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State-owned Multinationals: An Emerging Market Phenomenon? †

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Abstract: Benefitting from the publication of a new data set by the United Nations Conference on Trade and Development (UNCTAD) in 2017, this article examines the main characteristics in the realm of state-owned multinationals, especially in terms of their geographical origin, the target countries of outward investment, and other main features of multinationals' foreign direct investment (FDI). It finds that state-owned multinationals continue to play an important role in the world economy. Many of these multinationals are headquartered in emerging economies, confirming the reliance of these economies on multinational firms for foreign expansion strategies. There are also many state-owned multinationals headquartered in developed economies. The modalities of state intervention vary largely by country and firm. Nevertheless, in general, state-owned multinationals raise concerns about the non-economic motivations of foreign expansion.

Keywords: multinational enterprise, state-owned firms, emerging markets

JEL Classification Numbers: F01, F10, F23, M16

1. General considerations: Who are the state-owned multinationals?

Details of a new data set published by the United Nations Conference on Trade and Development (UNCTAD) in June 2017 (UNCTAD, 2017)[1] demonstrate that state-owned multinationals continue to be important players in the world economy. We do not present a longer time series on the dynamics of their importance, though some aspects of this are covered later in the paper in the section about greenfield investment commitments. This is because the data provides a snapshot of these enterprises in early 2017. For financial data, there is sometimes information on preceding years, but the information is not comparable to that of other institutions. Even UNCTAD itself provided less complete data in some of its earlier reviews.

For instance, the 2017 data set identified close to 1,500 state-owned multinationals around the globe in 2017, compared to only 650 six years before (UNCTAD, 2011). In between, there may have been firms that transitioned out of being state-owned multinationals as governments divested their shares, as in the case of General Motors in the United States, which was reprivatized at the end of 2015. There may have been new state-owned multinationals created since then. Another possibility is that state-owned firms became multinationals in between then and now. However, most likely, it is possible that some firms escaped the radar in 2011 but were found with the better methodology of 2017. This may also be the case if we look at the number of affiliates controlled by state-owned multinationals. The 2011 study found 8,500 affiliates, while the 2017 review found more than ten times more: 86,000. Obviously, it is not the real number of affiliates that grew ten times but that the method to detect them improved greatly.

Let us emphasize at the outset that the UNCTAD data set is unique in the world. This is because it does not identify all state-owned enterprises carrying out activities in foreign markets as most other international agencies do, such as the Organisation for Economic Co-operation and Development (OECD), nor does it pinpoint the activities of *non-commercial agents* of Governments and international organizations, such as development banks. This leaves us with a very precise and up-to-date definition for state-owned multinationals that avoids any ambiguity about its application. State-owned multinationals must meet various criteria. They must be, as follows,

- separate legal entities
- established by governments[2] to engage in *commercial* activities
- conducting *foreign direct investment (FDI) operations* by way of having affiliates abroad or by engaging in non-equity modes of international production; *cf.* the earlier definition of UNCTAD (2011)
- controlled by the government or a governmental entity not including a pension fund, such as a central bank, a state property agency, or a national investment fund such as a sovereign wealth fund, through at least 10% ownership, otherwise the state or public entity must be the largest shareholder or have a 'golden share'

The definition of state-owned multinationals used by UNCTAD (2017) is mostly in line with the internationally accepted definition put forth by Blundell-Wignall and Wehinger (2011, p. 107) according to which state-owned multinationals are 'entities (separate from public administration) that have a commercial activity where the government has a controlling interest (full, majority or significant minority) whether listed or not on the stock exchange. The rationale is often industrial/regional policy and/or the supply of public goods (often in utilities and infrastructure – such as energy, transport, and telecommunications)...SOEs are not pools of investable capital as such, but they may finance investments via their earnings, fiscal appropriations from the government, or from debt markets at a (possibly) distorted low cost of capital. In some sense, there is greater scope for financially less-constrained investment, and with strategic objectives very much in mind'.

As a consequence of this definition, state-owned multinationals are at the relatively small intersection of two large universes: multinational enterprises, of which a large majority are privately owned; and state-owned enterprises, a majority of which are uninational. At a later point, we will provide an estimate about the number of firms involved in these dimensions. However, readers should be warned that however advanced the new data set is, some firms may have escaped the detection process, especially in countries for which limited information is available. Moreover, there is a high degree of uncertainty, in general, about the total number of state-owned enterprise around the globe. While UNCTAD suggests a reasonable global estimate, it must be pointed out that there is no universal counting procedure that exists for state-owned firms, and apparently there is not consistency among the different sources providing partial data (to be seen below).

2. Brief survey of relevant literature

Extant literature commences with studies by Vernon (1979) and Aharoni (1986). Their main aim was to document the *relationship* or 'partnership' between multinationals and state-owned firms in international projects. Originally, it was thought that these two universes were fairly distinct from each other, although it was known that some type of FDI was being carried out by state-owned firms. At a minimum, there was discussion about the firms originating from centrally planned systems that installed them in market economies (Hamilton, 1986). Naturally, there was an ideological debate about whether these entities were 'real' multinationals or not. However, once the ideological question was put aside, it was evident that these firms were carrying out FDI. Then there was the case of the 'national champions'—partly or fully owned by the state —created in the period of import-substituting industrialization. Some of these champions began expanding abroad, and thus obviously, they were engaged in FDI. In this manner, the search for a formula to identify state-owned multinationals was introduced, and the search was usually based on lists of state-owned firms that were engaged in international business activities. The advantage of this methodology was that it could detect many salient cases; its disadvantage was that the distinction between uninationals and multinationals was not always clear.

This strand of literature has also documented something of crucial importance: that even the victory of the market economy and the wave of privatizations have not fully eradicated state-owned multinationals from the international scene. As the highly important summary of Cuervo-Cazurra, Inkpen, Musacchio, and Ramaswamy (2014) has pointed out, the 'survival' and even the thriving of state-owned multinationals were related to the issue of different varieties of capitalism. In particular, he refers to the typology developed by Nölke (2005), introducing the concept of 'state-permeated' capitalism, in which one form of state involvement is direct ownership. It is noted that, although varieties of capitalism have been undergoing major changes in the aftermath of the Great Recession, state ownership and influence continue to exist even in Europe (Schweiger, 2014). According to this school of thought, the distinction between private and state ownership is becoming blurred, giving way to 'hybrid organizations' (Bruton *et al.*, 2015) under which the state can be an owner or a 'strategic supporter' (Musacchio, Lazzarini and Aguilera, 2015).

