20.1	-17.9	18.6	18.6	-18.5	-13.7	1.6	3.9	8.8	1.8	25.6	2.0
MSCI Europe IMI Index	2.1	5.8	10.4	-18.1	7.9	7.9	-19.1	-11.8	-0.7	0.1	4.4	1.6	13.9	4.1
MSCI World Small Cap Index	3.5	10.2	16.8	-18.1	15.3	15.3	-19.2	-12.9	0.5	3.0	7.3	1.5	19.6	2.5
MSCI FM IMI Index	0.9	3.1	4.2	-22.5	5.8	5.8	-21.8	-14.7	-4.2	-2.0	nan	1.3	9.9	5.2
MSCI EM Small Cap Index	1.9	4.6	14.4	-21.9	13.2	13.2	-22.3	-19.5	-5.9	-4.2	-0.0	1.1	14.6	3.3
MSCI Europe Small Cap Index	2.7	7.1	14.4	-20.9	11.3	11.3	-22.6	-14.1	-1.8	1.7	6.7	1.4	14.2	3.3
MSCI EM EMEA IMI Index	2.8	7.0	13.1	-24.7	11.1	11.1	-26.7	-23.1	-6.0	-4.9	-2.1	1.2	9.7	5.0
MSCI EM Latin America IMI Index	5.4	5.5	8.8	-39.9	9.2	9.2	-41.3	-35.4	-10.0	-5.9	-5.6	1.5	11.2	4.0

Gross returns in USD for the period ending Apr 29, 2020

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
Switzerland IMI	-0.1	2.1	9.3	-7.4	6.8	6.8	-5.8	9.0	7.7	5.0	8.8	2.7	18.9	3.1
USA IMI	2.9	5.9	16.5	-10.6	14.7	14.7	-9.3	0.2	8.5	8.4	11.3	3.0	20.9	2.0
Hong Kong IMI	0.2	2.2	7.8	-9.6	7.3	7.3	-11.6	-17.3	0.5	0.1	5.8	1.1	13.1	3.6
MSCI World IMI Index	2.5	5.8	14.0	-12.9	12.3	12.3	-12.5	-3.8	5.2	5.2	8.2	2.1	17.8	2.6
Japan IMI	0.3	4.2	2.3	-12.0	4.7	4.7	-13.4	-3.6	2.2	2.2	5.0	1.1	13.3	2.7
Netherlands IMI	1.7	4.3	12.3	-12.9	9.8	9.8	-13.9	-3.7	4.3	5.3	6.8	2.1	17.5	2.9
Canada IMI	3.6	8.6	22.6	-16.8	17.4	17.4	-16.3	-9.0	1.2	-0.6	1.4	1.6	15.3	3.4
Germany IMI	3.0	6.6	13.4	-17.8	11.0	11.0	-18.9	-13.2	-3.2	-0.4	4.7	1.4	15.6	3.5
France IMI	2.5	6.4	6.1	-22.2	5.9	5.9	-23.7	-16.1	-1.0	1.6	4.4	1.4	13.8	4.0
United Kingdom IMI	2.8	7.4	11.7	-22.1	8.3	8.3	-24.2	-18.5	-3.2	-3.0	2.9	1.5	12.2	5.5
Australia IMI	2.4	7.1	19.2	-25.4	13.6	13.6	-24.7	-18.9	-3.7	-1.5	1.7	1.8	15.7	4.8

Gross returns in USD for the period ending Apr 29, 2020

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

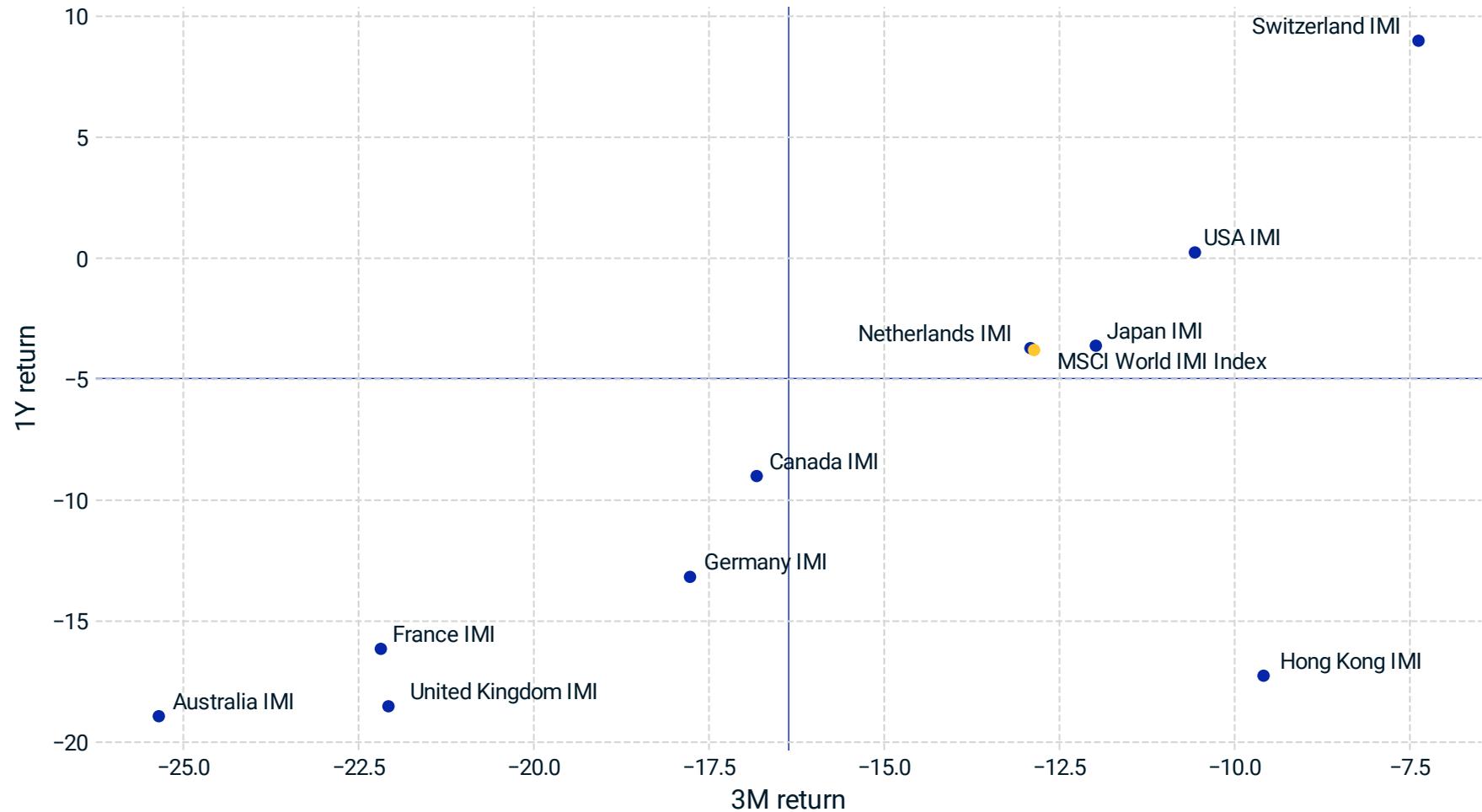
Performance (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr
Switzerland IMI	-0.2	2.3	11.3	-7.5	7.5	7.5	-5.3	4.1	6.9	5.7	7.6
USA IMI	2.9	5.9	16.5	-10.6	14.7	14.7	-9.3	0.2	8.5	8.4	11.3
Canada IMI	3.1	6.9	21.3	-12.3	14.9	14.9	-10.1	-5.8	1.8	2.5	4.8
Netherlands IMI	1.5	4.1	14.3	-11.8	10.9	10.9	-11.2	-1.1	4.5	5.9	8.9
MSCI World IMI Index	2.4	5.5	13.9	-12.5	12.1	12.1	-11.5	-3.5	5.3	5.6	8.9
Hong Kong IMI	0.2	2.2	7.8	-9.8	7.3	7.3	-12.0	-18.2	0.4	0.1	5.7
Japan IMI	0.0	3.0	0.8	-14.1	3.3	3.3	-15.0	-8.1	0.7	-0.0	6.3
Germany IMI	2.8	6.3	15.6	-16.7	12.2	12.2	-16.1	-10.7	-3.1	0.1	6.8
Australia IMI	1.6	3.4	11.8	-23.0	6.4	6.4	-19.0	-12.5	0.7	2.7	5.4
United Kingdom IMI	2.8	6.5	10.9	-18.5	8.0	8.0	-19.3	-15.3	-1.9	1.3	5.0
France IMI	2.3	6.2	8.1	-21.1	7.1	7.1	-21.1	-13.7	-0.9	2.2	6.5

Gross returns in local for the period ending Apr 29, 2020

Returns are annualized for periods longer than a year.

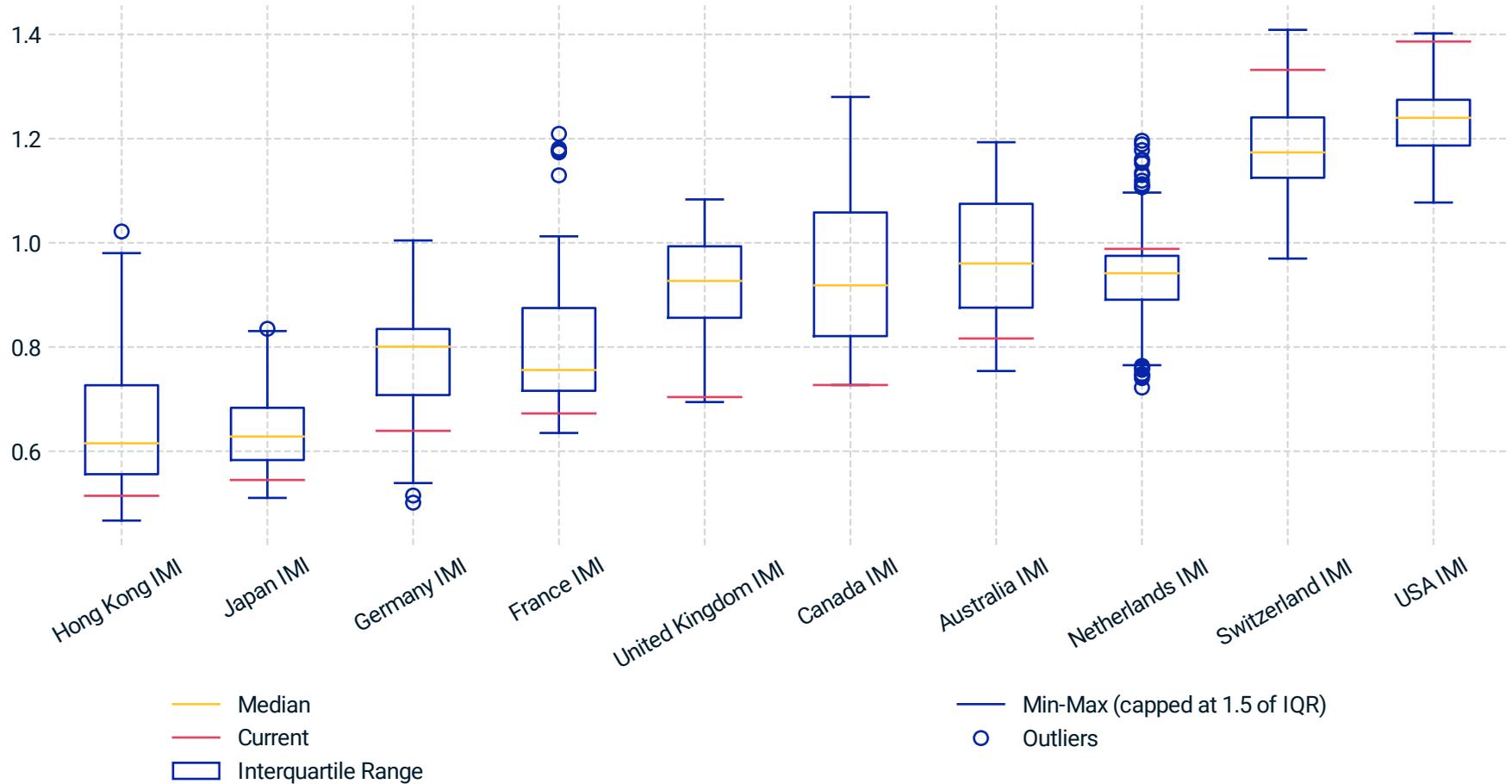
► Largest 10 DM countries: momentum



As of Apr 29, 2020.

► Largest 10 DM countries: valuations

Price to book relative to the MSCI World IMI Index



Period: Dec 29, 2000-Mar 31, 2020.

Large 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
China IMI	1.2	2.0	7.8	-2.6	6.6	6.6	-4.4	-2.5	7.8	1.1	5.1	1.7	14.2	2.0
Taiwan IMI	1.7	4.7	12.1	-10.7	12.1	12.1	-9.7	8.8	8.5	7.0	7.6	1.8	17.1	4.0
Korea IMI	1.1	3.4	10.6	-14.3	9.0	9.0	-15.5	-12.4	-2.4	-0.8	2.6	0.9	14.6	2.4
Saudi Arabia IMI	1.5	6.6	12.0	-13.8	8.6	8.6	-16.8	-25.1	4.8	-0.5	nan	1.6	17.7	4.2
MSCI EM IMI Index	1.9	3.6	9.9	-16.4	9.0	9.0	-17.6	-13.2	-0.0	-0.5	1.6	1.5	13.7	3.0
India IMI	2.1	4.5	11.2	-25.4	11.7	11.7	-23.8	-24.3	-5.7	-0.7	0.3	2.2	17.9	1.5
Thailand IMI	0.6	1.3	17.1	-18.3	15.4	15.4	-24.7	-24.6	-2.4	-0.6	7.2	1.5	14.7	3.8
Russia IMI	3.6	7.5	19.6	-28.6	13.2	13.2	-27.8	-6.1	6.6	6.6	0.6	0.9	5.6	8.0
Mexico IMI	5.5	11.3	6.5	-36.2	4.8	4.8	-33.0	-32.6	-13.8	-10.4	-3.5	1.6	12.5	4.0
South Africa IMI	4.0	9.3	15.2	-29.2	13.9	13.9	-33.4	-33.8	-11.5	-9.1	-1.1	1.6	14.6	3.8
Brazil IMI	5.6	2.5	7.2	-43.8	9.7	9.7	-46.0	-34.9	-7.6	-3.0	-6.2	1.6	10.9	4.0

Gross returns in USD for the period ending Apr 29, 2020

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

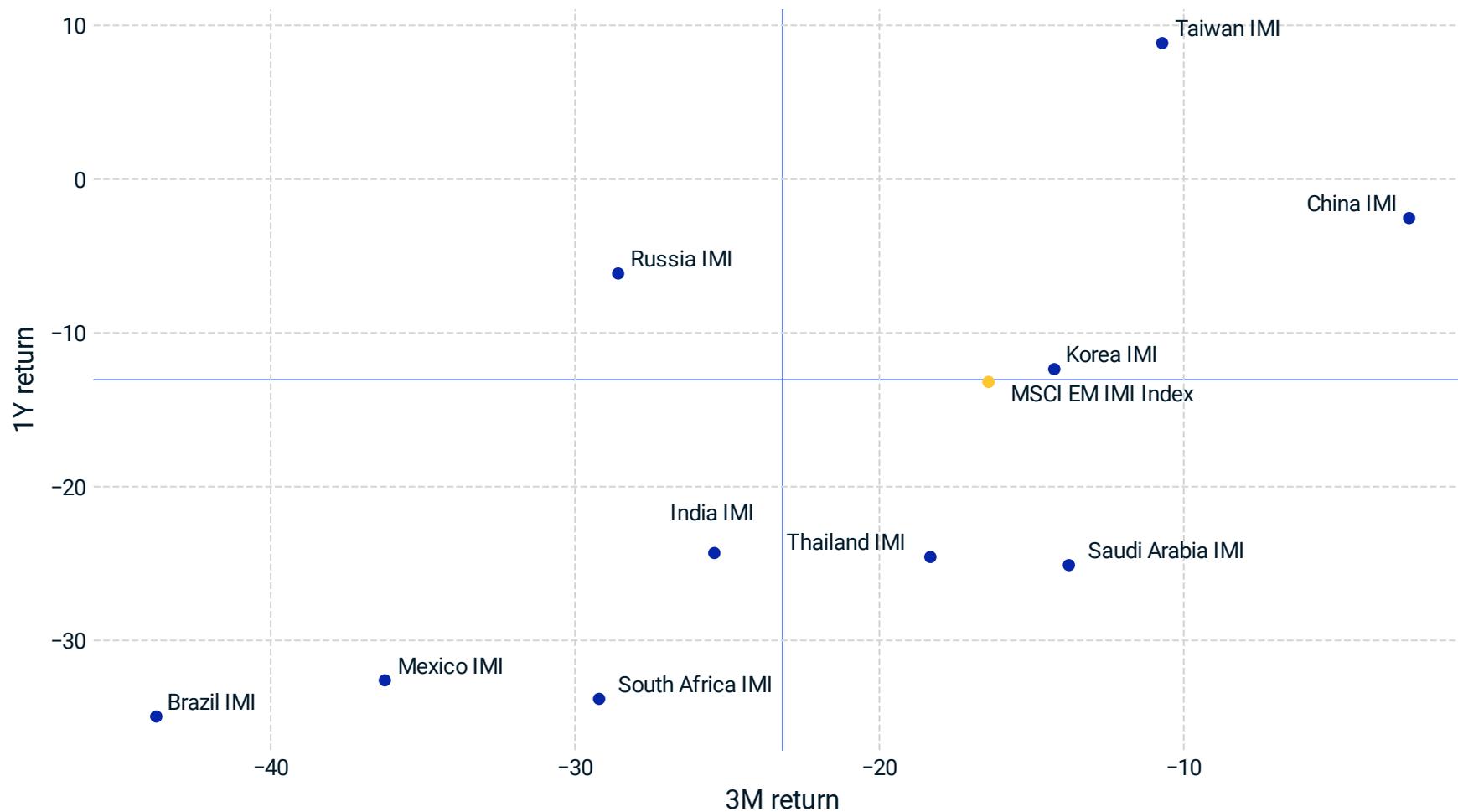
Performance (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr
China IMI	1.2	2.0	7.8	-2.6	6.6	6.6	-4.5	-3.0	7.9	1.2	5.1
Taiwan IMI	1.4	4.2	10.9	-10.9	10.9	10.9	-10.0	5.4	8.2	6.6	7.0
Korea IMI	0.6	2.2	11.3	-11.3	9.1	9.1	-11.0	-7.8	-0.1	1.9	3.5
MSCI EM IMI Index	1.3	2.9	10.1	-12.2	8.8	8.8	-12.7	-8.6	3.0	2.3	4.8
South Africa IMI	1.7	5.5	20.0	-11.4	16.6	16.6	-12.9	-15.4	-1.8	-0.7	8.4
Mexico IMI	3.5	8.7	9.3	-18.1	7.2	7.2	-14.9	-15.0	-6.8	-1.8	3.2
Russia IMI	2.4	3.9	11.7	-17.9	7.0	7.0	-16.3	5.2	14.8	13.3	8.6
Saudi Arabia IMI	1.4	6.7	12.0	-13.6	8.6	8.6	-16.7	-24.9	4.8	-0.4	nan
Thailand IMI	0.6	1.5	16.4	-14.6	14.0	14.0	-18.4	-23.4	-4.5	-0.9	7.2
India IMI	1.5	3.1	12.4	-20.8	11.8	11.8	-19.2	-18.2	-0.5	2.9	5.8
Brazil IMI	2.2	2.9	13.3	-27.9	14.4	14.4	-27.4	-10.7	10.1	9.6	5.2

Gross returns in local for the period ending Apr 29, 2020

Returns are annualized for periods longer than a year.

