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Re-examining the global urban hierarchy of corporate geography: the rise of Pacific Rim cities and shifting command-and-control

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Abstract. This paper investigates the dynamic evolution of world city hierarchy from 1996 to 2023, emphasising metropolitan areas as global command-and-control centres. It proposes a classification of the diverse literature on world/global cities and develops an analytical framework revisiting Godfrey and Zhou's (1999) approach. Using data from the Fortune Global 500 list and Refinitiv Eikon database, the paper explores trends in global command-and-control centres by analysing the locations of corporate and regional headquarters. It confirms a shift towards Pacific Rim cities, driven by the emergence and rapid growth of firms from developing economies, particularly China. The findings highlight the strengthening role of US cities, the relative decline of Europe, and persistent global disparities in command-and-control. Beijing, in particular, rivals traditional centres such as New York, Tokyo and London, becoming a leading hub of global corporate power.

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1. Introduction

Since the 1980s, globalisation has dramatically changed the economic landscape worldwide (Cuervo-Cazurra et al., 2020). Multinational enterprises (MNEs) (*Note*) have become crucial players in the global economy, significantly affecting the allocation of resources, employment, international trade, and the spread of technologies (Stutz & Warf, 2005; Dicken, 2007). Already at the turn of the millennium, 53 of the world's 100 largest economies were corporations, surpassing the economic output of over 120 countries (Gabel & Bruner, 2003). The rising importance of cities has accompanied the diminishing role of nation-based states (Sassen, 1991; Knox, 1995; Scott et al., 2001; Scott et al., 2001; Neal et al., 2020; Scott et al., 2001).

Cities and their metropolitan areas have become concentrated sites of economic power, serving as strategic command-and-control centres in the global economy (Wood & Roberts, 2011; Sassen, 2018; Chakravarty et al., 2021). Corporate and regional headquarters, responsible for corporate decisions, place cities with a concentration of such entities as command centres (Godfrey & Zhou, 1999; Rice, 2010; Rice & Lyons, 2010; Tonts & Taylor, 2010; Pan & Xia, 2014). The dynamics between regional/subsidiary headquarters and corporate strategy reveal how MNEs navigate local adaptation and global integration (Rice & Pooler, 2009; Rice, 2010).

Previous research demonstrates that cities are hierarchical and, to varying degrees, integrated into the network of global cities (Timberlake et al., 2014; Acuto & Leffel, 2021). Research on the hierarchy of world cities related to international business has traditionally focused on the concentration of corporate headquarters (hereafter, CHQ) (Holloway & Wheeler, 1991; Knox, 1995; Lyons & Salmon, 1995). However, Godfrey and Zhou (1999) argued that focusing solely on CHQ location distorts urban hierarchies by overstating the importance of urban centres in developed countries. Therefore, they advocated for evaluating world cities by adding the distribution of regional headquarters (RHQ), i.e., CHQs plus RHQs. Literature has emerged documenting the strategic role of RHQs in global business operations and the importance of global cities' RHQ locations in mitigating the liability of foreignness, introduced by Hymer (1972) (Goerzen et al., 2013; Belderbos et al., 2020; Taylor & Derudder, 2022; Kola-Bezka & Kuzel, 2023).

Nevertheless, contemporary literature is not homogeneous. Besides the World City concept developed in Friedmann (1986) and elaborated upon in Godfrey and Zhou (1999), there are the Global City concept, as developed by Sassen (1991, 1994), and the World City Network, as proposed in Beaverstock et al. (1999). Various modifications and fusions of these fundamental approaches were founded on geographical and functional criteria (Knox & Taylor, 1995; Taylor, 2001; Alderson & Beckfield, 2004; Csomós, 2017; Derudder & Taylor, 2016, 2020). However, a research gap exists, since there is no comprehensive organisation of these approaches in the literature.

In this paper, we pursue three main aims. First, we organise the heterogeneous contemporary literature on global urban hierarchy and the role of MNEs. Second, we develop an analytical framework re-examining the principal approach in Godfrey and Zhou (1999). Third, we apply the framework to explore trends in the global hierarchy of command centres since 1996. We employ the same foundational dataset as Godfrey and Zhou (1999) – the 100 largest corporations from the 2023 Fortune Global 500 list – and consider evolution since their work.