It is interesting to introduce into the debate these broad categories of firms: 'state-influenced' or 'state-related'. The disadvantage of these approaches is that the contours of real state ownership become somewhat blurred, since some authors use 'state-related' as a synonym for state ownership (Zeng and

Lin, 2011). Others use it as a synonym for non-commercial entities of the state (Geiger and Sá, 2005) or for the designation of state agencies owning shares in the state-owned firms (Bo, Huang, and Wang, 2011). In some cases, state influence is extended to the developmental state, in which the government occupies the commanding heights, sometimes irrespective of the share of formal state ownership of productive assets (Schmidt, 2012). In another strand of literature, Hao Liang and his co-authors (2015) differentiate between 'state ownership control' and 'executives' political connections' or 'political connection control'. The former is defined in a similar way as in this article, although it is not clear to what degree they apply the test of foreign assets. The latter concept is more vague and can probably be considered a synonym of state relation or influence.

In this article, we will limit ourselves to mapping the multinationals that are owned by the state. In this category, Cuervo-Cazurra and his co-authors (2014) observed that the number of international business studies is limited. They referred to studies by Aharoni (1986); Vernon (1979); Anastassopoulos, Blanc, and Dussauge (1987); and Mazzolini (1979). In more recent years, they identified the most salient studies as the ones by Buckley, Clegg, Cross, Liu, Voss, and Zheng (2007); Cui and Jiang (2012); Knutsen, Rygh and Hveem (2011); and Shapiro and Globerman (2012).

Cuervo-Cazurra and his co-authors (2014) speculated that the limited number of studies may be due to the fact that the large-scale expansion of state-owned multinationals may be a 'relatively new phenomenon'. This does not correspond, however, with our understanding of the long existence of state-owned multinationals and their activities abroad. It may well be that it is more related to the political implications of FDI by state-owned multinationals, which complicates the life of the international business scholar. It is safer to analyse the 'traditional' privately owned multinationals; this is also from the point of view of theory, which is not geared towards explaining the effects of state ownership (see below). It should be noted that we are looking for studies that analyse state-owned multinationals around the globe or at least across various countries, leaving off the table studies carried out on smaller individual countries. To prove that point, let use refer to Götz and Jankowska's recent (2017) study on the Polish case as an example. Their study covered nine firms. Interestingly, even in such a limited sample, they found that 'the group can be pretty heterogeneous and indeed can combine the specificity of multinational enterprises (MNEs) and SOEs'.

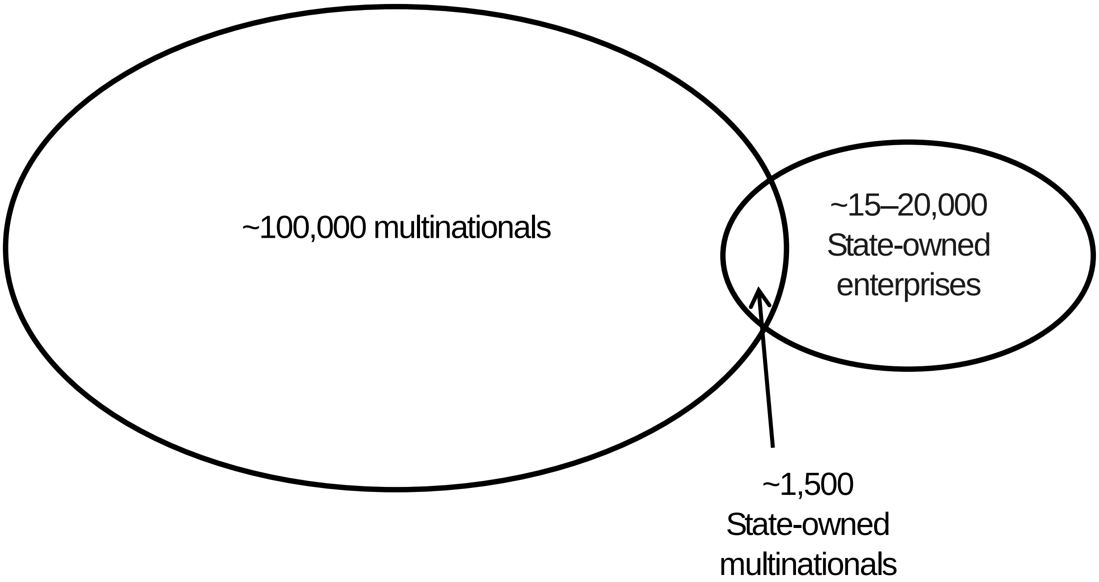
3. The intersection of multinationals and state-owned firms

As we have seen, it is an increasingly accepted idea that state-owned multinationals lie at the intersection between multinationals and state-owned firms. We know that there are approximately 1,500 firms in this intersection, and we also need to compare this intersection with the size of the other two dimensions. This section does so, in the form of a detailed presentation.

As mentioned above, we have a ballpark estimate from UNCTAD on the global number of multinationals: 100,000 in 2017 (UNCTAD, 2017). We do not have an overarching number for state-owned enterprises and are therefore obliged to gather bits and pieces and add them up, however large the differences in counting methodologies are between the bits. In any case, we are not aiming for an absolutely precise number but for one that will give us a general idea about the extent of the phenomenon.

Figure 1. The relationship between the universes of multinationals and State-owned enterprises, around 2017

(Number of companies)



Source: The authors.

Starting with a recent cross-country OECD compilation covering 34 economies, of which 32 were OECD members in 2017 (all OECD except Iceland, Luxembourg, and Slovakia), as well as the accession countries of Colombia and Lithuania, the report describes 'state-owned enterprise (SOE) portfolios with a combined *2 111 enterprises*, valued at over USD 2 trillion and employing about 6 million people' (OECD, 2014b) (we italicized the number of firms). The study points out that this number is surprisingly high in light of 'ambitious privatisation programmes undertaken in recent decades'. To obtain information about China, which probably hosts the highest number of state-owned enterprises and which, as we will see, hosts the highest number of state-owned multinationals, Jefferson (2016) compiled information from various government yearbooks. According to the 2015 yearbook, in 2004 (this may be a typo error; the author may have been referring to 2014), the total count of state-related firms included 3,450 'state-owned enterprises' and 3,003 'limited liability state solely-funded corporations'. In comparison, the 2011 yearbook reported that there were 8,726 'state-owned enterprises' and 1,479 'limited liability state solely-funded corporations' in 2010. For Brazil, Musacchio and Lazzarini (2014) reported 47 majority-owned state-owned enterprises at the federal level and 49 at the state level in 2009. In contradiction with this finding, in 2017, Wikipedia listed 148 enterprises owned by the federal government, 136 by the states, and seven by the municipalities.[3] For India, Mishra (2014) reported 229 'operating' state-owned enterprises for the fiscal year 2012–13. In turn, a government source (export.gov 2016) reported a minimum of 4,100 state-owned enterprises in the Russian Federation in 2016. Finally, for South Africa, another official source[4] reported the existence of 130 state-owned enterprises. However, it may be that in this case, the number was overestimated because the list seemed to include some public agencies and investment funds.