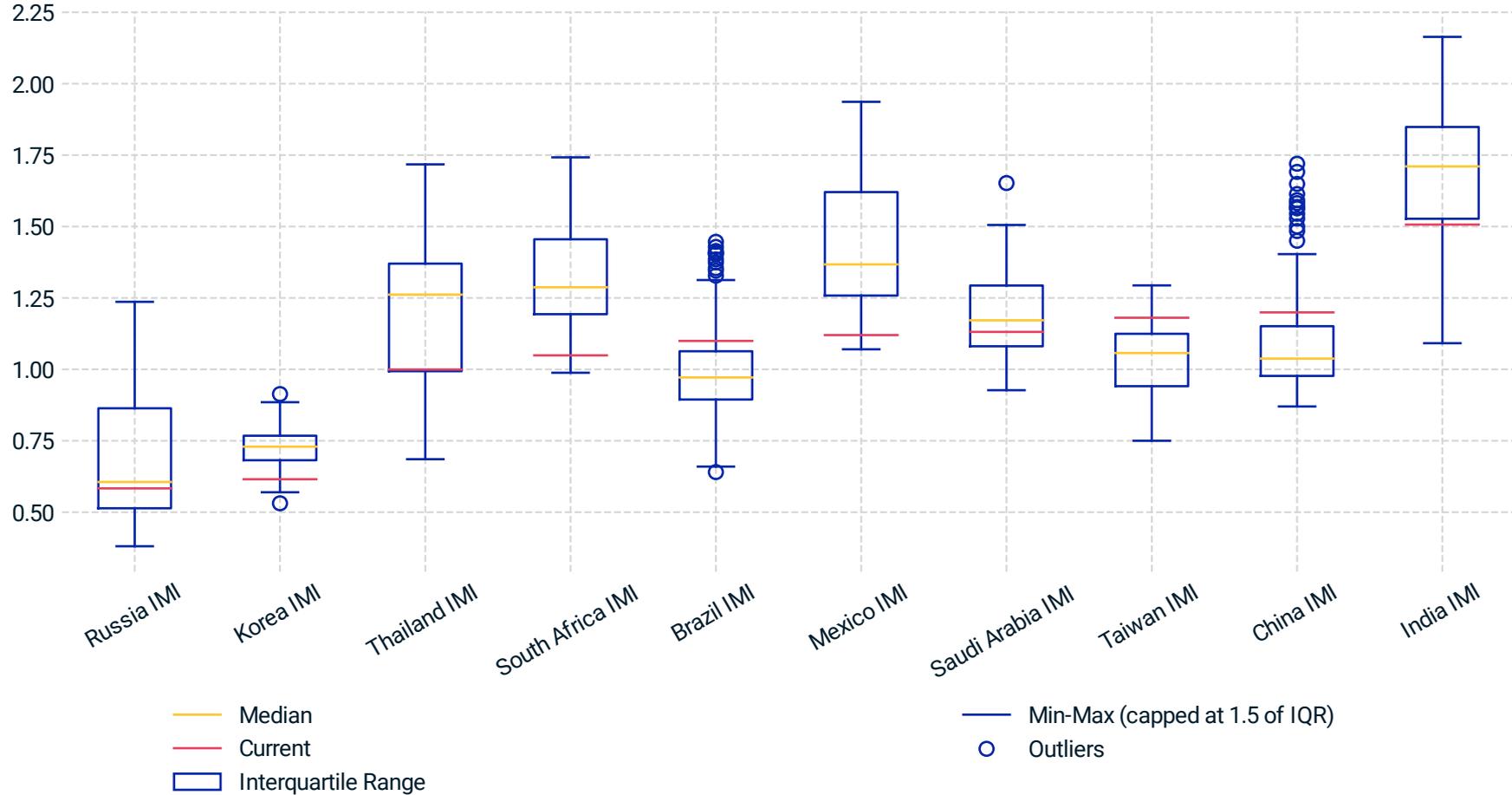
Large 10 EM countries: momentum



As of Apr 29, 2020.

► Largest 10 EM countries: valuations

Price to book relative to the MSCI EM IMI Index



Period: Sep 30, 2014-Mar 31, 2020.

MSCI ACWI IMI sectors: performance

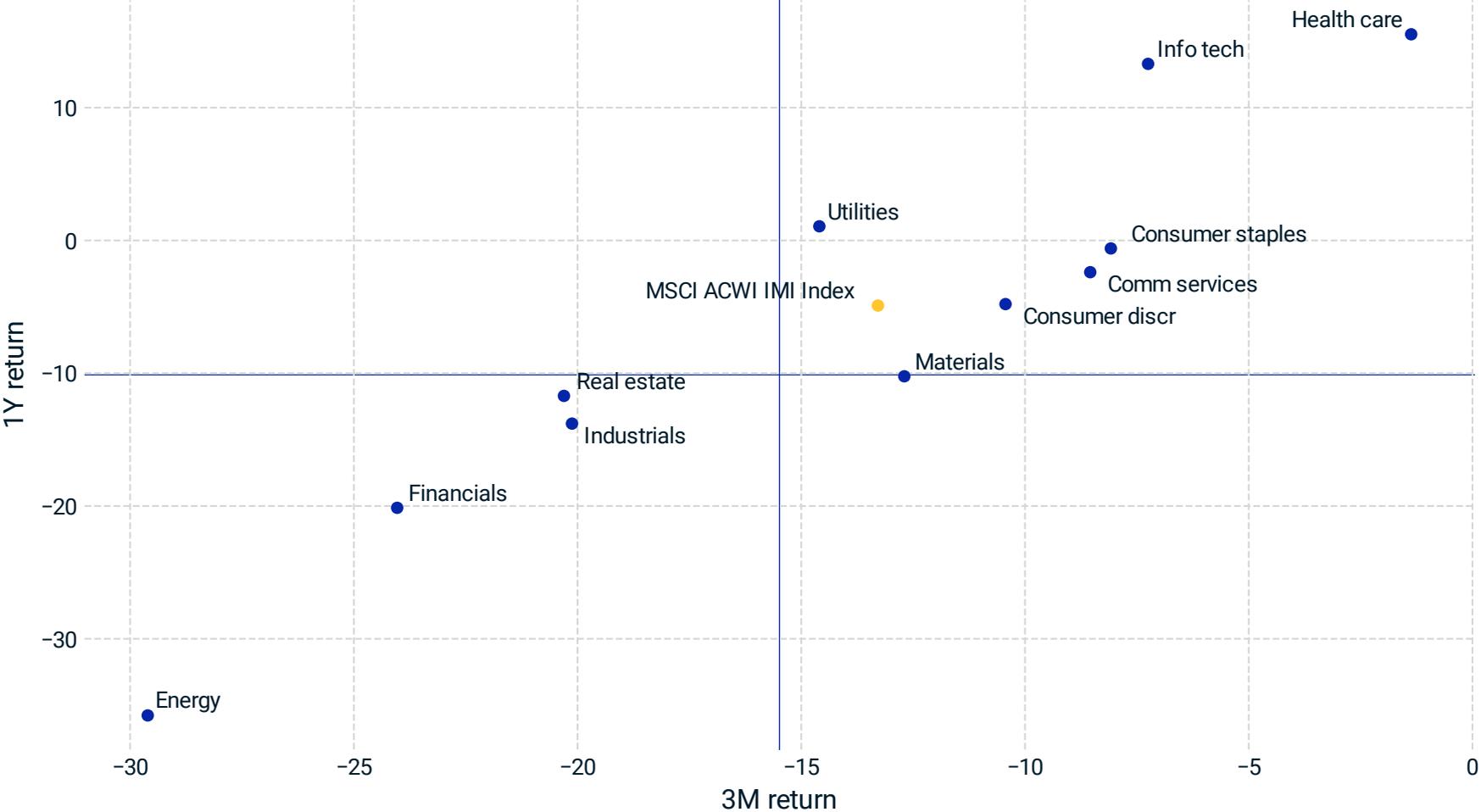
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Health care	0.4	2.1	17.0	-1.4	12.6	12.6	-0.8	15.5	11.2	7.0	13.0	4.0	27.9	1.7
Info tech	3.6	5.2	15.7	-7.2	13.8	13.8	-2.7	13.3	18.0	15.8	14.2	4.7	27.0	1.4
Comm services	3.6	4.9	14.3	-8.5	11.9	11.9	-6.9	-2.4	3.8	1.7	6.6	2.6	22.3	1.9
Consumer staples	0.1	1.5	9.0	-8.1	7.0	7.0	-8.2	-0.6	3.0	4.4	8.7	3.6	19.8	2.8
Utilities	0.3	1.7	6.1	-14.6	5.5	5.5	-10.6	1.1	6.2	5.7	6.1	1.7	16.4	3.9
Consumer discr	2.5	5.8	16.3	-10.4	16.3	16.3	-11.1	-4.8	5.1	5.0	10.0	2.7	19.5	1.8
MSCI ACWI IMI Index	2.4	5.5	13.5	-13.3	11.9	11.9	-13.1	-4.9	4.6	4.6	7.4	2.0	17.2	2.7
Materials	2.5	7.9	18.3	-12.7	16.3	16.3	-16.2	-10.2	0.1	1.5	1.5	1.5	16.1	3.3
Real estate	1.5	5.1	8.7	-20.3	8.0	8.0	-19.8	-11.7	1.2	1.7	6.4	1.3	16.6	4.5
Industrials	2.2	7.7	10.1	-20.1	10.0	10.0	-19.9	-13.8	-0.2	2.7	6.4	2.2	16.2	2.5
Financials	3.3	9.2	8.8	-24.0	9.3	9.3	-25.6	-20.1	-3.1	0.1	4.0	0.9	8.8	4.4
Energy	5.8	12.1	26.6	-29.6	19.4	19.4	-34.5	-35.8	-10.6	-8.9	-3.2	0.9	11.8	6.6

Gross returns in USD for the period ending Apr 29, 2020

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

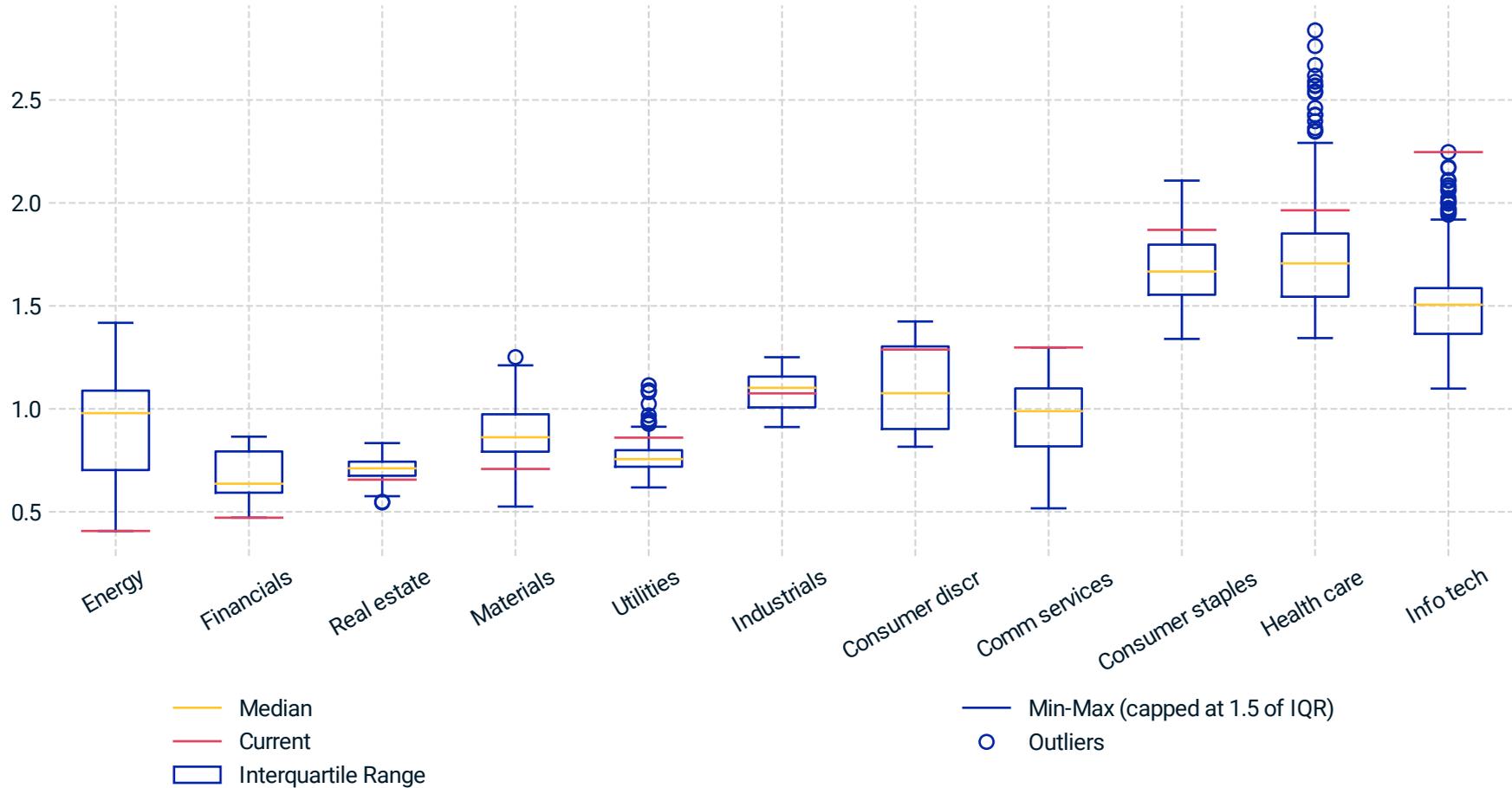


As of Apr 29, 2020.



MSCI ACWI IMI sectors: valuations

Price to book relative to the MSCI ACWI IMI Index



MSCI ACWI factors: performance

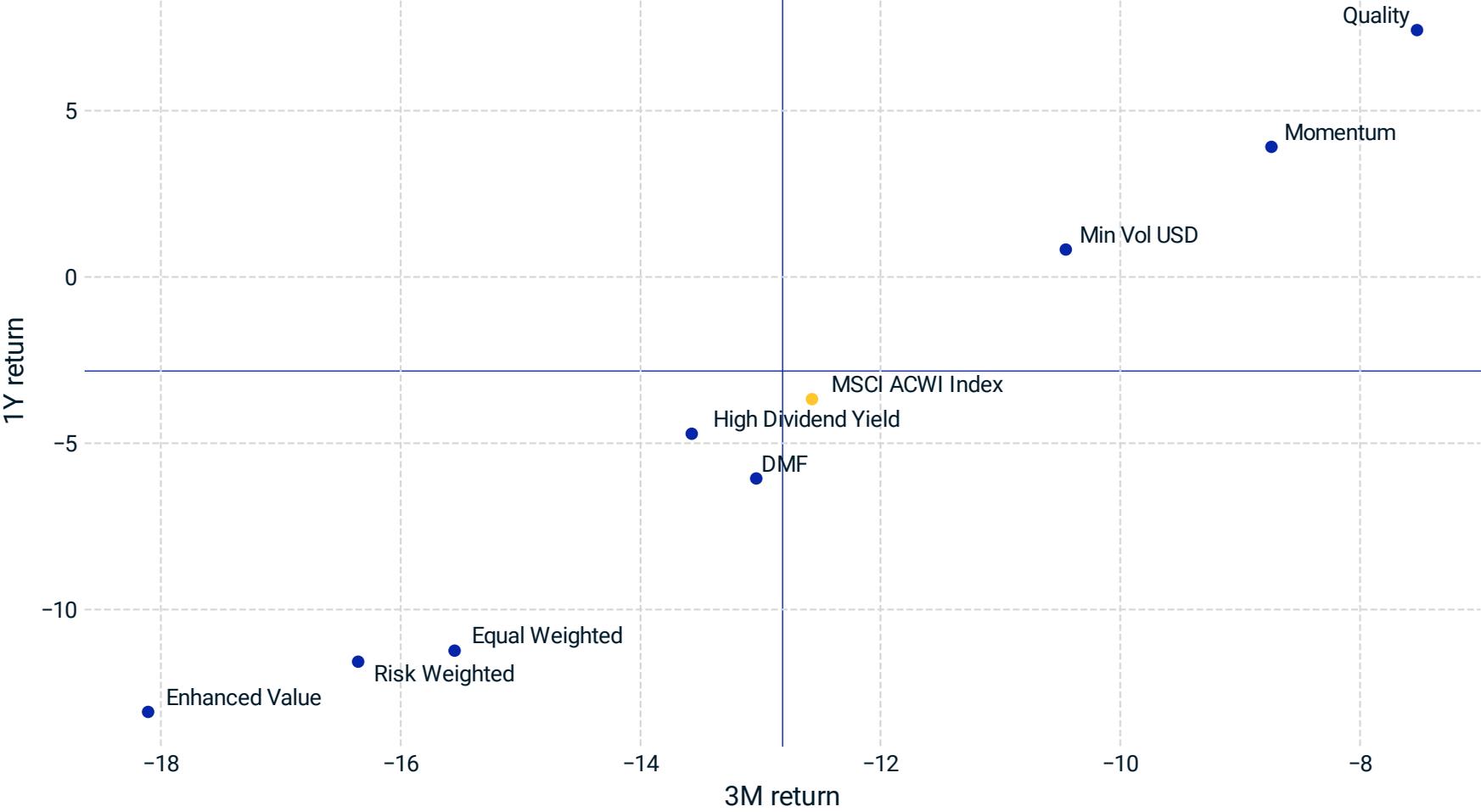
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Quality	2.4	4.2	14.4	-7.5	11.9	11.9	-5.3	7.4	11.5	9.6	11.2	6.5	21.8	1.9
Momentum	1.7	3.4	11.7	-8.7	11.1	11.1	-5.6	3.9	11.6	9.2	11.8	3.8	25.7	2.0
Min Vol USD	0.5	2.1	9.1	-10.5	8.6	8.6	-8.6	0.8	6.8	6.4	9.7	2.2	18.8	3.1
MSCI ACWI Index	2.3	5.1	13.1	-12.6	11.5	11.5	-12.2	-3.7	5.3	4.9	7.5	2.1	17.0	2.7
DMF	2.1	5.7	13.6	-13.0	12.1	12.1	-13.1	-6.1	3.5	4.0	8.7	1.8	12.6	2.8
High Dividend Yield	1.4	4.7	11.1	-13.6	9.1	9.1	-14.9	-4.7	3.7	3.7	6.7	1.8	12.5	4.6
Equal Weighted	1.8	4.7	10.1	-15.6	9.6	9.6	-16.5	-11.2	0.1	0.8	4.5	1.4	14.4	3.0
Risk Weighted	1.7	4.7	9.4	-16.4	8.7	8.7	-17.0	-11.6	0.6	1.6	5.7	1.4	14.1	3.4
Enhanced Value	2.0	6.3	7.5	-18.1	7.7	7.7	-20.3	-13.1	-1.6	-0.2	4.2	0.7	8.7	4.4

Gross returns in USD for the period ending Apr 29, 2020

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

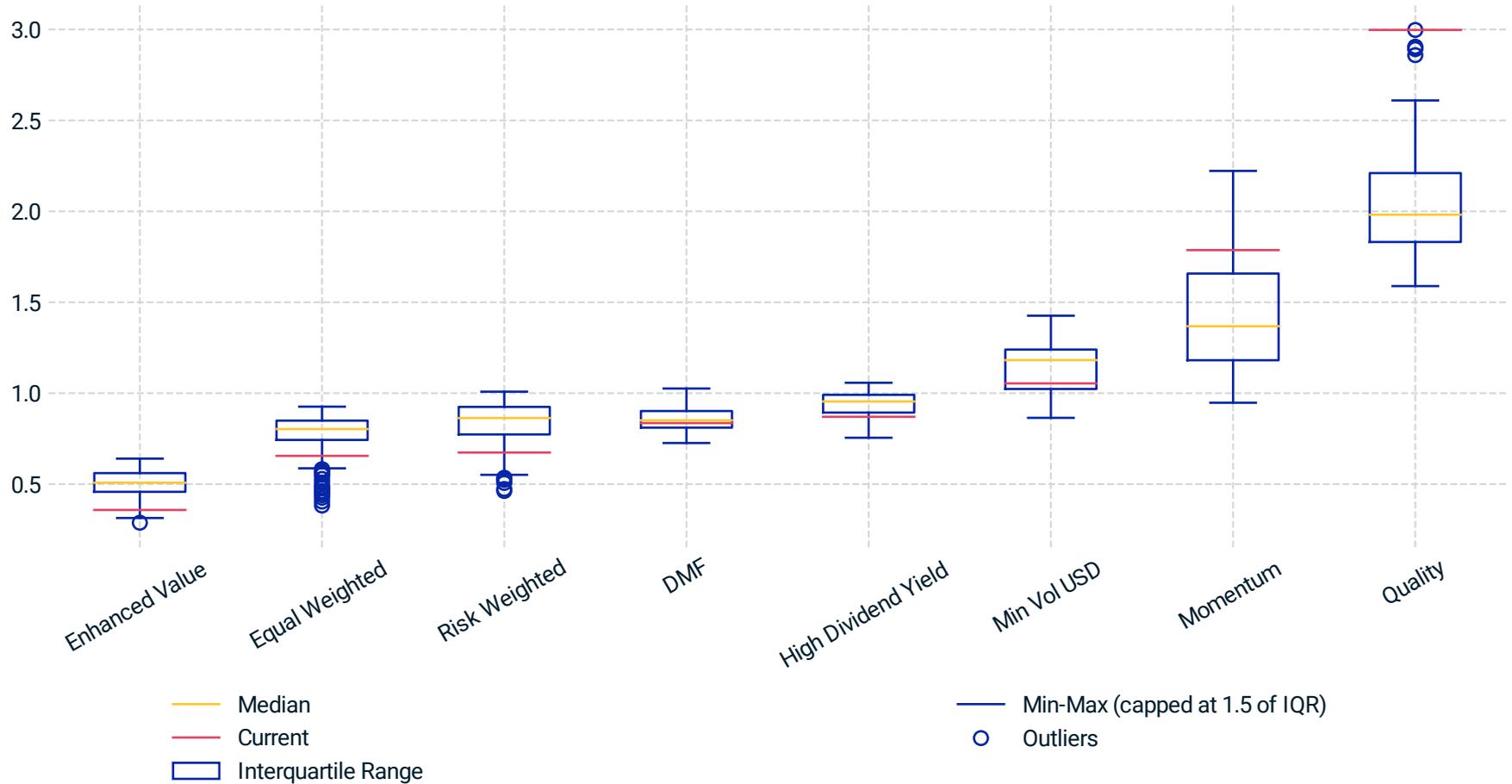


As of Apr 29, 2020.



MSCI ACWI factors: valuations

Price to book relative to the MSCI ACWI Index



Period: Dec 29, 2000-Mar 31, 2020.

