NICOLAUS COPERNICUS UNIVERSITY IN TORUŃ

Bulletin of Geography. Socio-economic Series, No. 60 (2023): 101-125
http://doi.org/10.12775/bgss-2023-0018

BULLETIN OF GEOGRAPHY. SOCIO–ECONOMIC SERIES

journal homepages:
https://apcz.umk.pl/BGSS/index
https://www.bulletinofgeography.umk.pl/

Global Cities and Multinational Enterprises: integrating the existing concepts for future research studies

Maria Kola-Bezka[1, CFMR], Marcin Kuzel[2, CFMR]

[1]*Nicolaus Copernicus University in Toruń, D*epartment of Economic Policy and Regional Studies, Gagarina 13a, 87-100 Toruń, Poland, e-mail: mkola@umk.pl, https://orcid.org/0000-0001-9532-8540; [2]*Nicolaus Copernicus University in Toruń*, Department of Investment and Real Estate, Gagarina 13a, 87-100 Toruń, Poland, e-mail: mkuzel@umk.pl (*corresponding author*), https://orcid.org/0000-0002-7685-653X

How to cite:
Kola-Bezka, M. & Kuzel, M. (2023). Global Cities and Multinational Enterprises: integrating the existing concepts for future research studies. *Bulletin of Geography. Socio-economic Series*, 60(60): 101-125. DOI: http://doi.org/10.12775/bgss-2023-0018

Abstract. Global Cities (GCs) and Multinational Enterprises (MNEs) shape the modern world economy in a very distinct way. To date, both have been given a lot of attention in the literature, but relatively few studies have been written linking these two important threads of deliberation, leaving the aspects of the relationships between GCs and MNEs largely unexplored. This is surprising, as GCs and MNEs are not sole players but symbionts in the world economy. Hence, the intention of the authors – and the aim of this paper – is to overview these issues and connect GC and MNE threads in order to provide a platform for future research studies. By adopting an evolutionary approach and integrating the perspectives of economic geography, urban studies and international business, the paper identifies several research areas that may be fundamental to the GC–MNE discussion. They have been grouped in the following five thematic categories: global trends, international and country-specific factors; heterogeneity and transformation of global cities; MNE internationalisation motivations and different market entry modes; global cities and global value chains; outcomes of MNE activity.

Article details:
Received: 17 November 2022
Revised: 26 January 2023
Accepted: 17 February 2023

Key words:
global cities,
multinational enterprises,
economic geography,
urban studies,
international business,
internationalisation

Contents:

1. Introduction

From the perspective of globalisation, one can certainly point out the dynamic development of metropolitan centres of interregional, intercontinental or even global importance (Global Cities – GCs), as well as the expansion of enterprises controlling and coordinating complex business operations on a transnational scale (Multinational Enterprises – MNEs). The former group plays the role of "the hearts of the world's finest metro economies", while the latter are referred to as "primary agents of globalisation". Both have been given a lot of attention in the literature, with GCs becoming a subject of interest for researchers conducting research mainly in the area of economic geography and urban studies, while the issues of MNEs have primarily dominated international business studies.

However, there are relatively few theoretical and empirical studies focusing on the relationship between these two important threads of deliberation, especially from an interdisciplinary perspective. As a result, different aspects of the relationships between cities and multinationals remain largely unexplored (Goerzen et al., 2013: 427–428; Izumi et al., 2016: 49–51; Izumi et al., 2017: 274; Iammarino et al., 2018: 236–237; Pilka & Sluka, 2019: 138; Chakravarty et al., 2021). This is surprising, as GCs and MNEs are not sole players but symbionts in the world economy, as evidenced by a number of characteristics presenting the interrelationships of these two groups – in particular in the context of the locations that multinationals select for international investment (Goerzen et al., 2013; Beaudouin et al., 2019; Chakravarty, 2019; Belderbos et al., 2020; Pilka et al., 2022). Moreover, as indicated by P.J. Buckley and P.N. Ghauri (2004) as well as D. Chakravarty et al. (2021), linking economic geography and theories of globalisation to international business approaches may not only help better understand the mechanisms of the contemporary world economy and the behaviour of its main actors, but also identify new, potentially important research areas.

