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The Demographics of World's Largest
Corporations: Focus on the Different Region Levels

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Abstract

Patrik Vaněk: **The Demographics of World's Largest Corporations: Focus on the Different Region Levels**

We explore the large corporations' corporate headquarters based on their geographical location, age, and sector composition. Companies are divided by global regions, countries, metropolitan areas, and cities to provide a detailed analysis of the ability to produce large companies. It is a descriptive study using a cross-sectional design. The unit of research consists of the world's 2000 largest companies (champions), as reported by Forbes Global 2000 in 2008 and 2022. Our results indicate that East and South Asia strengthened their significance since the Great Recession, North America remained stable, and other regions, including Western Europe, have weakened due to China's rapid growth. We suggest that focusing only on the country and city levels is misleading, and future research should consider the metropolitan regions instead. Our results might interest economic geography researchers and policymakers as they indicate the relative competitiveness of regions in supporting the emergence and growth of champions.

Key words

Geography of IB activities; MNE performance; headquarters' distribution; corporate demographics; Forbes Global 2000

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Introduction

Global corporations have been part of the global economy since the 17th century, when the first world corporations, such as the East India Company, began to emerge. Corporations gained importance over time, especially after Second World War. Their importance in the world economy is fundamental and will probably continue to gain influence in the future. Therefore, it is necessary to examine their development trends to provide the basis for a better understanding of the increase in the number of large corporations in China or to gain knowledge about the competitiveness of the European Union based on the structure of global corporations and their development trends.

Many authors address the issue of the global importance and influence of world corporations, the most important of which include Dicken (2015) and Alan M. Rugman and his numerous studies (e.g., Rugman and Brain 2003; Rugman and Oh 2008), which were followed up by other authors (e.g., Rosa, Gugler, and Verbeke 2020). Global corporations' changing geography and demographics are an ongoing process related to global corporations' economic challenges. Such challenges include, for example, the globalization process, changes in the comparative advantages of nations, or adaptation to the changing economic environment after economic crises and changes in the economic policy of individual regions.

Demographics of large corporations is an area of interest for international-business researchers, economic-geography researchers, and policymakers alike. This topic has not been fully explored (Véron 2008; Martelli and Abels 2011), even though the "corporate demographics provide a basis for comparing different national and regional business environment" (Véron 2008, 1). We address the call of authors (e.g., Martelli and Abels 2011), who recommend studying the geographic presence of large corporations and tracking them over time. Many studies have examined the influence of large corporations on local and national economies and their influence on global business and policies. However, only a handful of studies focused on the demographics of large corporations. Most of them cover the US and concentrate on the earlier stages of companies' life (Véron 2008).

However, as researchers aggregate the number of corporations based on the country or continent where the firm is headquartered, details about sub-country differences for significant economies such as the United States, China, Japan, and others still need to be included. To our best knowledge, no paper covering the global distribution of corporate headquarters focused on a sub-national level. Corporate headquarters are the commanding centers of an economy, and their locations significantly influence the urban structure and local economic growth (Zhang, Zhang, and Yang 2018). The lack of sub-regional information has left a void in the current literature to understand the influence of

globalization and international competitiveness as large corporations such as those listed in the Fortune Global 500 is their primary fuel (Rugman and Oh 2008).

Many of the largest corporations in the world have a global presence, with operations and employees in multiple countries (Rugman and Oh 2008; Asmussen 2009; Aggarwal, Berrill, Hutson, and Kearney 2011). However, the geographic concentration of corporate headquarters is highly uneven, with a small number of cities and regions dominating the landscape. There is a clear three-way split between Western Europe, East Asia, and North America, suggesting a tripartite geopolitical division of the world economy (Bergesen and Sonnett 2001; Rugman and Verbeke 2004; Véron 2008; Asmussen 2009; Aggarwal, Berrill, Hutson, and Kearney 2011). When tracing the history of post-war US dominance in the top 50 production firms between 1956 and 1998, Bergesen and Sonnet (2001) found clear American dominance in the early post-war period, as 42 out of the 50 largest production firms were American. The number dropped over the years to 16 by 1998. On the other side, Western Europe and Pacific Asia (represented only by Japan) experienced an increase, from eight to 21 firms in Western Europe and from none to 11 in Pacific Asia. Based on Fortune Global 500, at the end of the 20th century, the top five nations (the United States, Japan, Germany, France, and the United Kingdom) accounted for more than 80 percent of the world's largest companies (Bergesen and Sonnett 2001).

