



# INVESTMENT TRENDS MONITOR



UNITED NATIONS  
UNCTAD

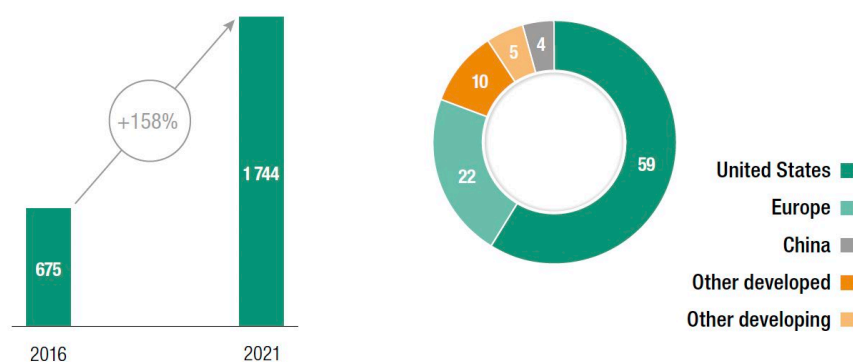
## Digital MNEs are growing at breakneck speed

**The top 100 MNEs are changing the nature of cross-border investment. Their international production footprint, which was already expanding, grew even faster during the pandemic.**

### H I G H L I G H T S

- *Multinational enterprises (MNEs) in the digital economy are transforming international trade and investment.* UNCTAD's new ranking of the top 100 digital MNEs, which updates the first edition published in [WIR2017](#), shows the impact of the COVID-19 pandemic on the performance and global asset footprint of the largest MNEs.
- *Total sales of the top 100 were almost 160% higher in 2021 than in 2016, an average increase of 21% per year.* Net income increased by 23% per year with a significant growth spike of +60% between 2020 and 2021. This compares with an essentially flat trend for the traditional top 100 MNEs, excluding those in the technology sector.
- *The digital top 100 is very dynamic.* While the ranking of the traditional top 100 is relatively stable with 3-4 new MNEs every year, the digital top 100 shows significant change. Over the 5-year period, as many as 39 new companies joined the ranking replacing others that were acquired or outranked. The number of internet platforms on the list increased from 11 to 15, with 9 new entrants. In the digital solutions segment, the number of MNEs increased from 26 to 34, and in the e-commerce segment from 18 to 21.
- *The digital top 100 remains highly concentrated geographically.* Although several of the new firms in the ranking have their headquarters in developing countries, the list is still dominated by companies from developed economies, mostly from the United States (59) and Europe (22). A few digital MNEs from South-East Asia and Latin America are gaining global relevance.

**Figure 1. Increase in sales of the top 100 digital MNEs, and geographical distribution of headquarters**  
(Billions of dollars, number of MNEs)



Source: UNCTAD.

- *The “FDI lightness” of the digital top 100 increased further.* Their foreign asset footprint decreased since 2016, while foreign sales grew. The ratio between foreign sales and foreign assets increased by 11%, with most of the rise taking place in 2021 (+9%) due to the spike in sales caused by the pandemic.
- *Despite this overall trend, the pandemic did push some digital MNEs to invest in overseas operations.* e-Commerce MNEs, in particular, increased greenfield investments (mostly in logistics and distribution projects) by 120% in 2020 and a further 10% in 2021.
- *The growing relevance of digital MNEs in international production generates both challenges and opportunities for developing countries.* On the one hand, FDI by digital MNEs often brings relatively few physical assets and employment. On the other, it can stimulate the development of all-important digital (hard and soft) infrastructure and e-commerce opportunities for local firms.

\* \* \*

## Context

The development opportunities related to the digital economy can be significant; but there are also challenges. It can provide a boost to competitiveness across all sectors, new opportunities for business and entrepreneurial activity, and new avenues for market access and participation in global value chains. Digital companies have shown incredible growth momentum in the last decade, which was further boosted by the pandemic.

Digitals are a very dynamic group of companies that, based on firm-specific advantages in intangibles, network effects and digital assets can reach scale in a short time and expand abroad seamlessly. They are transforming not just traditional industries but also traditional forms of international production (trade and investment in global value chains). As such, the global expansion of digital MNEs is highly relevant for the development strategies of host economies.

UNCTAD's *World Investment Report 2017* ([WIR2017](#)) included the first ranking of the top 100 digital MNEs and investigated the effect of digitalization on global investment patterns. This Special Issue of the Global Investment Trends Monitor – published during UNCTAD's eCommerce Week – presents an update of the ranking and of the investment footprint of digital MNEs. The update is timely because:

- (i) a 5-year time span is sufficient to look at evolutionary trends,
- (ii) the period includes the COVID-19 pandemic, which has provided a huge boost to digital activities, and
- (iii) ongoing international tax reforms and the latest development in the Digital Services Act of the European Union, which include specific rule changes addressing the digital economy, make it interesting to assess which firms and activities will be most affected.