Despite challenges in definitions and comparisons (including timing), it is safe to assume in an extrapolation from the above sample of 39 countries that, in 2017, there were at least 15–20,000 state-owned enterprise around the world. In other words, the universe of multinationals is at least five times as large as that of state-owned enterprises. By comparison, the intersection, at least in terms of the number of companies—1,500—is rather tiny (figure 1). However, as we will see, these 1,500 firms play a very important role in the current world economy.

4. Main features of state-owned multinationals

4.1. Home countries

According to the UNCTAD data set, state-owned multinationals are headquartered in many countries around the world, although only a handful of these really play a key role. State-owned multinationals typically come from emerging markets, but there are also some in developed countries, especially in EU member countries. The coverage of the UNCTAD data set is fairly broad, spanning approximately 103 domestic economies: 53 developing, 38 developed, and 12 transition economies. This is an impressive result if one considers that, as a total, UNCTAD provides various kinds of FDI-related data for 193 UN members and 37 other territories. In other words, the country and territory coverage of the UNCTAD data is almost 45%, and all major countries are present in the data set except the United States. For the latter country, the question remains as to whether state-owned multinationals have really ceased to exist since the government sold its shares at the end of 2015 or if there is another issue that prevents monitoring.

Among the countries covered, China is the largest home economy; it has 18% of the state-owned multinationals; see table 1, showing how they are instrumental in the government's outward FDI expansion strategy. China is followed by Malaysia (5%), India (4%), South Africa (4%) and the Russian Federation (3%). These five economies are home to more than one third of the world's state-owned multinationals. They are followed by the United Arab Emirates and various EU member countries such as Sweden, France, Italy, and Germany; and each of these economies has approximately 3% of the state-owned nationals. It is important to keep in mind that this is a tally of the number of firms irrespective of size, although we can say that, in general, state-owned multinationals are large and play major roles in key economic activities in their home countries.

Table 1. Geographical breakdown of the State-owned multinationals of the world by major home economy, 2017

(Number of companies and share of world total)

Home economy	Number of firms	Share (%)	Home economy	Number of firms	Share (%)
European Union	*420*	*28.7*	*Developing Asia*		
Sweden	49	3.3	China	257	17.5
France	45	3.1	Malaysia	79	5.4
Italy	44	3.0	India	61	4.2
Germany	43	2.9	United Arab Emirates	50	3.4
Belgium	33	2.3	Republic of Korea	33	2.3
Portugal	26	1.8	Singapore	29	2.0
Slovenia	24	1.6	Qatar	27	1.8
Austria	23	1.6	Kuwait	22	1.5
Finland	23	1.6	Indonesia	13	0.9
Poland	21	1.4	Saudi Arabia	13	0.9
Spain	19	1.3	*Africa*		
Netherlands	11	0.8	South Africa	55	3.8
Croatia	10	0.7	Egypt	14	1.0
Other developed Europe			Zimbabwe	9	0.6
Norway	32	2.2	*Latin America and the Caribbean*		
Switzerland	20	1.4	Brazil	12	0.8
Other developed economies			Colombia	5	0.3
New Zealand	24	1.6	*Economies in transition*		
Canada	18	1.2	Russian Federation	51	3.5
Japan	6	0.4	Serbia	22	1.5

Source: The authors, adapted from UNCTAD (2017).

4.2. Main sectors and industries

UNCTAD (2017) found that 'The sectoral distribution of state-owned multinationals is more heavily focused on financial services and natural resources than that of other multinationals'. It reported the five main industries in which state-owned multinationals are engaged, at least according to their main activities: finance, insurance and real estate; utilities, in particular electricity provision; transport services;

holdings;[5] and mining (table 2). The holdings category may represent an overestimate of the share of services activities, which was close to 70% of the sample, with more than 1,000 firms. In this tally of firms, manufacturing firms account for 23% of the total, and 8% are within the primary sector. UNCTAD (2017) has observed that 'The sectoral and industry distribution reflects the priorities of state owners, who wish to control more directly key resources and key infrastructure networks'.

Table 2. Breakdown of the State-owned multinationals of the world by main industry, 2017
(Number of firms and per cent of world total)

Industry	**Number of firms**	**Share** (%)
Finance, insurance and real estate	269	18
Electricity, gas and sanitary services	152	10
Transportation	152	10
Holdings	108	7
Mining	90	6
Top five together	771	53

Source: The authors, adapted from UNCTAD (2017).

4.3. Largest state-owned multinationals

While state-owned multinationals account for only 1.5% of the multinationals of the world, their share is ten times higher (15%) among the 100 largest non-financial multinationals, indicating the following: measuring the role of state-owned multinationals in the world by their total number alone could significantly underestimate their importance; and state-owned multinationals tend to be much bigger than privately owned multinationals. It is notable that, in developing and transition economies, state-owned multinationals account for more than 40 of the top 100 non-financial multinationals (UNCTAD, 2017). The country and industry composition of the largest non-financial state-owned multinationals differs from that of the 100 largest multinationals (table 3). Developing-country firms account for almost one third, or eight, of the 25 largest state-owned multinationals, of which four are from China, the second most important home country behind France, which has six state-owned multinationals. Natural resources and infrastructure activities dominate in this realm: mining, quarrying, and petroleum are represented by five firms; four firms are in the electricity, gas, and water sectors; three are in the motor vehicles sector; three are involved in petroleum refining; and three are in telecommunications. Of these, only the motor vehicles sector belongs to non-resource-based manufacturing. There are also important size variations among the top 25, with the largest state-owned multinational having eight times more foreign and total assets than the smallest ones. Ranked by foreign assets, the car manufacturer Volkswagen AG (Germany) is the largest non-financial state-owned multinational; then the utility company Enel (Italy); the oil company Eni (Italy); and Deutsche Telekom (Germany). The foreign assets of these four state-owned multinationals exceeded $100 billion in 2016.