Sledge (2011) studied changes in the Fortune Global 500 list between 1995 and 2009. The author found that during the period, two new countries entered the top 10 country club—China and Canada. China has grown from three firms listed in 1995 to 37 and Canada from three to 14. These countries joined the slightly declining United States (151/140), declining Japan (149/68), France (44/40), Germany (44/39), the United Kingdom (33/26), strengthening South Korea (8/14), Switzerland (14/15), and the Netherlands (9/12). During the period, the share of companies from Asia declined from 32.6 to 28.8 percent, Western Europe slightly grew from 34.6 to 36 percent, and North America remained at 31.6 percent (Sledge 2011). During the first decade of the 20th century, there was a significant increase in the number of corporate headquarters located in emerging markets, particularly in China and India, indicating a rapid catch-up growth process (Véron 2008).

The distribution of corporate headquarters among the world's largest corporations has undergone significant changes since then. Several factors have contributed to these changes, including shifts in global economic power, changes in business practices, and the emergence of new technologies. In the past, during the end of the 20th century, most corporate headquarters were concentrated in developed countries, particularly in the United States, Japan, and countries of Western Europe. Since then, corporations from emerging economies have influenced and shaped the global economy (Nunes and Purdy 2008; Véron 2008). Several factors, including the rapid economic growth of emerging

markets, the expansion of global supply chains, and the increasing importance of these markets as sources of raw materials and labor, have driven this shift in the distribution of corporate headquarters. However, a paper analyzing the change in corporate headquarters and their characteristics covering this period is missing.

The presence of a large corporation can bring significant economic benefits to a region, including job creation and increased investment. However, the "corporate nationality" is ambiguous. Even though a company's culture, internal working language, and management are strongly influenced by the place where the company was initially created, the influence tends to decrease with time and the company's internationalization (Véron 2008). The concentration of corporate headquarters in a few cities and regions also creates an unequal distribution of economic benefits, with some areas experiencing much higher levels of growth and development than others.

In addition to the geographic distribution of corporate headquarters, it is also essential to consider the sectoral and age composition of the corporate demographics of these companies. The majority of the world's largest corporations operate in a small number of sectors, including finance, technology, healthcare, and manufacturing. Understanding the sector distribution of corporate headquarters can provide insight into the industries that are driving global economic growth and development.

Véron's (2008) work provided a deep insight into the sectoral distribution of the world's largest corporations by market capitalization and the diverse industry dynamics. For example, it was found that almost all (23 out of 28) studied Insurance companies were born before 1900, and Energy Services and Utilities sector companies trace their roots to the second industrial revolution (66 percent were born between 1880 and 1910). The Oil, Gas and Mining sector is almost entirely a creation of the 20th century (only 16 percent was created before 1900). Business Services such as transportation, software, and professional services companies were established in recent decades. Other sectors, such as Health and Life Sciences and Telecommunication and Media, have two waves of company creation. The former sector is linked to the advent of specialty chemicals between 1875 and 1950 and biotechnology development since 1975. The latter corresponds to the emergence of fixed telephony (1876-1900) and mobile networks (1976-2000), as 63 percent of companies were established in these periods. Sectors such as manufacturing (since the 1860s with a peak at the beginning of the 20th century), Consumer Products and Services (since the emergence of mass consumer markets in the late 19th century), and Banking and Finance sector have been dynamic throughout the time, though obviously in different regions at different moments (Véron 2008).

The age distribution of corporate headquarters is also an essential factor to consider. Studies have shown that a corporation's age can significantly impact its growth and development. Younger companies, for example, tend to be more agile and adaptable and may be more likely to take risks and pursue innovative business strategies as they are still developing their internal systems (Da Silva, Da Rocha, and Carneiro 2009). Furthermore, younger firms are entering the international markets much earlier, allowing them to grow faster than the traditional internationalization pattern (Da Silva, Da Rocha and Carneiro, 2009). On the other hand, older companies may be more established and have a more stable and conservative approach to business.

Previous research has found a stark contrast between the leading global economic regions of the United States, Western Europe, and Japan (Véron 2008). When considering the world's 500 largest corporations, the median establishment age of the European corporations was 130 years which is thirty years higher than that of the US counterparts. It was found that only 12 European companies out of 154 were created after 1950, while 51 out of 174 were in the US. Only three European companies were established after 1975, while 26 were in the US, illustrating Europe's fading as an incubator of new large corporations. Véron (2008) theorizes that this might not constitute a problem as large European companies can continuously re-invent themselves. While their share in the top 500 was relatively stable in the previous decade, the share of US firms has declined. By contrast, more than half of corporations from emerging countries were born in the last quarter of the 20th century.