The rapid growth of the top 100 is evident from the increase over the 6-year period of sales (158%), assets (165%) and net income (181%) (figure 2).

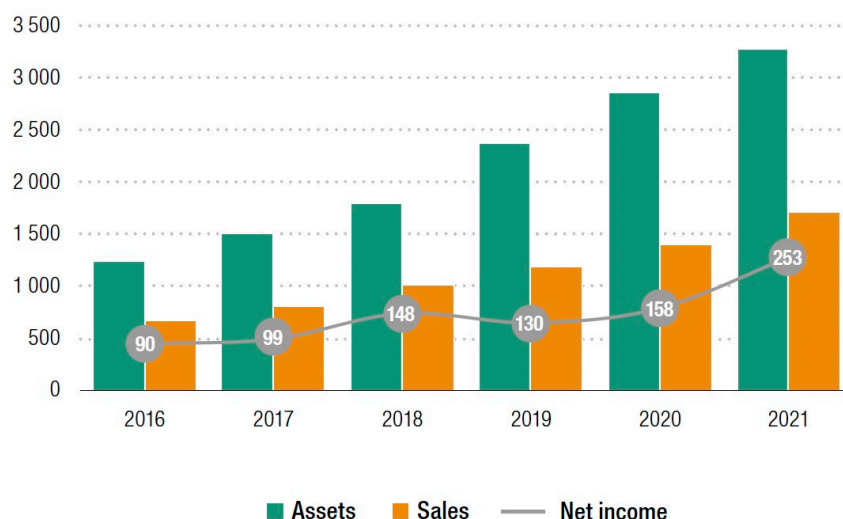
### UNCTAD's Top 100 Digital MNEs

#### Key criteria for inclusion

- Largest global publicly listed companies
- Core business in one of four digital economy segments: platforms, solutions, content, e-commerce
- More than 10% of assets and/or sales outside their home market

For methodology, see [World Investment Report 2017](#), and UNCTAD Insights in [Transnational Corporations](#), April 2022.

**Figure 2. Evolution of assets (TA), sales (TS) and net income for the top digital MNEs, 2016–2021**  
(Billions of dollars)



Source: UNCTAD.

## The top 100 digital MNEs is highly dynamic

The inherent dynamism of digital companies, coupled with the acceleration in the adoption of digital solutions caused by the pandemic, is reflected in a significant number of new companies in the top 100. In 2020 and 2021 abundant cash reserves, low interest rates and soaring equity markets fueled M&A activity and Initial Public Offerings (IPO). Tech start-ups made popular by the pandemic digitalization rush tapped equity markets to scale up and expand their businesses (*WIR2021*). Half of the new entrants in the ranking had their IPOs in the last 5 years. In the United States, IPO volumes almost doubled in 2021, after already high levels in 2020, with the debut of companies such as the dating app Bumble, Nubank, the Brazilian financial technology group, and the ride-hailing company Grab (Singapore). For many of these companies it will take time before they can leverage home market strength and expand abroad. They are therefore not yet included in the top 100 digital MNEs. But their fast growth and financial firepower means that the ranking will remain dynamic over the coming years, with many potential entrants in the pipeline.

In the updated ranking, the segment that saw the highest relative number of new entrants was internet platforms (9 out of the current 15) and e-commerce (9 out of 21), with the IPO of relevant digital firms that were private during the compilation of the first top digital ranking like Airbnb (United States), Didi Global (China), Uber (United States) and WeWork (United States). In both cases new entrants represent almost half of the companies in the group. In absolute terms the digital solutions segment had the highest number of new entrants (14) (table1).

Among the companies that fell out of the ranking over the 5-year period, almost a third (14) were acquired by others. This is the case of LinkedIn (acquired by Microsoft), Priceline (Booking Holdings, United States), Viacom (National Amusement, United States), Sky (Comcast, United States), and others. Another third were outranked by other companies, e.g. Mediaset (Italy), Konami (Japan) and Factset (United States).

Digital solutions is the segment with the most companies (34) followed by digital content, however they only accounted for 31% of the total revenue of the top 100 in 2021. E-commerce is the segment with the highest share of revenues in the ranking, due to the presence of big firms like Amazon (United States) and Alibaba (China). These two companies together correspond to 34% of revenues and 17% of assets of the top 100.