We delineate our contributions into two areas: methodological and empirical. Methodologically, we propose a new framework for classifying world and global city concepts, building on Godfrey and Zhou's (1999) approach with a focus on metropolitan areas. These we define using EU-OECD functional urban areas (Dijkstra et al., 2019; OECD/European Commission, 2020), offering a novel perspective in corporate geography. Empirically, our findings highlight four trends shaping international economic decision-making in the early 21st century: the pronounced dominance of Pacific Rim cities, the strengthening of US cities, Europe's decline, and persistent disparities in command-and-control functions. Notably, the shift toward the Pacific Rim is not driven by the relocation of Western MNEs, but by the emergence and rapid global expansion of new MNEs from developing economies, particularly China, whose HQs are embedded in rising cities such as Beijing.

This paper is organised into four sections. The first section summarises the evolution of the world/global city literature and proposes a classification of world/global city approaches. The second section introduces the method used by Godfrey and Zhou (1999) for our analysis. The third section presents our framework, which was developed as an extension of their approach, along with its data sources and limitations. The last section presents changes in the world city hierarchy between 1996 and 2023, which are discussed in relation to previous literature.

2. The development of world/ global city literature

Literature on cities is multifaceted, encompassing a wide range of disciplinary perspectives and thematic areas, including transportation, environmental sustainability, smart city initiatives and residential segregation. Within the context of urban studies that engage with the global economic roles of cities, two primary traditions can be distinguished: demographic or functional (Beaverstock et al., 1999). The demographic tradition explores the sociological and ecological effects of large population concentrations in the context of national urban systems (Gilbert, 1996), whereas the functional tradition reinterprets the global economic role of cities (Cohen, 1981; Friedmann, 1986; Sassen, 1991).

Within the functional tradition, Chakravarty et al. (2021) identify three generally converged approaches: (1) the corporate organisation approach, which relies on indicators such as the presence of CHQs or advanced producer services (hereafter, APS) to generate ranked lists of global cities; (2) the infrastructure perspective, which uses indicators such as telecommunications and transportation; (3) more recent research including additional aspects of globalness, resulting in several indices such as the Global Cities Index (Lohmeyer et al., 2023) and the Global Power City Index (Yamato et al., 2023).

In this paper, we focus on the organisational approach (*Note* 2) within the broader functional tradition and propose its classification into six themes, outlined in Figure 1.

2.1. Cities as command-and-control centres

The concept of *World City* and the use of spatial concentration of large MNE CHQs can be traced to Hall's (1966) pioneering study, which linked urbanisation and globalisation. Hall identified seven major nodes in the global urban network – London, Paris, Randstad, Rhine-Ruhr, Moscow, New York and Tokyo – highlighting their role as centres of political power, economic control and cultural influence. Later, Hymer (1972) proposed the first global hierarchy of cities, predicting the dominance of New York, London, Paris, Bonn, Tokyo, Moscow and Beijing as central hubs for leading MNEs. Following Cohen (1981), ranking cities based on the concentration of headquarters and the economic performance of the MNEs they host has become prevalent – hence, the concept of the *Headquarter City*. These authors can be seen as pioneers of the corporate organisation approach.

Building upon Friedmann and Wolff (1982), Friedmann (1986) introduced a classification for world cities based on criteria such as being a major financial hub, hosting MNE CHQs and international institutions, and witnessing significant growth in the business services sector. Cities like New York, Los Angeles, Tokyo, London, Paris and Chicago emerged from the classification as primary world cities, emphasising the importance of the spatial concentration of CHQs. Later, New York, London and Tokyo were identified as quintessential command-and-control centres (Friedmann, 1995). The concept was further

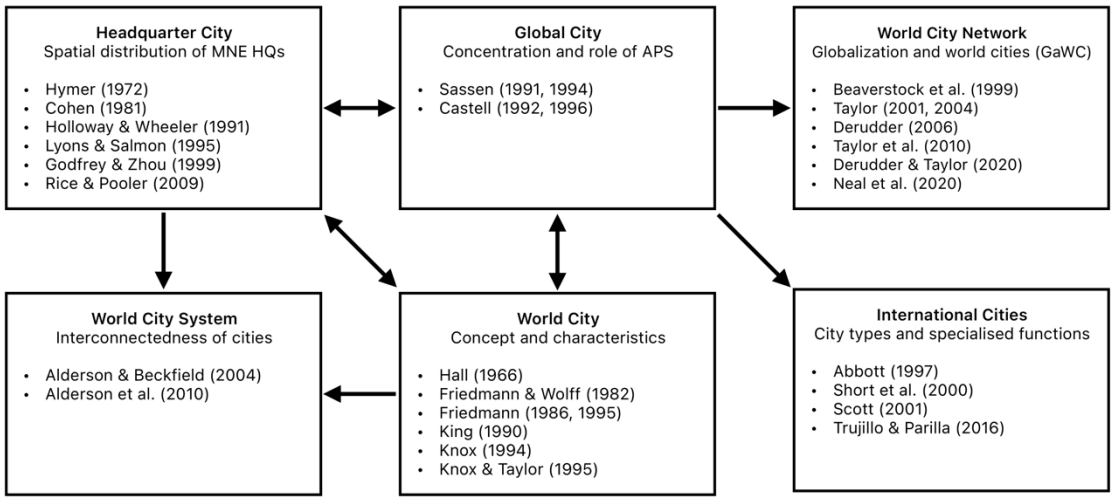

Fig. 1. Proposed classification of world/global city literature
Note: Arrows indicate evolutionary relationships between identified concepts

