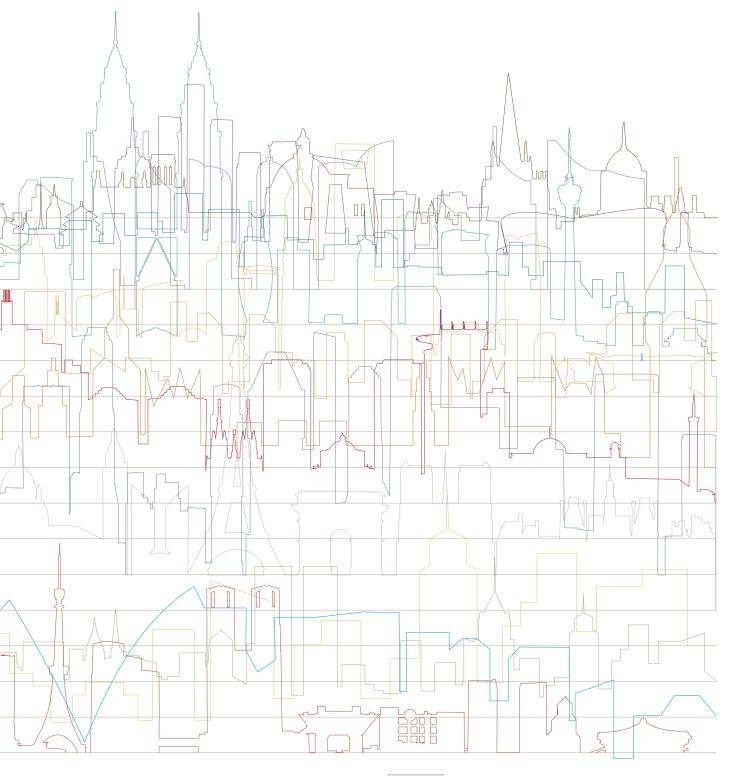
INTERNATIONAL EQUITY MARKETS AN ERA OF LOOMING UNCERTAINTY



The first-half of 2018 has experienced the highest volatility for the last ten years. This is the most troubling development identified in the first International Equity Review. It presages a new and uncertain phase in the evolution of equity markets resulting from equally new and increasing uncertainties in the world order. Most markets were down for the half-year, and all exhibited increases in volatility, many of these large enough to the point of becoming alarming. Three factors were at work: the overall outlook for business, geo-political factors, principally the risk of trade wars, and divergent central bank policies. However, these factors are working in different directions, and it is difficult to predict which will prevail.

The US versus the world

In many ways the US is at odds with the rest of the world. President Trump's foreign policies are causing considerable alarm, and this is shaking equity markets around the world. His aggressive tariffs against China and Europe, the deconstruction of NAFTA, his contradictory approach to Russia - hard sanctions but soft talk - and his criticism of other

THE FIRST-HALF OF 2018 PRESAGES A NEW UNCERTAIN PHASE FOR INTERNATIONAL EQUITIES US EQUITIES OUTPERFORM THE REST OF THE WORLD BY 6.95% NATO members, all contribute to the unease. However, his domestic policies such as tax reforms are bearing fruit, with excellent recent employment numbers and robust corporate earnings. Meanwhile, as central banks around the world continue to try to come to terms with

the consequences of their loose policies since the crisis (in Europe the ECB is continuing to pump €30 billion a month into the financial system) the Federal Reserve is embarked on a programme of increasing interest rates (nevertheless also criticised by the President). The combination of these contradictions and contrasting policies has ushered in a unique interval in world equity markets performance as shown in Figure 1, which reports the performance of the US equity market set against the rest of the world.

In the second half of 2017 both markets performed well, delivering an almost identical return of around 10% for the period. 2018 opened with an explosive 18% return in January in both which was then promptly reversed in February. Nevertheless the correlation between the US and the rest of the world held, although with a significantly higher level of volatility, until the onset of Trump's trade wars in April. Since then, US returns have diverged markedly from the rest. The US has shown a modest net positive return for the first half of 2018 of 1.67%, whereas the rest of the world posted a loss of 5.28% for the same period. This parting of the ways may continue, with the only common feature being volatility. The prospect of trade wars is certainly rattling the markets as reflected in increased volatility. However, encouraging economic prospects in the US have kept equities there buoyant - although price levels there probably do not yet reflect the full damaging consequences of the trade war. Divergent central bank policies have also widened the gap in equity performance as the dollar has strengthened. (Currency effects account for almost half of the 6.95% difference between the US equity market and the rest of world in performance - see below). As in the political world, the US has embarked on a different path, and this is having a signal effect on markets.