Thematic indexes: performance

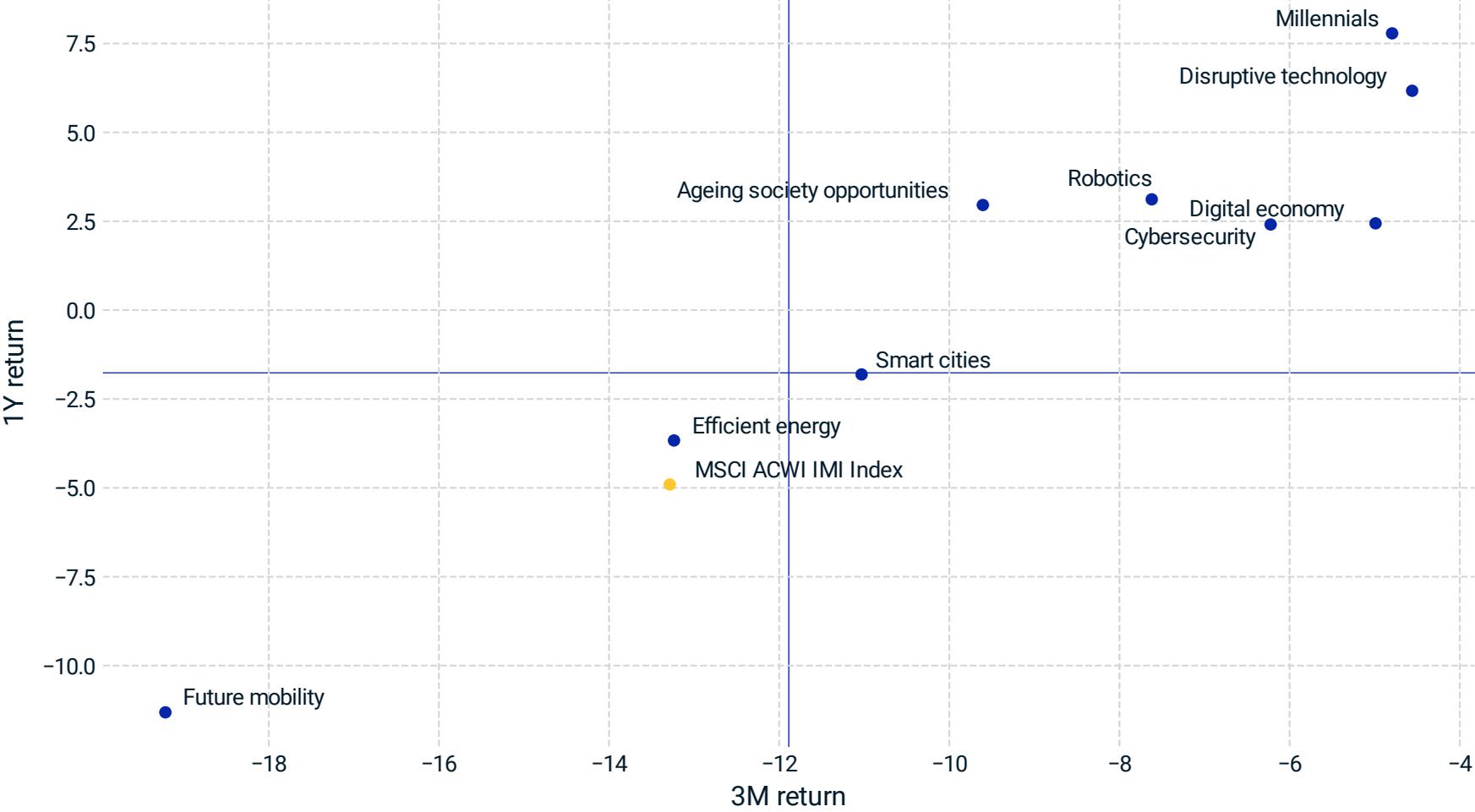
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
Digital economy	3.2	5.8	18.0	-5.0	17.8	17.8	0.9	2.4	18.0	15.7	nan	5.0	60.4	0.5
Cybersecurity	1.9	2.8	13.0	-6.2	11.3	11.3	-0.4	2.4	16.8	nan	nan	4.6	74.7	0.5
Millennials	2.6	3.6	15.7	-4.8	13.2	13.2	-2.0	7.8	15.2	nan	nan	4.6	28.1	1.3
Disruptive technology	2.7	5.0	17.8	-4.6	16.1	16.1	-2.9	6.2	13.4	10.4	nan	3.3	-112.7	0.6
Robotics	2.8	7.1	16.2	-7.6	14.5	14.5	-6.7	3.1	11.3	nan	nan	4.0	29.3	1.7
Ageing society opportunities	1.4	4.2	15.6	-9.6	12.9	12.9	-9.6	3.0	7.4	nan	nan	2.2	17.5	2.2
Smart cities	2.2	5.8	13.9	-11.0	13.1	13.1	-10.4	-1.8	7.3	nan	nan	2.7	22.9	2.4
Efficient energy	3.2	7.1	15.4	-13.2	14.2	14.2	-11.6	-3.7	2.4	nan	nan	1.6	25.5	2.1
MSCI ACWI IMI Index	2.4	5.5	13.5	-13.3	11.9	11.9	-13.1	-4.9	4.6	4.6	7.4	2.0	17.2	2.7
Future mobility	2.9	9.0	17.4	-19.2	18.6	18.6	-19.1	-11.3	0.6	3.7	nan	2.0	35.8	2.0

Gross returns in USD for the period ending Apr 29, 2020

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

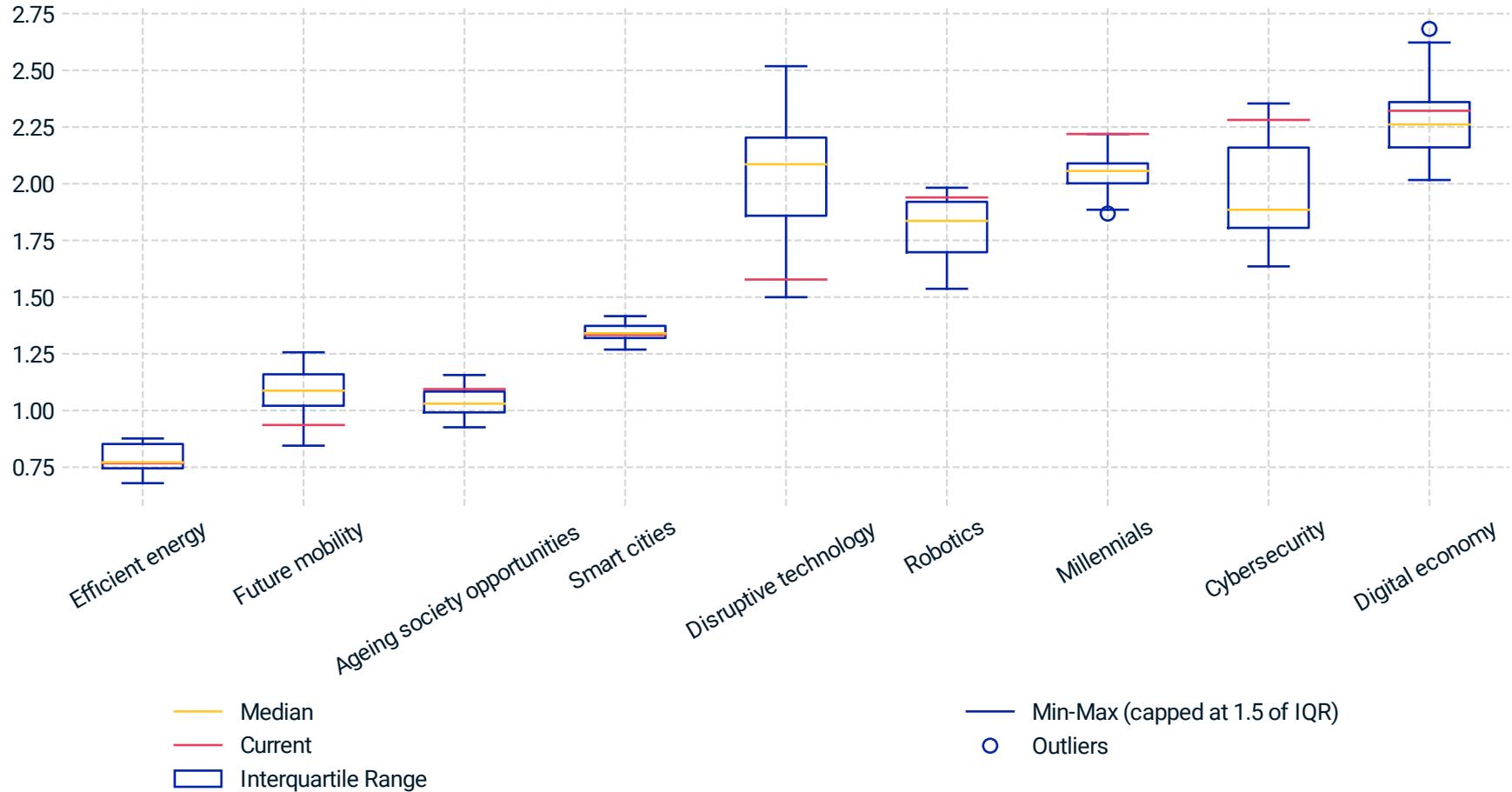


As of Apr 29, 2020.



Thematic indexes: valuations

Price to book relative to the MSCI ACWI IMI Index



Period: Dec 30, 2016-Mar 31, 2020.

MSCI World ESG indexes: performance

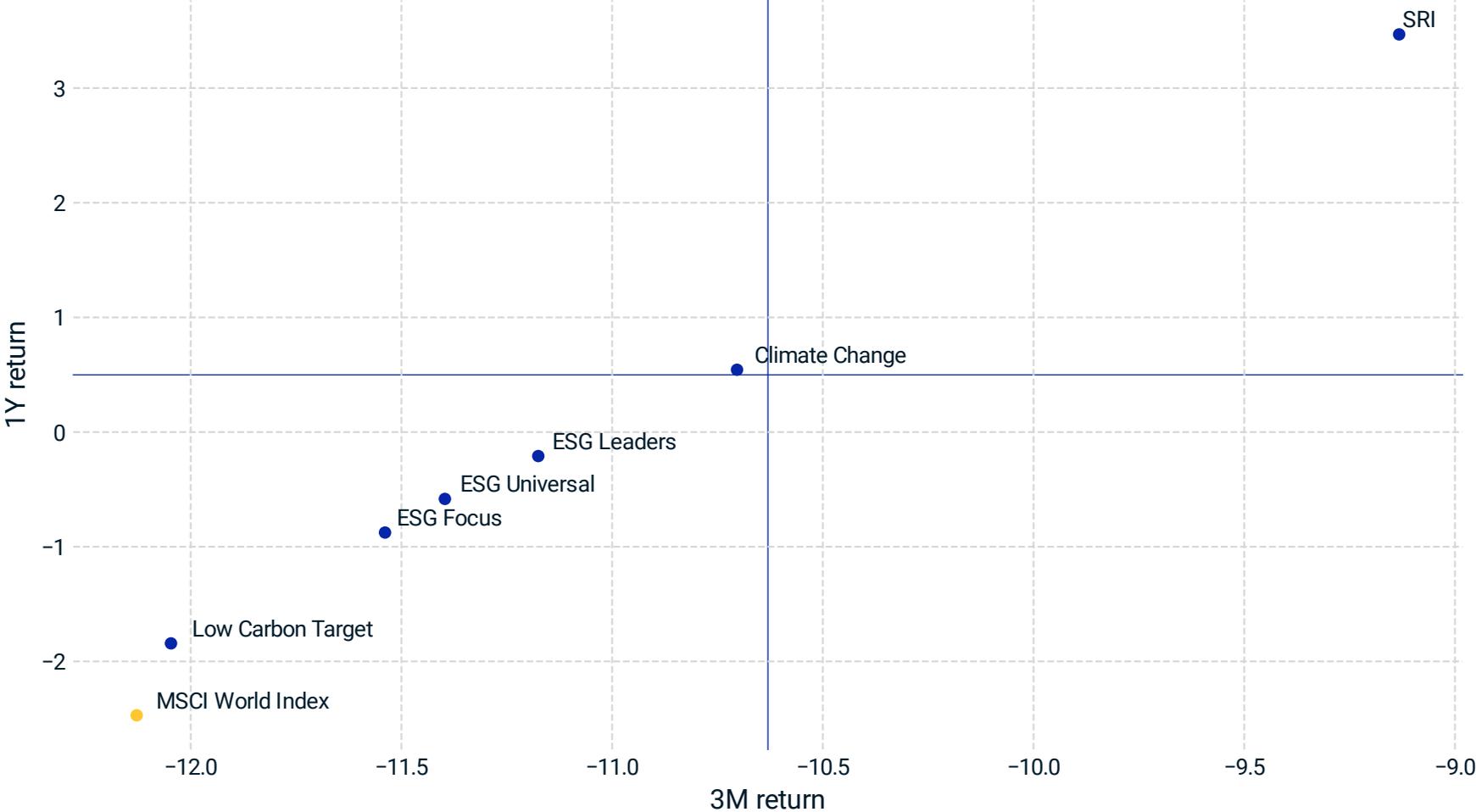
Performance and valuations (%)

	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	PB	PE	DY
SRI	2.0	4.4	13.3	-9.1	11.1	11.1	-8.2	3.5	8.7	7.2	8.7	2.8	19.5	2.4
Climate Change	2.4	5.1	13.7	-10.7	12.0	12.0	-9.6	0.5	7.2	6.7	nan	2.5	17.9	2.4
ESG Leaders	2.4	5.1	13.7	-11.2	11.7	11.7	-10.2	-0.2	6.7	5.9	8.3	2.7	18.1	2.6
ESG Universal	2.4	5.2	13.4	-11.4	11.5	11.5	-10.4	-0.6	6.5	5.9	8.4	2.4	18.0	2.6
ESG Focus	2.4	5.3	13.6	-11.5	11.8	11.8	-10.8	-0.9	6.6	6.0	8.4	2.3	17.8	2.7
Low Carbon Target	2.3	5.2	13.4	-12.0	11.9	11.9	-11.3	-1.8	5.9	5.6	nan	2.3	17.5	2.6
MSCI World Index	2.4	5.3	13.7	-12.1	11.9	11.9	-11.5	-2.5	5.9	5.5	8.3	2.3	17.6	2.7

Gross returns in USD for the period ending Apr 29, 2020

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

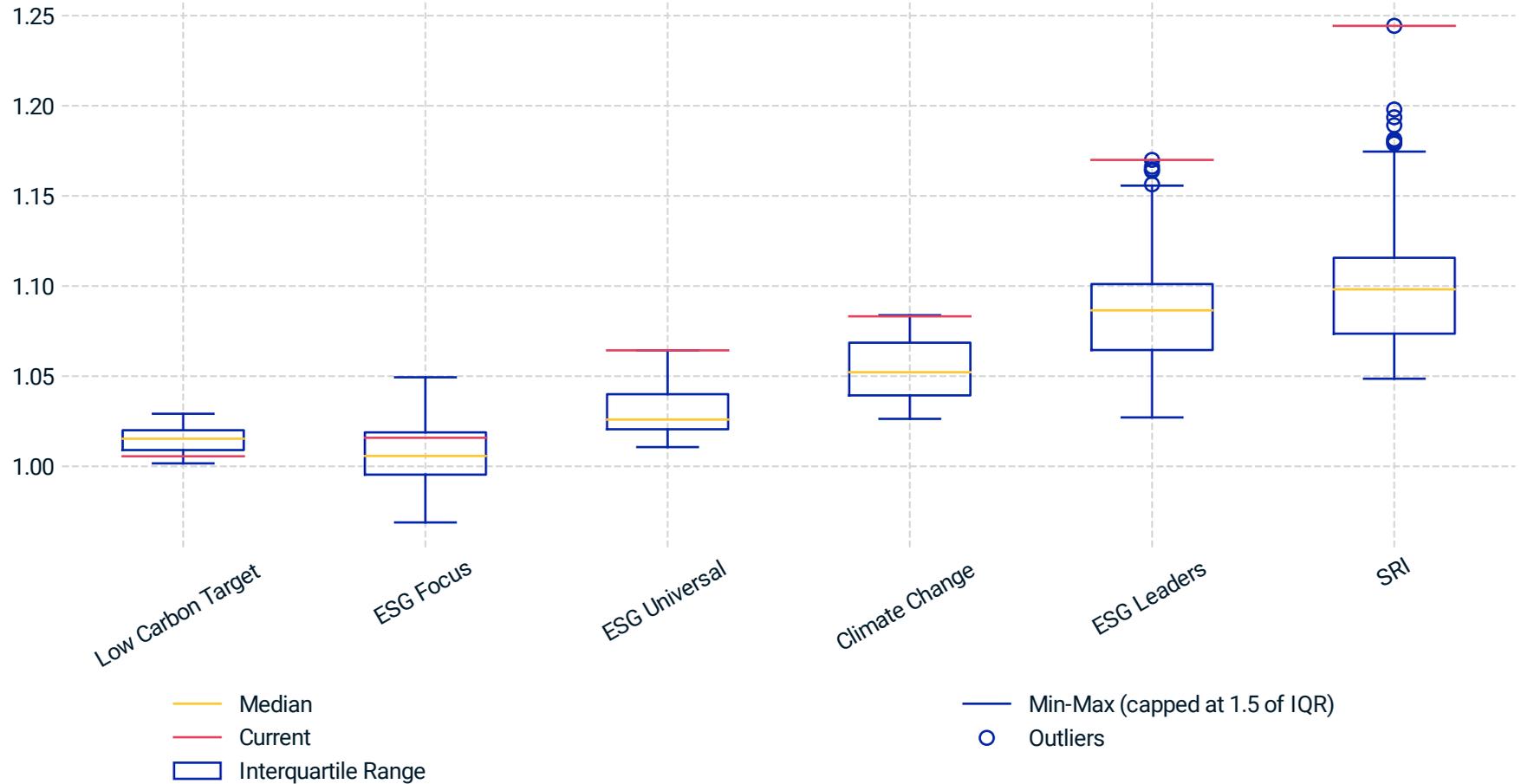


As of Apr 29, 2020.



MSCI World ESG indexes: valuations

Price to book relative to the MSCI World Index



Period: Dec 29, 2000-Mar 31, 2020.