developed by King (1990), Knox (1994) and Short et al. (1996), culminating in Knox and Taylor (1995). Nonetheless, this approach to defining world cities was criticised as casual empiricism (Beaverstock et al., 1999).

Within the Headquarter City concept, early scholars focused on the concentration of CHQs (Cohen, 1981; Holloway & Wheeler, 1991; Knox, 1995; Lyons & Salmon, 1995). Following the critique of this approach (Short et al., 1996; Smith & Timberlake, 1995; Godfrey & Zhou, 1999), the subsequent literature took two distinct paths. Authors such as Godfrey and Zhou (1999) suggested that the unique distribution of RHQ should be incorporated within the Headquarter City approach, recognising the different special distributions of CHQs and RHQs (Rice & Pooler, 2009). However, research on world cities continues to utilise the concentration of CHQs as an indicator of command-and-control centres and delineate their positions in the global economy (Pan & Xia, 2014; Csomós, 2017).

Alternatively, Alderson and Beckfield (2004) made significant contributions to this field by analysing the *World City System* – the structural relationships between cities and their interconnectedness in the global economy, using the headquarters network of corporate and regional headquarters. This unique approach was further developed in Alderson et al. (2010).

2.2 Cities as service centres

Since Sassen's (1991) work on the *Global City* concept, there has been an emphasis on the role and concentration of advanced producer services (APS) in major urban centres, challenging the earlier prominence of MNE headquarters. In Sassen's approach, global cities are key production centres capable of global control, supported by financial and professional services. Castells' (1992, 1994) contribution further elucidated the role of information and communication technologies in facilitating the rise of global cities.

The Globalization and World Cities (GaWC) research network has been instrumental in advancing the APS-focused literature that has evolved into the World City Network concept, classifying cities according to their degree of global connectivity. Beaverstock et al. (1999) explored this perspective and proposed a theory-driven, empirically validated hierarchy of global cities, further developed by Taylor (2001). The GaWC research network has been updating the list, with the most recent update being in 2020. This classification is commonly used by international business researchers (e.g., Goerzen et al., 2013). Taylor (2004), Derudder (2006) and Taylor et al. (2010) further expanded the literature. Recent contributions by Derudder and Taylor (2020) and Neal et al. (2020) continue to refine the understanding of the dynamics and evolving nature of the world city network.

2.3 Cities as specialised centres

The literature on *International Cities* focuses on the diverse types and specialised functions of cities within the global context, building on the concept of the global city. Abbott (1997) differentiated between world and international cities, focusing on the urban specialisation in the world economy. Short et al. (2000) extend the literature by introducing the concept of gateway cities and argue that they differ from traditional world cities, playing a unique role in globalisation. Scott (2001) explores the concept of global city-regions, which are large metropolitan areas that serve as crucial nodes in the global economy. Trujillo and Parilla (2016) identified seven types of international cities, offering a new framework with a broader perspective on global urbanisation, emphasising that cities contribute uniquely to global commerce and economic development, even if they do not fit the traditional image of a global city.

2.4 Territorial demarcation

In the debate on world and global cities, Derudder (2006) highlights distinctions in territorial demarcation. Sassen's (1991, 1994) concept of the *Global City* focuses on cities with traditional central business districts. In the APS-focused empirical literature, the geographical definition of a city is usually unspecified (Beaverstock et al., 1999; Taylor, 2001) but is linked to the location of APS. Conversely, Friedmann's (1986; 1995) World City concept encompasses broader metropolitan areas where CHQs may be spread out, suggesting a broader scope in the empirical analysis of world cities (Derudder, 2006). The MNE-focused strand of literature refers to metropolitan areas as territorial boundaries, although the definition of these metropolitan areas varies.