This paper aims to evaluate how the development of world corporations within the three key economic global regions (North America, Western Europe, and East Asia) differs, considering the significant metropolitan areas.

For our analysis, we employ Forbes magazine's annual list of the largest corporations in the world's economy. We begin with an overview of the sectoral, age, and geographical structure of the largest corporations in the global economy and trace its development over 15 years, focusing on different region levels. Finally, we conclude our results, compare them with other authors' findings, speculate about the potential development in upcoming years, and recommend fruitful areas for future research.

1 Materials and methods

In this paper, we consider the world's largest companies. Following Véron (2008), we refer to these companies as "champions". For each of them, we consider the foundation year, their operations' primary sector, and their corporate headquarters location. We focus on various levels of regional aggregation: global region, country, metropolitan area, and city. This way, the dataset of the 2000

largest companies can be used to compare the characteristics of champions on different levels of business environments, building on research done by previous authors.

To select a sample of corporations for investigation, it is possible to use one of the rankings of the world's most important corporations, which include, for example, Forbes Global 2000 or Fortune Global 500. These rankings are used by study authors mainly for two purposes, either as a sample of companies to monitor a specific phenomenon (e.g., Sledge 2011; Rugman and Brain 2013) or to examine changes within the ranking (e.g., Long 2016).

We use the Forbes Global 2000 annual ranking of the world's largest and most influential public companies for 15 years between 2008 and 2022. The list is based on composite sales, profits, assets, and market value ranking. It is widely regarded as a reliable and comprehensive source of information on global corporate size and power. Researchers and policymakers use it for evaluating the performance of listed companies. The most recent list includes companies from 56 countries across various industries. We decided to prefer Forbes' list over Fortune Global 500 as it provides more data in range (2000 instead of 500 firms) and depth (more indicators and information is published), making the Forbes Global 2000 more comprehensive and informative for our study. There is a one-year time lag for a listing, so the 2022 list tracks the 2021 fiscal year data.

2 Results

Recently, the 2022 list of the Forbes Global 2000, ranking the world's largest corporations by multiple indicators, has shown that nearly 60 percent of listed companies have their headquarters in just three countries—the United States, China, and Japan. The total share of firms rises to 75 percent if the number of countries is extended to cover all economies, with at least 50 firms in the list (South Korea, the United Kingdom, Canada, India, France, and Germany). Within these countries, the geographical distribution of corporate headquarters is also heavily concentrated in a few major cities and their urban area. For example, most Forbes Global 2000 headquarters in the United States are in a few cities, including New York, Houston, and San Francisco. Similarly, in China, most headquarters are concentrated in the major cities of Beijing, Shanghai, and Hong Kong. In Japan, most headquarters are in Tokyo, to less extent in Osaka. This concentration of corporate headquarters has significant implications for local and national economies.

2.1 Geographic distribution

North America (the United States and Canada), East Asia (China, Japan, North Korea, and Taiwan), and Western Europe comprise most companies listed in Forbes Global 2000 (see Table 1). At the same

time, we can see that some of these areas have strengthened their representation since the Great Recession (East and South Asia), and others have significantly weakened (Western Europe, Latin America, and South Africa). North America remained stable during the 15 years, with a slight decline. However, due to the rapid growth of East Asia, North America lost its dominance in the global economy. Western Europe experienced a significant decline in the number of its champions and became the least significant region of the triad, indicating its weakening position in the global economy. Triad regions have increased their share of the total number of champions from 81.4 to 85.3 percent. This indicates steady growth of the significance of these three global economic centers. However, using only Triad-approach in research (e.g., Rugman and Verbeke 2004) leads to misleading results, as a significant number of champions is in developing countries, especially in the Middle East, South Asia, and Oceania. The major development is the dramatic rise of emerging economies, especially after a series of high-profile initial public offerings in China since the mid-2000s (Véron 2008).