Currency

▀ Currencies: Performance

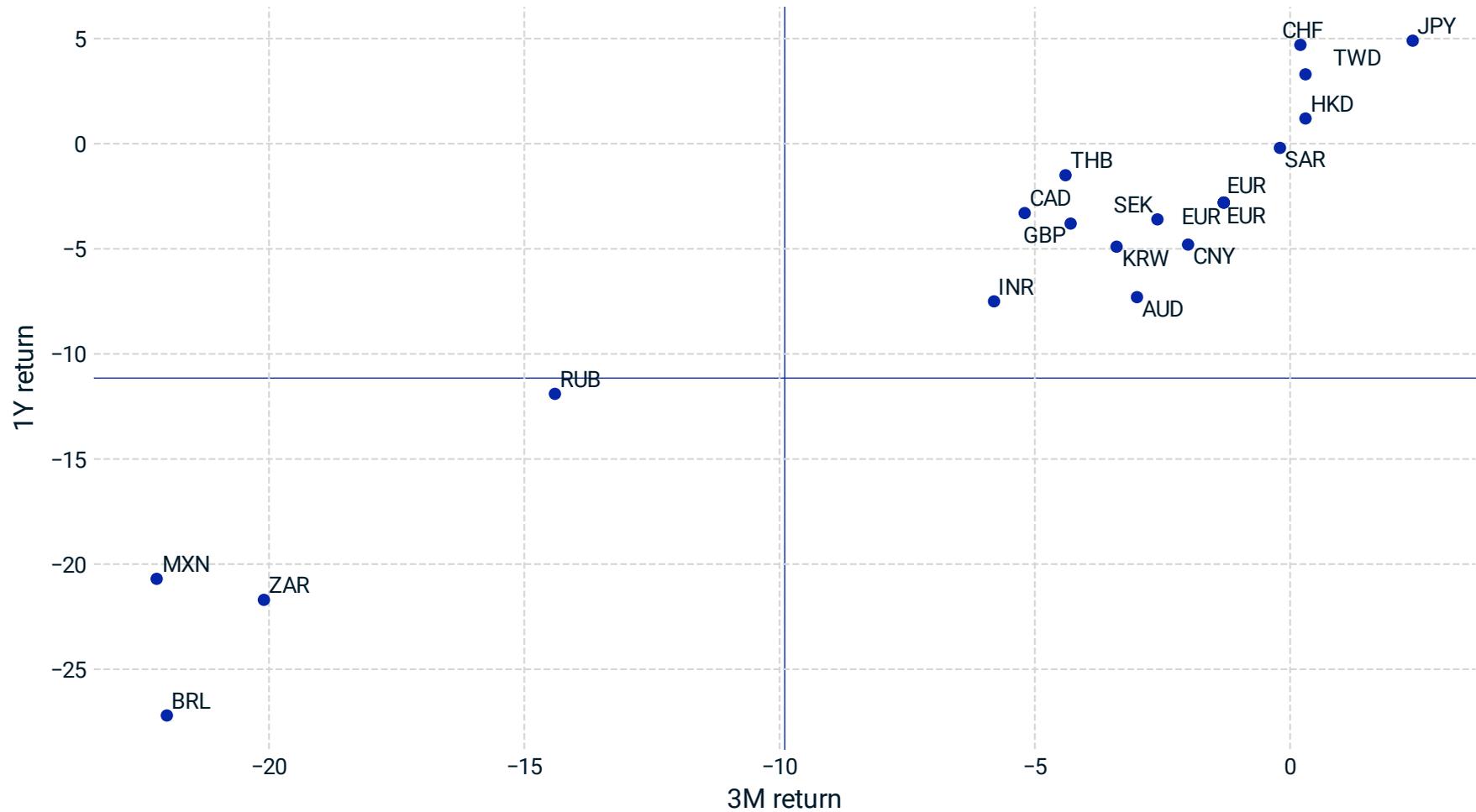
	1D	1W	1M	3M	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr
JPY	0.3	1.1	1.5	2.4	1.3	1.3	2.0	4.9	1.5	2.2	-1.2
HKD	-0.0	-0.0	0.0	0.3	0.0	0.0	0.5	1.2	0.1	-0.0	0.0
TWD	0.3	0.6	1.1	0.3	1.1	1.1	0.3	3.3	0.3	0.4	0.5
SAR	0.0	-0.1	-0.0	-0.2	-0.0	-0.0	-0.2	-0.2	-0.1	-0.0	-0.0
CHF	0.2	-0.2	-1.8	0.2	-0.6	-0.6	-0.5	4.7	0.7	-0.7	1.1
CNY	0.1	0.1	0.2	-2.0	0.3	0.3	-1.5	-4.8	-0.8	-2.6	-0.4
EUR	0.2	0.2	-1.8	-1.3	-1.1	-1.1	-3.3	-2.8	-0.1	-0.5	-2.0
EUR	0.2	0.2	-1.8	-1.3	-1.1	-1.1	-3.3	-2.8	-0.1	-0.5	-2.0
EUR	0.2	0.2	-1.8	-1.3	-1.1	-1.1	-3.3	-2.8	-0.1	-0.5	-2.0
KRW	0.5	1.1	-0.6	-3.4	-0.1	-0.1	-5.1	-4.9	-2.3	-2.6	-0.9
SEK	0.2	2.2	0.8	-2.6	0.4	0.4	-5.2	-3.6	-3.6	-3.3	-3.0
INR	0.7	1.3	-1.1	-5.8	-0.0	-0.0	-5.7	-7.5	-5.3	-3.5	-5.2
GBP	-0.0	0.9	0.7	-4.3	0.3	0.3	-6.1	-3.8	-1.3	-4.3	-2.0
CAD	0.5	1.6	1.1	-5.2	2.2	2.2	-6.9	-3.3	-0.6	-3.0	-3.2
AUD	0.7	3.5	6.7	-3.0	6.8	6.8	-7.0	-7.3	-4.4	-4.1	-3.4
THB	0.0	-0.3	0.6	-4.4	1.2	1.2	-7.6	-1.5	2.2	0.3	-0.0
RUB	1.4	3.9	8.1	-14.4	6.7	6.7	-15.2	-11.9	-8.0	-7.0	-8.8
MXN	1.9	2.3	-2.5	-22.2	-2.3	-2.3	-21.3	-20.7	-7.5	-8.8	-6.5
ZAR	2.2	3.6	-4.0	-20.1	-2.3	-2.3	-23.5	-21.7	-9.9	-8.5	-8.7
BRL	3.3	-0.3	-5.4	-22.0	-4.1	-4.1	-25.6	-27.2	-16.0	-11.5	-10.8

Source: WM Reuters. Returns in USD for the period ending Apr 29, 2020.

Returns are annualized for periods longer than a year.

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▀ Currencies: Momentum

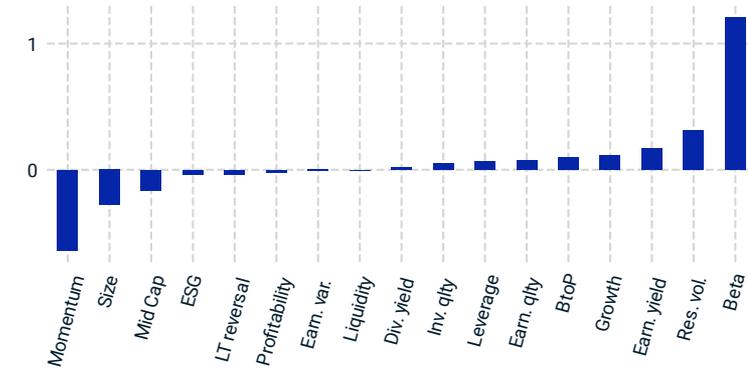


Source: WM Reuters. As of Apr 29, 2020. Disclaimer: Reuse of WM Reuters data requires additional permission and may require an additional license.

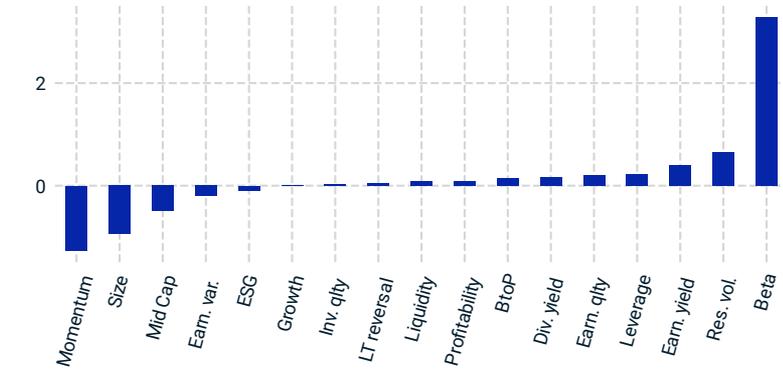
Risk model style factors

MSCI Barra Global Equity Model + ESG

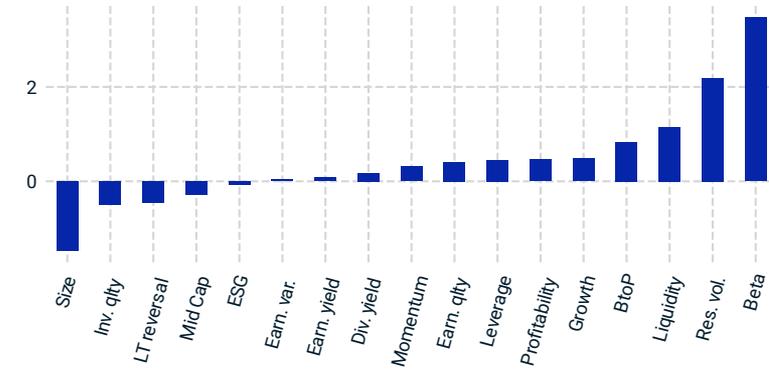
Daily Return (%)



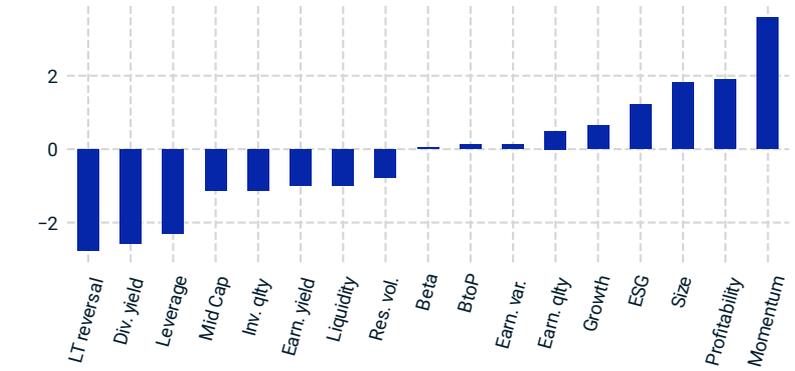
Weekly Return (%)



Monthly Return (%)



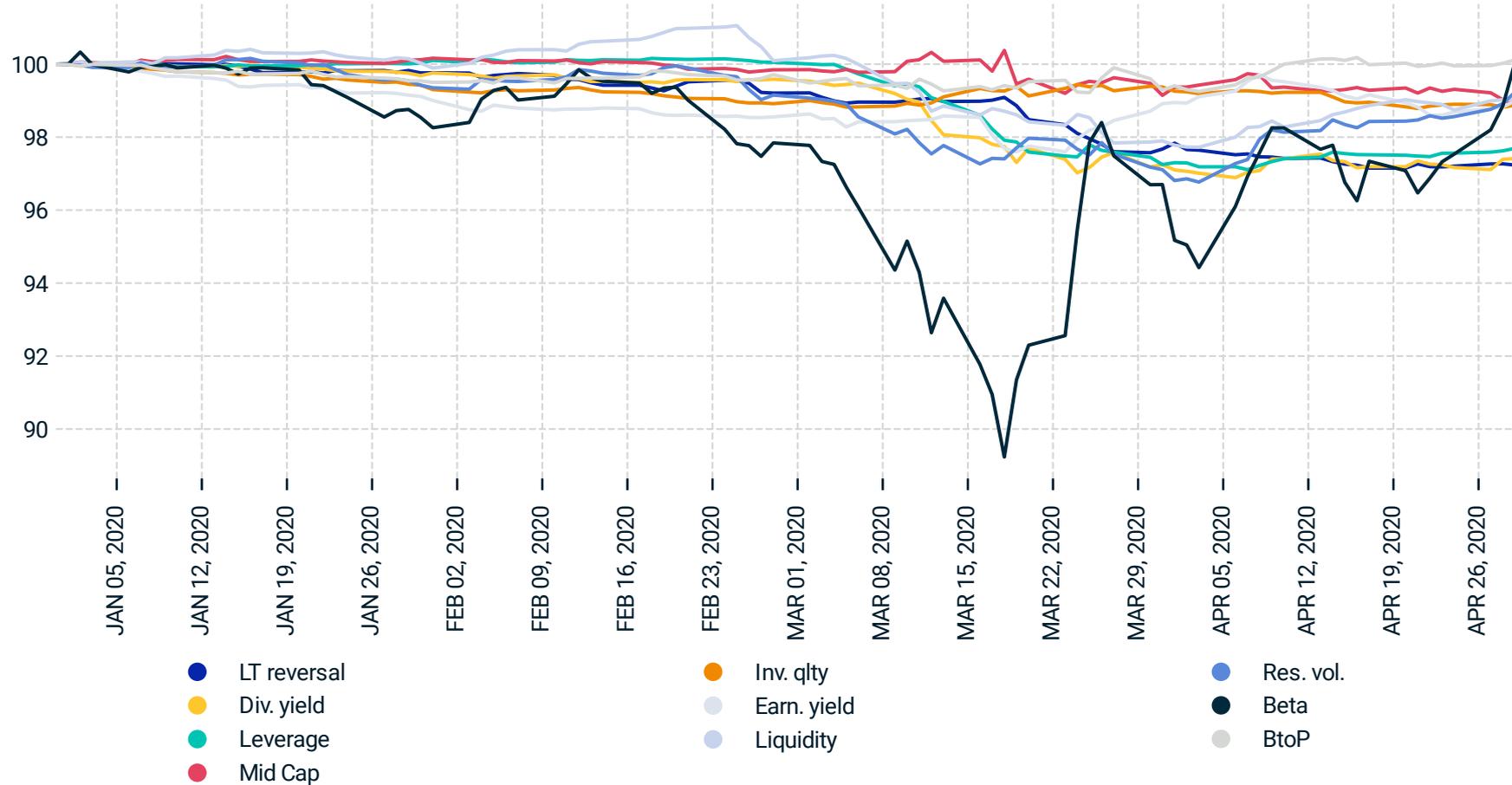
YTD Return (%)



As of Apr 29, 2020.

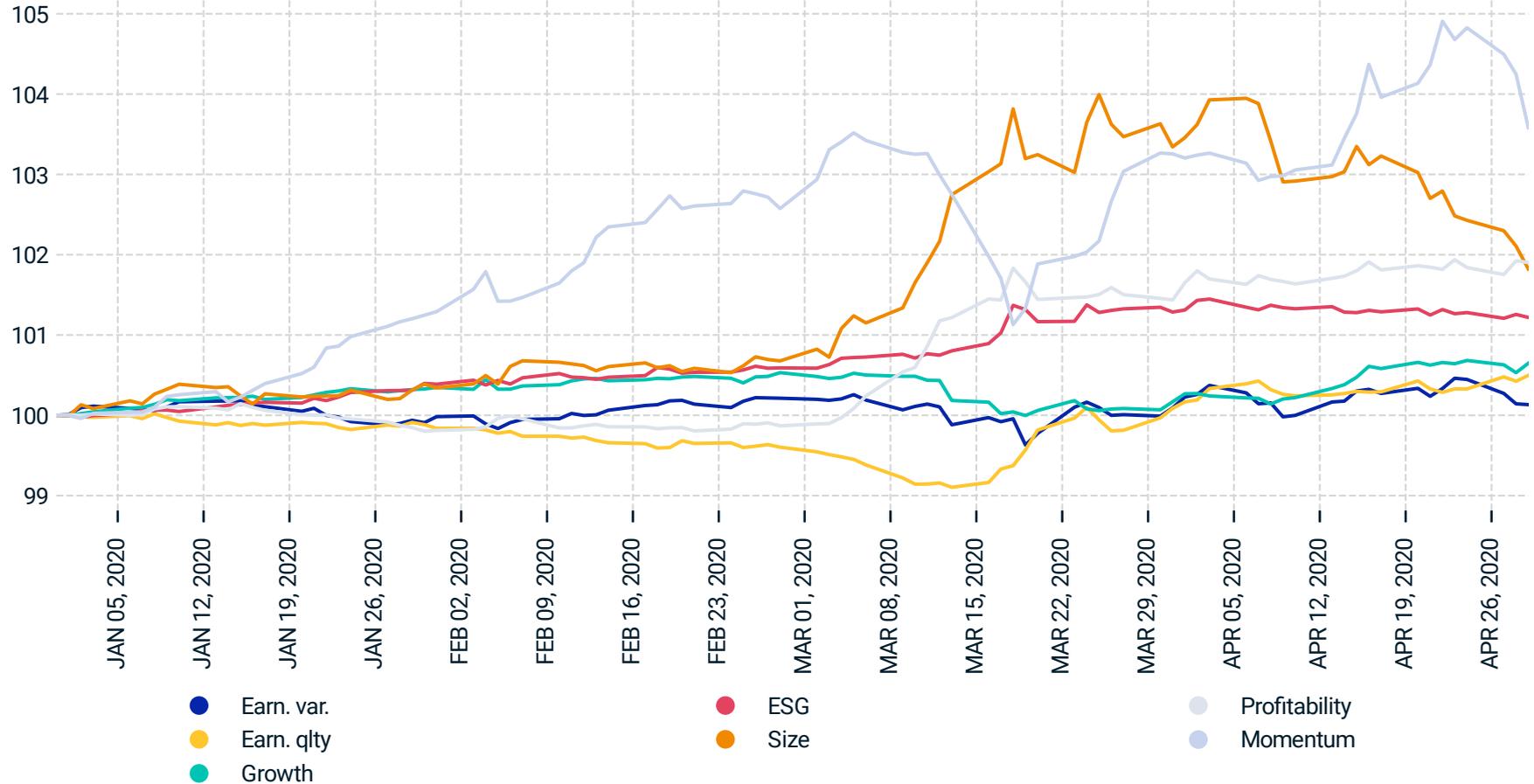
MSCI Barra Global Equity Model + ESG

GEMLTESG Style Factors (1/2)



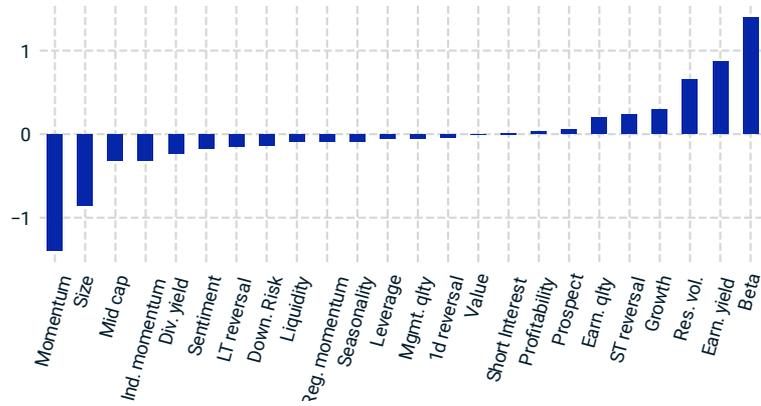
MSCI Barra Global Equity Model + ESG

GEMLTESG Style Factors (2/2)

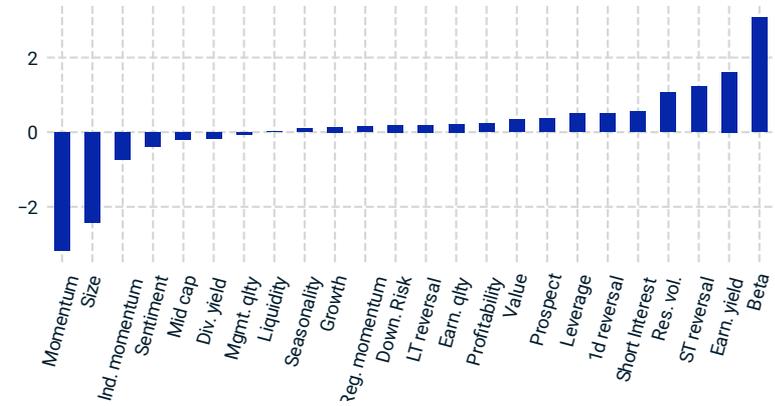


MSCI Barra US Total Market Equity Trading Model

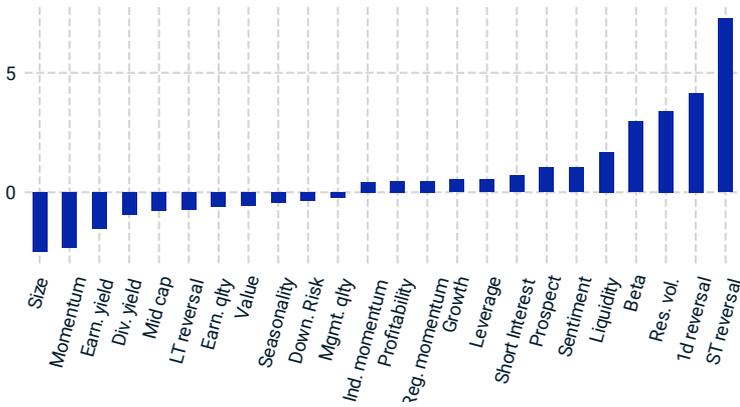
Daily Return (%)



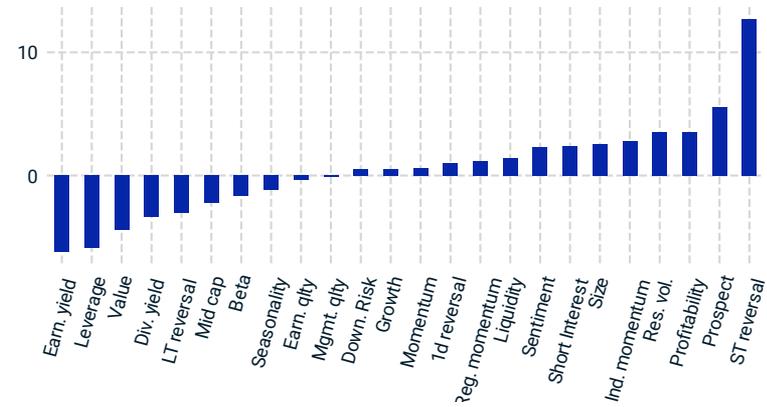
Weekly Return (%)



Monthly Return (%)



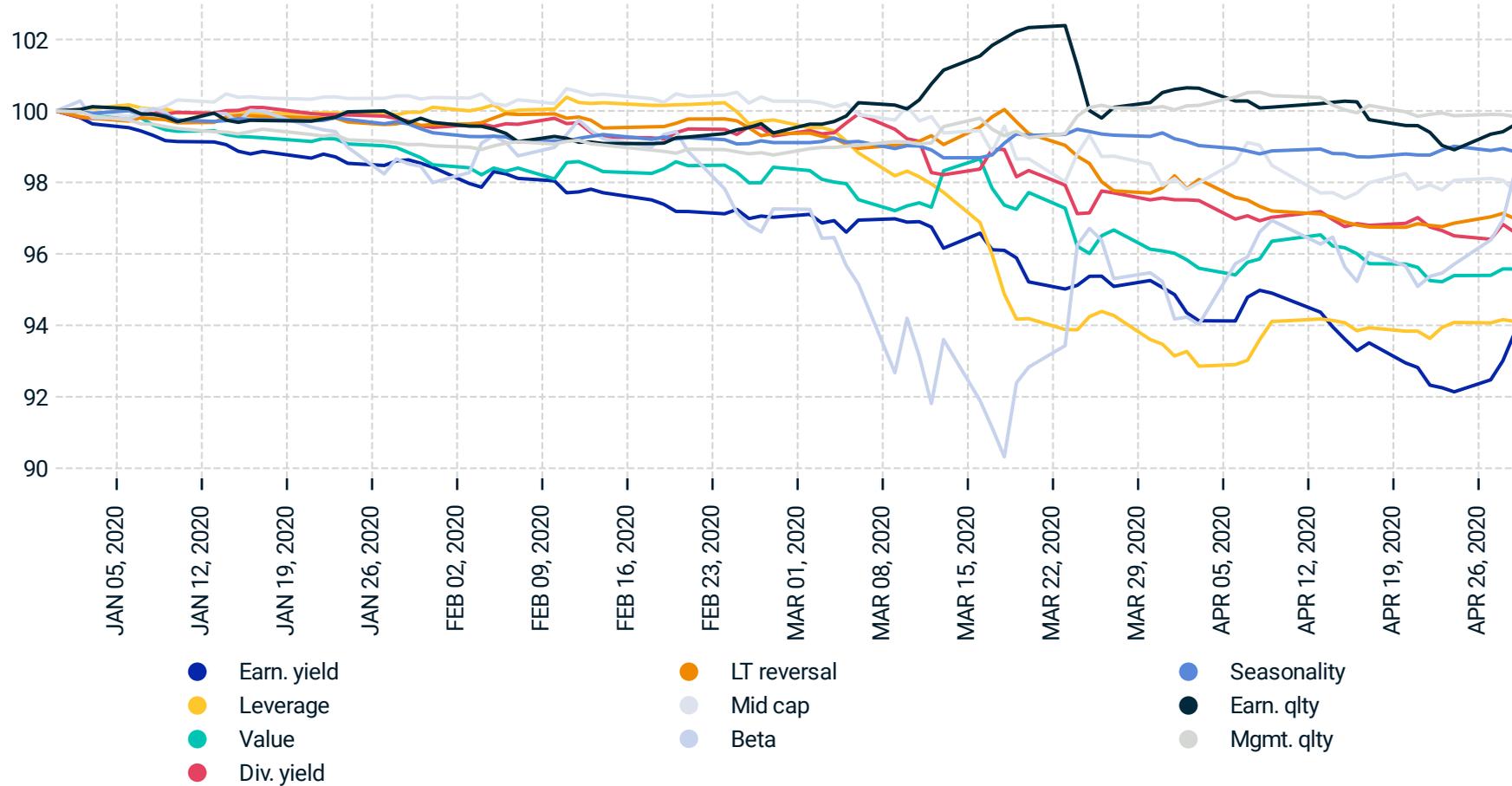
YTD Return (%)



As of Apr 29, 2020.