Hence, the intention of the authors – and the aim of this paper – is to overview these issues and connect GC and MNE threads in order to provide a comprehensive framework for further analyses and a platform for future research studies. In order to achieve this, we used an evolutionary approach as the overarching method of reasoning, as did J. Cantwell et al. (2010) who examined the co-evolution of MNE activities and institutions. To illustrate the fundamental shift in thinking about GCs and MNEs, we started with the ground-breaking works of Hall (1966), Sassen (1991, 1994, 2001) and Dunning (1979, 1981a, 1988a, 1995, 2000, 2001; Dunning & Lundan, 2008) and then benefited from later contributions by other authors. We also supplemented the conceptual and research works with information from reports of recognised research centres (e.g., the Globalisation and World Cities Research Network at Loughborough University) and international institutions (e.g., the United Nations Conference on Trade and Development).

In order to identify the issues recommended for further analyses and research, we broadly limited our discussion to publications from the last two decades, covering the period when the development of GCs and the activity of MNEs became a subject of keen interest to scholars. Specifically, we used the results of a recently published systematic review (Chakravarty et al., 2021) as a starting point and proceeded from there. In addition, we searched for articles published in 2022 for new developments. Drawing on the achievements of various disciplines, we revealed several research areas that may be fundamental to the GC–MNE discussion. They have been grouped in the following five thematic categories: global trends, international and country-specific factors; heterogeneity and transformation of global cities; MNE internationalisation motivations and different market entry modes; global cities and global value chains; outcomes of MNE activity.

The article is organised as follows. The introduction is followed by a part presenting a synthetic description of the evolution of global cities and multinational enterprises, pointing to their mutual relations and identifying an emerging gap in knowledge (thus justifying these deliberations). The third section describes contemporary GCs from the perspective of their attractiveness for MNEs, i.e. as locations conducive to these enterprises' implementation of their business goals. The fourth part is an attempt to integrate the perspectives of economic geography, urban studies and international business into a comprehensive framework for further analyses and a platform for future research studies. The concluding section highlights overlapping research areas and identifies key challenges.

2. The (co-)evolution of Global Cities and Multinational Enterprises

2.1. Global Cities: the hearts of the world's finest metro economies

Contemporary global cities are the world's dominant cultural, political, economic and social centres (Short et al., 2000; Taylor et al., 2002; Derudder et al., 2003) and are distinguished from other subnational geographic units by their high degree of interconnectedness with local and global markets, cosmopolitan environment and high levels of advanced producer services supporting global business leaders (Goerzen et al., 2013: 430).

For thousands of years, the importance of cities on a transnational scale and their role in the global economy have been determined by their participation in international trade and their position in the international network of commercial cities (Clark, 2016: 11–61). However, the genesis of modern GCs is associated with changes in the global economy, which in the second half of the twentieth century created new factors affecting the ability of cities to become global. This is about a transition from the industrial to the post-industrial era, the mass relocation of industrial activities from highly industrialised countries to countries that have so far been beyond the scope of industrial corporations, outsourcing certain functions previously performed within enterprises, and globalisation (expressed in, for example, the growing importance of knowledge and information as wealth-creating resources in companies, cities, regions and nations) (Abrahamson, 2004: 1–22). The effect of these changes was the dynamic development of those cities that chose a new development strategy ("the globalisation response"). For some of them, implementing this strategy helped them obtain the status of global command-and-control centres (Sassen, 2001, 2012; Csomós, 2013, 2017).