Table 1: Number of champions by global regions (2008 and 2022)

Source: *Forbes Global 2000*

Region	2008	2022	Change (%)
Middle East	60	60	0
Southern Africa	17	3	-82,4
North Africa	5	3	-40
West Africa	1	1	0
Latin America	64	44	-31,3
North America	657	649	-1,2
Central Asia	0	2	
Southeast Asia	55	49	-10,9
South Asia	50	55	10
East Asia	462	660	42,9
Eastern Europe	36	34	-5,6
Western Europe	509	396	-22,2
Oceania	51	30	-41,2
Other	33	4	-87,9

Except for East Asia, only South Asia has relatively grown. Other global regions, such as Southern and North Africa, Latin America, Southeast Asia, Oceania, and Eastern Europe, have lost the number of their champions due to the rapid growth of East Asia in the Forbes Global 2000. Countries included in the Other region include tax haven countries such as Bermuda and the Cayman Islands primarily.

Focusing on the performance of individual countries (Table 2), China (including Hong Kong) experienced a significant increase in the number of companies in East Asia (from 109 to 351 champions), thus surpassing the United Kingdom and Japan and moving into second place in the number of champions, after the United States. South Korea (up 25 percent) improved by four places, and Taiwan (14), which moved from eleventh to tenth place, also grew. In 2008, Hong Kong alone had 37 firms, placing it 12th. In 2022, Hong Kong increased the number of firms to 54 (46 percent), putting it in eighth place with France. Canada (up one place), India (up three places), Switzerland (up two places), and Sweden also strengthened their position. In 2008, Sweden, Russia, and Spain had the same number of companies (29), but only Sweden strengthened its position (from the shared 15th place to 12th); the other two countries fell in the number of companies in the ranking. The most significant drop is recorded for Japan (24 percent), which fell from second to third place, and the United Kingdom (48), which fell from the world's top three to sixth place in the number of champions. A significant drop also occurred in other European countries, namely France (from fifth to eighth position), Germany (down two positions), and Italy (also two positions). Australia also fell significantly (from 9th to 13th place). This finding confirms Véron's (2008) prediction that the emerging countries would witness the most significant growth of champions, as China, South Korea, India, and Taiwan had grown the most.

Table 2: Top 15 countries by number of champions in 2022

Source: *Forbes Global 2000*

Country	2008	2022	Change (%)
United States	598	585	-2,2
China	109	351	222,0
Japan	259	196	-24,3
South Korea	52	65	25,0
Canada	59	64	8,5
United Kingdom	123	64	-48,0
India	48	55	14,6
France	67	54	-19,4
Germany	59	52	-11,9
Taiwan	42	48	14,3
Switzerland	37	40	8,1
Sweden	29	32	10,3
Australia	51	30	-41,2
Italy	37	26	-29,7
Netherlands	26	24	-7,7

The number of countries listed with at least one company in the Forbes Global 2000 in 2008 was 60. For 2022, this number has decreased to 56. In 2008, 36 countries had at least ten companies in the ranking; in 2022, only 27. In 15 years, 2000 champions were concentrated in fewer countries. In 2008, the top 14 countries included over 75 percent of the 2000 companies in the list. In 2022, the top 10 countries covered over 75 percent of the total champions. In 2008, 24 countries had less than ten champions, compared to 30 countries in 2022. The number of countries with less than five champions has risen from 15 to 22. This indicates the growing concentration of champions in major economies.

Tokyo leads significantly at the city level (Table 3), even though Japan has lost the most champions in recent years. Among the fifteen most important cities are seven cities from East Asia (four from China and one each from Japan, South Korea, and Taiwan), four cities from North America (three from the United States, one from Canada), and three cities from Europe (one from the United Kingdom, France, and Sweden). Although the US dominates in the number of champions, China has already dominated the number of cities among the top 15. Economies where firms are highly concentrated (e.g., South Korea, the United Kingdom, and France) have representatives in the top 15. Conversely, comparable economies in terms of the total number of firms but less concentrated (e.g., Germany) do not have representatives in the top 15. In addition to these 15 cities, other cities are also important, for example, Dublin (17 companies), Chicago (16), Moscow (16), and Dallas (15).

Table 3: Top 15 cities by number of champions in 2022

Source: *Forbes Global 2000*

City	Country	Number of champions
Tokyo	Japan	124
Beijing	China	77
New York	United States	54
Hong Kong	China	51
Seoul	South Korea	51
London	United Kingdom	43
Shanghai	China	40
Paris	France	38
Taiwan	Taiwan	30
Shenzhen	China	23
Mumbai	India	22
Stockholm	Sweden	21
Toronto	Canada	21
Houston	United States	20
San Francisco	United States	18

Like the number of countries, the number of cities in the Forbes Global 2000 list has decreased. In 2022, 681 cities made it to the ranking, of which only 32 cities have at least ten companies, 79 cities have at least five, and 442 cities made it to the ranking with just one representative.