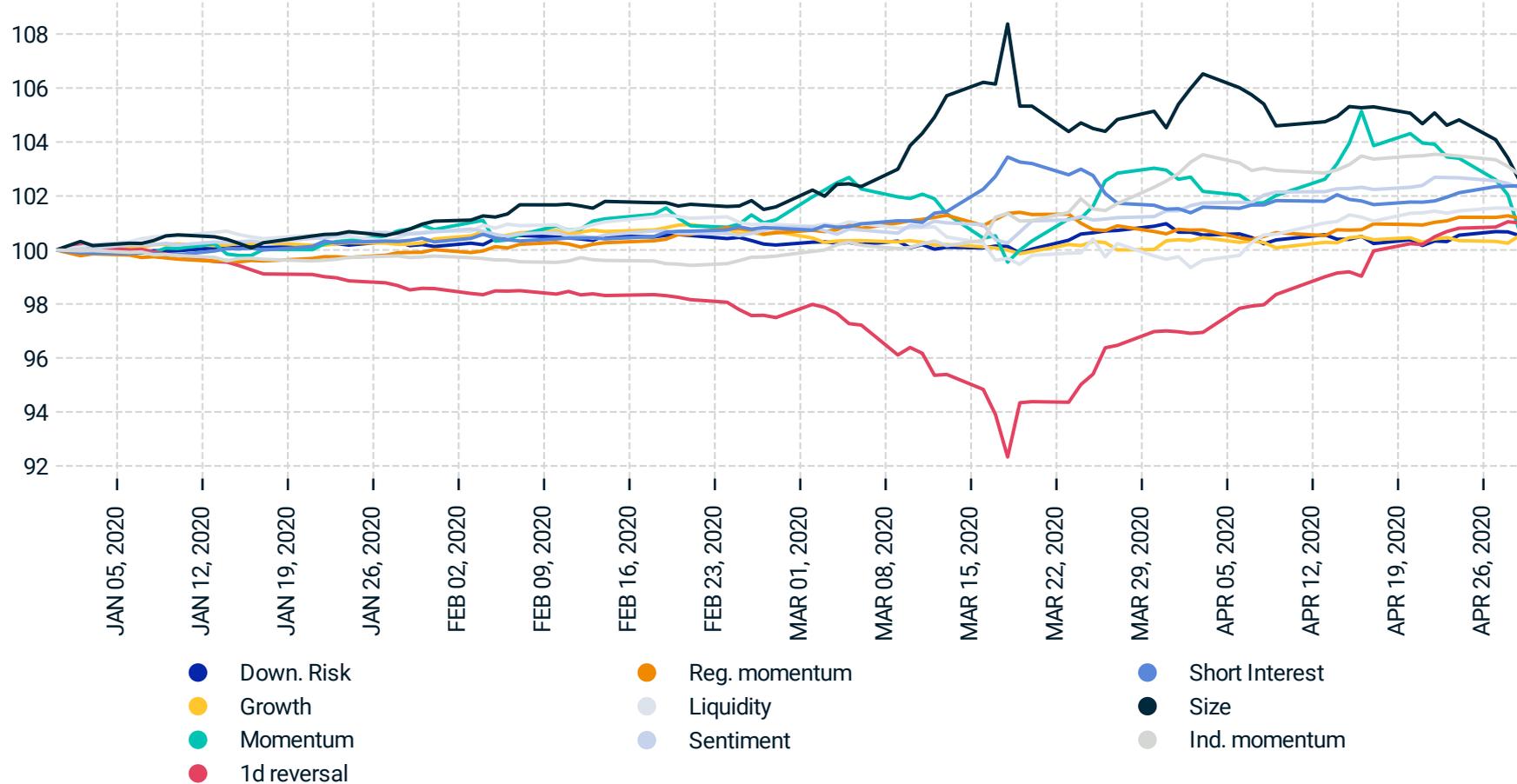
MSCI Barra US Total Market Equity Trading Model

USFAST Style Factors (1/3)



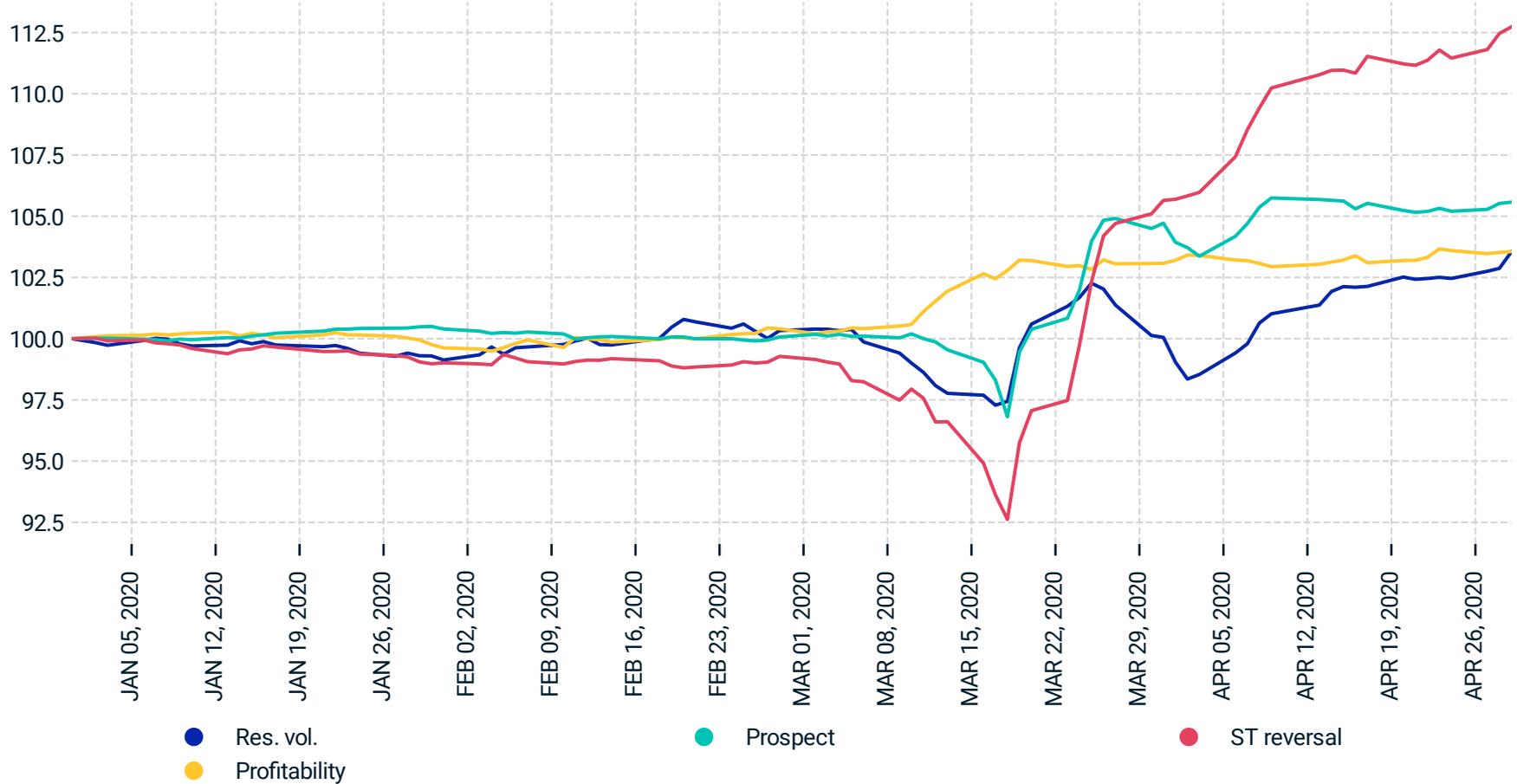
MSCI Barra US Total Market Equity Trading Model

USFAST Style Factors (2/3)



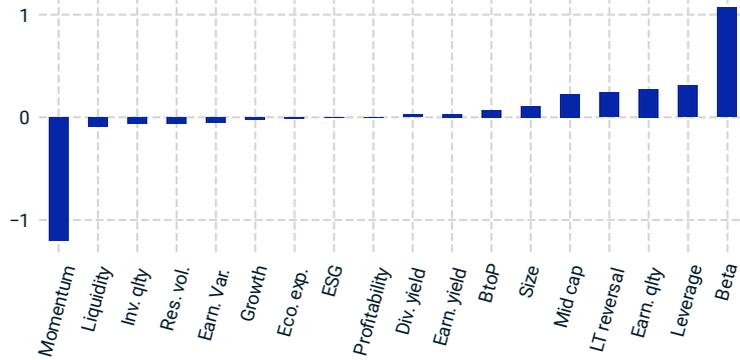
MSCI Barra US Total Market Equity Trading Model

USFAST Style Factors (3/3)

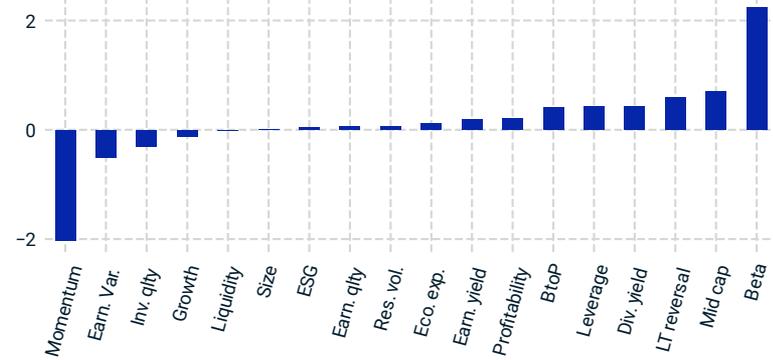


MSCI Barra Europe Total Market Equity Model

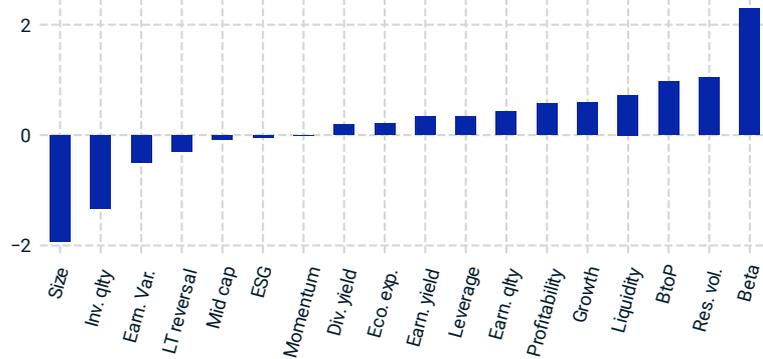
Daily Return (%)



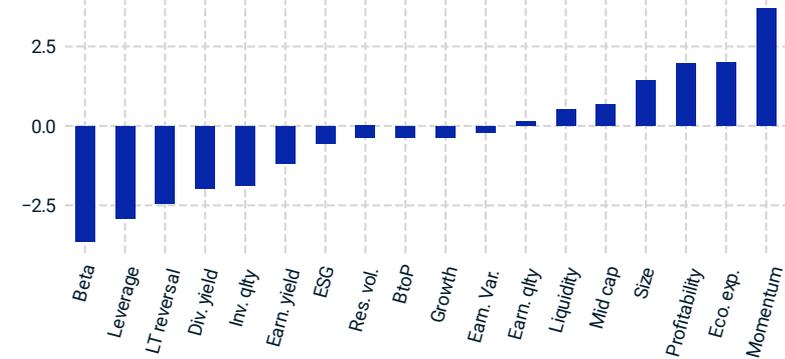
Weekly Return (%)



Monthly Return (%)



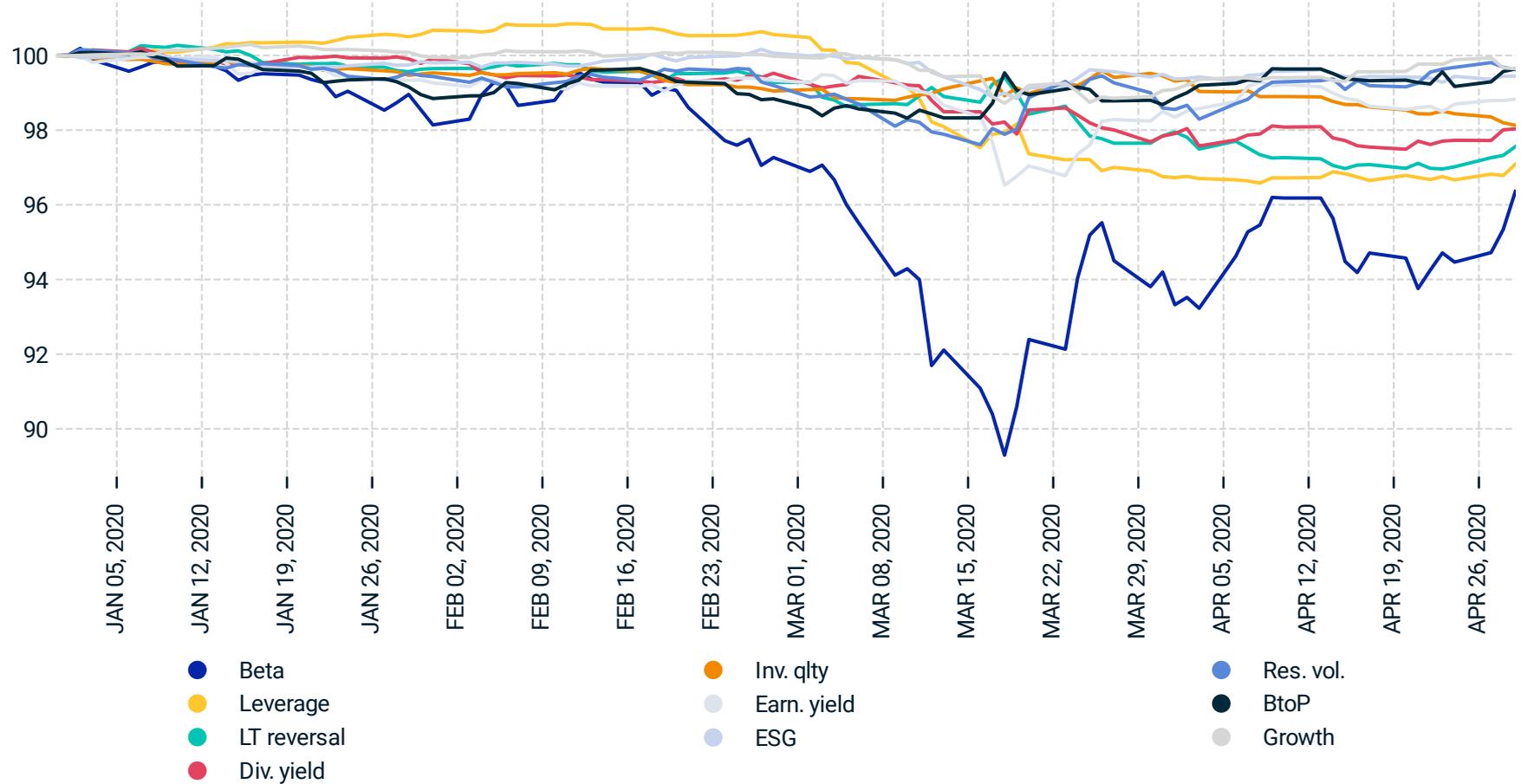
YTD Return (%)



As of Apr 29, 2020.

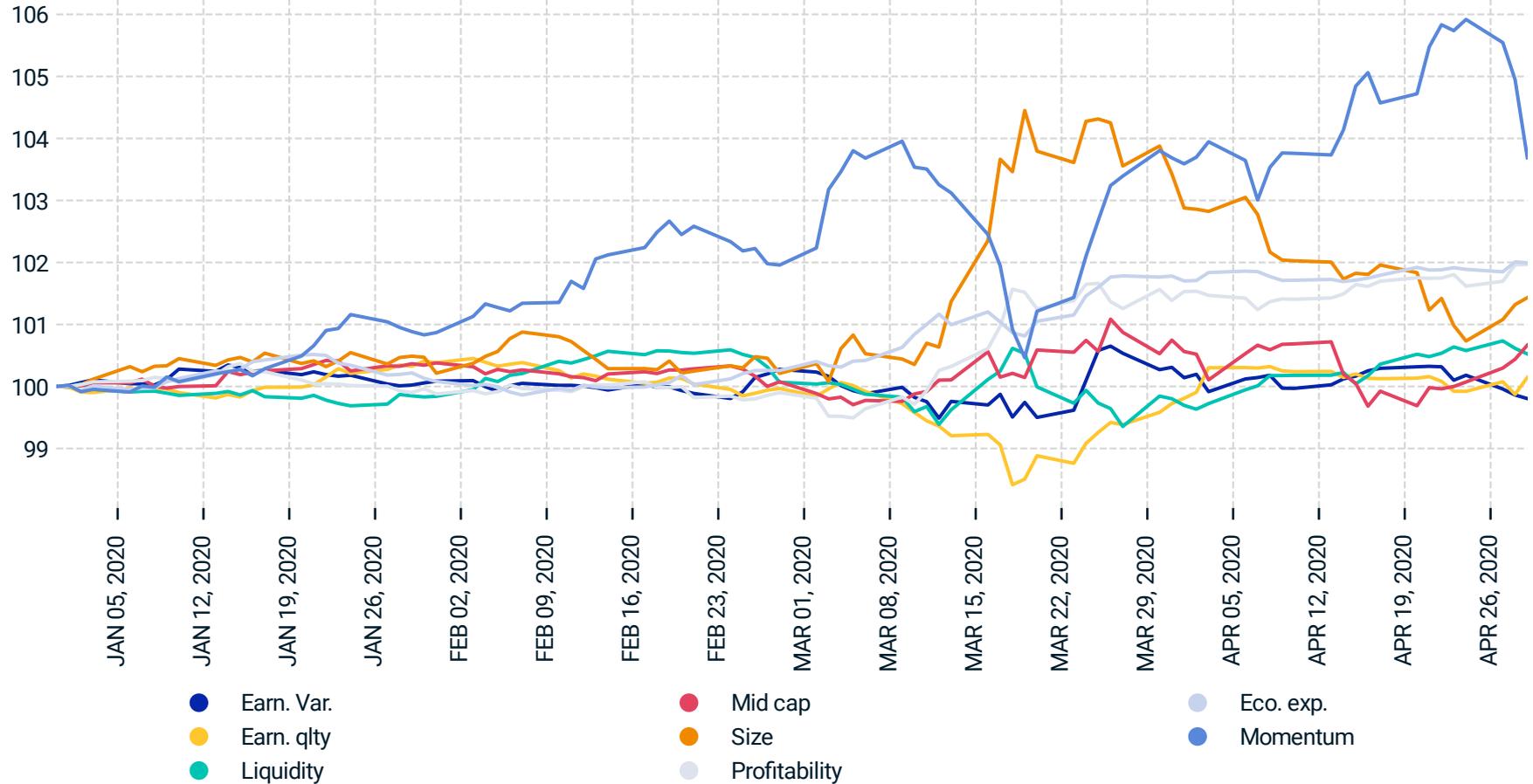
MSCI Barra Europe Total Market Equity Model

EULT Style Factors (1/2)