In MNE-focused studies on a single country, a unified approach is commonly used, with the US case typically employing combined statistical areas (Holloway & Wheeler, 1991; Lyons & Salmon, 1995; Pilka & Sluka, 2019; Pilka et al., 2022). These identify metropolitan and micropolitan statistical areas defined by the Census Bureau. Globally focused empirical studies, however, use multiple sources to

define metropolitan areas (outside the US), including National Geographic Society, MapQuest and ESPON (Alderson & Beckfield, 2004; Csomós, 2017), or employ an unspecified aggregation process (Godfrey & Zhou, 1999). The remaining research does not specify spatial aggregation (Friedmann, 1986, 1995; Knox, 1995; Pan & Xia, 2019). To date, a unified global approach defining metropolitan areas in empirical studies on global cities is still absent in the literature.

3. Ranking world cities: beyond CHQs

While the prevalent CHQ-focused approach is beneficial in understanding command-and-control functions, it can be significantly enhanced by considering RHQ locations (Godfrey & Zhou, 1999). Csomós (2017) argues that cities hosting the CHQs of large corporations, such as Bentonville for Walmart, act as crucial command-and-control centres. However, focusing solely on CHQs can inadequately capture a city's influence, as it overlooks strategic decisions made at the RHQ level (Godfrey & Zhou, 1999).

Godfrey and Zhou (1999) also note that, although the Global City approach is conceptually sophisticated and offers potential insights, it faces empirical challenges. These challenges include the need for more extensive information than general HQ-focused studies provide, along with data inconsistencies and biases. They argue that a straightforward approach based on the CHQ and RHQ location data more accurately characterises the global urban hierarchy, as the geography of corporate spatial strategies provides important indices of world city status. Their approach has four main advantages:

- Capturing international influence: Focusing solely on CHQs overlooks the impact of national borders, as MNEs are multinational in their subsidiaries (Godfrey & Zhou, 1999). Given the rarity of international relocations of CHQs (Coeurderoy & Verbeke, 2016), including RHQs provides a more accurate depiction of the geography of command-and-control centres, recognising their unique distribution (Rice & Pooler, 2009) and acknowledging the strategic importance of RHQs in MNEs' local adaptation and global strategies (Godfrey & Zhou, 1999).
- Acknowledging geographical and political-economic factors: Reliance on CHQ data ignores geographical and political-economic factors shaping urban economic landscapes. For example, cities in the US, such as New York, compete for CHQs with both foreign and domestic cities, a phenomenon less pronounced in European and Japanese cities, which tend to have more stable urban primacy (Godfrey & Zhou, 1999; Sassen, 2018).
- Highlighting strategic locations in emerging economies: The CHQ-centric view tends to emphasise economies dominated by large corporations, such as Japan and other developed countries, while underestimating the significance of strategic locations for MNE subsidiaries in places like Singapore and emerging markets in general (Godfrey & Zhou, 1999; Sassen, 2018).
- Reflecting diverse locational strategies: Although CHQs are disproportionately concentrated in large cities due to their central location and advanced service network, they may also be located near factories outside cities for operational-cost reasons or in the city of the company's founding (Evans, 1985; Sassen, 2018). Many firms also maintain secondary HQs or RHQs in world cities for specialised functions (Godfrey & Zhou, 1999; Sassen, 2018).

4. Research materials and methods

To maintain consistency with Godfrey and Zhou's (1999) methodology, we employ the same foundational approach: selecting the 100 largest firms by revenue from the 2023 Fortune Global 500 (FG500) list (Fortune, 2023) and identifying RHQ locations using first-level subsidiaries as proxies due to the complexities of MNE structures.

While the FG500 captures firms with the largest operational scale, it does not necessarily reflect firms with the highest degree of internationalisation. It is biased toward firms headquartered in larger economies and sectors with high revenue. The list includes not only MNEs but also nationally successful firms with limited foreign activity (Rugman & Nguyen, 2014; Vaněk, 2024), as well as some state-owned enterprises, which may follow distinct internationalisation paths (Cuervo-Cazurra et al., 2023; Kwiatkowski et al., 2022; OECD, 2024). Nonetheless, in line with prior literature, we refer to these firms as MNEs.

Subsidiary location data were collected from the Refinitiv Eikon database, using the Refinitiv Company Tree Structure in October 2023. This serves as a contemporary substitute for the Directory of Corporate Affiliations (1997) used in the original study.

Our analysis utilises an innovative EU-OECD framework for functional urban areas (Dijkstra et

al., 2019; OECD/European Commission, 2020) via the Cities in the World web tool (*Note* 3). This tool recognises an urban centre and its commuting zone, providing a refined and globally unified geographical scope for metropolitan areas. To our knowledge, this approach is novel in its application to corporate geography.