**Table 1. Top Digital MNEs: descriptive statistics, 2017 and 2022 rankings**  
(Number of firms, billions of dollars, per cent)

		Number of MNEs			Average sales per company (\$ billion)		
		2017	2022	Change	2017	2022	Change (%)
Internet platforms	Search engine	3	4	<b>+1</b>	27.6	71.9	<b>160.6</b>
	Social network	5	7	<b>+2</b>	5.5	19.9	<b>261.0</b>
	Other platforms – shared economy	3	4	<b>+1</b>	4.6	13.9	<b>202.1</b>
	<b>Total</b>	<b>11</b>	<b>15</b>	<b>+4</b>	<b>11.3</b>	<b>32.2</b>	<b>184.6</b>
Digital solutions	Electronic payments	5	4	<b>-1</b>	6.2	11.2	<b>81.1</b>
	Fintech	-	2	<b>+2</b>	-	15.1	<b>..</b>
	Software provider	-	2	<b>+2</b>	-	3.6	<b>..</b>
	Other digital solutions	21	26	<b>+5</b>	3.7	6.0	<b>61.0</b>
	<b>Total</b>	<b>26</b>	<b>34</b>	<b>+8</b>	<b>4.2</b>	<b>7.0</b>	<b>66.0</b>
E-commerce	Delivery	-	3	<b>+3</b>	-	3.5	<b>..</b>
	Internet retailer	13	13	-	11.9	50.9	<b>327.1</b>
	Other e-commerce	5	5	-	4.8	7.8	<b>63.4</b>
	<b>Total</b>	<b>18</b>	<b>21</b>	<b>+3</b>	<b>9.9</b>	<b>33.9</b>	<b>242.2</b>
Digital content	Digital media	22	9	<b>-13</b>	11.9	16.1	<b>35.1</b>
	Games	7	9	<b>+2</b>	4.5	11.9	<b>165.1</b>
	Information and data	16	12	<b>-4</b>	3.7	4.8	<b>29.1</b>
	<b>Total</b>	<b>45</b>	<b>30</b>	<b>-15</b>	<b>7.8</b>	<b>10.3</b>	<b>32.2</b>
<b>Total</b>		<b>100</b>	<b>100</b>	<b>-</b>	<b>7.6</b>	<b>17.4</b>	<b>129.0</b>

Source: UNCTAD.

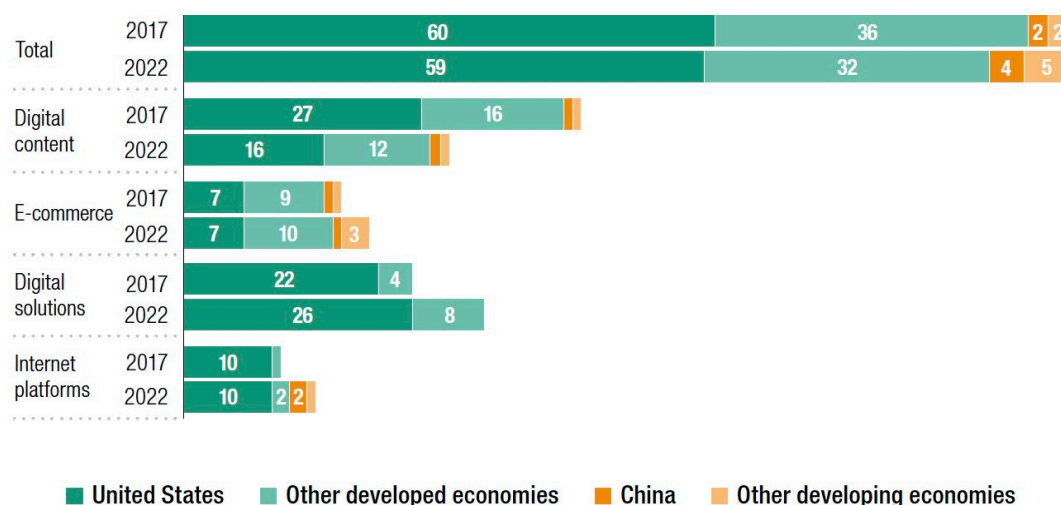
Notes: Years correspond to when the rankings were elaborated. The data on sales correspond to fiscal years 2015 and 2021, respectively.

## The geographical distribution of the top 100 is still very concentrated

The ranking is still dominated by companies from developed economies, mostly from the United States (59) and other developed economies (32). However, there are companies gaining global relevance from South-East Asia and Latin America, e.g. Mercadolibre from Argentina, and Joyy and Sea from Singapore (figure 3).