Table 4: Top 20 metropolitan areas by number of champions in 2022

Source: *Forbes Global 2000*

Metropolitan area	Country	No. of champions	Main city
Greater Tokyo Area	Japan	134	Tokyo
Greater Bay Area	China	100	Hong Kong
Jingjinji Metropolitan Region	China	87	Beijing
New York Metropolitan Area	United States	87	New York
Yangtze River Delta	China	68	Shanghai
San Francisco Bay Area	United States	67	Seoul
Seoul Capital Area	South Korea	58	San Francisco
Extended Greater London	United Kingdom	54	London
Île-de-France	France	52	Paris
Northern Taiwan	Taiwan	40	Taipei
Chicago Metropolitan Area	United States	35	Chicago
Greater Toronto Area	Canada	27	Toronto
Dallas–Fort Worth Metroplex	United States	26	Dallas
Keihanshin	Japan	26	Osaka
Stockholm County	Sweden	25	Stockholm
Greater Houston	United States	24	Houston
Greater Los Angeles	United States	24	Irvine
Mumbai Metropolitan Region	India	23	Mumbai
Greater Boston	United States	22	Boston
Greater Philadelphia	United States	21	Wilmington

However, it is essential to remember that many cities connect and form larger units, so-called metropolitan areas or megalopolises. Table 4 shows the 20 most significant metropolitan areas in the world economy. These 20 metropolitan areas include 50 percent of all companies listed in the Forbes Global 2000 ranking for 2022. Champions headquartered in the top eight metropolitan areas cover about one-third of the total. The top four metropolitan areas serve as corporate headquarters for 20 percent of all champions. Their distribution is, therefore, heavily concentrated in a few global economic centers.

The most crucial metropolitan area is the Greater Tokyo Area (with 134 champions), even though, over 15 years, Japan has significantly weakened in the number of national champions. The top five regions include four located in East Asia. The only exception in the top five is New York Metropolitan Area,

located in North America. The dominance of the East Asia region and the concentration of economic power is thus clear. China occupies the remaining three positions, and they are also the only positions it has within the top 20 metropolitan areas. Evaluating the results included in Table 4, it can be concluded that North America (9) leads in the number of metropolitan areas, followed by East Asia (7), Western Europe (3), and South Asia (1). For the total of champions included in the top 20 regions, the US leads with 306 firms, followed by China with 255 and Japan with 160. These three countries are also the only ones with two or more metropolitan areas in the top 25.

Other important metropolitan areas include the Greater Dublin Area, Ireland (18 champions); Washington metropolitan area, United States (18); Moscow Metropolitan Area (16); Rhine-Ruhr Metropolitan Region, Germany (16); and Metropolitan Atlanta (15). Other metropolitan areas were not defined as they contain 14 or fewer champions. All metropolitan areas were defined within country boundaries.

2.2 Sectoral Composition

The multinational corporation is generally considered the basic global economic activity production unit. Therefore, understanding their distribution across industries provides a good measure of the web of global economic activity (Bergesen and Sonnett 2001).

Different regions also display different sectoral profiles, reflecting their various levels of development and industry specializations, as previously noted in Véron (2008). Table 5 illustrates this diversity. Western Europe provides a balanced profile except for its highly concentrated and publicly listed electricity sector (Véron 2008); North America is dominant in Consumer Staples, Energy, Health Care, and Information Technology; and East Asia is dominant in Financials, Industrials, and Materials. In the rest of the world, champions in Financials represent the bulk of the total number of firms. Financials are the most important sector for all global regions (except for Eastern Europe and East Asia). In East Asia, the Industrials sector is dominant, while in Eastern Europe, Energy is the dominant sector. East Asia has become the world's factory in recent decades, and Eastern Europe is relatively weak in the financial sector. Only four global regions have at least one champion in each sector: North America, East Asia, Western Europe, and the Middle East.

Corporation headquarters of firms operating in some sectors are more concentrated in key metropolitan areas. In the case of a comparison of the share of companies located in the top 15 metropolitan areas (Table 6) with the total number of companies in individual sectors (Table 5), the sectors most concentrated in the main metropolitan areas are Information Technology (62 percent), Industrials (57), Telecommunication Services (53) and Consumer Discretionary (52). More than 50

percent of all companies in these sectors are in key metropolitan areas. On the other hand, the sectors least concentrated in these areas include Energy (28 percent), Materials (29), and Utilities (31). Here, less than a third of the companies have their headquarters in the main metropolitan areas.