Following Godfrey and Zhou (1999), we aggregated CHQ and RHQ locations within metropolitan areas, counting only one first-level subsidiary per metropolitan area for each firm (*Note* 4). This approach means an MNE could contribute either 1 (CHQ or RHQ presence) or 2 (CHQ and RHQ) to a metropolitan area's total. We excluded affiliate and joint-venture relationships to align our focus on core command-and-control functions.

Challenges included polycentric conurbations, cross-border urban areas, and data gaps. For polycentric regions, such as Guangdong and the Rhine-Ruhr, we examine individual urban areas (and discuss the possible influence on rankings in notes). Cross-border metropolitan areas – such as Detroit, San Diego and Ciudad Juárez – were allocated to the country with the larger share of the urban centre's population. Due to missing data, we aggregated headquarters for the San Francisco metropolitan area using two Metropolitan Statistical Areas by the US Census Bureau (San Francisco-Oakland-Berkeley and San Jose-Sunnyvale-Santa Clara).

5. Results

The widely accepted global hierarchy at the end of the 20th century was dominated by cities in developed economies, notably New York, London and Tokyo, which functioned as the primary nodes of economic decision-making and command-and-control centres (Godfrey & Zhou, 1999; Alderson & Beckfield, 2004; Sassen, 2018). Since then, particularly after the Great Recession in 2009, the landscape has undergone significant changes, marked by the increasing prevalence of cities in emerging economies. Previous literature has challenged the traditional hierarchy of global cities, pointing to a shift in global economic governance from the West to the East (Friedman, 2005; Csomós, 2017). However, we observe a significant geographical shift toward the Pacific Rim rather than the West-to-East transition.

Our analysis, illustrated in Figure 2 (visualisation of dominant and major world cities), Table 1 (regional level) and Table 2 (metropolitan level), reveals four pivotal trends in the early 21st century regarding the global hierarchy of metropolitan areas. These are the dominance of Pacific Rim cities, the strengthening position of US cities, the decline of European cities, and persistent command-and-control disparity.

Fig. 2. World cities with over 25 HQs (CHQs + RHQs) of the 100 largest corporations in 2023
Sources: 2023 values calculated by the authors using Fortune Global 500 and Eikon Refinitiv data. Comparative values for 1996 taken from Godfrey and Zhou (1999). Created with Datawrapper
Note: Based on the CHQs and RHQ of the 100 largest MNEs by Fortune Global 500

Table 1. Comparison of the global distribution of metropolitan areas among the top 50 by region in 1996 and 2023

Global Region	2023		1996	
	Metropolitan areas	%	Metropolitan areas	%
North America	15	30	7	14
East Asia & Pacific	14	28	15	30
Europe & Central Asia	13	26	20	40
Latin America & Caribbean	4	8	8	16
South Asia	2	4	0	0
Middle East & North Africa	1	2	0	0
Sub-Saharan Africa	1	2	0	0
Total	**50**	**100**	**50**	**100**

Sources: 2023 values calculated by authors using Fortune Global 500 and Refinitiv Eikon data. See Godfrey and Zhou (1999) for 1996 values. Note: Based on the location of CHQs and RHQs of the world's 100 largest corporations. Global regions classification by the World Bank (2024) is used.

Table 2. Top 30 metropolitan areas by location of CHQs and RHQs of the world's 100 largest corporations in 2023 and their changes since 1996

Metropolitan area	Country	2023			1996			Rank change	HQ change	CHQ change
		Rank	HQ total	CHQ total	Rank	HQ total	CHQ total			
Beijing	China	1	64	21	14	23	0	**13**	41	21
London	UK	2	58	2	3	50	1	1	8	1
New York	USA	3	55	3	1	69	8	-2	-14	-5
Hong Kong	China	4	54	2	4	40	0	0	14	2
Tokyo	Japan	5	45	4	2	66	25	-3	-21	-21
Singapore	Singapore	5	45	1	5	35	0	0	10	1
San Francisco	USA	7	41	3	20	21	2	**13**	20	1
Shanghai	China	8	40	2	28	17	0	**20**	23	2
Philadelphia	USA	9	38	2	N/A	N/A	1	N/A	N/A	1
Los Angeles	USA	10	37	0	21	20	0	**11**	17	0
Houston	USA	11	36	2	34	14	0	**23**	22	2
Amsterdam	Netherlands	12	33	1	24	18	1	**12**	15	0
Paris	France	13	32	4	7	29	12	-6	3	-8
Dallas-Fort Worth	USA	14	31	2	42	11	1	**28**	20	1
Mexico City	Mexico	15	30	1	8	28	0	-7	2	1
Toronto	USA	15	30	0	24	18	0	9	12	0
Dublin	Ireland	15	30	0	40	12	0	**25**	18	0
Madrid	Spain	18	29	0	8	28	0	**-10**	1	0
Seoul	South Korea	18	29	4	10	26	2	-8	3	2
Sydney	Australia	20	28	0	15	22	1	-5	6	-1
Chicago	USA	21	27	2	15	22	2	-6	5	0
Luxembourg	Luxembourg	21	27	0	N/A	N/A	0	N/A	N/A	0
Dubai	UAE	21	27	0	N/A	N/A	0	N/A	N/A	0
Jakarta	Indonesia	24	25	0	31	15	0	7	10	0
Milan	Italy	25	23	0	6	30	0	**-19**	-7	0
Zurich	Switzerland	25	23	1	11	25	2	**-14**	-2	-1
Bangkok	Thailand	25	23	0	15	22	0	**-10**	1	0
Buenos Aires	Argentina	25	23	0	23	19	0	-2	4	0
Moscow	Russia	25	23	0	N/A	N/A	0	N/A	N/A	0
Washington, D.C.	USA	25	23	1	N/A	N/A	2	N/A	N/A	-1