Emerging markets are suffering

Emerging markets as a whole lost 7.68% in the first half of 2018. Figure 2 reports in US dollars the performance of the international equity markets in aggregate (as in the MSCI ACWI), in the US (as in the S&P500), in the rest of the world (as in the MSCI ACWI Ex-US), in emerging markets (as in the MSCI EM) and in the BRICs (as in the MSCI BRICS). The strengthening US dollar has been the key factor, firstly in financial terms as portfolio flows have diverted cash from the emerging markets to the US, secondly, in real economic terms as the US dollar debt burden in these markets has dampened prospects and, thirdly, with the US dollar the numeraire for reporting, as local returns have been further discounted on this basis in measurement terms. The BRICs fared slightly less poorly, with an aggregate loss of 5.6%, while overall the world lost 1.53%. Given the likelihood of further increases in the dollar as a result of Federal Reserve policies, emerging markets are likely to see rocky times throughout the rest of 2018.

A new era of high and unprecedented volatility

It may be that the first half of 2018 has ushered in a new era of extreme volatility in international equity markets. Most markets exhibited an unusually high level of volatility in the first half of the year. Figure one clearly shows that the last twelve months have been a year of two halves. The last half of 2017 equity markets rose with a relatively low variance in returns in stark contrast to the very volatile returns in 2018. Table 1 reports the results for 62 equity markets and includes a new metric, the Risk Multiplier (which measures the extent

to which volatility increased in 2018 relative to the second half of 2017 with volatility measured as the relative standard deviation in return for the relevant period). It is clear that the first half of 2018 has been the most volatile six-month period since the 2008 crisis. The scale of this is

EMERGING MARKETS
LOSE 7.68% IN THE
FIRST HALF OF 2018
US EQUITIES WERE 16
TIMES MORE VOLATILE
IN 2018 THAN
THE SECOND HALF
OF 2017.

unprecedented, with the US market sixteen times more volatile in 2018 than the preceding six months. Overall, the MSCI ACWI was 15 times more volatile, mostly attributable to the US. The UK had the third highest risk multiplier with a 19 times increase in volatility, perhaps reflecting the uncertainty surrounding BREXIT - well behind Japan (49 times) and Portugal (48 times). However, this volatility has not yet caused a major sell-off in equities. Although, this level of fluctuation in equity prices may portend a significant readjustment and in retrospect come to be seen as the 'new normal'.

Currency impacts on performance

Less than one third of the 62 markets in table 1 and figure 3 reported a positive return for the period. These comprised 16 micro markets plus the US, the latter being the only major market to deliver a positive return in dollar terms. The remaining 45 were negative. The worst performer was Argentina which lost 44.36%, 30.96% of which was attributable to exchange rate effects. The overall average equity loss was 3.84% with the attendant average exchange rate loss 3.45% - which implies that on average almost 90% of equity losses were attributable to exchange rate losses versus the dollar.



Figure 4 illustrates the powerful impact of currency effects on equity returns in the sixty-two markets. It will be seen that only eight of the currencies were affected positively by exchange rate movements against the dollar. Considering the scale of the currency impact by comparing figures 3 and 4 it will be seen that currency movements account for a major element of equity returns in an international portfolio. Figure 5 illustrates the impact of currencies on seven of the markets. The best performer was the Ukraine which enjoyed a recovery both in its equity markets and its currency. Russia and Japan both experienced a slight increase in the value of their currencies for the period but these were insufficient to avoid an overall loss in equity returns. Korea and China lost ground in both their equity and currency markets. The UK lost ground in currencies but experienced a slightly positive equity return.

