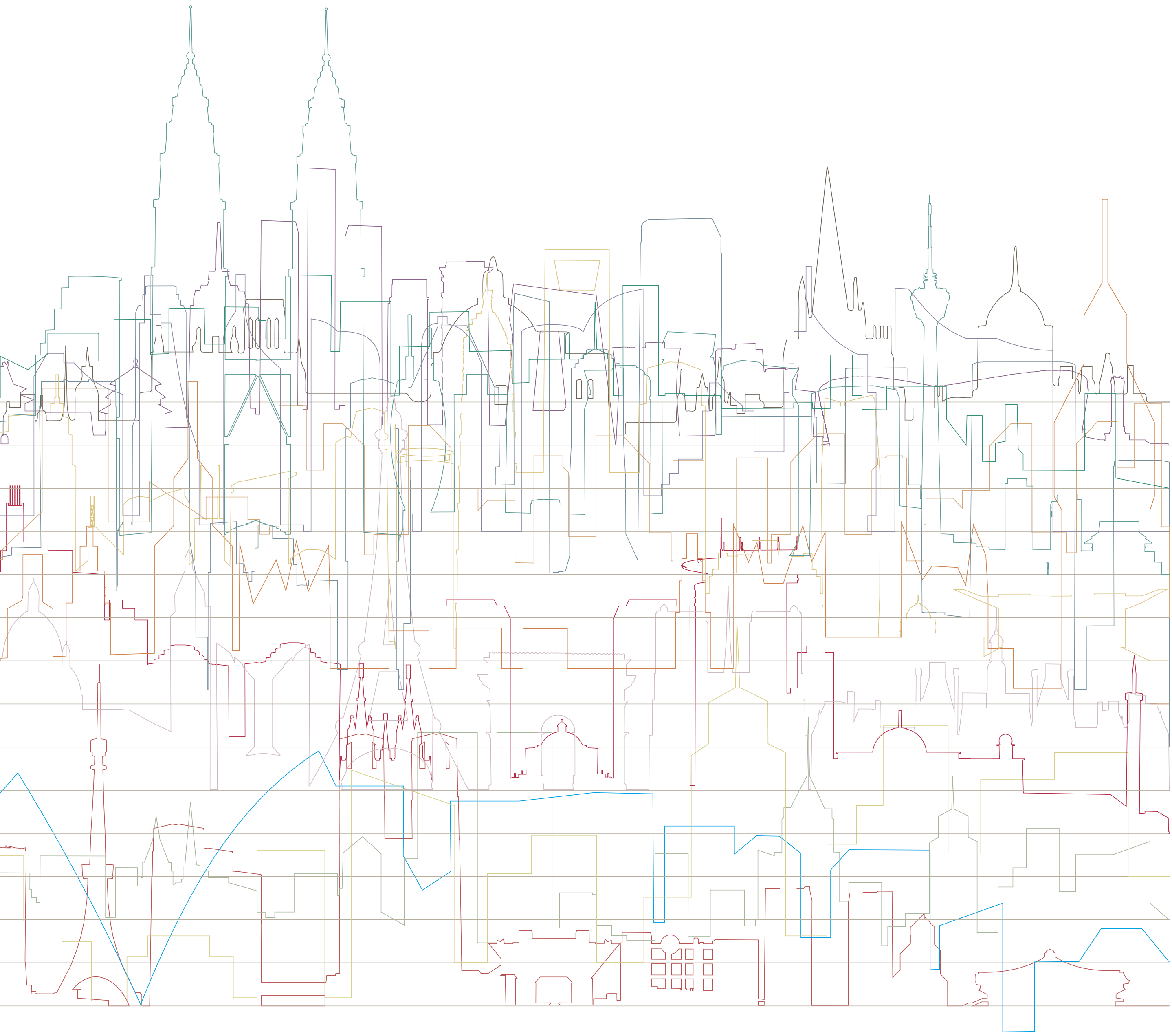
THE OXFORD METRICA REVIEW

EQUITIES IN A PANDEMIC - 2020 A TURNING POINT?