Table 3. The 25 largest State-owned non-financial multinationals of the world, ranked by foreign assets, 2016

(Billions of dollars and thousands of employees)

Enterprise	Home economy	Industry	State ownership (%)	Assets		Sales		Employment	
				Foreign	Total	Foreign	Total	Foreign	Total
Volkswagen Group	Germany	Automotive	20.0	197	432	192	240	347	627
Enel SpA	Italy	Utility	23.6	111	164	38	76	30	62
Eni SpA	Italy	Petroleum	25.8	106	131	36	62	13	34
Deutsche Telekom AG	Germany	Telecom	17.4	102	157	54	81	107	218
EDF SA	France	Utility	84.6	85	297	18	79	25	155
Engie	France	Utility	32.0	78	167	46	74	80	153
China National Offshore Oil Corp.	China	Petroleum	100.0	67	179 [a]	18	68 [a]	9	110 [a]
Airbus Group NV	France	Aircraft	11.1 [b]	66	117	50	74	86	134
Orange SA	France	Telecom	13.5	63	100	24	45	58	155
Nippon Telegraph & Telephone Corp.	Japan	Telecom	32.4	60	187	14	96	77	241
Statoil ASA	Norway	Petroleum	67.0	59	105	10	46	3	21
Renault SA	France	Automotive	15.0	49	108	43	57	100	125
Petronas - Petroliam Nasional Bhd.	Malaysia	Petroleum	60.6	48	140 [a]	46	63 [a]	11	53 [a]
China COSCO Shipping Corp. Ltd.	China	Transport	100.0	43	56 [a]	15	23 [a]	5	83 [a]
Vale SA	Brazil	Mining	Golden shares	37	99	25	27	16	73
China Minmetals Corp.	China	Metals	100.0	35	108 [a]	16	68 [a]	15	240 [a]
Inpex Corp	Japan	Petroleum	19.0	32	39	4	8	2	3
Deutsche Post AG	Germany	Transport	24.9	30	40	44	63	297	508
Japan Tobacco Inc.	Japan	Tobacco	33.4	28	41	12	20	26	45
OMV AG	Austria	Petroleum	31.5	28	34	16	21	19	23
Sabic - Saudi Basic Industries Corp.	Saudi Arabia	Chemicals	70.0	23	88	26	39	25	40
China State Construction Engineering Corp.	China	Construction	100.0	25	166	10	140	37	241
Vattenfall AB	Sweden	Utility	100.0	24	45	12	18	11	20
PSA Peugeot Citroen	France	Automotive	13.7	24	48	45	60	97	170
Oil and Natural Gas Corp. Ltd.	India	Petroleum	68.9	24	54	2	20	15	34

Source: The authors, adapted from UNCTAD (2017).

[a] 2015.

[b] The share of the French Government. The German Government also owns 11.1 per cent and the Spanish Government 4.2 per cent.

Table 4. The 25 largest State-owned financial multinationals of the world, ranked by total assets, 2015

(Billions of dollars and thousands of employees)

Institution	Home economy	Industry	State ownership (%)	Assets	Sales	Employ -ment
The Industrial & Commercial Bank of China (ICBC)	China	Commercial banks	34.6	3 421	103	466
China Construction Bank Corporation JSC	China	Commercial banks	57.0	2 827	94	369
Agricultural Bank of China Ltd.	China	Commercial banks	40.0	2 741	82	503
Japan Post Holding Co. Ltd.	Japan	Insurance carriers	80.5	2 592	127	251
Bank of China Ltd.	China	Commercial banks	64.0	2 590	73	310
Bank of Communications Co. Ltd.	China	Commercial banks	26.5	1 102	29	89
The Royal Bank of Scotland Group Plc.	United Kingdom	Bank holding	71.9	983	16	77
China Merchants Bank Co. Ltd.	China	Commercial banks	26.8 a	843	31	76
Shanghai Pudong Development Bank	China	Commercial banks	20.0	777	23	48
Ping An Insurance (Group) Company of China Ltd.	China	Insurance carriers	32.2	734	59	300
Commerzbank AG	Germany	Commercial banks	15.0 a	506 b	10 b	50 b
Banco do Brasil S.A.	Brazil	Commercial banks	65.6 a	499 b	34 b	109 b
China Life Insurance (Group) Co. Ltd.	China	Insurance carriers	100.0	466	70	99
State Bank of India	India	Commercial banks	61.2	448	20	208
CNP Assurances	France	Insurance carriers	40.9	429	35	5
Sberbank of Russia	Russian Federation	Savings institutions	52.3	418 b	29 b	325 b
ABN AMRO Group N.V.	Netherlands	Commercial banks	70.1 a	416 b	9 b	110 b
Life Insurance Corporation of India	India	Insurance carriers	100.0	331	40	115
DnB ASA	Norway	Bank holding	34.0	308 b	6 b	11 b
Landesbank Baden-Württemberg	Germany	Credit agencies	25.0 a	255	3	11
Woori Bank	Republic of Korea	Commercial banks	51.1	249	8	15
Dexia SA	Belgium	Bank holding	50.0 a	224 b	1 b	1 b
VTB Bank PJSC	Russian Federation	Commercial banks	47.2	207 b	10 b	95 b
Industrial Bank of Korea	Republic of Korea	Commercial banks	51.8	205	5	53
Qatar National Bank	Qatar	Commercial banks	50.0	198 b	6 b	27 b

Source: The authors, adapted from UNCTAD (2017).

Note: This list does not include development banks and other development finance institutions because their main profile is in non-commercial activities. For methodological reasons (the counting of foreign assets is different and the value of foreign assets cannot be compared with other MNEs), State-owned multinationals from the financial sector are ranked separately and by the value of total assets.

[a] Estimate.

[b] Data refer to 2016.

In financial services, the number one industry for state-owned multinationals (see table 2), firms tend to be very large. Among the 25 largest ranked by total assets, 18 are larger than the top non-financial state-owned multinational (Volkswagen AG). This is due to the fact that financial firms work with a higher ratio of assets to sales than other firms. Among the 10 largest financial state-owned multinationals, seven are from China, including the top one, the Industrial & Commercial Bank of China (table 4). Among the 25 largest, 16 are spread among developed economies such as Germany, Japan, the United Kingdom, as well as large emerging economies such as India, the Republic of Korea, and the Russian Federation. Commercial banking is by far the most frequently reported activity among these state-owned multinationals (15 firms).