Table 5: Sectoral composition of champions in top 15 global regions in 2022

Source: *Forbes Global 2000*

Global region	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Telecommunication Services	Utilities
Middle East	1	1	4	36	1	6	1	5	2	3
Southern Africa	1			7				4	1	
North Africa				3						
West Africa						1				
Latin America		9	4	13		4	2	9	1	2
North America	60	73	42	144	56	121	75	40	7	31
Central Asia				2						
Southeast Asia		6	3	24		5	1	6	3	1
South Asia	5	2	6	13	1	8	6	9	1	4
East Asia	61	43	18	166	26	188	57	66	13	22
Eastern Europe		2	11	8				8	1	4
Western Europe	39	31	15	112	24	86	20	40	13	16
Oceania	1	3	3	11	3	2	1	5	1	
Other				2		1	1			
Total	168	170	106	541	111	422	164	192	43	83

The Greater Tokyo Area, which includes the most champions, dominates sectors such as Consumer Discretionary (16), Materials (13), and Consumer Staples (10). Information Technology is the sector with the most pronounced concentration of champions, where the San Francisco Bay Area includes 37 firms with a significant lead over Northern Taiwan (13). The Financials sector is relatively evenly distributed among key metropolitan areas.

The most significant number of companies are in the New York Metropolitan Area (34), the Greater Tokyo Area (24), and the Jingjinji Metropolitan Region (22), which reflects the world's most important financial centers (New York, Tokyo, and Beijing). London, which is the European financial center, needs to catch up. Its number of significant financial firms is comparable to other Asian metropolitan areas that are gaining importance over time. The Industrials sector is most significant in East Asia, specifically

in the Greater Tokyo Area (44 firms), the Greater Bay Area (42), the Jingjinji Metropolitan Region (28), and the Yangtze River Delta region (23). The essential non-East Asia region is Île-de-France, with 17 companies. There is, therefore, an evident dependence on the East Asia region as far as industrial centers are concerned. None of the monitored metropolitan areas significantly dominates sectors such as Energy and Telecommunication Services.

Table 6: Sectoral composition of champions in top 15 metropolitan areas in 2022

Source: *Forbes Global 2000*

Metropolitan area	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Telecommunication Services	Utilities
Greater Tokyo Area	16	10	5	24	8	44	9	13	3	2
Greater Bay Area	11	7	3	18	4	42	5	3	2	5
Jingjinji MR	5	1	4	22	1	28	7	7	4	8
New York MA	12	5	2	34	11	14	4		2	3
Yangtze River Delta	5	7		16	5	23	7	5		
San Francisco Bay	4	3	1	8	5	8	37			1
Seoul Capital Area	5	5	3	17		11	7	7	3	
Greater London	5	7	3	16	2	9	1	8	2	1
Île-de-France	8	3	2	11	2	17	3	2	2	2
Northern Taiwan	1		1	16		8	13		1	
Chicago MA	3	7	1	7	3	9	2	2		1
Greater Toronto	4	3		12		3	1	2	1	1
Dallas–Fort Worth	1	1	4	4	2	7	2	2	2	1
Keihanshin	4		1	5	1	8	3	3		1
Stockholm County	3	2		7		9	1	2	1	
Total	87	61	30	217	44	240	102	56	23	26

All three of the most significant metropolitan areas in East Asia (Greater Tokyo Area, Greater Bay Area, and Jingjinji Metropolitan Region) have non-zero champions in all the listed sectors; the last four do not. Although the Yangtze River Delta region is the world's fifth most important metropolitan area, it lacks companies operating in Energy, Telecommunication Services, and Utilities, which are significantly concentrated in the rest of China's centers.

2.3 Age Structure

This section provides a summary description of the patterns that result from observing the establishment years of champions appearing in the Forbes Global 2000 in 2022. This analysis is purely descriptive and does not aspire to explore causalities. Table 7 presents the demographic composition of the global regions; Table 8 presents the age structure of the top 15 metropolitan areas.