OXFORD METRICA

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We are delighted to present the inaugural issue of *The Oxford Metrica Review*, a new series of occasional communiques bringing together all our themes under one banner. The topic for this first issue is a review of the top fifty major international equity markets' performance in 2020.

Key highlights

1. The MSCI ACWI was up 14%. Considering it lost approximately 30% in the first quarter – this recovery was impressive. Nevertheless, only nine of the fifty markets exceeded this benchmark, illustrating the skewed distribution in performance across equity markets.

2. Korea delivered the best performance for the year - 41% in dollar terms - the only stock market to outperform gold (35%). Overall, there was a significant swing to East Asia, with the top four performers coming from the region: after Korea, Taiwan (34%), China (27%) and Japan (24%).

3. The S&P500 had largely dominated all markets in the decade ending 2019, buoyed to some extent by the strengthening dollar over that period. However in 2020 the tables turned with the US benchmark (16%) barely surpassing the MSCI ACWI and just beating the emerging markets and BRIC benchmarks (16%).

4. The European markets, the Nordics excepted, did not fare well, with eight losing ground in local markets. The UK was down in both sterling and dollar terms despite the weakening dollar. In 2020 the dollar depreciated against the currencies of 37 of the 50 markets reported, boosting their respective market returns in dollar terms, reversing a decade-long trend and perhaps heralding the longer-term decline of the US dollar.

5. Current buoyant prices reflect neither bubble nor rational pricing. The cause lies not at the aggregate but the individual stock level. Generalisations about stock markets are no longer valid in the post-Covid world. Five powerful and mutually reinforcing vectors (see footnote below) will shape the new order.

The Global picture

GENERALISATIONS ABOUT STOCK-MARKETS ARE NO LONGER VALID IN A POST-COVID WORLD

2020 – Year of the Pandemic - was one of the most violently volatile years in living memory and may prove a turning point in the reshaping of equity markets worldwide. Many countries are starting to report the extent of the resultant damage. The UK has announced a literal decimation of its economy with a reduction of 10% in GDP - the worst in three centuries. There was a significant increase in unemployment everywhere and yet to be revealed is the damage to small and medium-sized enterprises, many of which may never recover. These developments have been attended by a significant expansion of debt, both private and public. When will the price be paid? Inevitably, the bill will one day need to be settled and could bring in its wake a very serious risk of inflation-driven recession. International equity markets will be on a knife edge in the year ahead. Indefinite continuation of the global lockdown would inevitably disrupt equities but global re-emergence from lockdowns by mid-year is likely to give markets a boost. On the bright side, the vaccination programmes mounted by many countries offer hope that the world economy will emerge from lockdown by mid-year. Table 1 and Figure 2 report the performance of the world's fifty major stock-markets together with some key benchmark indices. On average and despite the global recession, stock markets performed well although with increased volatility in 2020. The MSCI ACWI, despite losing 30% in Q1, delivered a dollar return for the year of 14.3% (see Figure 1). Although 2020 was a highly volatile year, the stronger performers delivered the best risk-adjusted returns. Table 1 reports the risk-adjusted return (Sharpe ratio) for each market. However on closer examination a worrying trend emerges. Firstly, good performance was not uniform across all markets. Forty-one of the fifty fell below the MSCI ACWI, twenty-four of which generated negative returns for the year. Secondly, 82% of returns were less than the average. Market weighting aside, East Asian countries far outpaced the rest, creating a skewed distribution overall. Thirdly, only twenty-one of the fifty generated a positive return in both local numeraire and US dollar terms. 2020 was not the good year the MSCI ACWI performance suggested, for most markets, rather a year to forget.In addition, good performance was exclusively driven by a small proportion of stocks, chiefly large-cap technology companies, which compensated for the huge losses in airlines, travel, retail and banking. The truth is that buoyant prices may reflect neither bubble nor rational pricing. The answer lies not at the aggregate but the individual stock level. Generalisations about stock-markets are no longer valid in the post-Covid world. The old order is over, and grasping that will be crucial for all investors.

