

Global internet market capitalisation leaders: where is the EU?

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Each year, in May, Mary Meeker[1] releases her annual presentation about “Internet Trends”. The presentation includes a slide disclosing the market caps[2] of the global internet leaders. Even if the market cap can be a questionable indicator[3] that triggers different assessments[4] as well as conflicting views, the figures for 2018 (Table I) are nevertheless impressive both from a quantitative (scope of the figures) and qualitative (as it reveals a strong domination of both Asia and China) viewpoint. This paper is simply meant to take a note of the issue, to give some perspectives about the meaning of the phenomenon, and to ask a few questions about the positioning of the EU.

According to the World Bank (2018), the global GDP, as of 2016, was US\$77.564tn (current US\$)[5]. The market capitalisation of listed domestic companies (current US\$) reached US \$79.214tn in 2017, US\$64.915 in 2016, growing faster than the GDP. For instance, the market cap of the number one company, Apple, has been increasing from US\$418 in 2013, to US\$924 in 2018 (Meeker, 2018, p. 218). As of 2018, the total of the market caps of these leading twenty global companies, US\$5.788tn, is higher than France’s GDP, US\$2.810tn, higher than Germany’s, US\$3.781 and higher than the UK’s GDP, US\$2.757. Only China with US\$9.504 trillion and the USA with US\$16.920tn, have a larger GDP. As stressed by Meeker (2018, p. 40) tech companies are becoming a larger part of USA business: “In April 2018, they accounted for 25 per cent of USA market capitalization”.

Domination of Asian and US companies – market cap

With 11 US companies and 9 Chinese companies (in italics in Table I), from an EU viewpoint, the most striking element is the absence of any EU companies within these top 20 in 2018. If one compares this 2018 ranking with a 2012 ranking (Table II),[6] the picture remains the same (with obviously some companies going down and others going up) with only two exceptions (in bold in Table II): Experian (Ireland), ranking 16 in 2012, and the Otto Group (Germany), ranking 19. The two companies reached respectively a market cap of \$16 and \$10bn in 2012. Experian is a global information services company that provides credit services, analytical tools, and marketing services (www.experianplc.com/[7]). The Otto group is a globally operating retail and services group and one of the biggest e-commerce companies, mainly based in Germany and France but operating in more than 30 countries (www.ottogroup.com/en/die-otto-group/Facts-Figures.php)[8]. SAP (www.sap.com/index.html), a leading technology company that develops enterprise application software, although with an over US\$136.63bn cap (2018: <https://ycharts.com/companies/SAP> and €23.76bn of revenues as of 2017[9], is not included in any of these rankings.

Table I Global internet market capitalisation leaders, May 2018 (US\$billion)

Rank	Company	Region	Market value
1	Apple	USA	924
2	Amazon	USA	783
3	Microsoft	USA	753
4	Google/Alphabet	USA	739
5	Facebook	USA	538
6	Alibaba	China	509
7	Tencent	China	483
8	Netflix	USA	152
9	Ant Financial	China	150
10	eBay+ PayPal	USA	133
11	Booking Holdings	USA	100
12	Salesforce.com	USA	94
13	Baidu	China	84
14	Xiaomi	China	75
15	Uber	USA	72
16	Didi Chuxing	China	56
17	JD.com	China	52
18	Airbnb	USA	31
19	Meituan-Dianping	China	30
20	Toutiao	China	30
	Total		5,788

Note: ^aeBay + PayPal combined for comparison purposes though PayPal spun-off of eBay on 7/20/15

Source: Meeker (2018, p. 218)

Table II Global internet market capitalisation leaders 2012 (US\$billion)

2012	Company	Region	Market cap
1	Apple	USA	483
2	Google	USA	233
3	Microsoft	USA	226
4	Amazon	USA	113
5	Tencent	China	73
6	eBay	USA	65
7	Facebook	USA	57
8	Softbank	Japan	42
9	Baidu	China	35
10	Priceline	USA	30
11	Salesforce	USA	24
12	Yahoo	USA	23
13	Yahoo!Japan	Japan	19
14	Experian	Ireland	16
15	360Buy	China	13
15	Symantec	USA	13
17	LinkedIn	USA	12
18	Rakuten	Japan	11
19	Liberty Interactive	USA	10
19	NHN	South Korea	10
19	Otto Group	Germany	10

Source: Compiled by author from Simon (2016a, 2016b) and Gilles and Marchandise (2013)

South African, e-commerce company Naspers is also missing from both 2018 and 2012 rankings, although the company reached a €64bn market cap as of 2014, and \$104.19bn in 2018 (https://ycharts.com/companies/NPSNY/market_cap). Ant Financial, an online payment services provider, is a subsidiary of Alibaba, but was listed separately in 2017[10]. In spite of these minor differences the global landscape remains the same: a global market

dominated by Asian (7 companies) and US companies (12). Within Asia, one can just notice the domination of China. Japanese companies (Softbank, Yahoo! Japan and Rakuten) and South Korean companies (NHN) disappeared from the Top 20.

