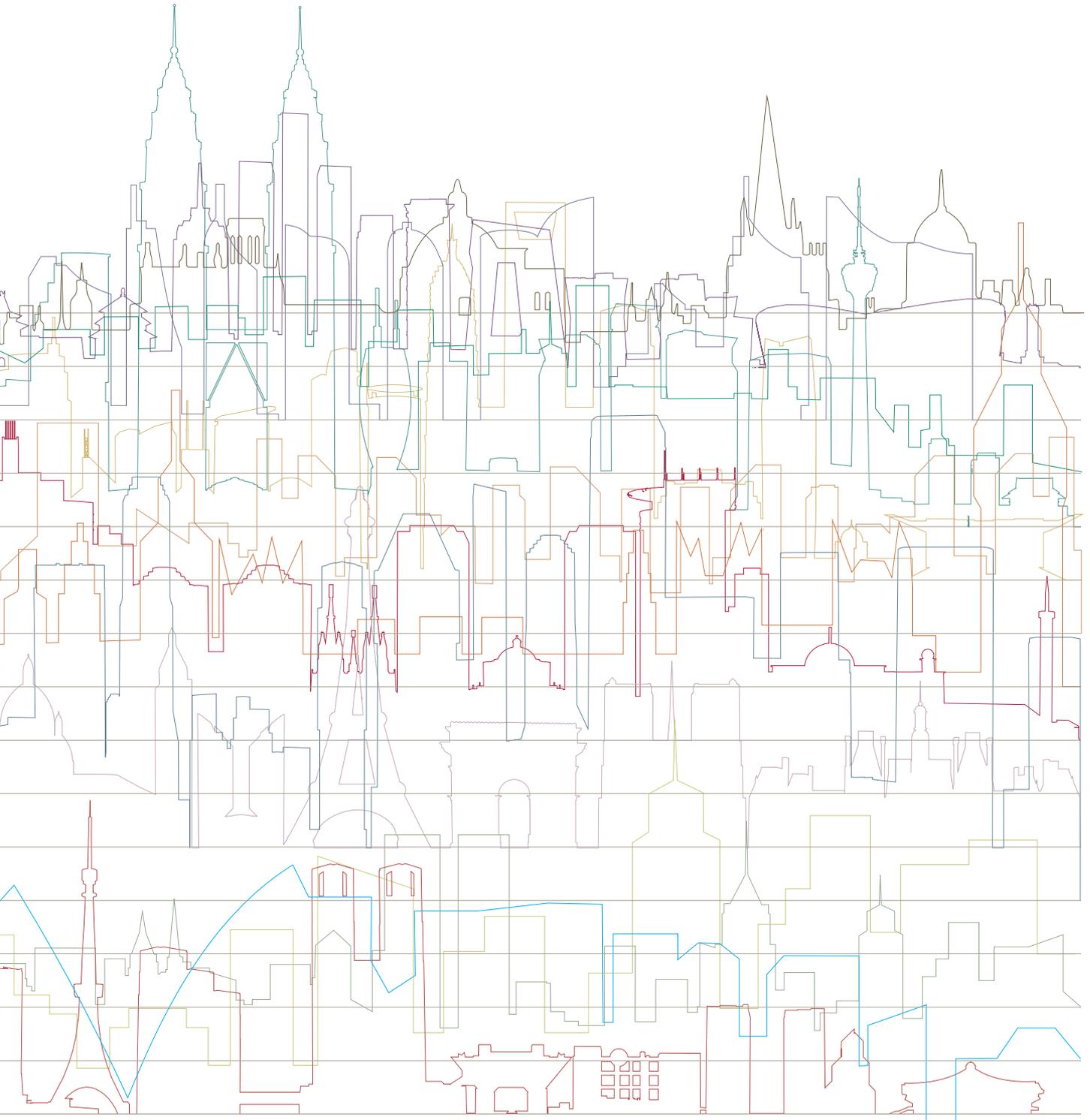


INTERNATIONAL EQUITY MARKETS GLOBAL 100 TECHS' DOMINANCE: GOOD OR BAD?