The modern GC concept has evolved following three basic stages since the publication of the pioneering work of P. Hall (1966) that linked the phenomena of urbanisation and globalisation (Clark, 2016: 95–101). In the 1970s and 1980s, analyses focused on world cities: these were places that concentrated the power of world economy, embodied the core of world economy, and were the location of the decision-making centres of the most important international corporations shaping the world economic system (centres of dominance and power) (Heenan, 1977; Friedmann & Wolff, 1982). The 1990s and the first decade of the 2000s were dominated by the concept of S. Sassen (1991, 1994, 2001), in which the term "GCs" referred to a relatively small group of production centres for the inputs that constitute the capability for global control, and which had developed advanced services supporting global companies in such fields as commercial law, wealth management, corporate tax advice and advertising. In the second stage of the GC concept's evolution, the idea of a "world city network" and the classification of cities according to the degree of global connectivity in their advanced service economies also gained popularity, which indicates that the status of a GC is gained by those cities that cooperate within the network, not the ones that compete for resources of capital and knowledge (Taylor, 2001; Beaverstock et al., 2002; Acuto & Leffel, 2021).

For some time now, GCs have been defined to include an increasingly numerous group of cities with very different socio-economic profiles. In addition to traditional "old" GCs, they also include cities and city-regions that have gained the "global" status thanks to their skilful use of the dynamically changing situation in the world economy (e.g., financial crises, faster pace of changes in the environment), creating favourable conditions for the intensive development of creative industries or tourism (Scott, 2002; Robinson, 2006; Acuto, 2011).

Different perceptions of GC roles and their significance in the modern world mean there is no precise, widely accepted definition of GCs, and even less a specific "globality threshold" that, if exceeded, would qualify a city as global. Although there are some patterns, namely cities that have been invariably considered global for decades (New York, London, Tokyo – Table 1), there is also a large group of cities that differ in various respects from the model ones but that are also considered to be global. This is reflected in numerous rankings of global cities prepared by recognised institutions and leading research centres, including McKinsey Global Institute, A.T. Kearney, Martin Prosperity Institute, fDi Magazine, and National University of Singapore. The economic, social and culture-forming potential of cities portrayed in these rankings confirms that they constitute the essence of modern civilisation in all its dimensions and that their network forms a basic structure of the world economy.

The claim that GCs are key engines of economic growth is evidenced by the fact that, with about 13% of the world's population, 123 large metro economies generate nearly a third of global GDP. They have attracted more than \$5.4 trillion in greenfield foreign direct investment (FDI) between

Table 1. The top established Global Cities

City name	City rank according to:			
	JLL 2017	GaWC 2018	GPCI 2020	WBC 2020
London, UK	1	1	1	1
New York, US	2	2	2	2
Paris, France	3	7	4	3
Singapore, Singapore	4	5	5	7
Tokyo, Japan	5	10	3	5

Source: compiled by the authors

2009 and 2015 – more than a quarter of the global total. They are critical generators of new scientific research and innovation, housing 44% of the world's most impactful research universities, generating 65% of all patents, and attracting 82% of all venture capital. Just six of them (London, Los Angeles, New York, Osaka-Kobe, Paris, and Tokyo) generate a combined real output of over $5.5 trillion. If they were a single country, they would be the world's third-largest economy (Trujillo & Parilla, 2016: 14, 17).

2.2. Multinational Enterprises: primary agents of globalisation

According to one of the most widely accepted definitions, an MNE is "an enterprise that engages in foreign direct investment and owns or, in some way, controls value-added activities in more than one country" (Dunning & Lundan, 2008: 3). Typically, an MNE consists of a parent company and its foreign affiliates – subsidiaries, associates and branches (WIR, 2017: 3), whose activity is organised, integrated and coordinated by the headquarters operating in the home country (Zorska, 2007: 10). Thus, the distinctive features (or specific attributes) of MNEs are primarily the ability to efficiently manage multiple business operations across national boundaries by coordinating the actions of various units (Rosińska-Bukowska, 2020: 36) and the willingness "to internalize at least some of the cross-border markets for the intermediate products arising from the value-added activities" that they control (Dunning & Lundan, 2008: 6). When pursuing their international (or even global) strategies, contemporary MNEs adapt to changing socio-economic, political and technological conditions across the globe. They concentrate on taking advantage of "multiple sources of external authority and multiple denominations of value" (Sundaram & Black, 1992: 729), i.e. on capitalising on the benefits of an international scale of operation and of functioning in diverse socio-economic environments (Kuzel, 2020: 6708).