East Asia dominated

Many markets have been damaged by the recession, and investors who were underweight in the East Asian markets suffered disproportionally. Only eight markets outperformed the MSCI EM and the MSCI BRIC indices - a further illustration of a return distribution across markets skewed to East Asia. Given the dire state of most real economies around the world, nearly all of which except China, contracted in 2020, many claim that equities are a bubble about to burst. A more optimistic interpretation would be that market judgements correctly predict a rebound in real economies as the East Asian countries emerge from lockdown. Encouragingly, Korean stocks surged on the back of Korea's technology mix and its dominant position in global chip manufacturing. Post-pandemic, China, Japan and Taiwan appear to be the market favourites to drive the world economy forward.

The US dollar started to decline

THE DOLLAR WEAKENED AGAINST ALL DEVELOPED COUNTRY CURRENCIES IN 2020

After dominating the world stock market performance in the decade to the start of 2020, the US market struggled to equal the world index, although it ranked 8th in the world (Figure 4). The most significant change during the pandemic has been the long-predicted weakening of the US dollar. During the preceding decade the US dollar strengthened against all but five of the fifty market currencies, whereas in 2020 there was a significant swing against the dollar in 37 of the 50 major equity market currencies, most significantly with a 9.3% and 8.9% depreciation against the Swiss franc and the euro respectively (see Table 1 & Figure 3). Despite the woes of Brexit even sterling appreciated by a modest 3.2% against the dollar. However, continuing to use the US dollar as the numeraire for international equity market performance gave a boost to most markets. Five European markets which suffered losses in local market terms were turned positive by the dollar weakness: France, Italy, Luxembourg, Portugal and Romania. The dollar's decline reflects the parlous state of the US economy. Interest rates are close to zero, and the Federal Reserve balance sheet has nearly doubled in the last twelve months. The new President will want to spend more, and as a result federal debt may exceed 100% of annual GDP - low by Greek standards but unique for the holder of the world's reserve currency. The dollar's status as the world's reserve currency is by no means guaranteed. It will only last as long as China and other creditor countries are prepared to hold their foreign reserves in US dollar securities. These reserves have ballooned in the last twenty years from around $2 trillion at the start of the millennium to close to $12 trillion today - a six-fold increase.

Europe fell behind and BRICS diverged

Apart from Finland and Sweden all European markets underperformed the MSCI ACWI and only a few were positive in local terms. The 8.9% appreciation of the euro against the dollar made many mediocre performances look better. Meanwhile the BRICS fell into two halves, with the Asians doing extremely well and the others falling behind and with Brazil in 50th place.

Footnote: The Five vectors

In a recent op-ed in Joongang Ilbo's Global Money 'The five change vectors that will affect your portfolio in 2021' we identified 2020 as a turning point. 2021 could bring to bear a range of factors that will transform the world and potentially disrupt financial markets. The five powerful, mutually reinforcing vectors sweeping through all global markets will shape this new order: geopolitical tensions, the spectre of inflation, social change, regulatory change and technological advance. Understanding their impact on portfolios will be crucial. This time it might actually be different ... Investors will need to take a hard and wide look at their portfolios. However the piece ends on an optimistic note suggesting that innovation will stimulate growth and drive up equities.

KOSPI (141) —
GOLD/SILVER (135) —
MSCI CHINA (127) —
S&P 500 (116) —
MSCI WORLD (114) —

FIGURE 1: Market performance 2020 (US$) SOURCE: Oxford Metrica.