Especially for e-commerce MNEs local knowledge is proving an important factor, as evidenced by the higher share of non-American MNEs. Geographical diversity also increased in the internet platforms segment due to the entry of companies from China, Singapore and Europe. In particular, the Chinese search engine Baidu has increased its foreign operations since 2016, including by entering a partnership with the American social network company Snap. Despite their economic importance, preeminent Chinese digital companies (like Meituan and JD.com) are not represented in the ranking due to their focus on the large domestic market.

**Figure 3. Geographical breakdown of the top 100 digital MNEs, 2017 and 2022**  
(Number)



Source: UNCTAD.

## Digital MNEs have a light international asset footprint

Digital MNEs can penetrate foreign markets with little or no investment in physical assets; the ratio between the share of sales generated by foreign affiliates and the corresponding share of foreign assets (the FDI lightness index) is very high compared to that of UNCTAD's regular top 100 MNEs. The sales of traditional MNEs in UNCTAD's top 100 (excluding technology MNEs) between 2016 and 2020<sup>1</sup> grew at a much lower rate than those of top digital companies (table 2). The difference between digitals and traditional MNEs is even more striking when looking at the FDI lightness index; for pure platform companies it is more than double that of traditional MNEs.

**Table 2. Sales growth rate between 2016–2020, and FDI lightness: comparison between traditional top 100 MNEs and top digitals**  
(Per cent and ratio)

	total sales % increase	FDI lightness		
	2016–2020	2016	2020	Change (%)
Traditional MNEs	10	1	0.99	-1
Internet platforms	212	2.25	2.19	-3
Digital solutions	110	1.85	2.46	33
E-commerce	222	1.03	1.08	4
Digital content	68	1.32	1.28	-3
<b>Top digital</b>	<b>108</b>	<b>1.37</b>	<b>1.45</b>	<b>6</b>

Source: UNCTAD.

Note: for traditional MNEs data for fiscal year 2021 is not yet complete. FDI lightness index is the ratio of the share of foreign sales to the share of foreign assets.

Foreign asset lightness varies between segments of the digital economy (table 2): internet platforms have the lightest ratio. Their business model is easily scalable internationally; it does not necessarily require physical capital investment in each of the markets where they generate sales. In contrast, e-commerce firms are increasingly relying on their own large-scale distribution centers across the world, driving up their foreign asset share.

<sup>1</sup> Financial data for fiscal year 2021 of the top 100 MNEs is not yet complete.



Digital content MNEs are in large part traditional firms that have transformed or expanded into digital markets (“gone digital” rather than “born digital”). They often still engage in the physical production of their content, and maintain a relatively higher FA share.

**Table 3. Change in FDI lightness, 2017 and 2022**

(Per cent, percentage points and ratio)

	Share of foreign sales (%)			Share of foreign assets (%)			FDI lightness		
	2017	2022	Change (percentage point)	2017	2022	Change (percentage point)	2017	2022	Change (%)
Internet platforms	50	48	-2	19	21	2	2.63	2.32	-12
Digital solutions	32	37	5	17	17	-	1.90	2.21	16
E-commerce	42	36	-6	38	30	-8	1.11	1.21	9
Digital content	36	33	-3	32	30	-2	1.14	1.12	-2
<b>Top digital</b>	<b>40</b>	<b>39</b>	<b>-1</b>	<b>27</b>	<b>25</b>	<b>-2</b>	<b>1.49</b>	<b>1.58</b>	<b>6</b>

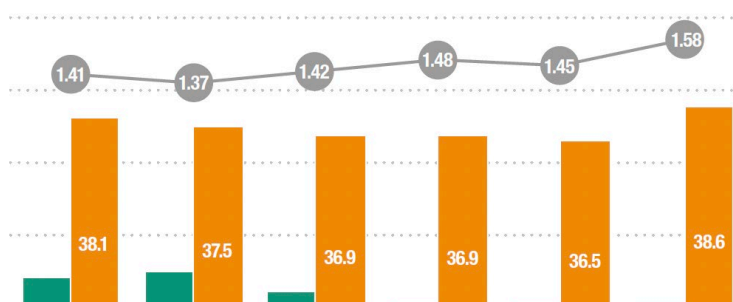
Source: UNCTAD.

Note: Years correspond to when the rankings were elaborated. The data on sales corresponds to fiscal years of 2015 and 2021, respectively. FDI lightness index is the ratio of the share of foreign sales to the share of foreign assets

Table 3 compares the foreign asset lightness of the top 100 digitals in 2017 and 2022. FDI lightness increased since 2016 and most of the increase took place in 2021, pushed by the sales increase during the pandemic (figure 4).

**Figure 4. Evolution of FA and FS shares and FDI lightness in Top Digitals, 2016–2021**

(Per cent and ratio)



预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_31056](https://www.yunbaogao.cn/report/index/report?reportId=5_31056)