Domination of Asian and US companies – revenues

Of course, as noted, market cap is far from being a perfect indicator. It reveals how the stock markets are anticipating the future of a company rather than properly assessing their economic strength. For instance, if one takes a look at the rankings, according to one of the simplest indicators, revenues (Table III), one can notice some differences, even if the landscape does not change drastically. Indeed, most of the companies are already present in the other rankings (neither Apple, Microsoft, nor SAP are included in Table III). Asian and US companies still dominate. One finds ten US companies, seven Asian and only two European companies, Odigeo and Zalando,[11] ranked 16th and 19th, respectively. eDreams ODIGEO[12] (founded in 2000) is one of the world's largest online travel companies and one of the largest European e-commerce businesses, operating under four online travel agency brands: eDreams, GO Voyages, Opodo, and Travellink. Zalando[13] (founded in, 2008) is one of Europe's leading online fashion platforms morphing into a multi-service platform. In contrast, the market cap of ODIGEO is low, US\$0.7bn (under the "unicorn" threshold of US\$1bn), Zalando had a market cap of US\$13.5bn. Coming next, one finds, ASOS.com[14] (UK), ranked 28th, with a US\$8.56bn market cap and US\$1.4bn of revenues.

Domination of Asian and US companies – funding and access to finance

As noted in the introduction, the market caps of the top 20 companies outstripped GDP in 2017. The market caps of these leading companies have been ballooning as stressed by Crunchbase. Although there is no need to assume any mechanical link between market caps and capital markets, it is interesting to check whether the evolution of VC funding, for instance, echoes the evolution of markets caps. The answer is clearly positive:

Table III Largest internet companies, ranked by revenue, 2017

Rank	Company	Industry	Revenue (\$ billion)	FY	Employees	Market cap (\$ billion)	Region
1	Amazon	E-commerce, cloud	177.86	2017	566,000	737.693	The USA
2	Alphabet Inc.	Search, cloud, advertising	110.8	2017	80,110	780.601	The USA
3	JD Com	E-commerce	55.7	2014	137,975	64.26	China
4	Facebook	Social	40.65	2014	25,105	528.22	The USA
5	Tencent	Social	21.90	2014	38,775	563.55	China
6	Alibaba	E-commerce	22.99	2014	50,092	510.05	China
7	Booking	Travel	12.23	2014	18,500	92.94	The USA
8	Baidu	Search	10.16	2016	45,887	88.11	China
9	eBay	E-commerce	8.98	2016	12,600	43.73	The USA
10	Netflix	Entertainment	11.7	2017	5,400	146.43	The USA
11	Expedia Inc.	Travel	8.77	2016	20,000	16.17	The USA
12	Salesforce	Cloud computing	8.39	2017	25,178	85.06	The USA
13	Uber	E-commerce	6.5	2016	12,000	51 ^a	The USA
14	Rakuten	E-commerce	6.3	2015	14,826	12.28	Japan
15	Meituan-Dianping	E-commerce	5.4	2017	19,000	30	China
16	Odigeo	Travel	4.9	2015	1,700	0.707	Spain
17	NetEase	Social	3.63	2015	15,948	38.79	China
18	B2W	E-commerce	3.29	2016	2,376	3.30	Brazil
19	Zalando	E-commerce	5.55	2017	14,000	13.5	Germany
20	Groupon	E-commerce	3.143	2016	10,000	2.437	The USA

Note: Not available from the source, retrieved from Forbes, www.forbes.com/sites/markberniker/2016/03/29/why-uber-and-mega-cap-tech-may-never-go-public/

Source: https://en.wikipedia.org/wiki/List_of_largest_Internet_companies

According to projected data from Crunchbase, global venture capital deal and dollar volume in Q1 2018 eclipsed previous highs from Q3 2017, setting fresh quarterly records for post-Dot Com startup investment (Rowley, 2018)[15].