Despite much publicised ups and downs in recent months new technology titans Apple, Alphabet and Facebook still dominate world company rankings, a new analysis by Oxford Metrica has found. Their onward march, shouldering aside yesteryear's giants - Big Oil and the old well established industrial icons - continues irresistibly to forge ahead.

Oxford Metrica has been tracking the performance of the top Global 100 companies for six years now. Table 1 below presents its most up-to-date analysis, listing the Top 100 companies in 2018 by their ranking, their US\$ market capitalisation and country and also by changes in their percentage and ranking since 2012.

Who were the winners? Although much has changed within the Global 100, Apple continues to strengthen its grip on the number one spot, indeed briefly breaking through the \$1 trillion barrier - the first company to achieve this feat in the long history of finance. Thanks to a cumulative annual growth rate of around 10%, its value has grown by an amazing 89% over the six years - well above the average rate of 55% for the Global 100 group as a whole.

TECHNOLOGY STOCKS
HOLD SIX SLOTS IN
THE TOP 10 & ARE
WORTH MORE THAN
\$4 TRILLION - APPLE
BRIEFLY BREAKS THE
TRILLION DOLLAR
BARRIER

Trade wars and performance issues to do with its latest iPhone may have caused some slippage but it is still worth a staggering \$847 billion and as such dwarfs the vast majority of national economies. Were current geopolitical tensions to ease, Apple could possibly

punch back through the \$1 trillion barrier in early 2019. Other technology companies also dominate the Global 100. Amazon has jumped forty-five places in the last six years. Facebook, despite much public criticism, has shot up an extraordinary one hundred and fifty places in the same period. The 'Gang of Five' (Apple, Alphabet, Microsoft, Facebook and Amazon) hold top places and, if Alibaba is included, are collectively valued at more than an astounding \$4 trillion. To put this in perspective, it should be remembered that only three countries in the world have an annual GDP worth more than that. Table 2 reports the thirty-one new entrants to the Global 100 since 2012. Two conspicuous new entrants are tech firms Facebook and Alibaba, both of which have shot into the top ten, now at sixth and seventh positions respectively thanks to recent IPOs. Taiwan Semiconductor (TSMC) is another notable high-tech winner, having leapt forty-three places in the last six years to come in at the 36th position.

The overriding dominance of the technology giants has serious implications for both investment and for corporate governance. The unprecedented value allocated to them hands them major competitive advantage and unparalleled abilities to expand through acquisition. It is very likely that behind closed corporate doors they are even now eyeing up the convalescent banking sector (see below). In addition, many of these firms have unusually asymmetrical voting structures which privilege control by management at the expense of shareholders. Questions about competitiveness and anti-trust interventions are therefore bound to surface.

Who were the losers? Table 3 shows that thirty-one participants in the Global 100 in 2012 dropped out altogether. GE suffered the most spectacular fall. Having been a member of the

top ten for decades it has plummeted a breath-taking 98 places to crash out of the top 100 altogether. A possible break-up may mean it never again re-enters the listing. The most salient sector that lost relative and - in some cases - absolute value is Energy, Oil & Mining, reflecting the fall in oil prices and rise of renewables (see Figure 2). Six of the fourteen largest losers were in the oil, gas and commodities field, twelve of such companies disappearing altogether from the Global 100. Although Exxon Mobil managed to cling on to a place in the top ten, it fell eight places to the tenth spot, losing 20% of its nominal value in the process. BP plunged a spectacular twenty-two places to fifty-third position. Telecommunication companies fared little better, losing two companies out of the Global 100. Volkswagen disappeared altogether from the Global 100, reflecting the damage inflicted on its reputation and balance sheet resulting from the emissions scandal.

However other sectors did better. Alongside the dominance of technology companies another significant trend in the Global 100 was the resurgence of financial institutions in the after-math of the crash of 2008 - clear evidence of a real if somewhat belated recovery. Bank of America and Visa have climbed thirty-five and forty-six places to achieve fifteenth and thirteenth positions respectively. JP Morgan Chase entered the top ten at ninth position having risen eighteen places.