The most significant number of companies were founded after the Second World War, with the fact that from the end of the 20th century East Asia already took over the scepter in the number of new significant companies from North America, overtook Western Europe and is rapidly catching up with North America as well. In Latin America, where significant growth was still expected at the end of the last century, one can see stagnation or even a decline in the ability to generate significant new companies or support the growth of existing ones. Other interesting findings include the stagnation of Oceania (primarily Australia) and Africa. On the contrary, a significant increase in the last 50 years in Eastern Europe is related to the collapse of the Soviet Union, the entry of multiple countries into the European Union, and their involvement in global trade. The Second World War meant a decline in the emergence of today's champions only in the case of Western Europe and stagnation of growth in the case of North America. East Asia was not negatively affected by the Second World War. Instead, on the contrary, it significantly strengthened during the last century.

Most of today's champions before 1800 were generated by Western Europe. During the second half of the 19th century, however, the position of the dominant global region was taken over by North America, whose ability to generate today's most influential companies was replaced by East Asia at the end of the last century. This has culminated in today's situation where East Asia currently has the largest share of world champions.

East Asia is the dominant global region for creating today's champions this century, which generated almost as many firms as the other two Triad regions—North America and Western Europe (147 versus 152). Given this ratio, it can be expected that the significance of East Asia will continue to grow in the future and strengthen its position as a dominant global region. The region of Southeast Asia (mainly Singapore, Malaysia, and Thailand) significantly strengthened during the second half of the 20th century. Therefore, we can expect further growth in the importance of this part of the world as much production moves from East Asian countries, thereby supporting the future competitiveness of the Southeast Asia region. A significant increase was also recorded in South Asia (represented only by India). The importance of Asia in the Forbes Global 2000 rankings may continue to strengthen in the coming decades. An increase in importance can also be expected in the Middle East region, where most companies were founded in the second half of the 20th century.

In the case of Africa, today's champions were established sporadically throughout the 20th century. Therefore, we cannot speak of any trend, and in the next 20-30 years, we cannot expect a significant increase in the importance of this continent in Forbes Global 2000. The same applies to Oceania, which generated today's champions during the last two centuries.

The peak of the ability to generate future champions in the case of Latin America occurred in Q2 20c. Over time, its gradual decline followed. Latin America may continue to lose its representation in the Forbes Global 2000 ranking.

Table 7: Age structure of champions by global regions in 2022

Source: *Forbes Global 2000*

Global region	Prior 1775	18c Q4	19c Q1	19c Q2	19c Q3	19c Q4	20c Q1	20c Q2	20c Q3	20c Q4	21c Q1	No data
Middle East							4	8	17	18	10	3
Southern Africa					1	1	2	1	3	3	2	
North Africa							1	1	1			
West Africa										1		
Latin America			1			3	5	11	9	8	4	3
North America		4	6	18	31	55	68	61	100	202	89	15
Central Asia							1				1	
Southeast Asia			1	1		2	6	4	15	16	4	
South Asia						1	7	8	11	23	4	1
East Asia	1	1	2	1	9	24	39	65	91	222	147	58
Eastern Europe	1		1	1			1	5	3	19	3	1
Western Europe	4	2	9	16	42	29	42	33	45	99	63	12
Oceania			1	1	2	3	5		6	5	4	3
Other				1						2	1	
Total	6	7	21	39	85	118	181	197	301	618	332	96

Within the structural composition of champions, individual waves of industrialization of individual metropolitan areas in the East Asia region are visible. The Greater Tokyo Area started generating today's champions in the first half of the 20th century. It was followed by South Korea, specifically the Seoul Capital Area, during Q3 of the 20th century and only then by the metropolitan areas in China during Q4 of the 20th century. The Greater Tokyo Area generated most of today's champions in Q2 of the 20th century, with its ability waning over the rest of the century. The revival occurred at the beginning of the 21st century when this area generated the most current champions after the Greater

Bay Area (China). Therefore, Japan's decline in importance may slow down or even reverse in the coming decades.

In the case of China, today's champions first began to appear in the Greater Bay Area (primarily Hong Kong), followed by the Jingjinji Metropolitan Area (primarily Beijing) and then the Yangtze River Delta region (the area around Shanghai). At the beginning of the 21st century, Beijing and its surroundings generated the most significant number of today's champions. In the future, the Jingjinji Metropolitan Area may catch up with the Greater Bay Area in the number of future champions.