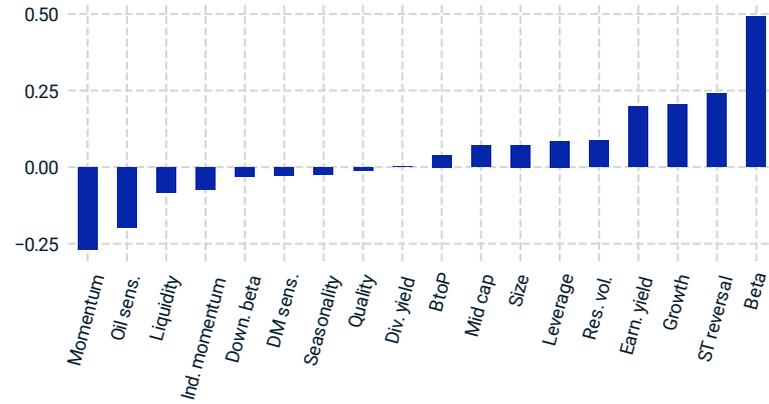
MSCI Barra Europe Total Market Equity Model

EULT Style Factors (2/2)

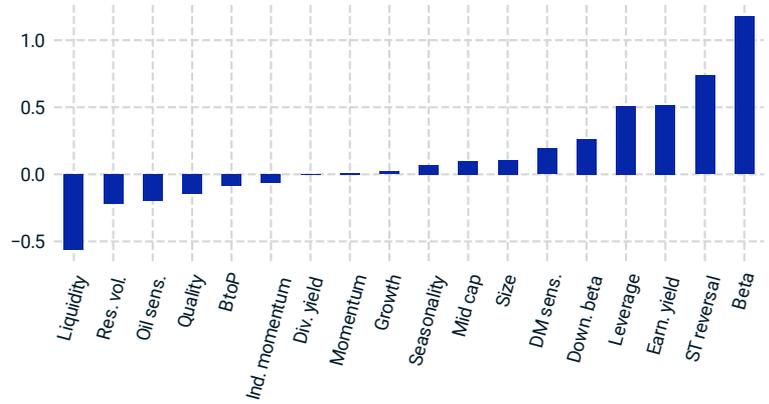


MSCI Barra Emerging Markets Model

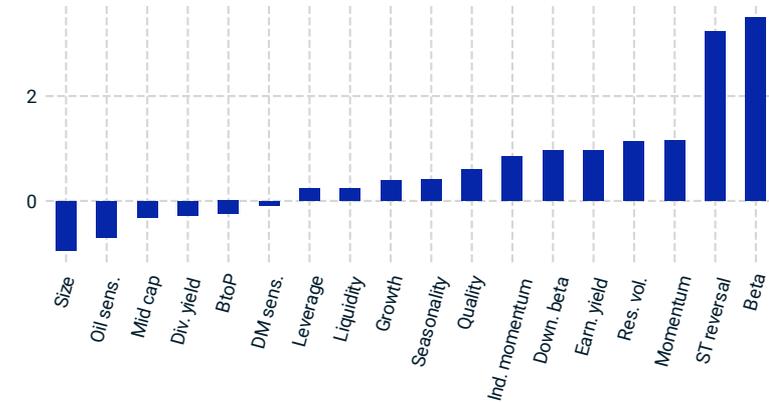
Daily Return (%)



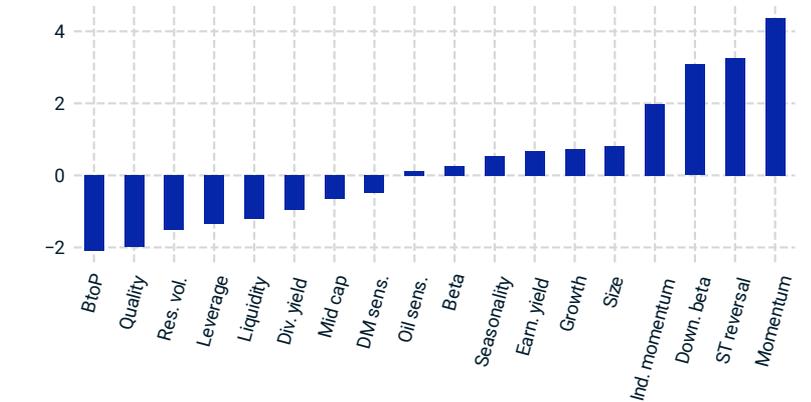
Weekly Return (%)



Monthly Return (%)



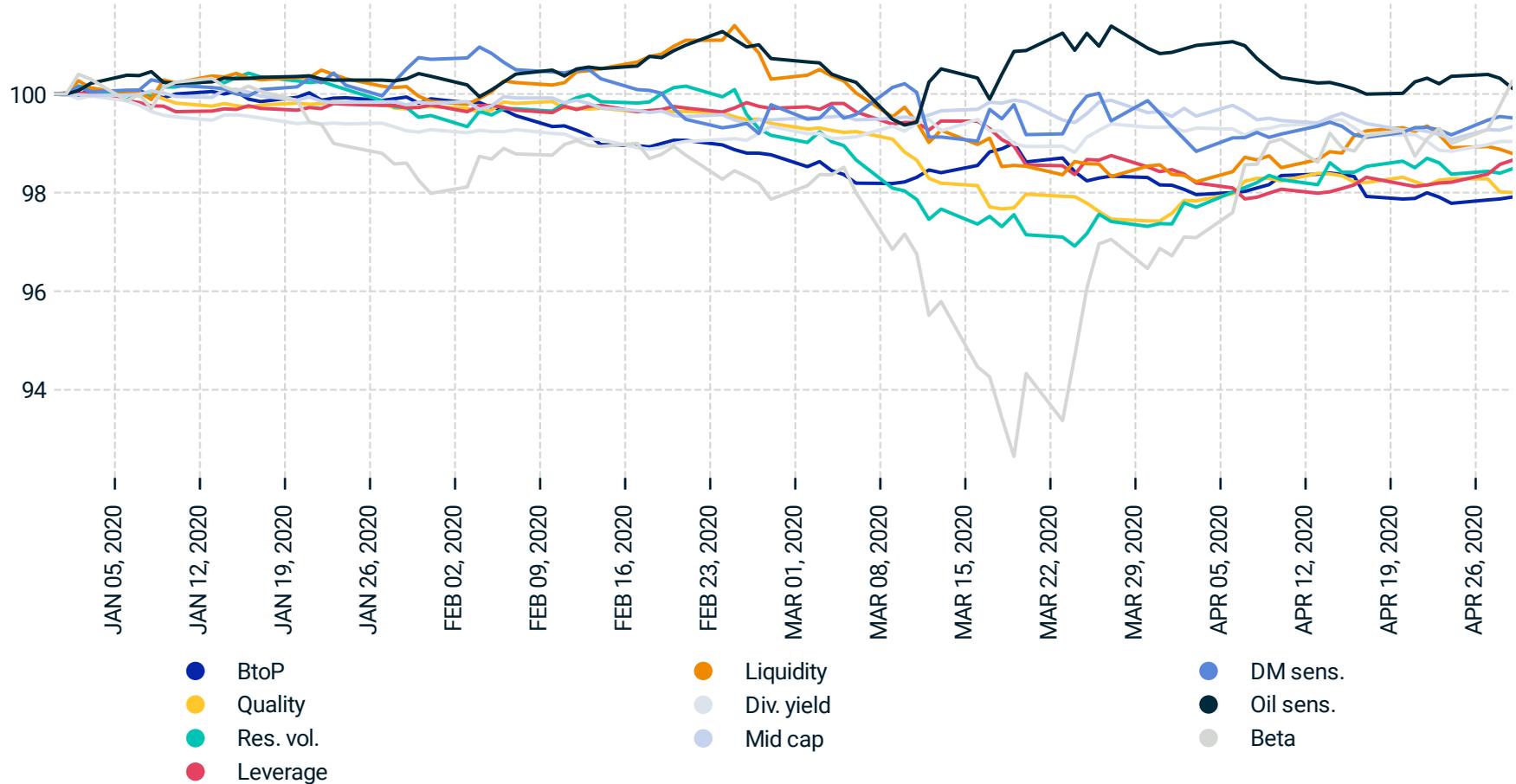
YTD Return (%)



As of Apr 29, 2020.

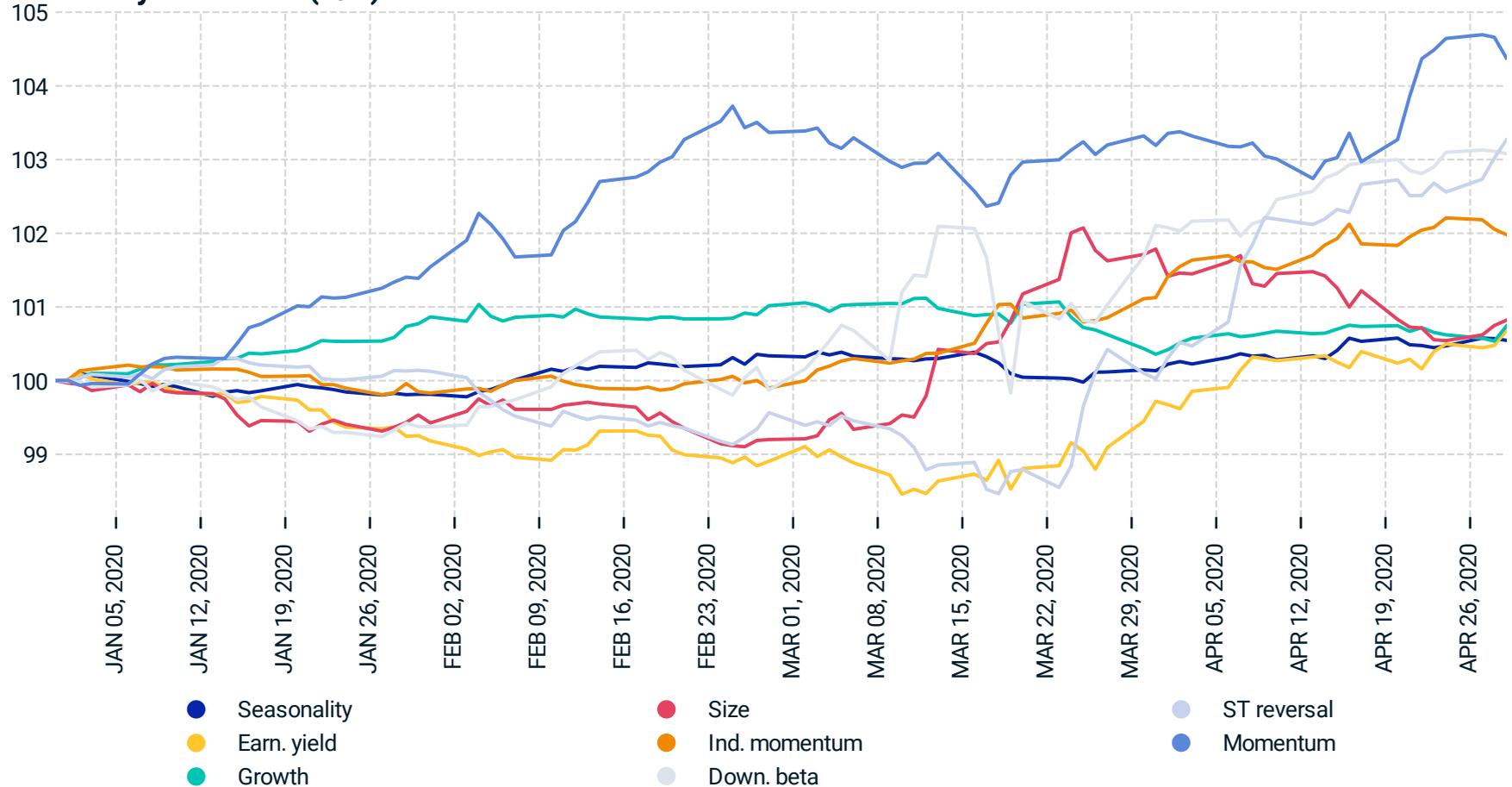
MSCI Barra Emerging Markets Model

EMM1 Style Factors (1/2)



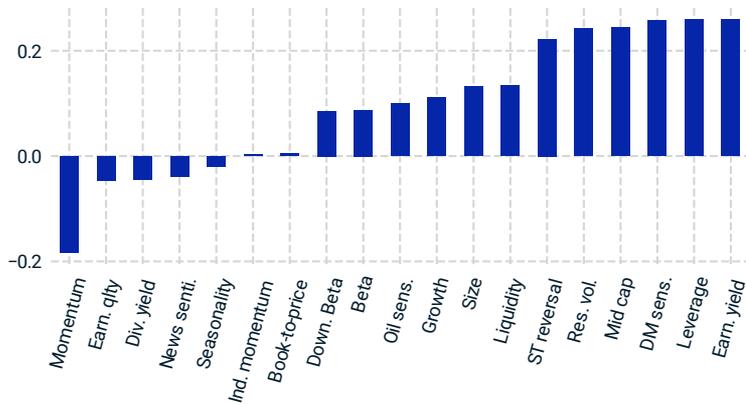
MSCI Barra Emerging Markets Model

EMM1 Style Factors (2/2)

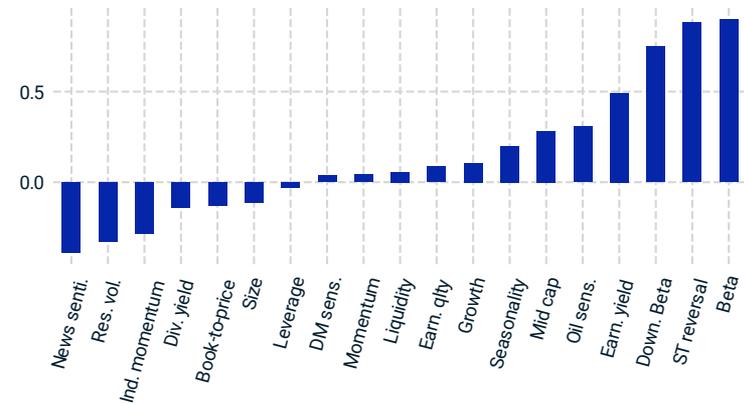


MSCI Barra China International Equity Model

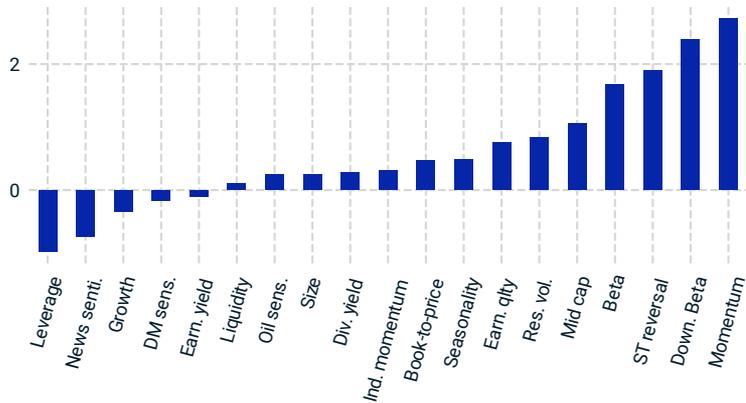
Daily Return (%)



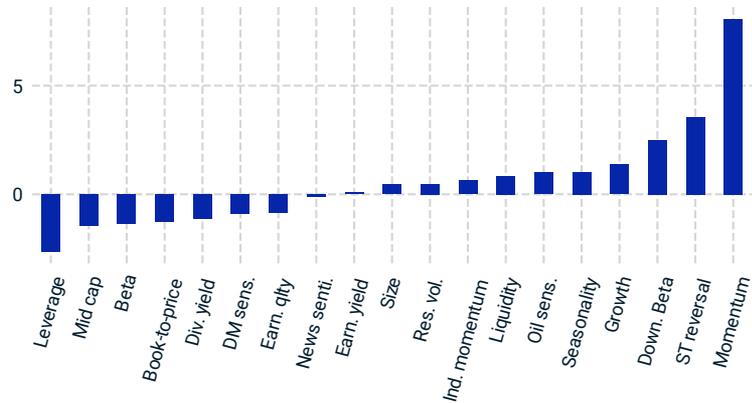
Weekly Return (%)



Monthly Return (%)



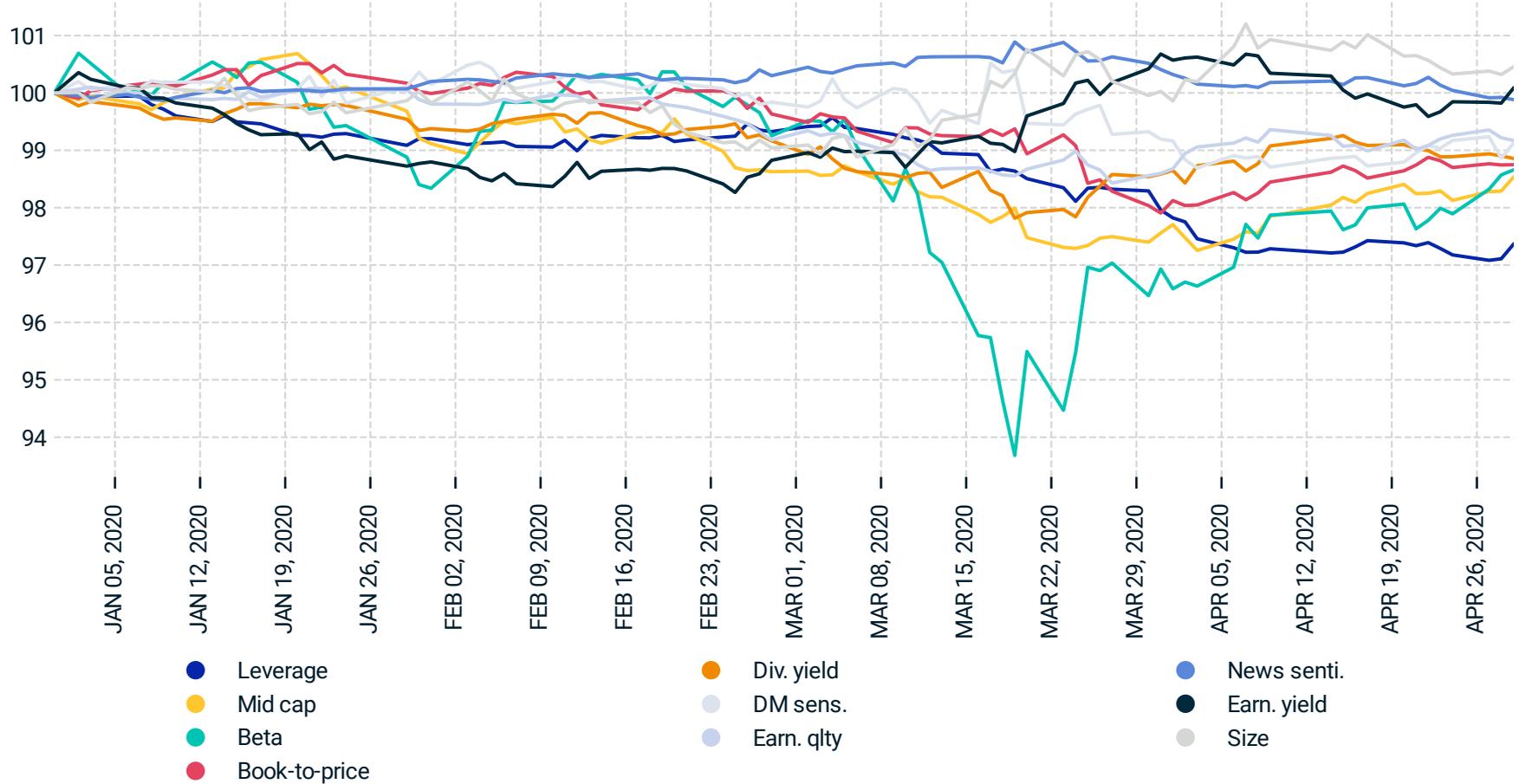
YTD Return (%)



As of Apr 29, 2020.