Now, if one takes a look at the active lead investors (see Figure 1), again one finds the same domination of Asian and US VC companies. As stressed by Rowley (2018): “what makes the top here – and just below the threshold for making it to the chart – are mostly just the usual suspects”. And the usual suspects are Asian and US companies: ten US companies, five Asian companies (Tencent, Softbank, Alibaba, IDG and Shunwei), one European company (from Switzerland: Index Ventures) and one Brazilian company (Canary). Rowley adds that these companies can be split into two major groups: established venture funds like Sequoia Capital and New Enterprise Associates (NEA), and corporate venture investors like GV (formerly Google Ventures), Tencent Holdings, Alibaba Group, and SoftBank. Again, these corporate venture investors are the leading IT companies: a self-enforcing virtuous circle?

Globally, VC funding nearly tripled between 2013 and 2015. China now, second only to the US (US\$72.3bn in 2015), accounts for three times more investment than all the countries of Europe put together, raising total funding of US\$49bn in 2015 (EY, 2016). The Atomico/Slush, 2017 reports notes an increase of the total capital invested over the last few years and a record-breaking 2017. However, the same report acknowledges that: “European countries still lag others such as the US and Israel in terms of capital invested per capita” (Atomico/Slush, 2017, p. 58).

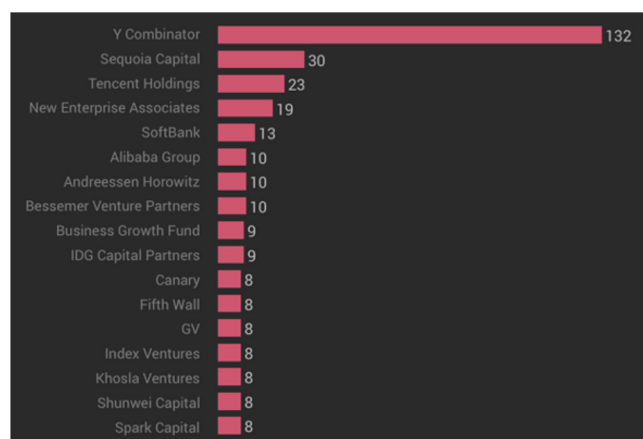
Initial public offerings (IPOs)[16] of Chinese companies are even taking place on the New York Stock Exchange (NYSE), not on any EU stock exchange, not even in the UK.

Large IT companies are large R&D investors

As market cap can be a dubious indicator, one may try to see whether the strength of these companies translates into a significant level of R&D expenditures. These high technology-oriented companies are indeed lead investors. Meeker (2018, p. 40) stresses that tech companies responsible for “a growing share of corporate R&D and capital spending”.

As noted by the Scoreboard (European Commission, JRC, 2016, p. 54), stressing the magnitude of investments in “Software and Computer Services”:

Figure 1 The global active lead investors in Q1, 2018 (US\$billion)



Source: Crunchbase News, 2018

The R&D growth rate of the Software & Computer Services sector is mostly due to the R&D growth of US companies such as Alphabet (22.4 per cent) and Facebook (80.6 per cent) and Chinese companies such as Baidu (46.2 per cent). The German company SAP (16.6 per cent) is the fourth contributor to the R&D growth of this sector.

However, as highlighted by the 2017 Scoreboard (European Commission, JRC, 2017, p. 5), “Software and IT hardware the EU shows persistent weakness in most indicators such as size and R&D/firm or sales/firm (in particular compared to the US). The EU/non-EU gap in these latter [...] sectors has widened over the last ten years”; with the notable exception of SAP. This is also in line with the previous tables; Experian appears as 1337 in 2016.

GAFA(M) (Google, Apple, Facebook, Amazon and Microsoft) and BATJ (Baidu, Alibaba, Tencent, and JD.com) companies are indeed large investors in R&D as illustrated in Table IV. However, their R&D expenditures are quite uneven as only three firms (Google/Alphabet ranked 1, Microsoft ranked 5 and Apple ranked 11) are among the top twenty of R&D investors, and only two (Facebook, ranking 3, and Yahoo!, ranked 6) in terms of R&D intensity.

Table IV adds the ranks of the companies within the top R&D investing companies to the ones listed in Table II (for 2017 only). However, to make the comparison more consistent across the three different sources, Naspers, Microsoft and SAP have been added to the 2017 data. The market cap of Ant Financial has been added to the market cap of Alibaba. Experian, although appearing only in the 2012 figures, has been added to the table.

Xiaomi is not listed among the top investors in this ranking as the company, being private, does not disclose data. The same holds for Airbnb, Uber and probably Uber’s Chinese major competitor Didi Kuadi. Neither Alibaba nor Naspers show up in the scoreboard. Their consolidated results (annual reports) do not give any indication about R&D expenditures.