Table 8: Sectoral composition of champions in top 15 metropolitan areas in 2022

Source: *Forbes Global 2000*

Metropolitan area	Prior 1800	19c Q1	19c Q2	19c Q3	19c Q4	20c Q1	20c Q2	20c Q3	20c Q4	21c Q1	No data	Average
Greater Tokyo Area	1	1	1	8	10	17	33	24	11	27	1	1947
Greater Bay Area		1		1	2	4	3	9	53	22	5	1982
Jingjinji MR						2	3	2	39	34	7	1994
New York MA		2	5	5	6	8	9	12	23	12	5	1949
Yangtze River Delta						1		1	39	16	11	1996
San Francisco Bay Area				1	1	1	3	10	29	20	2	1984
Seoul Capital Area					1		5	26	14	9	3	1973
Greater London		4	3	4	4	9	1	3	15	10	1	1939
Île-de-France	2	2	2	4	2	6	5	14	9	6		1932
Northern Taiwan						1	2	8	12	12	5	1985
Chicago MA	1		1		4	5	4	5	8	7		1952
Greater Toronto Area		1	1	4	3	2	1	6	6	3		1934
Dallas–Fort Worth MP			2	1	1	4	4	3	7	3	1	1947
Keihanshin					4	8	5	5	1	2	1	1936
Stockholm County				4	2	3	3	3	6	2	2	1944
Total	4	11	15	32	40	71	81	131	272	185	44	

The New York Metropolitan Area has generated the most current champions in the United States since the 1800s. The growth of the San Francisco Bay Area since the second half of the 20th century has been much more pronounced, whereby the importance of the state of California within the United States continues to grow, primarily in the Information Technology sector.

The most crucial metropolitan area is the Greater Tokyo Area, even though, over 15 years, Japan has significantly weakened in the number of national champions. The top five regions include four located

in East Asia. The only exception in the top five metropolitan areas is New York Metropolitan Area, which is in North America. The dominance of the East Asia region and the concentration of economic power is thus clear.

Conclusions

Utilizing data on the location of corporate headquarters in Forbes Global 2000 for 2008 and 2022, we aggregated cities into global regions and metropolitan areas to better understand their geographical distribution, sectoral composition, and age structure. Therefore, we studied the ability of different regional levels to generate current champions and their significance for urban, national, and global economies.

Focusing on the geographical distribution of corporate headquarters, we found that since Great Recession, East and South Asia strengthened their significance (primarily China and India). At the same time, Western Europe, Latin America, and Africa have weakened due to China's rapid growth. During the 15 years, China surpassed the United Kingdom and Japan and moved into second place in the number of champions after the United States. However, Great Tokyo Area still leads at the metropolitan level, even though Japan has lost the most champions. Among the fifteen most important cities are seven cities from East Asia (four from China and one each from Japan, South Korea, and Taiwan), four cities from North America (three from the United States, one from Canada), and three cities from Europe (one from the United Kingdom, France, and Sweden). The top 20 metropolitan areas include 50 percent of all companies listed in the Forbes Global 2000 ranking for 2022. The top five metropolitan areas include four in East Asia, with one exception in the United States.

North America is dominant in Consumer Staples, Energy, Health Care, and Information Technology; East Asia is dominant in Financials, Industrials, and Materials; and Western Europe provides a balanced sectoral profile. In the rest of the world, champions in Financials represent the bulk of the total number of firms. The most concentrated sectors are Information Technology, Industrials, Telecommunication Services, and Consumer Discretionary. On the other hand, the sectors least concentrated in key metropolitan areas include Energy, Materials, and Utilities. The Greater Tokyo Area, which includes the most champions, dominates the Consumer Discretionary, Materials, and Consumer Staples sectors. Information Technology has the most pronounced concentration of champions, especially in the San Francisco Bay Area. The Financials sector is relatively evenly distributed among key metropolitan areas. The most significant number of Financials sector companies are in the New York Metropolitan Area, the Greater Tokyo Area, and the Jingjinji Metropolitan Region, which reflects the

world's most important financial centers. London, which is the European financial center, is lagging. The Industrials sector is most significant in key Chinese metropolitan areas.

We have shown that focusing only on the country or city level is misleading, and future research should consider the metropolitan regions instead.

Further research is needed to understand this concentration's drivers and identify ways to promote more balanced and inclusive economic development. Additionally, it might be enriching to analyze a sample of both public and private companies, as our sample consists only of public corporations. As many Chinese corporations are not publicly traded, our results might be distorted and not show the actual proportions within a sample of all large companies. We expect that using a sample of private and public companies might reveal that the Chinese economy consists of a much greater number of large corporations' corporate headquarters than the US economy. This might indicate its vast dominance in the world economy. Furthermore, as South Korea, Canada, and the UK have about the same number of champions, it might be interesting to compare these economies, their competitiveness, and project their future development.

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