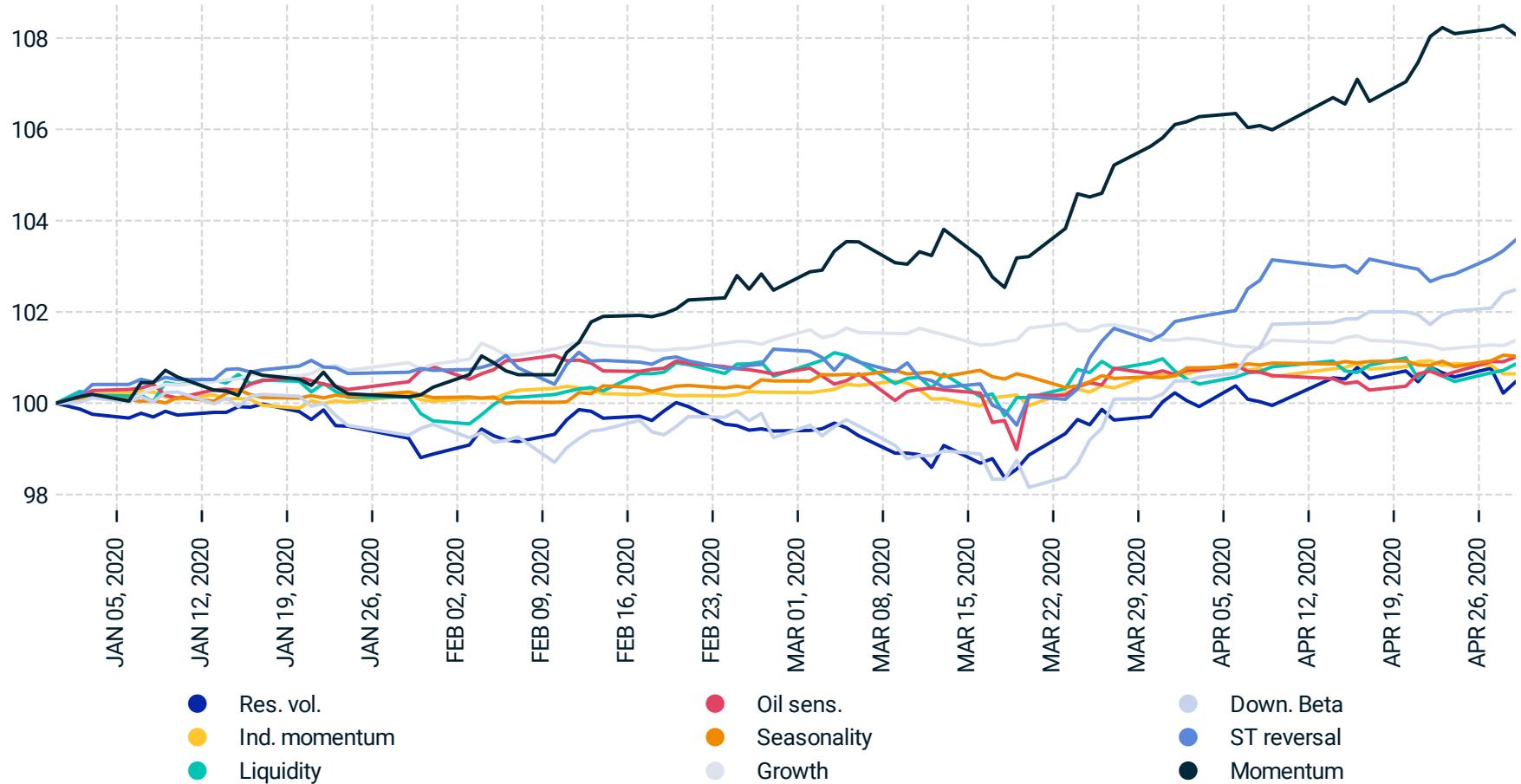
MSCI Barra China International Equity Model

CXE1 Style Factors (1/2)



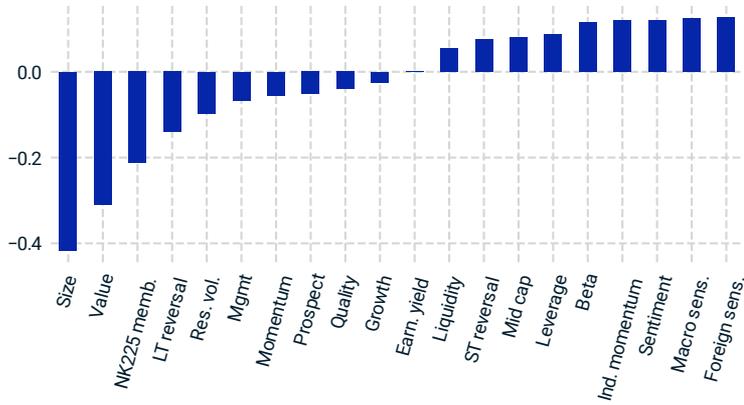
MSCI Barra China International Equity Model

CXE1 Style Factors (2/2)

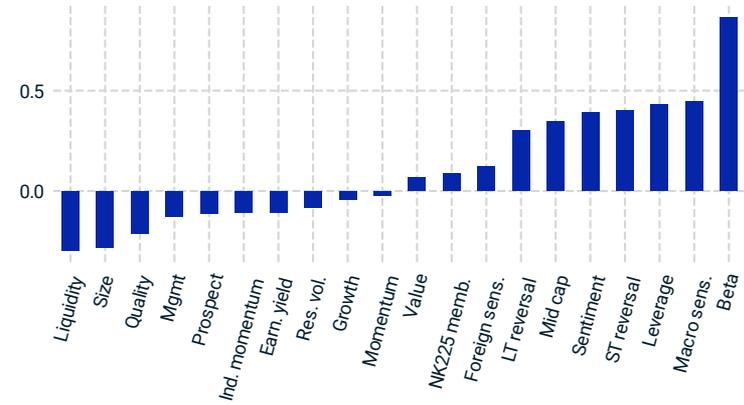


MSCI Japan Equity Model

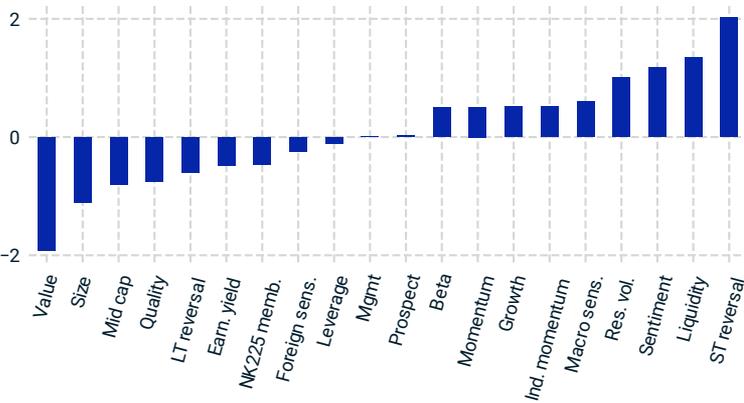
Daily Return (%)



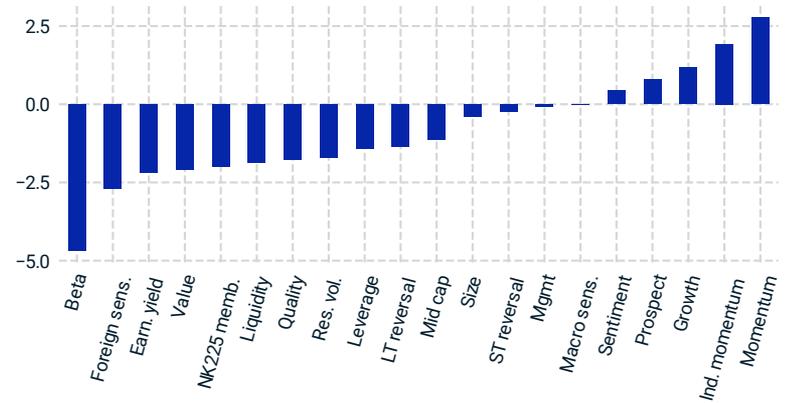
Weekly Return (%)



Monthly Return (%)



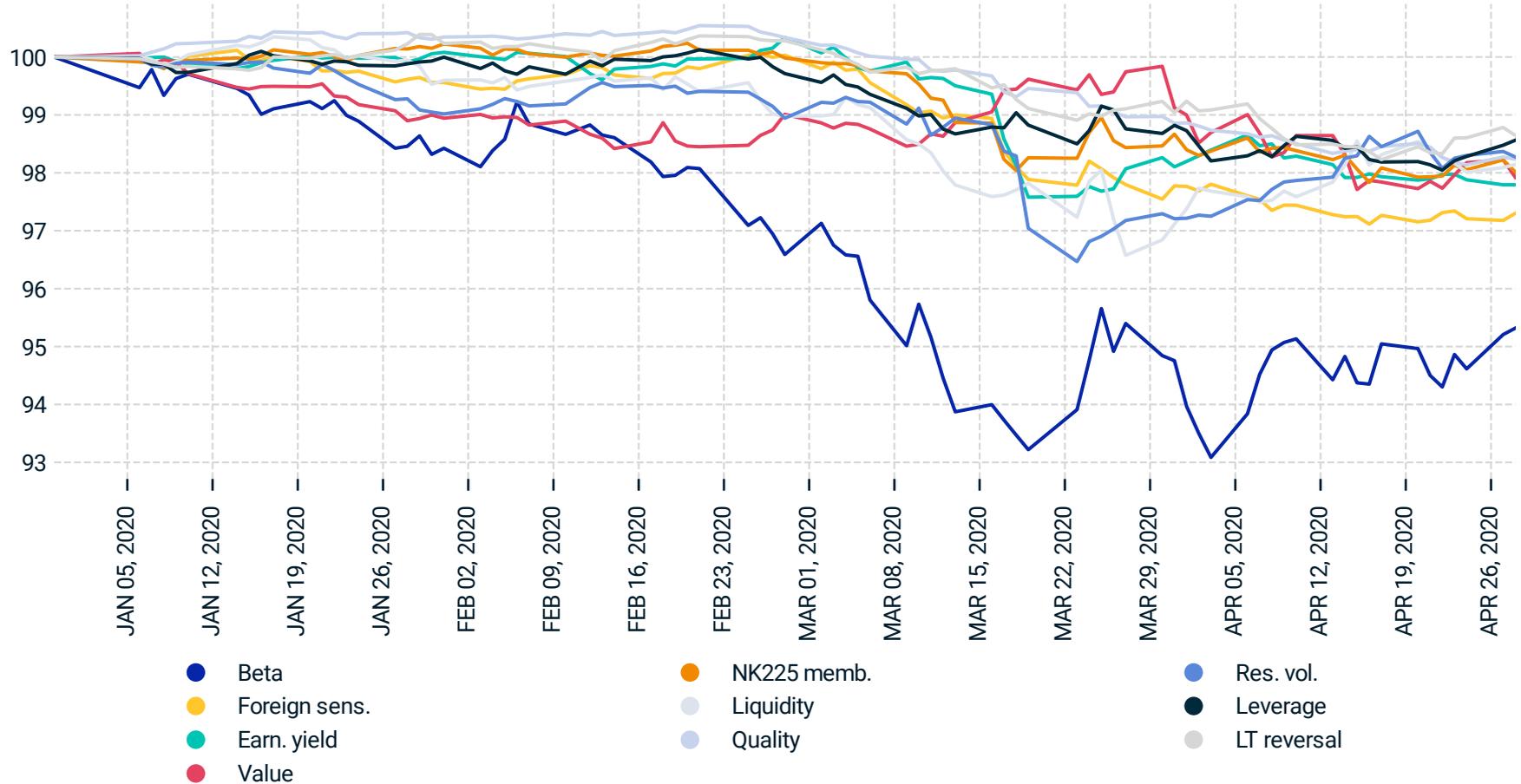
YTD Return (%)



As of Apr 28, 2020.

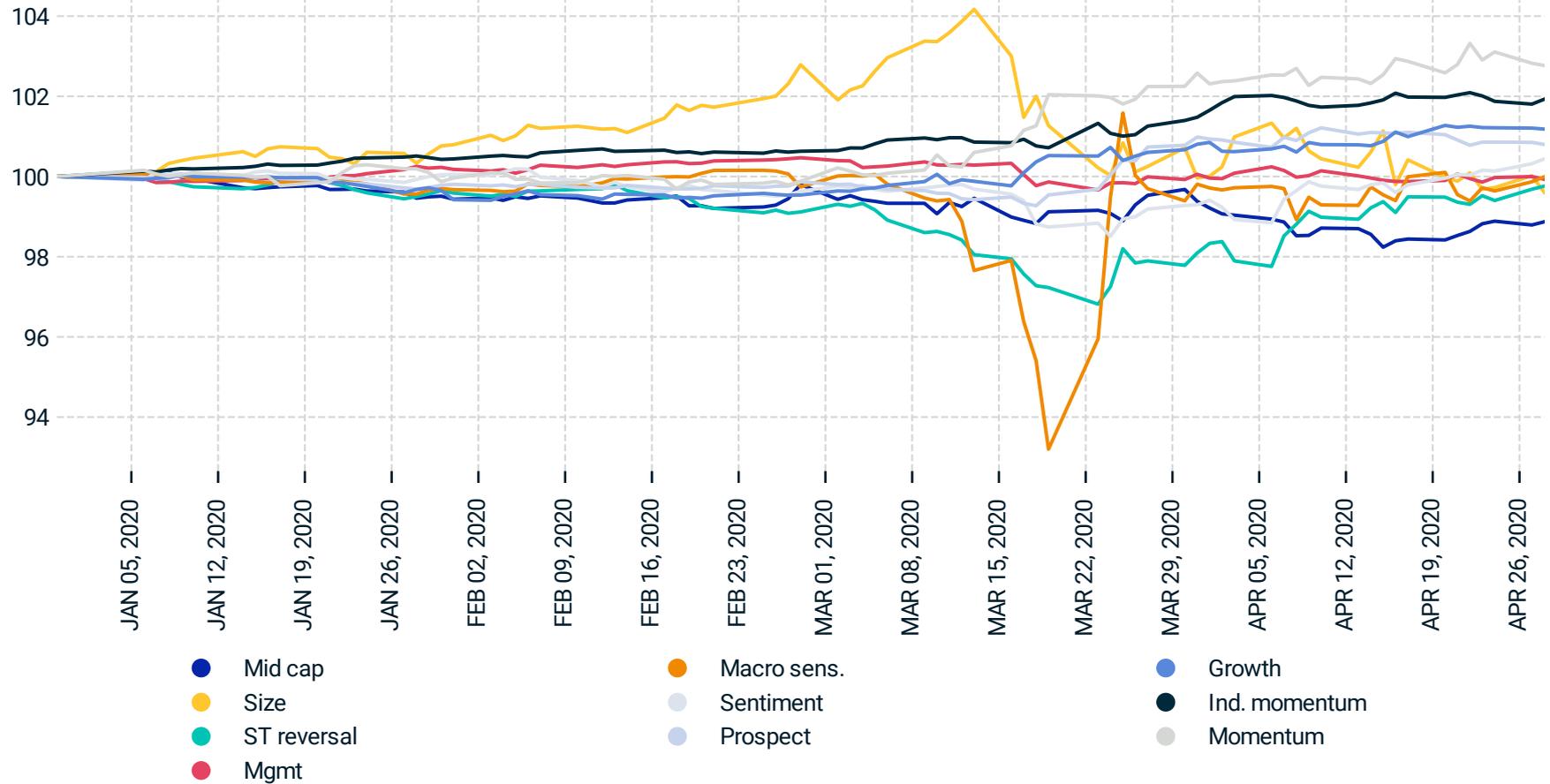
MSCI Japan Equity Model

JPE4 Style Factors (1/2)

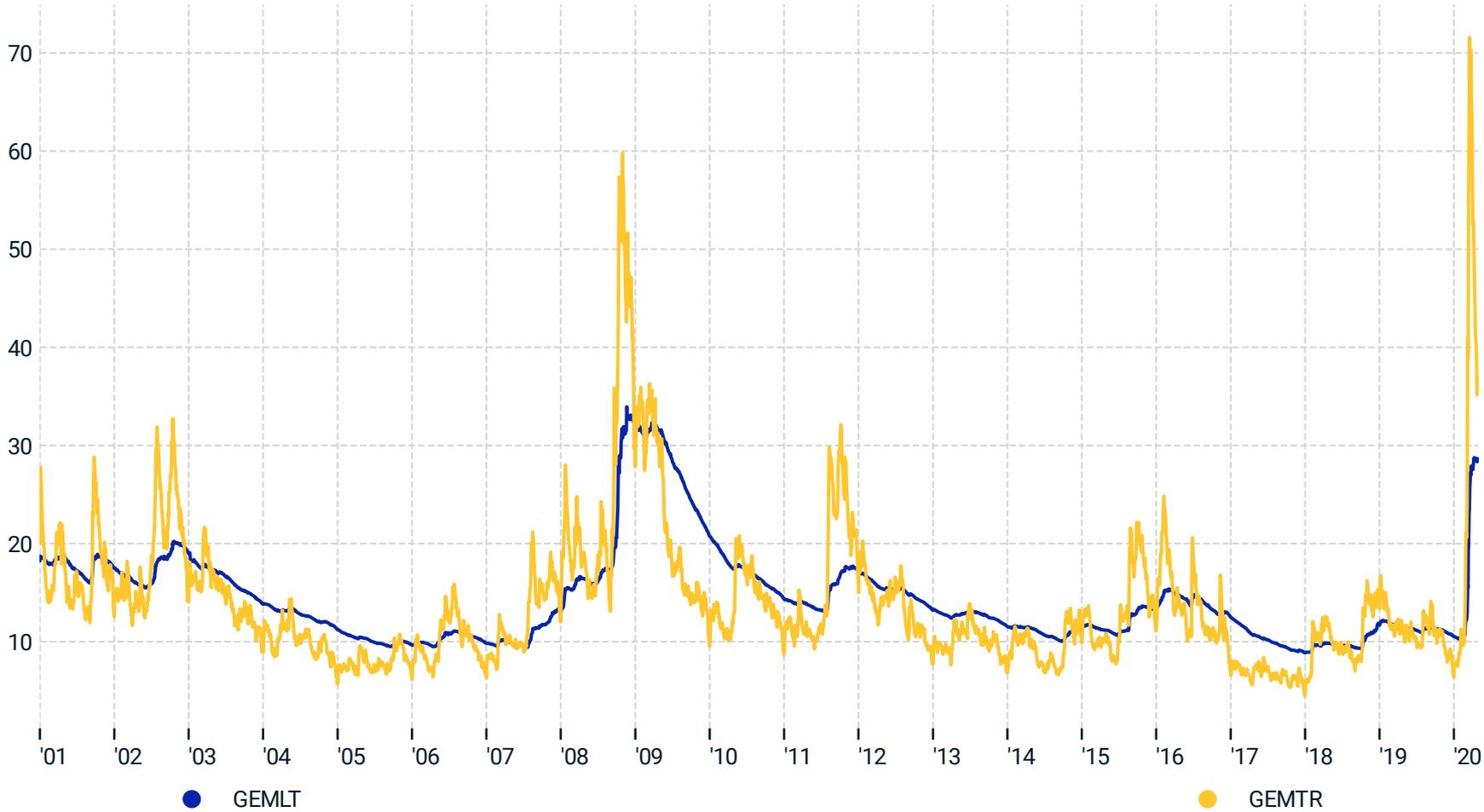


MSCI Japan Equity Model

JPE4 Style Factors (2/2)

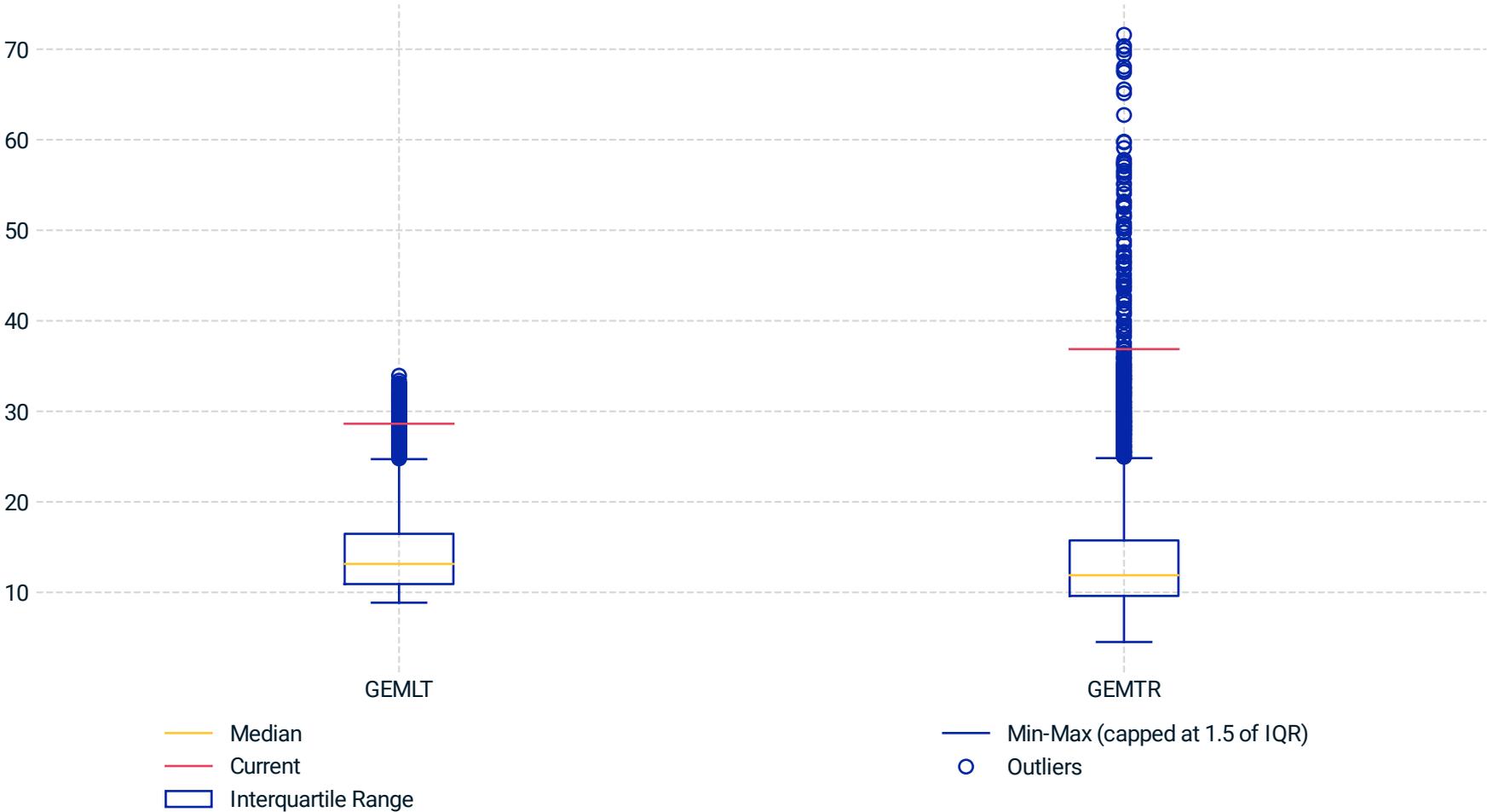


Risk model volatility forecast



Period: Dec 29, 2000-Apr 29, 2020.