4.4. Geography of affiliates

State-owned multinationals own numerous foreign affiliates: around 86,000, or 1% of the wold total. While the majority of their physical bulk may be located in emerging economies, the majority of their foreign affiliates in is in developed countries, especially in the EU, suggestive of market seeking and strategic asset seeking motives that stand in contrast to the efficiency seeking motives of many privately owned multinationals. In 2017, UNCTAD (2017) reported the EU to be host to close to 33,000 foreign affiliates of state-owned multinationals, or 38% of the total. By individual host countries, the highest numbers were registered in the United States, with close to 9,000; the United Kingdom, with close to 8,000; and Germany, with close to 5,000 (table 5). Indeed, the geographical distribution of foreign affiliates reflects the corporate strategies of state-owned multinationals, which tend to focus on the largest consumer markets for their services (especially finances, utilities, and transportation) or the most important sources of technology for reverse engineering.

According to UNCTAD's observations, the geographical preferences of state-owned multinationals headquartered in Asia and Europe—two of the key continents for state-owned multinational parents—are only partly similar. State-owned multinationals from both continents focus heavily on the EU market, followed by the United States and a few emerging economies. There are however some differences: Asian state-owned multinationals target Hong Kong (China), China, and Singapore; while European state-owned multinationals target China more frequently. Also notable is that more than half of the foreign affiliates of European state-owned multinationals are located in the EU, while the share of Asian state-owned multinationals' foreign affiliates located in Asia is about one quarter (UNCTAD 2017). In other words, European state-owned multinationals show a very high degree of regionalization, whereas Asian state-owned multinationals appear to be more globalized.

4.5. Greenfield investments and M&As by state-owned multinationals

The value of announced greenfield projects by state-owned multinationals is large and rising. Over the period 2010–2016, the total value of these announced projects reached $514 billion, well over 9% of the world total. This share is more than six times higher than the share of state-owned firms among

Table 5. Geographical breakdown of the foreign affiliates of the State-owned multinationals of the world by major host economy, 2017

(Number of affiliates and per cent of world total)

Host economy	Number of affiliates	Share (%)	Host economy	Number of affiliates	Share (%)
European Union	*33 200*	*38.4*	Canada	1 151	1.3
United Kingdom	7 635	8.8	Japan	691	0.8
Germany	4 581	5.3	*Developing Asia*		
Netherlands	3 743	4.3	China	3 630	4.2
France	2 864	3.3	Hong Kong, China	3 521	4.1
Spain	1 760	2.0	Singapore	2 360	2.7
Italy	1 722	2.0	India	1 663	1.9
Sweden	1 399	1.6	Indonesia	911	1.1
Poland	957	1.1	United Arab Emirates	789	0.9
Portugal	784	0.9	*Africa*		
Belgium	752	0.9	Egypt	691	0.8
Luxembourg	743	0.9	South Africa	674	0.8
Ireland	707	0.8	*Latin America and the Caribbean*		
Cyprus	628	0.7	British Virgin Islands	1 558	1.8
Romania	597	0.7	Brazil	1 239	1.4
Other developed Europe			Cayman Islands	939	1.1
Switzerland	761	0.9	Mexico	678	0.8
Other developed economies			*Economies in transition*		
United States	8 706	10.1	Russian Federation	1 128	1.3
Australia	3 726	4.3			

Source: The authors, adapted from UNCTAD (2017).

multinationals. The value of these announcements fluctuated between 2010 and 2014 but increased in 2015 and 2016 (table 6). In 2016, the value reached $91 billion, or 11% of the world total, up from 8% in 2010. These projects involved the creation of the equivalent of more than 100,000 jobs per year, with a record 120,000 in 2016. In other words, the projects announced by state-owned multinationals tended to be particularly large and important for host countries. These projects targeted a wide range of countries in 2016 alone. More than 500 projects were announced in 64 developing, 28 developed, and 9 transition economies.

State-owned multinationals focus most of their greenfield projects in three industries: utilities, automotive, and transportation. These three together accounted for close to 60% of the cumulative value of announced projects from 2010–2016. The dynamism of these three industries varied over time. The

Table 6. Value and share of world total of greenfield FDI projects announced by State-owned multinationals, 2010–2016

(Billions of dollars and per cent of world total)

Year	**Value** ($ billion)	**Share in world total** (%)
2010	69	8
2011	78	9
2012	65	10
2013	78	9
2014	50	7
2015	82	11
2016	91	11

Source: The authors, adapted from UNCTAD (2017), based on information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com).

Table 7. The 10 largest M&A purchases by State-owned multinationals, 2010–2016

Year	**SOE-MNE**	**Home economy**	**Target company**	**Target economy**	**Industry of target company**	**Value** (Millions of dollars)	**Share acquired** (per cent)
2010	France Telecom SA	France	T-Mobile (UK) Ltd	United Kingdom	Radiotelephone communications	8 496	100
2011	Vattenfall AB	Sweden	Nuon NV	Netherlands	Electric services	4 658	15
2010	France Telecom SA	France	Egyptian Co for Mobile Services	Egypt	Radiotelephone communications	4 469	51
2015	Orange SA	France	Jazztel Plc	Spain	Telephone communications, except radiotelephone	4 315	100
2016	Hainan Airlines Co Ltd Labour Association	China	Swissport International AG	Switzerland	Airports and airport terminal services	2 820	100
2011	Deutsche Telekom AG	Germany	Polska Telefonia Cyfrowa Sp zoo	Poland	Telephone communications, except radiotelephone	2 777	51 [a]
2010	Deutsche Bahn AG	Germany	Arriva PLC	United Kingdom	Local bus charter service	2 426	100
2016	China General Nuclear Power	China	Edra Global Energy Bhd – Power Assets	Malaysia	Electric services	2 295	100
2010	Red Eléctrica Corp SA	Spain	Endesa Distribución Eléctrica SL – Electricity Transmission	Spain	Electric services	1 891	100
2010	TenneT Holding BV	Netherlands	TenneT TSO GmbH	Germany	Electric services	1 649	100

Source: The authors, based on UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

[a] Acquisition of additional assets.

[b] Acquisition of Enel's (Italy) shares.

value of announced greenfield projects in electric, gas, and water distribution increased, for example, reaching $32 billion in 2016. Projects announced in transport, storage, and communications, on the other hand, had more fluctuations and a slower overall rate of growth; their value reached $17 billion in 2016. The value of projects in motor vehicles and other transport equipment actually declined to $5 billion by 2016, while at the same time, the value of announced projects in construction, coke, petroleum products, and nuclear fuel exceeded the value of the greenfield projects that were announced in the automotive industry.