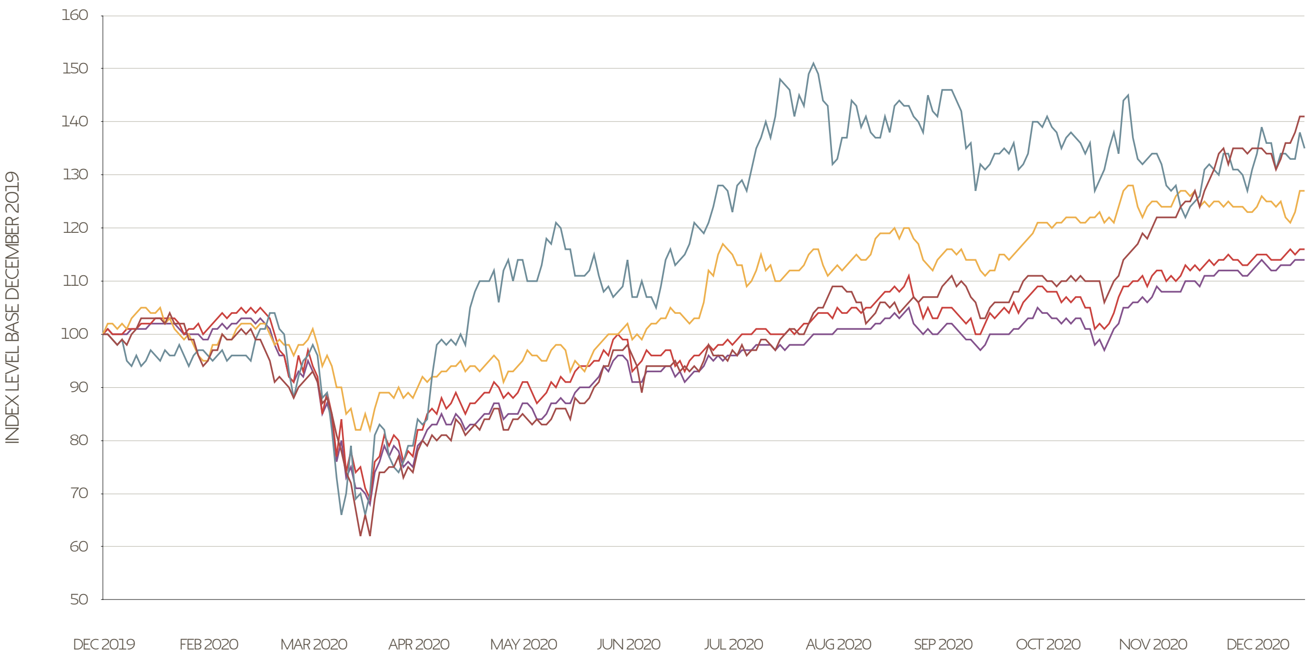


FIGURE 2. International equity markets performance ranking (US$ returns) SOURCE: Oxford Metrica.