Table IV R&D Expenditures of global internet market cap leaders (market cap: 2017, rank R&D: 2016)

2017	Company	Region	MC \$bn)	Rank R&D 2016		
				(top 2500 investors ^[20])	R&D in 2015(€ million)	
					Rank R&D Intensity (top 50)	
1	Apple	The USA	801	11	7.409	
2	Google/Alphabet	The USA	680	1	11.053	27
3	Microsoft	The USA	559.9	5	11.011	35
4	Amazon	The USA	476	215	589.7	
5	Facebook	The USA	441	29	4.423	3
6	Alibaba	China	345	NA		
7	Tencent	China	335	117	1.177	
8	SAP	Germany	103	49	2.689	40
9	Priceline	The USA	92	NA		
10	Naspers	S.Africa	90.87	NA		
11	Uber	The USA	70	NA		
12	Netflix	The USA	70	212	597.8	
13	Baidu	China	66	93	1.444	30
14	Salesforce	The USA	65	152	874.8	
15	Paypal	The USA	61	155	869.8	
16	JD.com	China	58	NA		
17	Didi Kuadi	China	50	NA		
18	Yahoo!	The USA	49	125	1.110	6
19	Xiaomi	China	46	NA		
20	eBay	The USA	38	140	972.7	
21	Airbnb	The USA	31	NA		
22	Yahoo!Japan	Japan	26	NA		
	Experiana	Ireland	19.9	1337	56	

Source: Compiled by author, R&D scoreboard 2016, 2017; ^ahttps://ycharts.com/companies/EXPGF/market_cap, June 2017

Subsidiaries may be an imperfect proxy. Youku Tudou was acquired by Alibaba Group in 2015, and ranks 1247 in the scoreboard (with €61.3m in R&D expenditure). Naspers owns about a third of Tencent (ranked 117th for R&D). However, e-commerce companies appear to have a much lower R&D intensity, for instance, only 0.6 per cent for Amazon.

Discussion

The rather weak position of the EU is roughly in line with the analysis of a sample of the so-called “unicorns”,^[17] based on the same indicator, market cap (Simon, 2016a, 2016b). Asia and the USA were riding in front of the EU, although Atomico is more positive about how EU companies are performing in that field (Atomico, 2015; Atomico/Slush, 2017)^[18], stressing that “Great companies can come from anywhere”. Experts, quoted by the Atomico State of European Tech 2017 report, deem that diversity of EU cultures is an advantage.

In contrast, one parameter that could contribute to this output of EU firms is the size of the market. As stressed by GSMA Intelligence (2016, p. 31):

A key challenge for European developers and internet companies is the lack of scale in national markets compared to for example the US, or emerging markets in Asia such as China and India.

Forge *et al.* (2012) emphasised the same issue, from another angle, in their case study of Amazon: “The more advantageous business environment in the USA was a key factor for Amazon’s successful start-up and growth in its first few years”. Indeed, the business environment does vary from countries with a highly favourable environment for doing business and innovation (for instance, Denmark is ranked 3rd for the ease of doing business in the World Bank *Doing Business 2018* rankings) to countries with a less supportive one. The EU’s Digital Single Market strategy has been designed to address this imbalance, but it may take some time to yield solid results. Even with a harmonised legal framework, the EU regulatory framework may be less flexible than the US or the Chinese one, as illustrated recently by the debate around the impact of the new General Data Protection Regulation (GDPR, 2018)^[19].

Even if the amount of funds available in Europe has been increasing over the past decade, there are still major obstacles to the EU capital market integration, as stressed by Veron (2015): “Major obstacles to capital markets integration remain untouched, including divergent accounting enforcement regimes, fragmented market infrastructure, or incompatible frameworks for the taxation of financial investments”.

Another feature of the explanation has to do with the strong growth of these leading firms and among them, especially the Chinese ones, with double digit growth. For instance, Alibaba, Tencent, and JD.com have kept an average quarterly growth rate of over 40 per cent during the past 10 quarters, in which Tencent and Alibaba both saw a 55 per cent revenue growth in 2017 (China Tech Insights, 2017b). Baidu did not fare as well but, nevertheless, did experience double-digit growth. The impact of this growth is clearly revealed whenever these firms are launch an IPO: Alibaba was the largest in 2014 (raising US\$22bn), and it is predicted that Xiaomi may raise US\$10bn and reach a US\$100bn market cap (Custer, 2018). Meituan-Dianping (ranked 19th in Table I) is reportedly planning to go public with an offering that could push its valuation from the current US\$30bn to upwards of US\$60bn (Dowling, 2018).