The outlook

Equity markets are in uncharted territory with respect to the geo-political forces that affect expectations. These effects could result in a major repricing in the second half of 2018. That said, many economic signals remain positive,

and a recovery in the second half cannot be ruled out. Such finely balanced odds between the upside and downside will likely see a continuation of the

THE FUTURE IS NOT WHAT IT USED TO BE - YOGI BERRA

increased volatility experienced in the first half of 2018. What is clear is that the market has not yet assigned a high likelihood to a full-on trade war. However, if that were to change, markets should brace themselves for significant losses.

FIGURE 1. The US versus the rest of the world (\\$ returns)



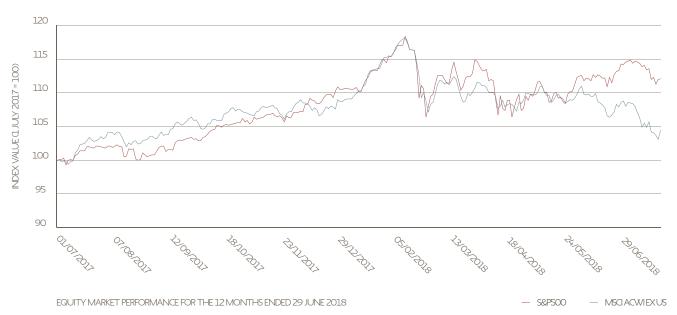


FIGURE 2. The US versus the rest of the world, emerging markets & BRICs (\$ returns)

SOURCE: Oxford Metrica.

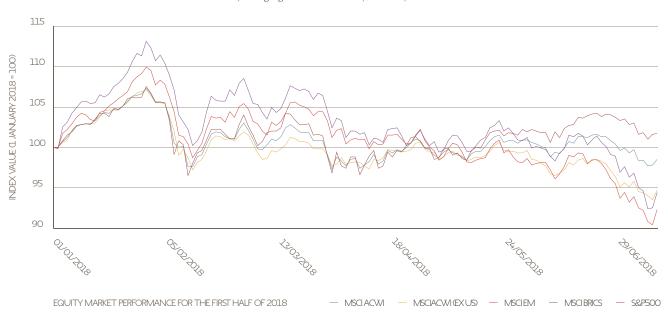
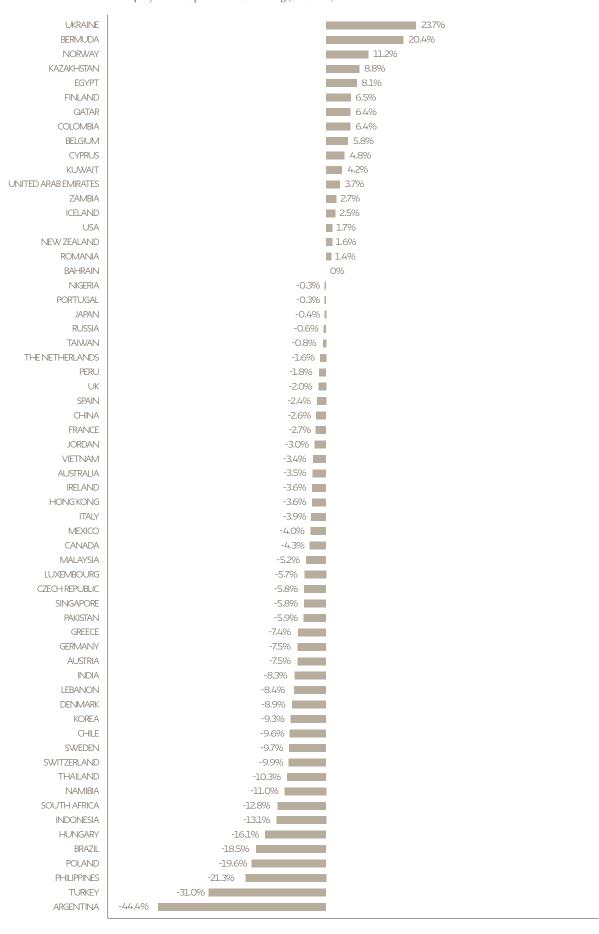




FIGURE 3. International equity markets performance ranking (\$ returns)