Risk model volatility forecast



Period: Dec 29, 2000-Apr 29, 2020.

Earnings outlook

▀ Earnings outlook: Fwd vs actual EPS g

MSCI ACWI IMI Index (%)



Period: Dec 29, 2000-Mar 31, 2020. 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

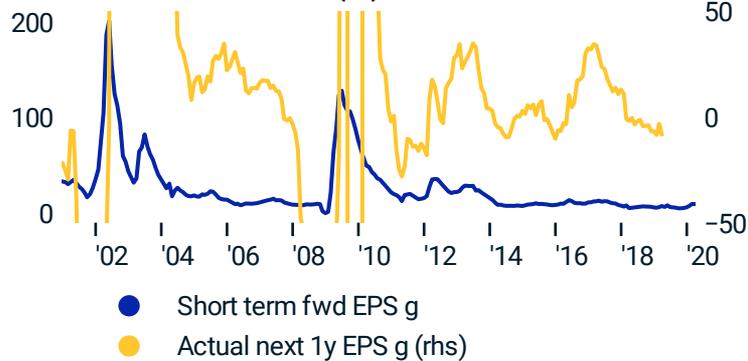
MSCI North America IMI Index (%)



MSCI Europe IMI Index (%)



MSCI Pacific IMI Index (%)



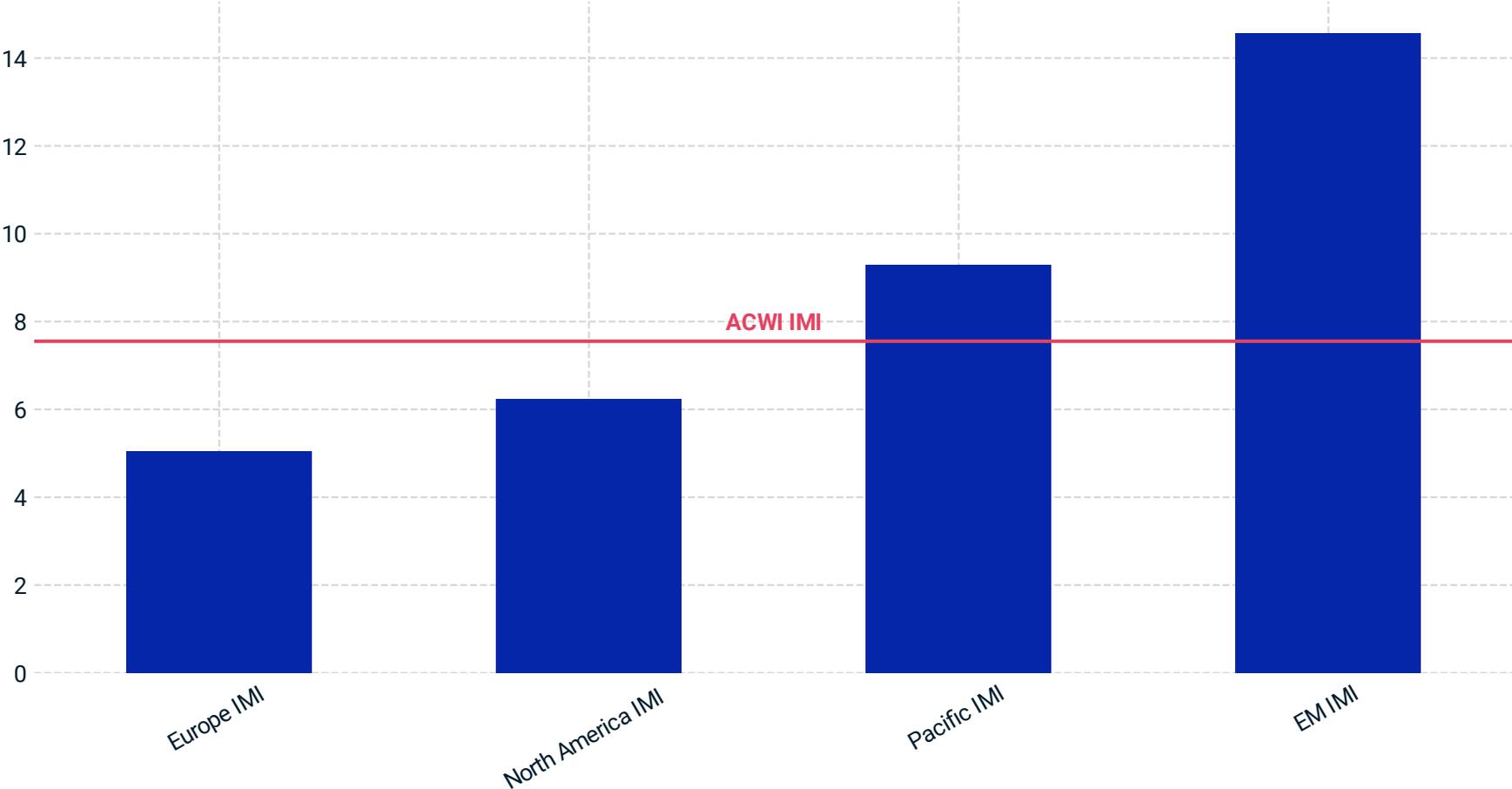
MSCI EM IMI Index (%)



Period: Dec 29, 2000-Mar 31, 2020. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

▀ Earnings outlook

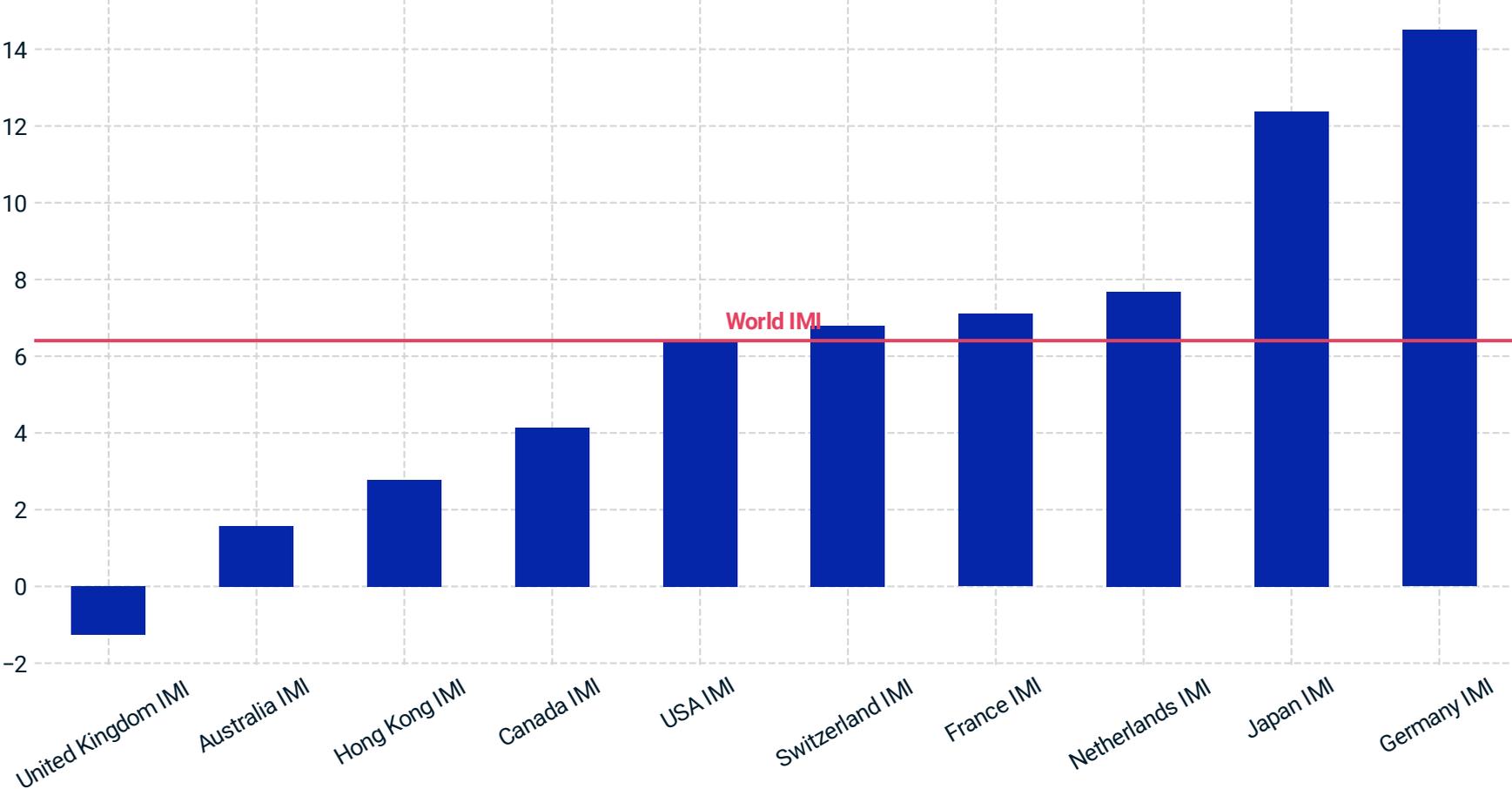
Regions: short term forward EPS growth rate (%)



As of Mar 31, 2020. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

Earnings outlook

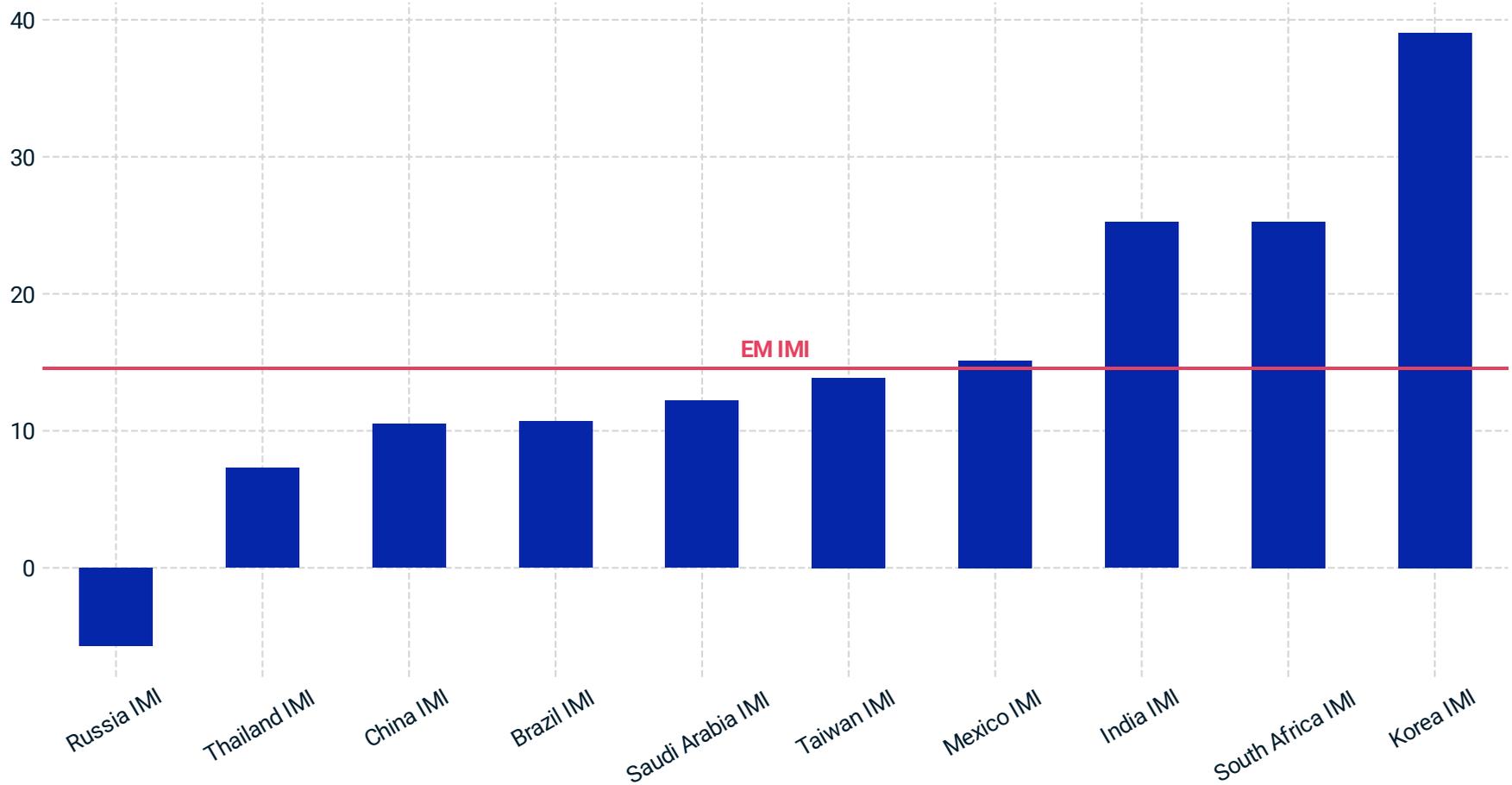
Largest 10 DM countries: short term forward EPS growth rate (%)



As of Mar 31, 2020. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

▀ Earnings outlook

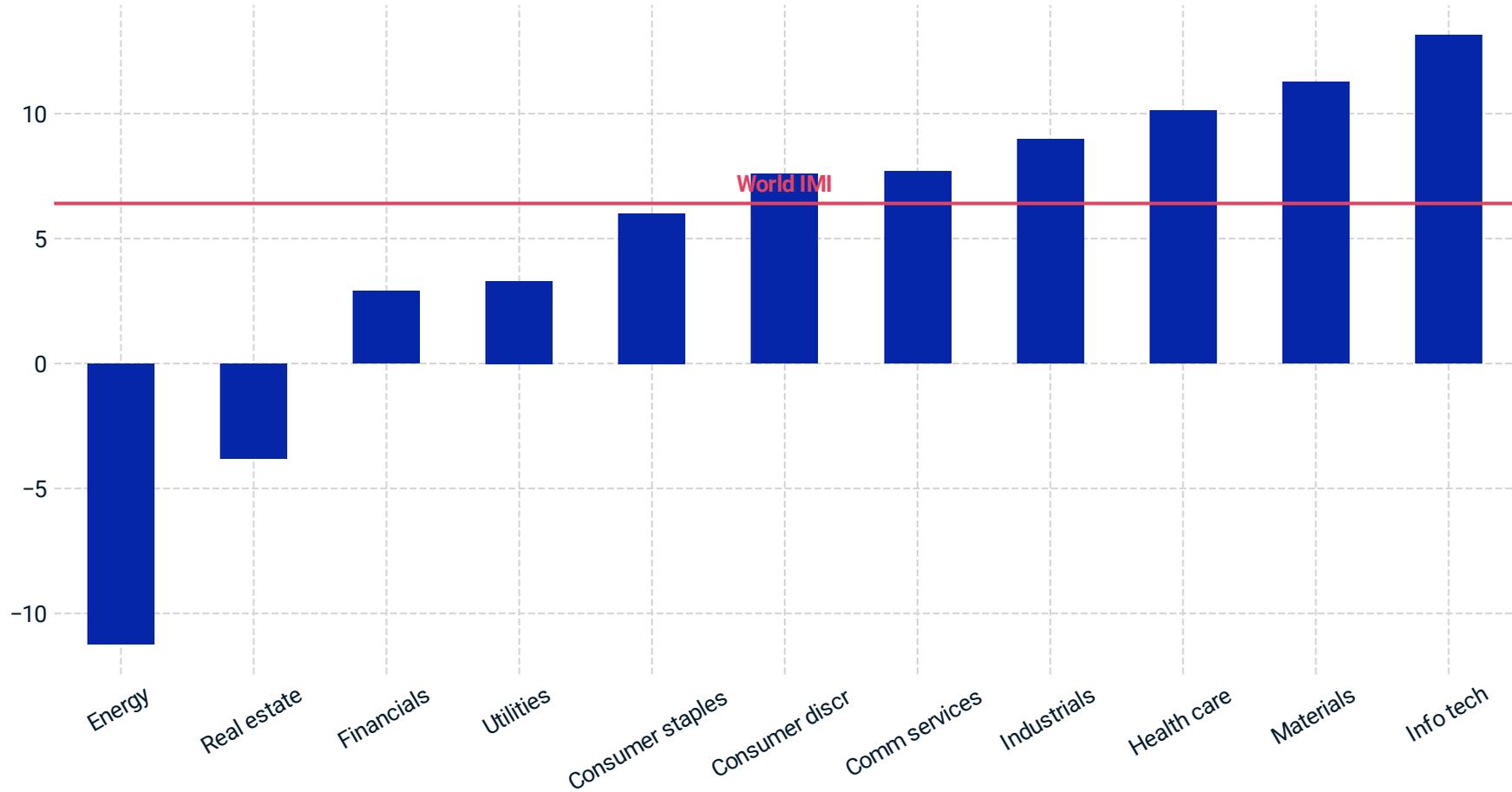
Largest 10 EM countries: short term forward EPS growth rate (%)



As of Mar 31, 2020. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

▀ Earnings outlook

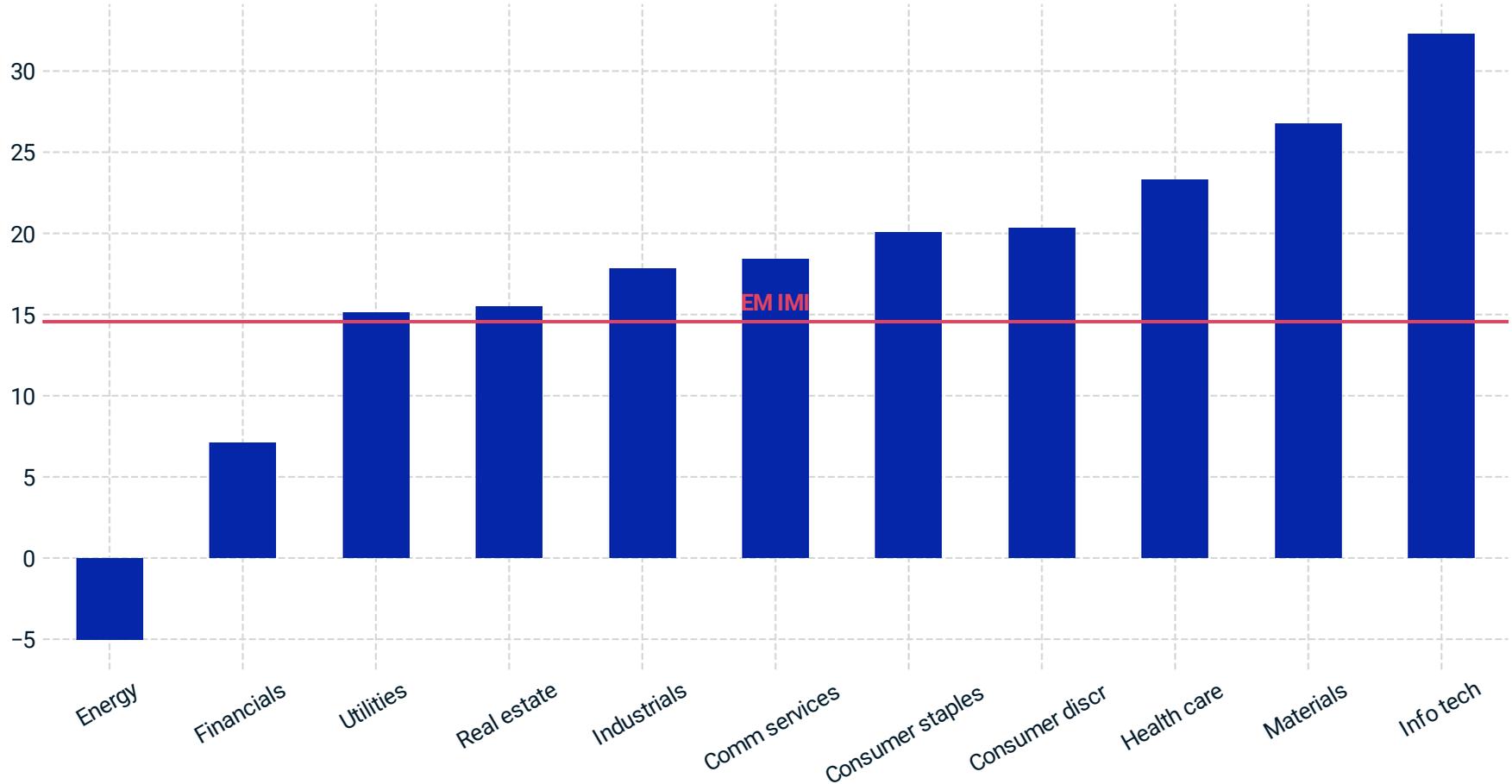
MSCI World IMI Index sectors: short term forward EPS growth rate (%)



As of Mar 31, 2020. 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 Mar 31, 2020. Short term forward EPS growth rate is the growth rate between index 12-month backward EPS and the 12-month forward EPS.

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