Taking a global view, Figure 1 shows that the countries which gained most ground were the USA - talk of American decline notwithstanding - and China. The US still dominates the Global 100 with fifty-five companies, up from forty-four six years ago and occupies the top six slots and nine of the top ten places. The main engine of US value hegemony has of course been the already noted dominance of its high-tech sector, further fuelled by the strengthening US dollar over the last six years. China, though still a long way behind America, is nevertheless relentlessly edging forward and now has eleven companies in the Global 100. In third place is the UK with a small but by no means contemptible seven companies in the listing - sending perhaps a bright if small signal out of fog-bound Brexit Britain.

HOW THE MIGHTY
HAVE FALLEN
ICONS IBM & GE
OUSTED FROM THE
TOP 10. IBM DOWN
TO 77 & GE OUT OF
THE TOP 100 FOR THE
FIRST TIME

Despite significant losses in overall value in October, the Global 100 companies as of 1 November 2018 still weigh in at \$19.8 trillion by market capitalisation - a sum approaching the total value of the NYSE, the largest stock exchange in the world. Moreover, the Global 100 companies are sitting on mountains of liquid cash in their balance sheets - mountains that are continuously and prodigiously edging upwards, reflecting a reluctance to invest on the part of these companies. In total, the cash on their balance sheets amounts to more than \$10.5 trillion - up by nearly 100% since 2012. The technology companies in the top ten alone hold nearly \$500 billion in cash, the largest being Microsoft with \$135 billion.

While recent US tax incentives may see these balances somewhat reduce, the unprecedented accumulation of cash in these companies augurs poorly for the larger world economy. It is essential for future world growth that these funds are productively mobilised internationally. The values attributed to these companies by global markets demand no less.