State-owned multinationals are also involved in major cross-border M&A purchases as they seek to improve their international competitive position or attain strategic objectives. As these are mostly one-off transactions, they do not follow a clear-cut trend. Nevertheless, between 2010 and 2016, state-owned multinationals carried out major transactions during the reorganization of their respective industries, especially in telecommunications, electricity, and transport services. For example, France Telecom (now Orange) purchased T-Mobile's United Kingdom assets in 2010 for more than $8 billion; and Vattenfall's (Sweden) acquired Noun NV in the Netherlands in 2011 for close to $5 billion (table 7).

4.6. Summing up: the relative importance of state-owned multinationals

Summing up these findings on the importance of state-owned multinationals in the world economy, we can present them on an increasing scale, in which the most important elements indicate a key role (figure 2). They account for only 1.5% of the number of multinationals of the world, but they account for 10% of the affiliates, 11% of announced greenfield projects, 15% of the world's 100 largest non-financial multinationals, 41% of the 100 largest non-financial multinationals of developing and transition economies. Finally, the share of developing and transition economies in the list of home countries is 63%, proving that state-owned multinationals are largely but not exclusively an emerging market phenomenon.

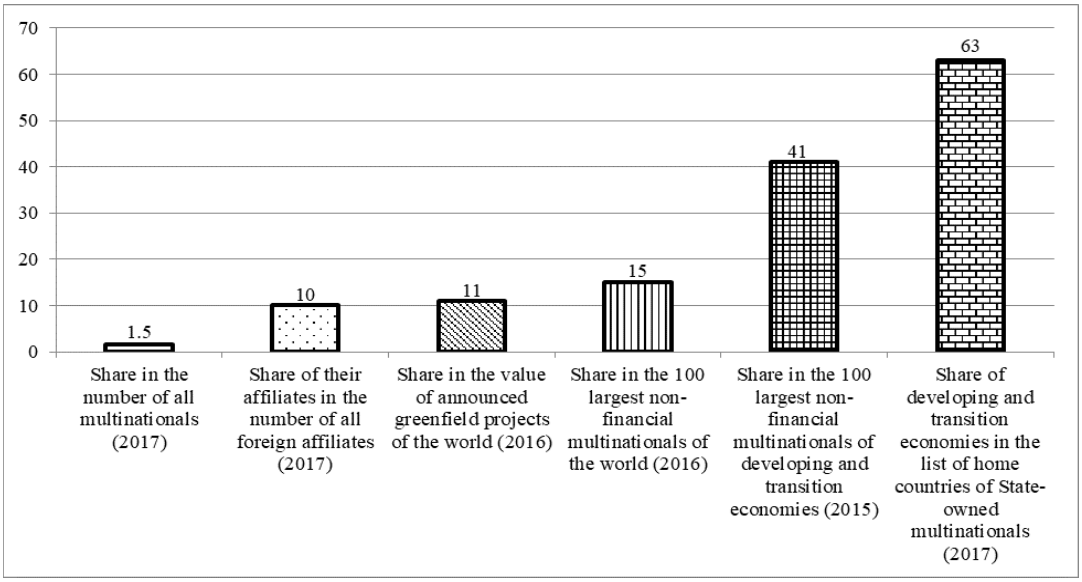
5. Government influence: to what degree does it depend on the percentage of ownership?

Extant literature has focused extensively on the question how the government exercises its control over its state-owned multinationals and how this influence affects FDI decisions. In general, it has been accepted that the government needs some kind of ownership share in its multinational. However, the influence is not necessarily proportional to the degree of ownership. Knutsen and his co-authors (2011), for example, claimed that 'Theoretical arguments indicate that state-owned enterprises (SOEs) should invest relatively more than privately owned enterprises (POEs) in countries with poor rule of law, poor property rights protection, and a high degree of corruption. However, SOEs are expected to invest relatively less than POEs in dictatorships and countries with poor human rights protection'. Another strand in the literature (Li and Xia, 2017) is related to the degree to which state-owned enterprises investing in other countries can be considered 'agents of their home-country governments, pursuing political agendas, and implementing government strategies that are outside of normal business considerations. They may receive subsidies from home countries, a practice that conflicts with free-market principles'. The answer is ambiguous, as there are state-owned multinationals that operate under strict business principles, while others almost fully deviate from them.

In most cases, in substantive terms, the degree of state influence on its multinationals can be traced back to the main reasons for the formation and perpetuation of such firms. The *creation* of state-owned firms, including multinationals, can be explained by the fact that there are public priorities that the

Figure 2. Relative importance of State-owned multinationals and emerging markets: various measures, mid-2010s

(Per cent)



Source: The authors, based on data from UNCTAD (2017).

government wishes to influence more directly, but it is thwarted by various factors. These factors may include unrelated actors or privately owned firms or the existence of natural monopolies, such as in mineral and fuel resources, railways, water, electricity, and certain segments of telecommunications in fixed-line telephony. Governments may wish to have more control over capital market failures in industries that are high risk, capital intensive, and/or have long gestation periods, such as aircraft production, air transport, electric power plants, and refineries. Finally, states' desire for more control can also be hindered by externalities (e.g., basic input producers such as steel and chemical) or compelled by the prerogative to ensure social fairness, in terms of being able to provide basic goods and services to the population (e.g., public transport and basic education). In addition, strategic considerations can be attached to public control over certain non-renewable resources, which can also apply to state-owned multinationals securing access to resources in foreign countries; *cf.* Cuervo-Cazurra et al. (2014).

With respect to the *lasting existence* of state-owned multinationals, this is partly because the issues justifying their creation persist in the long term. Moreover, state-owned multinationals are trapped in a 'Janus face' impact of government influence on competitiveness. The fact that state-owned multinationals can take high risks and diverge from short-term profit motives can enhance competitive advantage. As Globerman (2015) has observed, 'many governments provide direct or indirect support for OFDI to their multinationals investing abroad', and this is particularly true for state-owned multinationals. However, excessive losses in the long term may be costly for the home country to finance and can weaken the firms themselves. In the same vein, access to government funds can boost the competitiveness of state-owned multinationals; however, overdependence on these sources of financing in the long term can detract from the incentive to innovate and excel in the face of international competition. Finally, state ownership can be an asset in a host economy if the home country is considered to be a close ally; however, state ownership can be seen as a threat to national security or sovereignty of the host country if the home country is considered 'hostile', *cf.* Moran (2009). The latter arguments are often used in merger control when blocking acquisitions by state-owned entities from abroad. State-owned multinationals may also be vulnerable to sanctions imposed on their country of origin, for instance, in the case of Russian state-owned multinationals in 2014; see Liuhto (2015).