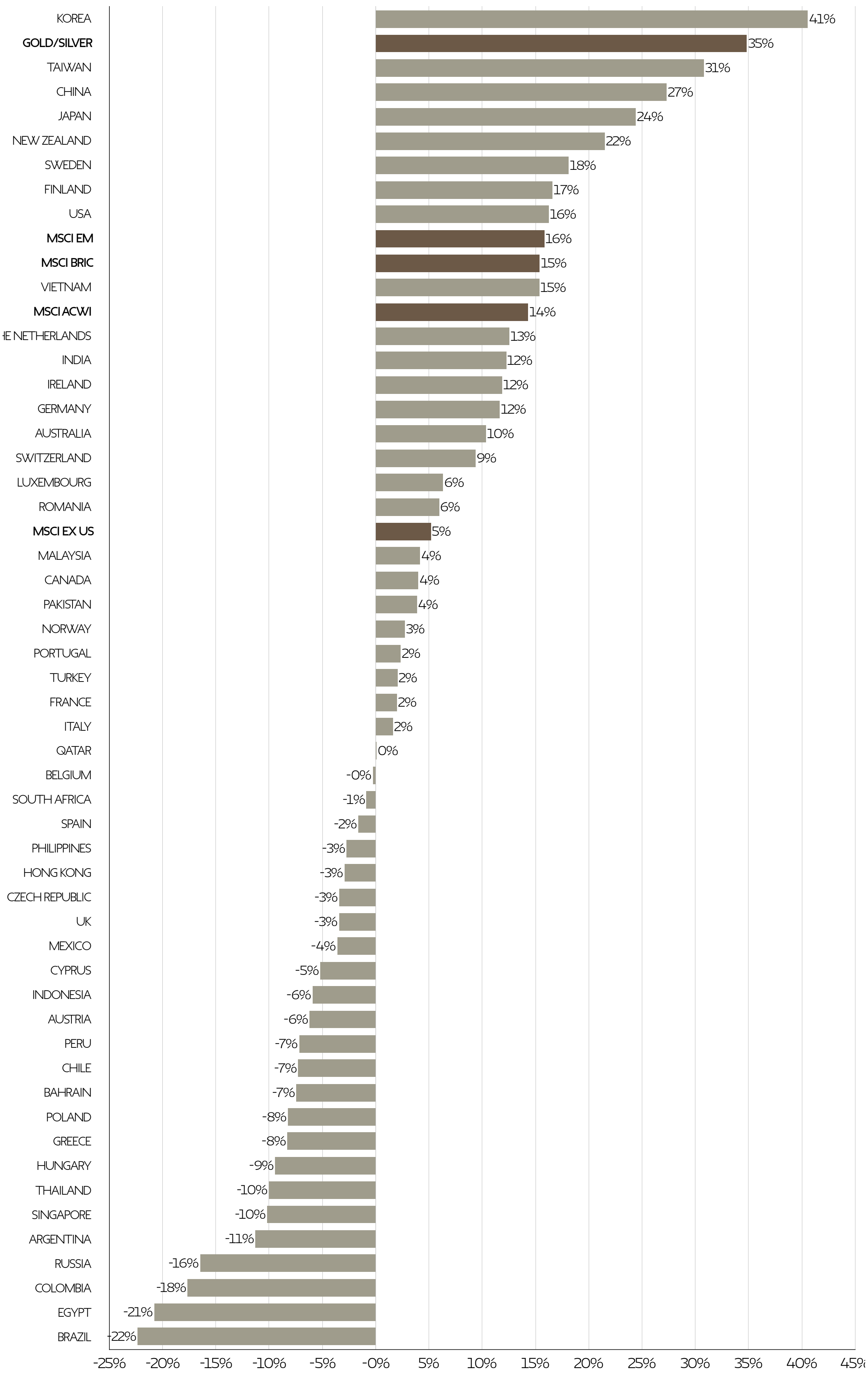


FIGURE 3. Currency movements against the US$ in 2020

SOURCE: Oxford Metrica.