Sources: 2023 values calculated by the authors using Fortune Global 500 and Refinitiv Eikon data. See Godfrey and Zhou (1999) for 1996 values Note: N/A indicates metropolitan areas not included among the top 50 in 1996. Rank changes of 10 or more places are in bold. Colours indicate the main geographical locations of North America, Europe and East Asia.

5.1 Global-regions focus

Beginning with an analysis of global regions (Table 1), the impact of economic globalisation on decision-making power is evident. Three regions from the Global South (South Asia, the Middle East and North Africa, and Sub-Saharan Africa), which were unrepresented in the top 50 metropolitan areas in 1996, now have four cities (Delhi, Mumbai, Dubai and Johannesburg), making up 8% of the list. Their breakthrough into the list provides evidence of the positive effects of globalisation on developing and emerging economies during the last four decades.

Metropolitan areas in the East Asia & Pacific region have retained their position, with almost one third attributable to China's rise. The relative importance of Europe and Central Asia has diminished, while that of North America has risen.

5.2 Metropolitan-areas focus

Recognising urban hierarchy as outlined in Knox (1994) and using the metric for categorisation by Godfrey and Zhou (1999), one may observe that the number of dominant world cities (exhibiting over 40 HQs) has risen from three in 1996 to seven in 2023, as Beijing, Hong Kong, Singapore and San Francisco joined New York, Tokyo and London. The second tier, referred to as "major world cities" (hosting over 20 HQs), comprises 29 cities, compared to 17 in 1996. This further supports the contention that economic globalisation impacts decision-making as the world has become increasingly multipolar. Using this metric, two cities, Osaka and Brussels, have lost their status as major world cities since 1996. The dominant and major world cities for 2023 are visualised in Fig. 2, together with their HQs' change since 1996.

A comparison of the geographical location of the top 10 metropolitan areas in 1996 and 2023 reveals a shift in command and control towards the Pacific Rim region. In 2023, eight of these metropolitan areas were in the Pacific Rim, compared to just four in 1996 (see Table 2).

Additionally, we identify a general trend of increasing HQs since 1996 across 41 of the top 50 metropolitan areas in 2023 (see Table 2, which covers the top 30 metropolitan areas). Whereas in 1996, only 12 metropolitan areas had over 25 HQs, their number had doubled by 2023. This spread is attributed to the strategic establishment of RHQs designed to oversee corporate activities on a regional or continental scale. It also indicates that the largest MNEs have evolved to adopt global operations (Wood & Roberts, 2011). The highest growth occurred in the United States (Houston, San Francisco and Dallas-Fort Worth) and China (Beijing and Shanghai), where the increase in HQs was over 20 (see Fig. 2). In Europe, the highest growth occurred in Dublin and Amsterdam, with lower levels: this trend highlights their potential strengthening roles as decisive European command-and-control hubs.

The CHQ change (see Table 2) has significantly affected rankings in four metropolitan areas. Of the 41 new HQs in Beijing since 1996, 21 have been CHQs of Chinese firms. This indicates that the importance of Beijing is primarily attributed to the rise of the Chinese economy. On the contrary, Tokyo's decline in the list (down by 21 HQs) can be attributed solely to the loss of 21 CHQs, as its importance as a location for RHQs has not changed. Similarly, New York has experienced the loss of 14 HQs, of which five were CHQs. Tokyo and New York are the only metropolitan areas with over 25 HQs that experienced HQ losses (see Fig. 2). While experiencing a decline of eight CHQs, Paris has become a more important location for RHQs, resulting in its overall rise of HQs by three.