In particular, the internationalization process of state-owned multinationals may be influenced by the level of development of the home country, with the probability of state intervention increasing in less developed countries. As a result, in some cases the government might discourage FDI by its state-owned enterprises, as this could reduce their contribution (e.g. social, industrial) to the domestic economy. In other cases, the state might be prepared to support FDI by state-owned enterprises, as this may help to build economies of scale and further enhance the competitive position of the firm and home country; *cf.* Deng (2004), Child and Rodrigues (2005), and Xie (2017). In general, three main attitudes can be distinguished (UNCTAD, 2011, pp. 34–35). The first is that the government is a hindrance to internationalization, for example, in Italy, where there has been repeated concern about the potential effects of state owned enterprises' internationalization on local unemployment rates (Amatori, 2017). The second is that the Government can support internationalization, as in China's 'Go Global' policy. In this model, firms owned by the central government are tightly controlled (Li, Cui and Lu, 2014; Xie, 2017). The third is that the government is indifferent to state-owned enterprise internationalization but has a guiding influence on the developmental impact of outward FDI, as in, for example, the case of Sweden's Vattenfall in Africa. To these three main models of state management, we should add a fourth one, already mentioned above—the model of bailing out failing firms, especially in the financial sector. In this case, the Government acts as a 'bankruptcy manager', as described above. Variations between home countries in the degree of control over state-owned multinationals reflect long-term differences in development strategies and management cultures.

With all these considerations in mind, it is interesting to have a look at UNCTAD's findings on the degree of state ownership in the multinationals, indicating that governments tend to prefer majority ownership. In the data set, full control (100% ownership) is the most favoured type. Of the firms for which exact data were available, over a third were fully owned by their respective governments, and another 29% were controlled through majority ownership (table 8). In other words, governments enjoy majority control in close to two thirds of all state-owned multinationals. The state-owned multinationals in this group are typically either fully integrated into the state, usually as an extension of a particular ministry, or they are publicly listed but with the state owning more than 50% of the voting shares. When the government owns from 25–50% of state-owned multinationals (21% of cases), it is still typically the largest single shareholder and has significant influence over the composition of the board of directors and the corporate strategies. In 16% of cases, the state has a minority stake of less than 25%, including golden shares. In those cases, the state is still represented on the board of directors, but its participation in the management of the enterprise is usually more selective, focusing on key strategic decisions.

Table 8. Degree of government ownership in the State-owned multinationals of the world, 2017

(Per cent of all firms)

Government ownership	Per cent of firms
Full ownership	34
Majority ownership	29
Minority ownership over 25%	21
Minority ownership below 25%, incl. "golden shares"	16

Source: The authors, adapted from UNCTAD (2017).

6. Challenges for economic and business theories

We have provided some evidence that state-owned multinationals are not really a new phenomenon. If there is any surprise, it is more related to the stubborn persistence of these entities in the modern economy. Furthermore, if theoreticians are reticent to deal with them, it is probably related to the simplified way in which we look at the modern economy. Most importantly, when we acknowledge that this is a market economy, or at least *mostly* so, we automatically assume that the main actors should necessarily be privately owned ones. However, this assumption stands in contradiction to the experience of economies that emerged in the 19th century (e.g., Germany) or in the 20th century (the Asian tigers), in which the state played a developmental role, including through direct ownership of assets. It is true that the idea of a centrally planned economy was largely discredited after numerous failed attempts in the developing world, where these experiments ended in a downward spiral of corruption. However, in many parts of the world, state-owned firms survived and at least partly succeeded, and theory must now reckon with them.

To illustrate the challenges ahead, let us refer to two main strands of literature: the different varieties of resource-based theories such as the Uppsala School, see Johanson and Vahlne (1977, 1990), Johanson and Wiedersheim-Paul (1975); and the eclectic or OLI paradigm of Dunning (1977).

For the resource-based theories, the main challenge is that the resources of firms are usually defined as internal rather than external. In reality though, in state-owned firms, the government is a key provider of resources. However, how do we account for this? It is also true that then, the growth of the firm is gradual and organic, something that state-owned multinationals do not respect in their activities. Firms following the Uppsala theory would start operating with limited experience and face uncertainty on foreign markets; they would internationalize via international trade at best. They envisage investing abroad gradually. Then they gain experience in FDI, and they become major global players in the long run. One of the main merits of the Uppsala School is that it provides an explanation for how multinationals are overcoming the liability of 'foreignness' in overseas markets. However, they miss the point of how a state-owned firm can become multinational overnight, sometimes despite the lack of any gradually nurtured expertise. This is so because the theory takes into consideration only the firm's resources, without paying heed to the crucial additional resources that are supplied by the supporting government.

The main merit of the eclectic paradigm is not its originality but its success in weaving together different strands of theory. Another major merit is its relative flexibility, allowing it to incorporate new developments along the way. For example, in the latest version of the theory (Dunning and Lundan, 2008), ownership advantages were divided into asset-based advantages (Oa), such as cutting-edge technologies, marketing strength, or powerful brand names; and transaction-based advantages (Ot), such as common governance of assets and interaction with other corporate networks. The latter is important because it can also account for the relationship with the home country government, crucial for the understanding of state-owned multinationals. Locational advantages are even easier to adjust to state-owned multinationals: we only need to consider the strategic assets that the host country can offer, in additional to the traditional competitive location. Internalization is also easy to adjust: state-owned multinationals aim to control foreign assets directly if this is in line with the policy dictated by the home country government.

The only 'hole' in the eclectic paradigm is indeed the lack of consideration for the home country environment and government, in particular. One solution to that problem would be to simply add a home country (H) factor to the OLI legs, see Kalotay (2010), Álvarez and Torrecillas (2013), and Stoian (2013). The 'H' factor can encompass various sub-factors, such as an Hb (home country business environment), an Hd (development strategy of the home government), and an Hs (the home country state involvement in outward FDI) (Kalotay, 2010). Of these three, the last two can have direct relevance to the foreign expansion of state-owned multinationals. All this requires further testing in the future. A first econometric exercise on the Russian case (Kalotay and Sulstarova, 2010) has produced promising proofs of the importance of the home country. Further analysis based on more (and more highly detailed) data would be needed to follow up.