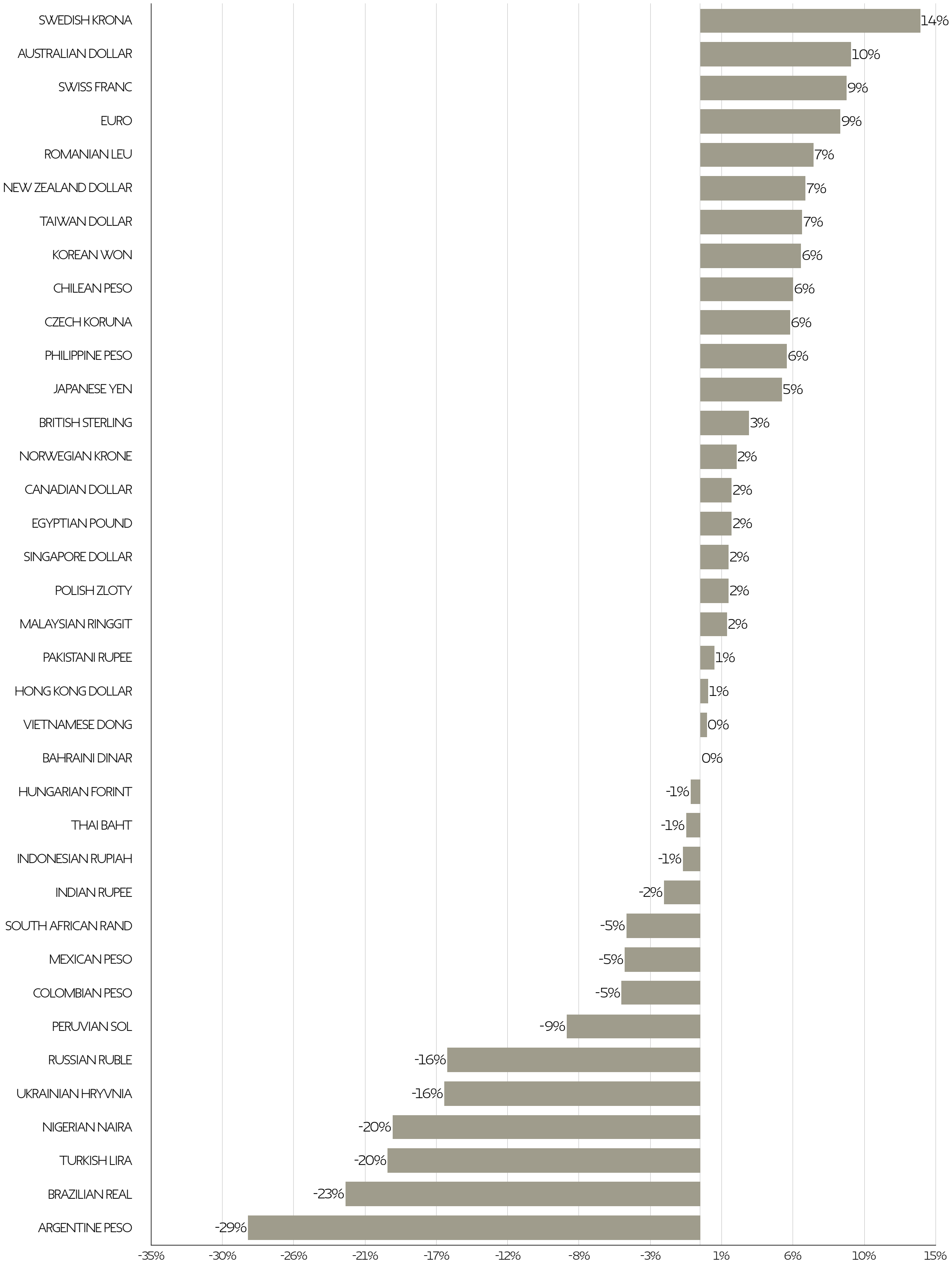


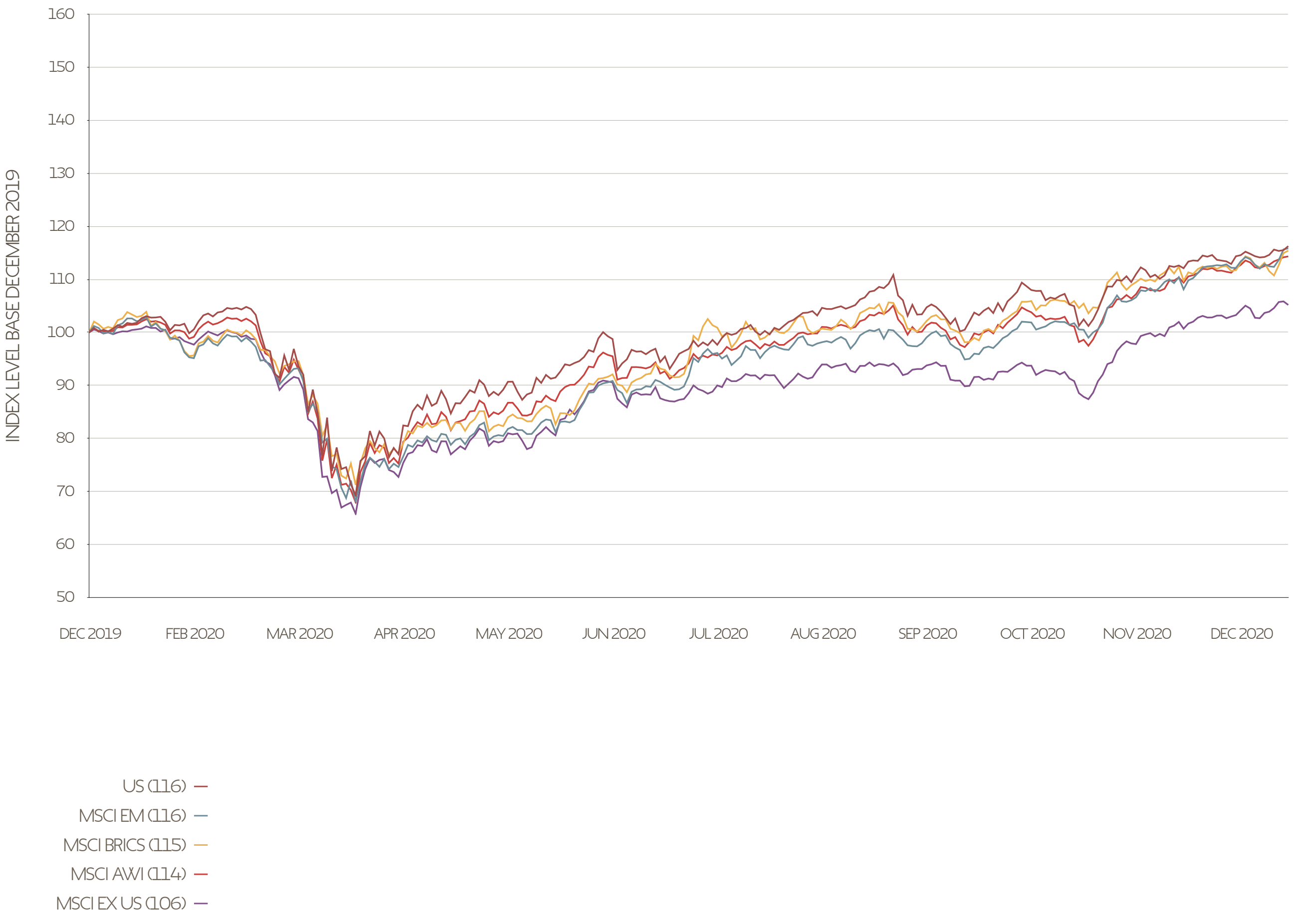
TABLE 1. International equity market performance ranking for 2020

SOURCE: Oxford Metrica.