Our results support Csomós' (2017) findings, highlighting Beijing's rise as the dominant command-and-control centre in the global economy and San Francisco-San Jose's role as a major one. However, Csomós (2017) focuses solely on CHQ locations, underlining the significance of metropolitan areas such as Singapore, Philadelphia and Los Angeles, which are essential for RHQs.

Our ranking correlates with a commonly used GaWC classification of world cities, suggesting the robustness of Godfrey and Zhou's (1999) method. However, a close look reveals nuances using the most recent publication by GaWC (2020). Cities such as Beijing (first in our analysis and classified as Alpha+ in GaWC), San Francisco (seventh; Alpha−), and Philadelphia (ninth; Beta) rank significantly higher in our analysis. Other cities rank higher in the GaWC classification, such as Paris and Dubai (Alpha+), which we rank 13th and 21st, respectively. These nuances can be attributed to the different analysis focuses, as we build on the World City concept, while GaWC builds on the Global City concept.

5.3 China's rise

The increasing importance of Chinese cities in the global economy has been evidenced (Csomós & Derudder, 2014b; Csomós, 2017; Derudder & Taylor, 2020; GaWC, 2020), and it is possible that

China may soon outpace the US in terms of the command-and-control function soon (Raźniak et al., 2021). Beijing, which was already identified by Hymer (1972) as a central hub for leading MNEs, has emerged as a formidable command-and-control centre, challenging traditional leaders such as New York, Tokyo and London by 2015 (Csomós & Derudder, 2014b; Csomós, 2017; Derudder & Taylor, 2020). Our findings also exhibit this trend. However, the rise of Beijing appears to be caused by the growth of domestic, state-owned firms (Pan & Xia, 2014; Csomós, 2017; Kwiatkowski et al., 2022).

We demonstrate that Beijing's importance is partly a consequence of the substantial concentration of Chinese firms' CHQs within its metropolitan area, which aligns with the findings of Pan and Xia (2014) and Csomós (2017). Including CHQs in our method significantly overestimates Beijing's global economic stature (*Note* 5). If solely RHQs were considered, Beijing would rank fifth with 43 RHQs, after London (56), New York (52), Hong Kong (52) and Singapore (44).

Other Chinese cities, such as Shanghai and Shenzhen, have emerged as important economic control centres, hosting a significant share of China's publicly listed firms (Pan & Xia, 2014), but Beijing clearly dominates. Large-firm headquarters in China are less centralised than in the US and other Western countries, although, in recent decades, several relocations have been made to Beijing and Shanghai (Pan & Xia, 2014). Projections indicate a significant rise in East Asian global cities because they play vital roles in shaping future global value chains (Chakravarty et al., 2021) and are a primary location for newly opened RHQs (Belderbos et al., 2017; Derudder & Taylor, 2020) (*Note* 6).

5.4 Divergent trends across the Atlantic

The economic landscape in the US has undergone a diversification of command centres in recent decades (Csomós, 2013, 2017). A trend of relocating US headquarters from New York and Chicago to second-tier cities such as Atlanta, Dallas and Houston (Holloway & Wheeler, 1999) has strengthened North America's standing in the rankings (Table 1), illustrating a more multipolar urban system within the United States. This evolution contrasts with Friedman's (2005) prediction that American cities might struggle to retain their leading positions in the global hierarchy.

New York maintained its premier position as the leading command-and-control hub. However, Chicago fell to the eighth position in the national hierarchy. This decline is attributed to the growth in RHQs within metropolitan areas such as San Francisco, Philadelphia, Los Angeles, Houston and Dallas. At the same time, Chicago suffered from the Rust Belt crisis (Pilka & Sluka, 2019). Notably, the Philadelphia metropolitan area (including Wilmington, Delaware) has risen to the global top 10 from outside the top 50, mainly due to Delaware's corporate-friendly tax and regulatory environment (Wood & Roberts, 2011). Similarly, Los Angeles and San Francisco have become central US locations for foreign MNEs (Stutz & Warf, 2005; Csomós, 2013, 2017; Pilka & Sluka, 2019; Pilka et al., 2022).