7. Are state-owned multinationals reason for concern?

The existence and operations of state-owned multinationals raise policy questions for both home and host governments. It has been noted, however, that many of these concerns are not the sole consequence of the state ownership or cross-border operations but the interaction of the two; *cf.* OECD, (2016, p. 118). On the home country side, the main concern is that assistance to state-owned multinationals may risk subsidizing activities that take place in other countries and therefore raise welfare in those host economies. On the host country side, the main issue is what kind of additional scrutiny to apply to state-owned foreign investors compared with privately owned multinationals. It can be argued on the basis of the evidence presented here that the strategies of state-owned multinationals do differ from those of their privately owned peers. However, one can also argue that those differences have the potential to result in positive developmental impacts in the host country. Naturally, it goes without saying that certain issues, especially those related to national security, will always remain in place to justify special measures, especially in merger review procedures. It is nearly impossible to determine if the deviation of state-owned multinationals from short-term commercial objectives has positive or negative development implications for host countries. It has been noted that 'to the extent that SOEs wilfully engage in inefficient economic behaviour, the harm will be experienced primarily by the SOEs' owners, and not by residents of the host economy' (Globerman, 2015).

The most constructive way to present issues is in the form of challenges that home and host governments can take on and tackle. In home countries, key challenges can be summed up as follows:

- *The challenge of minimizing the risk of state-owned multinationals overextending their foreign operations and implementing effective risk management.* Foreign expansion that is too rapid is related to the problem of the soft budget constraint of those firms, and risk management can be a tool to mitigate that problem. Naturally, excessive risk taking is not just a state-owned multinational problem. However, state-owned multinationals tend to have weaker governance than other companies in this respect (OECD, 2014a). Risk management can be also weakened if the two main functions of the state vis-à-vis the state-owned multinational (owner and regulator) are not sufficiently separated from each other.
- *The need to ensure adequate disclosure and transparency by state-owned multinationals*. This is a major issue for those state-owned enterprises that engage in operations in other countries, especially those with weaker requirements in this area.
- *The need to define clearly the interface between the activities of state-owned multinationals and the public policy and development objectives of the home country*. State-owned multinationals can be tasked with activities that go beyond the scope of a private enterprise in similar circumstances, also in international operations, such as access to certain resources in areas of high risk. In some exceptional cases, such as China's 'Go Out' policy, international expansion becomes an explicit responsibility of the firms concerned.
- *The need for corporate responsibility in international operations.* This is important especially if state-owned multinationals operate in so-called 'weak governance zones' that are challenged in the implementation of labour, health, environmental or other standards (OECD, 2016, p. 120).
- *The need for supporting competitiveness under state ownership.* State-owned multinationals are commercial enterprises that must become successful on the marketplace in competition with private firms. Such competitiveness should hold even when state-owned multinationals do not have privileged access to home country subsidies or access to finance or public procurement.

- *The need to consider the non-economic (e.g., geopolitical) dimension of state-owned multinational operations*. These firms are not viewed in the same way as privately owned multinationals. Changes in political relations can have immediate consequences for operations, independent of profitability considerations.

In host countries, the main challenges are presented as follows:

- *The autonomy and independence of the state-owned multinationals and their foreign affiliates from home government interference.* If the home state intervenes too frequently in the management of the firm and its affiliates, the latter entities can be rightly considered agents of the home state and not autonomous corporate entities.
- *National security concerns.* In some cases, even if the home state abstains from direct intervention, the nature of activities is such that it raises the issue of national security in the host country, especially if the host and home country governments have political or geopolitical issues with each other.
- *The impact of the state-owned multinationals and their foreign affiliates on host country national development strategies and industrial policies*. In principle, all multinational operations have an impact in those areas. However, it is a special feature of the state-owned investors that they have to fulfil public policy objectives at home, and it is not clear how these obligations interact with international expansion. It is also not clear if home country obligations stop at the border or also affect host country policies.
- *The problem of adequate disclosure and transparency by the foreign affiliates of state-owned multinationals, including in their dealings with parent firms.* Effective host country policies towards those firms require transparency about relevant activities of the state-owned multinational group.
- *The fairness or unfairness of competitive advantages arising from home-country state ownership.* Host country regulators can ask legitimately if state-owned investors have been directly or indirectly subsidized or cross-subsidized by their home governments or if they have enjoyed other tangible or intangible benefits, such as public procurement and access to financing.
- *Competition policy issues*. It is not easy to ensure fair competition rules vis-à-vis state-owned foreign investors, because the competitiveness of those actors depends on many factors that are not easy to gauge and calculate. As a result, 'legitimate' and 'undue' competitive advantages are not easy to separate from one another, making the designing of policies particularly difficult.

8. Conclusion

This article has reviewed the *picture* of state-owned multinationals as of 2017. It has found that these firms indeed play a major role in the world economy and that many are headquartered in emerging markets, although they are not exclusively an emerging market phenomenon. Data on the evolution of the greenfield projects of state-owned multinationals also suggest that their presence in the world economy will remain strong into the foreseeable future. As the world economy becomes more and more characterized by the coexistence of various types of capitalism rather than by a single model, the opportunities for state-owned multinationals to continue their activities will be significant, in home and host economies.

However, it would be too daring to forecast a linear growth for the FDI of state-owned multinationals. In the past, these firms underwent various transformations, during which the strength of their presence showed various ups and downs. In the same vein, we can hypothesize that the current upward trend may come to a halt once the main factors behind the current expansion weaken. Change can come, for instance, if the capacities of the states to instigate and support foreign expansion dissipate. Slowdown can also take place if the government approach to foreign expansion changes in the major home countries from openly favourable to more selective. Take, for example, the most important home country—China. In 2017, the government made clear its concerns about eventual overstretching, and it has indicated that it may discourage certain types of transactions, for example real estate, in the future (Feng, 2017). This could lead to a slowdown of outward FDI by state-owned multinationals from this particular home country.

All of this points to the fact that future research is necessary to understand fully the contemporary behaviour of state-owned multinationals, especially in broader international comparisons. That work would require a high degree of analytical rigour as well as political and ideological neutrality. It cannot be assumed from the outset that state-owned multinationals are an obstacle to the development of the modern market economy, nor can it be assumed that they are the only champions of development. Their real impact can be determined only on the basis of facts, and these facts must be gathered through detailed investigation and analysis.

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Notes

[1] The data set was collected and verified by an UNCTAD team. Data used in this presentation is exclusively based on information made publicly available in the *World Investment Report 2017* (UNCTAD, 2017). The author is fully responsible for any remaining error.

[2] Subnational entities in federal countries with significant state functions (e.g., German Länder, or Republics as federal subjects in the Russian Federation, or states in the United States) are to be considered as state owners.

[3] https://pt.wikipedia.org/wiki/Lista_de_empresas_estatais_do_Brasil (checked on 29 May 2017).

[4] http://www.gcis.gov.za/content/resourcecentre/contact-directory/government-structures-and-parastatal

s (accessed on 29 May 2017).

[5] Holdings is a miscellaneous category, covering either diversified conglomerates or headquarters of companies that in substance operate in other industries.

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