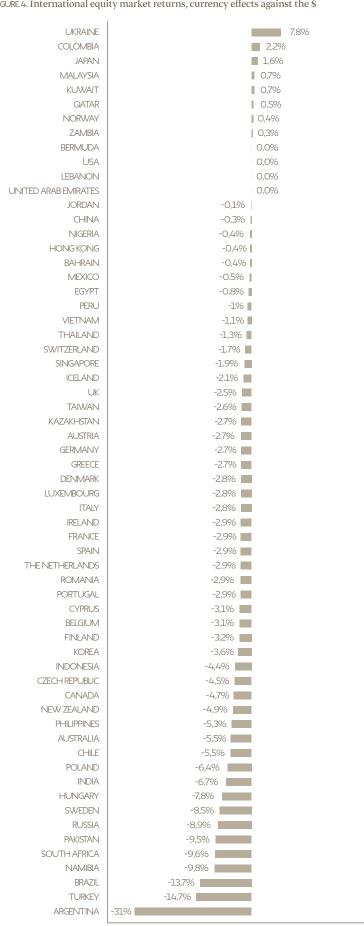
SOURCE: Oxford Metrica.



О М

FIGURE 4. International equity market returns, currency effects against the \$

SOURCE: Oxford Metrica.



% IMPACT ON \$ RETURN FOR THE FIRST HALF OF 2018





TABLE 1. International equity market performance ranking SOURCE: Oxford Metrica. 62 markets with shares traded in international exchanges.

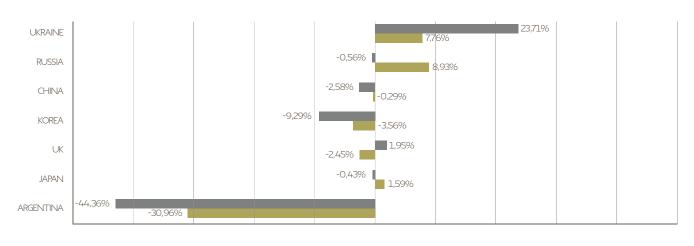
Rank	Country Equity Index	Return in \$	Standard deviation in return	Risk multiplier	Currency impact v \$
1	Ukraine	23.71%	9.33%	1	7.76%
2	Bermuda	20.41%	23.55%	1	0.00%
3	Norway	11.21%	13.44%	2	0.41%
4	Kazakhstan	8.80%	13.04%	4	-2.73%
5	Egypt	8.11%	12.76%	2	-0.76%
6	Finland	6.49%	11.49%	1	-3.15%
7	Qatar	6.36%	15.56%	1	0.52%
8	Colombia	6.36%	15.40%	2	2.17%
9	Belgium	5.76%	11.50%	1	-3.12%
10	Cyprus	4.82%	13.66%	1	-3.10%
11	Kuwait	4.21%	4.95%	1	0.69%
12	United Arab Emirates	3.67%	10.80%	4	0.00%
13	Zambia	2.66%	9.60%	1	0.26%
14	Iceland	2.50%	10.76%	2	-2.12%
15	USA	1.67%	13.58%	16	0.00%
16	New Zealand	1.61%	10.65%	6	-4.88%
17	Romania	1.38%	13.60%	1	-2.92%
18	Bahrain	-0.04%	7.01%	7	-0.42%
19	Nigeria	-0.32%	13.36%	2	-0.42%
20	Portugal	-0.34%	12.97%	48	-2.94%
21	Japan	-0.43%	14.13%	49	1.59%
22	Russia	-0.56%	21.87%	11	-8.93%
23	Taiwan	-0.80%	12.62%	9	-2.62%
24	The Netherlands	-1.60%	11.45%	16	-2.91%
25	Peru	-1.84%	9.63%	12	-0.97%
26	UK	-1.95%	19.57%	19	-2.45%
27	Spain	-2.42%	11.24%	1	-2.88%
28	China	-2.58%	17.49%	12	-0.29%
29	France	-2.67%	11.13%	6	-2.88%
30	Jordan	-2.96%	6.31%	1	-0.07%
31	Vietnam	-3.44%	21.35%	17	-1.05%
32	Australia	-3.47%	10.16%	3	-5.46%
33	Ireland	-3.63%	10.31%	3	-2.85%
34	Hong Kong	-3.64%	16.02%	7	-0.42%
35	Italy	-3.88%	15.81%	6	-2.84%
36	Mexico	-3.96%	16.12%	4	-0.54%
37	Canada	-4.30%	10.13%	4	-4.72%
38	Malaysia	-5.17%	11.16%	3	0.70%
39	Luxembourg	-5.73%	15.62%	1	-2.79%
40	Czech Republic	-5.80%	11.40%	4	-4.50%
41	Singapore	-5.80%	11.96%	2	-1.85%
42	Pakistan	-5.94%	12.99%	2	-9.50%
43	Greece	-7.36%	16.91%	1	-2.74%
44	Germany	-7.47%	12.98%	2	-2.73%
45	Austria	-7.53%	13.90%	3	-2.73%
46	India	-8.25%	11.65%	5	-6.74%
47	Lebanon	-8.25%	6.44%	1	0.00%
₹/	LOGITOIT	0.55 /0	U-TT /U	1	0.0070