Unlike cities in the US, European cities have experienced mixed trajectories, with a 35% drop in the top 50 ranking (*Note* 7). London and Paris maintained their top positions in the regional hierarchy. Other European cities have shifted in diverse ways. Whereas Milan and Madrid declined, Amsterdam and Dublin have strengthened their positions in the global economy. Dublin's significant improvement in global rankings has partially resulted from the move of RHQs from locations like Hamilton and Bermuda, following the Obama administration's stance against tax havens (Csomós, 2017). These findings align with the fDi Intelligence (2020) report, which identifies London, Paris, Dublin, Munich and Amsterdam as the European cities of the future, characterised by their high investment attractiveness.

Overall, most European cities have experienced a decline in command-and-control capacity, as noted in Csomós and Derudder (2014a). For a deeper analysis of Europe's command and control potential, see Dorocki et al. (2019).

6. Conclusions

This paper reveals significant shifts in the global economic decision-making landscape of the early 21st century from a corporate geography perspective. We can place the analyses within the "third globalisation" outlined in Derudder and Taylor (2020). This corporate globalisation has been enabled by coincidences and a combination of developments in the communication and computing industries (Sassen, 2018). Employing Godfrey and Zhou's (1999) method and applying the EU-OECD definition of metropolitan areas (Dijkstra et al., 2019; OECD/European Commission, 2020), we examined corporate geography, with a focus on corporate and regional headquarters. Our findings highlight four key trends:

1. Dominance of Pacific Rim cities: East Asian cities (Beijing, Hong Kong, Tokyo, Singa-

pore and Shanghai) and the US West Coast cities (San Francisco and Los Angeles) have strengthened their command-and-control footprint in the global economy, rivalling traditional centres like New York and London.
2. Strengthening US cities: The number of US cities in the top 50 has more than doubled, driven by HQ relocations from New York and Chicago to second-tier US cities.
3. Europe's decline: Despite some cities strengthening their position (Dublin, Amsterdam, London), Europe's overall standing has declined, with a significant 35% decline among the top 50 cities.
4. Persistent command-and-control disparity: Despite the global shifts, the distribution of the top 50 metropolitan areas across locations by income levels has remained unchanged.

These trends reflect a broader shift toward a multipolar world economy, with growing corporate power emerging from the Global South. This transformation is not driven by the relocation of Western MNEs but by the rise of new large MNEs in emerging economies, especially China. Derudder and Taylor (2020: 1850) describe this as "a new important Chinese globalisation", evident in banking and knowledge-intensive business services. The increasing number of HQs in 41 of the top 50 world cities underscores the ongoing globalisation of MNE operations, concentrated especially in East Asian economies, where most newly established RHQs are located (Belderbos et al., 2017; Derudder & Taylor, 2020).

Our analysis contributes to understanding the evolving global urban hierarchy. It highlights the role of the MNE network in shaping regional economic interdependence. It provides policymakers, urban planners and economists with insights to enhance their cities' competitiveness and resilience in the global economy.

We acknowledge several limitations. First, the FG500 ranks firms by revenue, emphasising operational scale but not necessarily innovation, strategic importance or market valuation. This introduces bias toward firms from large economies and certain sectors. Second, our focus on the top 100 firms narrows the scope, potentially excluding more internationalised firms. Third, RHQs are approximated using first-level subsidiaries, which may not accurately reflect the actual locations of RHQs. Finally, our city rankings are sensitive to the inclusion of CHQ in Beijing's case.

Notes

1. MNEs operate through networks of a parent company and foreign entities (subsidiaries, affiliates and joint ventures) centrally coordinated from the corporate headquarters in their home country (UNCTAD, 2017).
2. See Beaverstock et al. (1999) for a review of foundational literature, Csomós (2017) for a review of command-centres-focused literature, and Chakravarty et al. (2021) for a broader review of global city literature in the context of international business.
3. The Cities in the World tool is accessible at https://www.oecd.org/regional/regional-statistics/.
4. For 2023, CHQs and RHQs of the top 100 MNEs from the Fortune Global 500 list are distributed across 2,488 individual cities and integrated into 1,016 functional urban areas for our analysis.
5. For comparison, Seoul, ranking second in the number of CHQs in 2023, hosts only four CHQs.
6. The interconnectedness, cosmopolitanism and abundance of APS in the Greater Bay Area metropolis (encompassing Hong Kong, Guangzhou, Shenzhen, Foshan and Zhuhai) in southern China (Goerzen et al., 2013) support its potential inclusion in our ranking. In such a case, it would rank second, with a total of 62 HQs.
7. The Rhine-Ruhr region, Europe's largest continuous urban area, was identified by Hall (1966) and Hymer (1972) as a key hub for leading MNEs. In our analysis, its metropolitan areas were treated separately; when aggregated, the region ranks within the global top 40 with 21 HQs, which does not alter the rankings presented in Table 2.

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