FIGURE 1. Global 100 by country

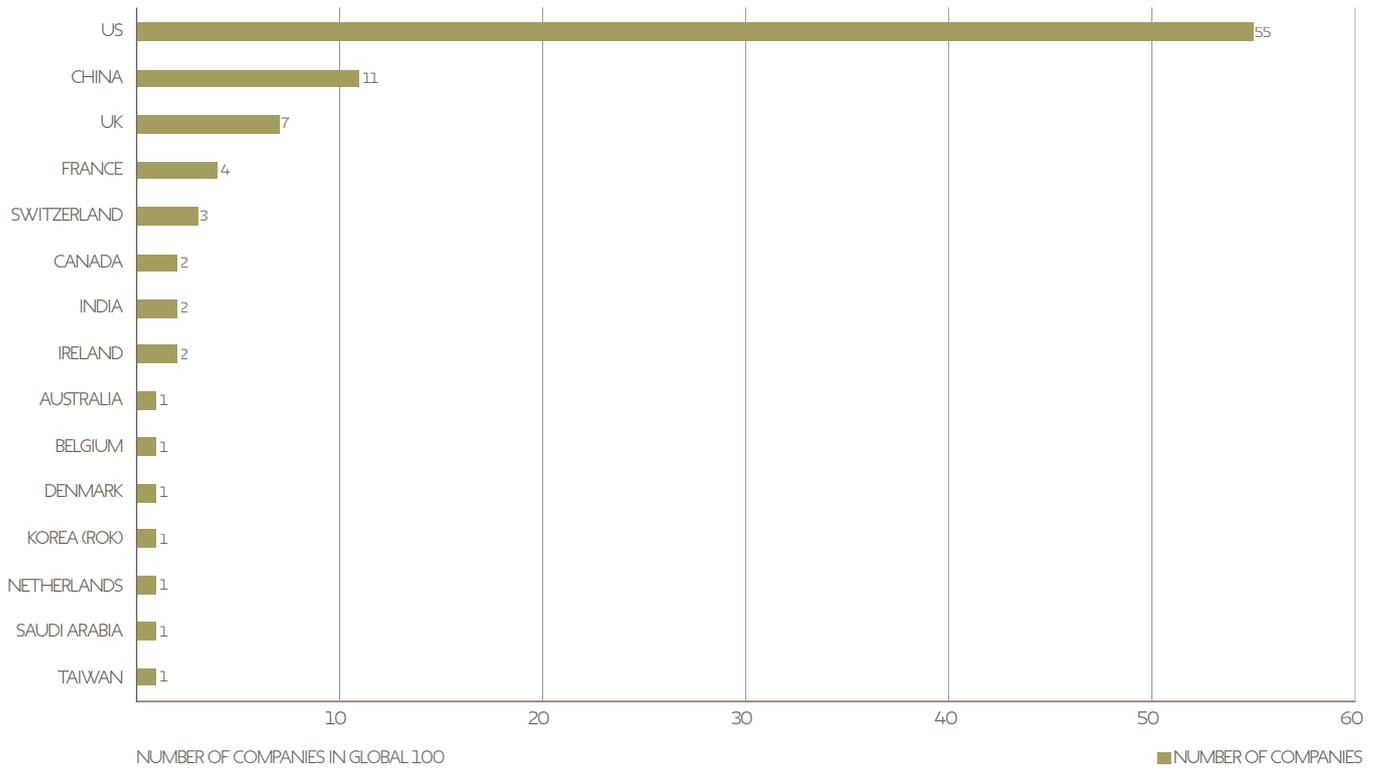
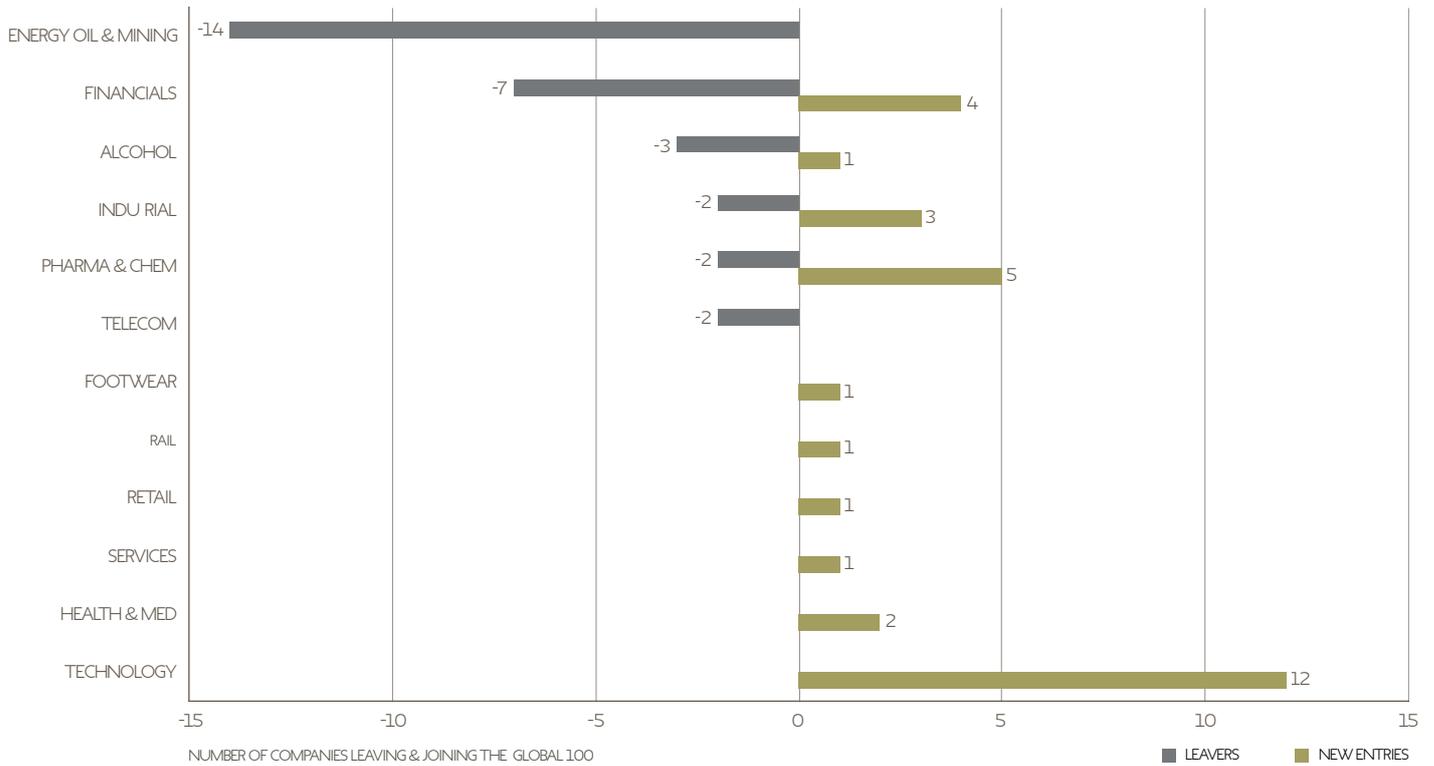