Rank	Country Equity Index	Return in \$	Standard deviation in return	Risk multiplier	Currency impact v \$
48	Denmark	-8.87%	12.25%	1	-2.77%
49	Korea	-9.29%	14.69%	1	-3.56%
50	Chile	-9.60%	11.65%	2	-5.54%
51	Sweden	-9.68%	14.05%	1	-8.54%
52	Switzerland	-9.94%	11.47%	1	-1.70%
53	Thailand	-10.31%	10.68%	3	-1.29%
54	Namibia	-11.04%	23.48%	4	-9.81%
55	South Africa	-12.80%	19.43%	2	-9.61%
56	Indonesia	-13.13%	13.80%	1	-4.38%
57	Hungary	-16.06%	18.91%	2	-7.81%
58	Brazil	-18.50%	25.32%	2	-13.74%
59	Poland	-19.60%	17.72%	1	-6.36%
60	Philippines	-21.26%	14.64%	1	-5.32%
61	Turkey	-31.03%	23.82%	1	-14.72%
62	Argentina	-44.36%	36.01%	1	-30.96%
	Average	-3.84%		5	-3.45%
	MSCI	-1.53%	9.75%	15	
	MSCI EX US	-5.28%	9.23%	4	
	MSCI EM	-7.68%	12.19%	3	
	MSCI BRICS	-5.60%	13.64%	5	

FIGURE 5. Equity returns (\\$) and currency effects against the \$

SOURCE: Oxford Metrica.



% IMPACT ON RETURN FOR THE FIRST HALF OF 2018

■ EQUITY RETURN

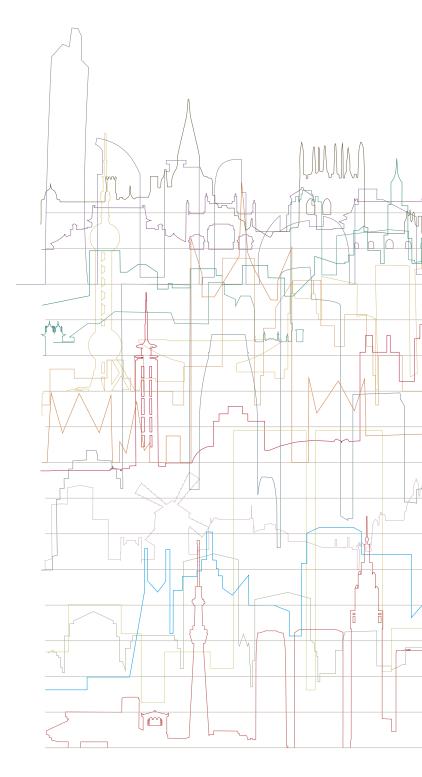
CURRENCY EFFECT



OXFORD METRICA

Oxford Metrica is a strategic advisory firm, offering informed counsel to boards. Our advisory services are anchored on evidence-based research in risk and financial performance. Our work includes statistical analysis and index construction for banks and insurers, risk and performance analytics for asset managers, due diligence support in mergers and highly customised services for corporate boards.

Dr Rory Knight, is Chairman of Oxford Metrica and a member of the Board of the Templeton Foundations. 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.



oxfordmetrica.com