Rank	Country Equity Index	Return in $	Return in local currency	Sharpe ratio ($)	Currency change v $
1	Korea	40.6%	32.1%	1.07	6.4%
	Gold/Silver	**34.9%**	**34.9%**	**0.56**	
2	Taiwan	30.8%	22.8%	1.14	6.5%
3	China	27.3%	27.3%	0.88	0.0%
4	Japan	24.4%	18.3%	0.74	5.2%
5	New Zealand	21.5%	13.9%	0.62	6.7%
6	Sweden	18.1%	3.7%	0.39	14.0%
7	Finland	16.6%	7.0%	0.39	8.9%
8	USA	16.3%	16.3%	0.33	0.0%
	MSCI EM	**15.8%**	**15.8%**	**0.45**	
	MSCI BRIC	**15.4%**	**15.4%**	**0.40**	
9	Vietnam	15.4%	14.9%	0.44	0.4%
	MSCI ACWI	**14.3%**	**14.3%**	**0.34**	
10	The Netherlands	12.6%	3.3%	0.26	8.9%
11	India	12.2%	14.9%	0.21	-2.3%
12	Ireland	11.9%	2.7%	0.21	8.9%
13	Germany	11.7%	2.5%	0.19	8.9%
14	Australia	10.4%	0.7%	0.15	9.6%
15	Switzerland	9.4%	0.0%	0.18	9.3%
16	Luxembourg	6.4%	-2.4%	0.04	8.9%
17	Romania	6.0%	-1.2%	0.04	7.2%
	MSCI EX US	**5.2%**	**5.2%**	**0.01**	
18	Malaysia	4.2%	2.4%	(0.04)	1.7%
19	Canada	4.0%	2.0%	(0.03)	2.0%
20	Pakistan	3.9%	3.0%	(0.04)	0.9%
21	Norway	2.7%	0.4%	(0.06)	2.3%
22	Portugal	2.3%	-6.1%	(0.09)	8.9%
23	Turkey	2.0%	27.4%	(0.09)	-19.9%
24	France	2.0%	-6.4%	(0.09)	8.9%
25	Italy	1.6%	-6.7%	(0.09)	8.9%
26	Qatar	0.1%	0.1%	(0.24)	0.0%
27	Belgium	-0.3%	-8.5%	(0.15)	8.9%
28	South Africa	-0.8%	4.1%	(0.15)	-4.7%
29	Spain	-1.6%	-9.7%	(0.26)	8.9%
30	Philippines	-2.7%	-7.8%	(0.23)	5.5%
31	Hong Kong	-2.9%	-3.4%	(0.34)	0.5%
32	Czech Republic	-3.4%	-8.6%	(0.27)	5.7%
33	UK	-3.5%	-6.4%	(0.24)	3.1%
34	Mexico	-3.6%	1.2%	(0.23)	-4.8%
35	Cyprus	-5.2%	-13.0%	(0.48)	8.9%
36	Indonesia	-5.9%	-4.8%	(0.33)	-1.1%
37	Austria	-6.2%	-13.9%	(0.29)	8.9%
38	Peru	-7.2%	1.4%	(0.43)	-8.5%
39	Chile	-7.3%	-12.4%	(0.33)	5.9%
40	Bahrain	-7.4%	-7.5%	(0.86)	0.0%
41	Poland	-8.2%	-9.8%	(0.36)	1.8%
42	Greece	-8.3%	-15.8%	(0.30)	8.9%

Rank	Country Equity Index	Return in $	Return in local currency	Sharpe ratio ($)	Currency change v $
43	Hungary	-9.4%	-8.9%	(0.41)	-0.6%
44	Thailand	-10.0%	-9.2%	(0.48)	-0.9%
45	Singapore	-10.2%	-11.8%	(0.58)	1.8%
46	Argentina	-11.3%	24.6%	(0.31)	-28.8%
47	Russia	-16.5%	-0.5%	(0.55)	-16.1%
48	Colombia	-17.6%	-13.3%	(0.49)	-5.0%
49	Egypt	-20.8%	-22.3%	(0.85)	2.0%
50	Brazil	-22.3%	0.4%	(0.49)	-22.6%

FIGURE 4. Market perfromance US versus major indices 2020 (US$) SOURCE: Oxford Metrica.



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Dr Rory Knight, is Chairman of Oxford Metrica and the investment committee at the John Templeton Foundation. He was formerly Dean of Templeton, Oxford University's business college. Prior to that Dr Knight was the vize-direktor at the Schweizerische Nationalbank (SNB) the Swiss central bank.

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