FIGURE 2. Changes in Global 100 since 2012



INTERNATIONAL EQUITY MARKETS GLOBAL 100 TECHS' DOMINANCE: GOOD OR BAD?

TABLE 1. Global 100

SOURCE: Oxford Metrica. Market values (\$ MM) at 1 November 2018.

Rank	Name	Rank Change on 2012	Market Capitalisation	Change on 2012 (%)	Cash (\$MM)	Country
1	Apple	0	1,057,080	89%	70,970	US
2	Microsoft	3	825,525	244%	135,880	US
3	Amazon	45	781,377	641%	29,765	US
4	Alphabet	3	753,309	239%	106,416	US
5	Berkshire Hathaway	8	506,397	137%	321,186	US
6	Facebook	150	436,852	855%	41,206	US
7	Alibaba	n/a	389,683	new listing	33,430	China
8	Johnson & Johnson	8	375,450	92%	19,364	US
9	JP Morgan Chase	18	362,536	129%	614,388	US
10	Exxon Mobil	-8	337,350	-20%	3,430	US
11	Tencent	83	324,204	395%	20,296	China
12	Walmart	-8	293,693	16%	15,840	US
13	Visa	46	279,146	200%	11,709	US
14	I & C Bank of China	-3	276,259	27%	1,495,561	China
15	Bank of America	35	269,890	169%	655,611	US
16	Royal Dutch Shell	-7	267,198	21%	19,468	Netherlands
17	Nestlé	-3	258,346	26%	6,771	Switzerland
18	Pfizer	1	252,422	36%	13,431	US
19	United Health	99	251,542	340%	17,341	US
20	Wells Fargo	2	250,798	41%	346,943	US
21	Samsung	2	238,325	35%	75,427	Korea (ROK)
22	Verizon	14	235,897	85%	2,538	US
23	AT&T	-8	223,044	13%	8,657	US
24	Novartis	2	223,015	37%	14,710	Switzerland
25	Proctor & Gamble	-8	220,938	17%	11,253	US
26	Intel	20	213,960	99%	13,186	US
27	Chevron	-15	213,938	-1%	7,686	US
28	Roche	-4	209,503	25%	9,055	Switzerland
29	PetroChina	-26	208,336	-18%	24,295	China
30	Cisco	33	207,256	129%	46,548	US
31	Mastercard	86	204,152	256%	8,493	US
32	Coca-Cola	-7	203,802	22%	18,847	US
33	Boeing	98	201,520	279%	9,990	US
34	Home Depot	27	201,231	117%	3,490	US
35	China Construction Bank	-17	200,531	7%	1,202,372	China
36	TSMC	43	195,973	149%	19,814	Taiwan
37	Merck	-7	195,768	41%	8,376	US
38	China Mobile	-32	191,394	-14%	70,769	China
39	Toyota	-5	190,931	44%	50,055	Japan
40	Ag Bank of China	-5	190,593	45%	1,401,402	China
41	Oracle	-13	185,037	24%	60,094	US
42	Comcast	10	173,518	75%	10,616	US
43	Walt Disney	24	170,780	94%	4,326	US
44	Ping An Insurance	84	168,949	210%	545,815	China
45	HSBC	-24	163,908	-9%	461,681	UK
46	Citigroup	-2	159,862	46%	973,780	US
47	Pepsico	0	158,632	48%	13,898	US
48	Total	-9	157,621	32%	28,805	France
49	Unilever	-7	154,295	39%	5,672	UK
50	LVMH	21	153,500	86%	5,780	France