As a final note, one should recall the strong links between Asia and the USA, and the strengths of the Asian communities in the US in Silicon Valley, for example. The USA–Asia relationship has been taking a growing share in global networking (De Prato *et al.*, 2013). Relationships between China and the USA have intensified over the past decade, although this may be affected by the policies of the Trump administration.

Notes

1. Partner at the venture capital firm Kleiner Perkins Caufield & Byers.
2. Market capitalization (also known as market value) is the share price times the number of shares outstanding (including their several classes) for listed domestic companies.
3. Another value is the “enterprise value”: the theoretical takeover price. It is more comprehensive than market cap, which only includes common equity. Enterprise value is calculated as the market cap plus debt and minority interest and preferred shares, minus total cash and cash equivalents. From a micro-economics or business management viewpoint, other criteria like revenues, EBITDA (a measure of operating profit and net income), and of course profit provide sound metrics.
4. Hence, the variations of the market cap of the companies according to the various sources. Most of the time the way it has been computed is not disclosed, if the equation is simple enough (share price x number), but the perimeter of the company may indeed vary. For instance, for Amazon, Wikipedia gives US\$737 billion, Yahoo US\$563 billion. According to other sources, Tencent is ahead of both Alibaba and Facebook with a US\$500 billion market cap. These numbers should be seen as mere indicators.
5. <http://data.worldbank.org/indicator/CM.MKT.LCAP.CD> <http://databank.worldbank.org/data/reports.aspx?source=2&type=metadata&series=CM.MKT.LCAP.CD>
6. 2012 ranking from another source, Meeker introduced this ranking in 2014: www.kpcb.com/blog/2014-internet-trends. Same remark: no EU firm in the 2014 ranking.
7. A credit service company initially, created in 1996 as a spin-off of US TRW. The group employs 17,000 people across 37 countries, and had revenues of US\$4.3 billion in 2017, www.experianplc.com/media/1323/8151-exp-experian-history-book_abridged_final.pdf.
8. The Otto Group is group of retailers and retail-related service providers with around 50,000 employees and sales of €12.5 billion. Through 123 major companies, it has a presence in more than 30 countries in Europe, North and South America as well as Asia. See Annual Report 2016-2017, www.ottogroup.com/media/docs/en/geschaeftsbericht/Otto_Group_Annual_Report_16_17_EN.pdf
9. www.sap.com/corporate/en/company.html
10. If one add its market cap to the one of Alibaba, it will go up one rank, overtaking Tencent. See Simon, 2016a, part 2: case studies, Alibaba and Tencent.
11. One Brazilian company, B2W (an e-commerce company founded in 2006), appears in the 2018 ranking. The company was not present in 2017. The company is the e-commerce subsidiary of Lojas Americanas, a Brazil-based company primarily involved in the operation of over 1000 department stores across Brazilian territory.
12. www.edreamsodigeo.com/
13. www.zalando.com/
14. Asos is an online platform engaged in the retail of fashion and beauty products for men and women. <http://us.asos.com/>
15. The Crunchbase analysis is based on reported data for 4,951 venture funding rounds from the last quarter that identified around 1,940 distinct investors – both individual and institutional – that led at least one round in Q1.
16. An initial public offering (IPO) is the process through which a company makes the transition from a privately held entity to a public company with stock traded on one of the major stock exchanges. Typically, a company going through an IPO is young and relatively unknown, therefore IPOs generally are considered riskier investments. However, established private companies occasionally decide to “go public” in order to raise more capital. See www.pbs.org/wgbh/pages/frontline/shows/dotcon/thinking/primer.html
17. Companies that have been valued, at some stage of their life-cycle, at one billion dollar market capitalization. The term was coined by VC analyst Aileen Lee (2013), who also worked with Kleiner Perkins Caufield & Byers before founding Cowboy Ventures.
18. Atomico is an international venture capital firm that invests in technology companies around the world. Atomico was co- founded in 2006 by Kazaa and Skype co-founder, Niklas Zennström. Atomico has been releasing reports on unicorns since 2015.
19. As noted in the Villani (2018, p. 22) report, the GDPR is “*Welcomed by some, scorned by others – for a multitude of reasons in both cases*”. The Hall and Pesenti (2017, p. 68) UK report stressed the

same issue: “some commentators, suggest that implementing and complying with the regulation will encounter challenges in practice”.

20. The 2500 companies are grouped into four main sets: the top 590 companies based in the EU, 837 companies from the US, 356 companies from Japan, 327 companies based in China and 390 companies from the rest of the world (RoW group, comprising companies based in Taiwan (111), South Korea (75), Switzerland (58), Canada (32), and a further 19 countries).

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