Rank	Name	Rank Change on 2012	Market Capitalisation	Change on 2012 (%)	Cash (\$MM)	Country
51	AB Inbev	-19	148,712	11%	7,974	Belgium
52	Bank of China	-14	148,012	23%	421,924	China
53	BP	-22	145,130	6%	26,584	UK
54	McDonald's	15	137,239	57%	1,624	US
55	Philip Morris	-26	136,907	-8%	5,880	US
56	Netflix	1848	131,602	2890%	3,068	US
57	SAP	8	131,478	47%	5,797	Germany
58	NVIDIA	1202	128,185	1628%	7,943	US
59	L'Oréal	21	125,994	63%	2,351	France
60	Dow-Dupont	165	124,414	254%	9,751	US
61	Amgen	32	122,850	85%	29,921	US
62	Altria	33	122,213	90%	2,393	US
63	Medtronic	105	121,303	186%	11,004	Ireland
64	Abbott Laboratories	-15	121,082	18%	7,550	US
65	Adobe	477	119,964	612%	4,944	US
66	Nike	115	119,172	189%	4,269	US
67	AbbVie	n/a	117,886	new listing	3,743	US
68	Eli Lilly	54	116,463	106%	6,909	US
69	BHP Billiton	-49	115,246	-37%	15,889	Australia
70	Sanofi	-30	111,674	-4%	8,750	France
71	3M	37	110,786	83%	3,523	US
72	Union Pacific	41	107,733	86%	1,900	US
73	Honeywell	74	107,209	123%	11,653	US
74	China Petro & Chem	-6	107,130	22%	34,409	China
75	Novo Nordisk	-11	105,768	17%	2,883	Denmark
76	Royal Bank of Canada	-4	105,045	28%	191,519	Canada
77	IBM	-67	104,902	-52%	14,495	US
78	Salesforce	360	103,850	413%	3,427	US
79	China Merchants Bank	138	103,174	188%	160,025	China
80	Toronto-Dominion Bank	4	101,512	37%	99,625	Canada
81	SABIC	8	101,408	43%	16,607	Saudi Arabia
82	Accenture	70	100,766	116%	5,065	Ireland
83	Costco	84	100,188	135%	7,259	US
84	United Technologies	4	99,490	39%	13,799	US
85	BAT	-28	99,275	4%	3,052	UK
86	Paypal	n/a	99,176	new listing	9,587	US
87	Kweichow Moutai	95	98,846	140%	14,667	China
88	Tata	60	98,200	105%	4,670	India
89	Siemens	-23	97,831	10%	19,067	Germany
90	AstraZeneca	24	96,778	67%	3,777	UK
91	GlaxoSmithKline	-48	95,608	-13%	5,051	UK
92	NTT Docomo	4	95,168	48%	6,769	Japan
93	Thermo Fisher Scientific	297	94,113	322%	1,098	US
94	Broadcom	1055	92,401	1043%	4,136	US
95	Qualcomm	-44	92,392	-7%	35,910	US
96	UPS	-5	91,542	30%	4,841	US
97	AIA	52	91,405	92%	135,497	China
98	Linde	162	91,183	189%	11,049	UK
99	Reliance Industries	46	90,828	85%	9,496	India
100	Texas Instruments	161	90,249	187%	5,113	US
	Total		19,884,748	55%	10,524,672	

TABLE 2. New Entries to Global 100 since 2012

SOURCE: Oxford Metrics. Market values (\$ MM) at 1 November 2018.

Rank 2018	Name	Rank 2012	Rank Increase	Country	Sector
6	Facebook	156	150	US	Technology
7	Alibaba	n/a	n/a	China	Technology
19	United Health	118	99	US	Healthcare
31	Mastercard	117	86	US	Financial
33	Boeing	131	98	US	Industrial
44	Ping An Insurance	128	84	China	Insurance
56	Netflix	1,904	1,848	US	Technology
58	NVIDIA	1,260	1,202	US	Technology
60	DowDupont	225	165	US	Chemicals
63	Medtronic	168	105	Ireland	Medical
65	Adobe	542	477	US	Technology
66	Nike	181	115	US	Footwear
67	AbbVie	n/a	n/a	US	Pharma
68	Eli Lilly	122	54	US	Pharma
71	3M	108	37	US	Industrial
72	Union Pacific	113	41	US	Rail
73	Honeywell	147	74	US	Technology
78	Salesforce	438	360	US	Technology
79	China Merchants Bank	217	138	China	Banks
82	Accenture	152	70	Ireland	Services
83	Costco	167	84	US	Retail
86	Paypal	n/a	n/a	US	Technology
87	Kweichow Moutai	182	95	China	Alcohol
88	Tata	148	60	India	Technology
90	AstraZeneca	114	24	UK	Pharma
93	Thermo Fisher Scientific	390	297	US	BioTech
94	Broadcom	1,149	1,055	US	Technology
97	AIA	149	52	China	Insurance
98	Linde	260	162	UK	Chemicals
99	Reliance Industries	145	46	India	Industrial
100	Texas Instruments	261	161	US	Technology

TABLE 3. Leavers from Global 100 since 2012

SOURCE: Oxford Metrics. Market values (\$ MM) at 1 November 2018.

Rank 2018	Name	Rank 2012	Rank decrease	Country	Sector
106	GE	8	-98	US	Industrial
107	Industria de Diseno Tex	76	-31	Spain	Industrial
109	Equinor	77	-32	Norway	Energy, Oil & Mining
110	Commonwealth Bank	55	-55	Australia	Financials
113	Rio Tinto	56	-57	UK	Energy, Oil & Mining
114	Diageo	87	-27	UK	Alcohol
116	MUFG	97	-19	Japan	Financials
118	Volkswagen	58	-60	Germany	Auto
123	ConocoPhillips	90	-33	US	Energy, Oil & Mining
124	Vale	53	-71	Brazil	Energy, Oil & Mining
125	China Life	75	-50	China	Financials
131	CNOOC	60	-71	China	Energy, Oil & Mining
132	Banco Santander	82	-50	Spain	Financials
134	Rosneft	78	-56	Russia	Energy, Oil & Mining
138	Bayer	85	-53	Germany	Pharma & Chem
140	Schlumberger	62	-78	US	Energy, Oil & Mining
141	BASF	81	-60	Germany	Pharma & Chem
150	Bank of Nova Scotia	98	-52	Canada	Financials
151	Westpac	73	-78	Australia	Financials
154	Eni	70	-84	Italy	Energy, Oil & Mining
187	Gazprom	45	-142	Russia	Energy, Oil & Mining
188	China Shenhua Energy	83	-105	China	Energy, Oil & Mining
200	Aus & NZ Bank	86	-114	Australia	Financials
212	Occidental	99	-113	US	Energy, Oil & Mining
214	Vodafone	33	-181	UK	Telecoms
231	EcoPetrol	37	-194	Colombia	Energy, Oil & Mining
234	America Movil	54	-180	Mexico	Telecoms
Acquired	AB SAB	92	n/a	UK	Alcohol
Aquired	Ambev	41	n/a	Brazil	Alcohol
Delisted	Cementos Chimborazo	100	n/a	Ecuador	Energy, Oil & Mining
Not Ranked	G-Energy	74	n/a	Poland	Energy, Oil & Mining

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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.

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