As with Global Cities, the perception of MNEs has changed over time (Aggarwal et al., 2011: 557–577) along with the intensification of their foreign expansion, the growing diversity of foreign market entry modes used (Buckley & Casson, 1998: 539–561) and changing practices of company organisation (Jones, 2005: 165–198; Callies, 2011: 604–605; Lichtenstein, 2016: 190, 192). Other aspects include the concentration of activity within "core competencies" while expanding networks of contractual and cooperative relationships (Forsgren et al., 2005: 97; Dunning & Lundan, 2008: 196–197; Dicken, 2015: 130–132), the growing importance of services (Dunning, 1989: 5–39), the development of the Internet (Petersen et al., 2002) and e-business (Dunning & Wymbs, 2010: 276–280), and an increasingly important place for knowledge, technology and entrepreneurial skill transfers within their multinational systems (Root, 1990: 11–16). It can be pointed out that MNEs have evolved from the level of enterprises that mainly pursue the postulate of increasing the international scale and scope of operations towards complex network systems integrating the operations of geographically diverse and dispersed units (linked by capital ties or cooperation relationships) to obtain above-average economic benefits.

While some researchers are looking for MNE predecessors even in ancient times (Dunning, 1993: 96; Moore & Lewis, 2000: 17–42), in the Middle Ages (Dunning & Lundan, 2008: 146–148) or during the colonial conquests (Carlos & Nicholas, 1988: 398–419; Robins, 2012: 12–26; Coetzee, 2020: 1), it seems, however, that the main impulse for the emergence of modern forms of business process organisation was only brought about by the Industrial Revolution (Castro, 2000: 7; Dunning & Lundan, 2008: 154–175; Wilkins, 2009: 4; Jaworek & Kuzel, 2015: 56; Amungo, 2020: 4).

Of course, the companies established at that time did not immediately commence mass internationalisation – as it only dates back to the second half of the 20th century, when post-war improvements in communications and transportation and the massive liberalisation of international trade, capital flows and payments made it possible to conquer international markets on an unprecedented scale (Root, 1990: 2). This conquest was clearly seen in the 1960s and 1970s (Jaworek & Kuzel, 2015: 56–57). According to R. Vernon, who made the first attempt to estimate the number of MNEs, there were already at least 396 parent companies and their 28,318 foreign affiliates at the time (Cox, 1997: 9–46).

The continuing liberalisation of international economic relations, as well as further technological advances (including in particular the development of ICT solutions), brought about a further spectacular intensification of MNE expansion in the 1980s and 1990s. It could be seen, among other things, in the dramatic increase of the total global FDI value (which is one of the most important parameters describing the expansion of MNEs), i.e. from $579 billion in 1982 (WIR, 2009: 18) to $1,786 billion in 1990 and to $7,409 billion in 2000 (WIR, 2020: 242), as well as the increase in the number of MNEs from 30,000 parent companies and 150,000 foreign affiliates in 1990 (Dunning, 1993: vii) to, respectively, 63,459 and 689,520 in 2000 (WIR, 2005: 264–265). In 2010, the number of multinationals was estimated at 103,786 and the number of MNE foreign affiliates at 892,114 (WIR, 2011). At the same time, the value of the global outward FDI stocks exceeded $20,465 billion and then continued to grow, reaching the level of $34,571 billion by the end of 2019 (WIR, 2020: 242).

This intensive increase of MNEs in the last few decades and the proven ability to adapt to changing conditions and to take advantage of growth opportunities have made them one of the most important agents of globalisation. As pointed out by G. Ietto-Gillies (2002: 10), they are the economic actors with the highest degree of active participation in the mechanisms of integration and globalisation, which is due to the fact they are the only ones that can plan, organise and control activities across countries. This is reflected in particular in the significant role MNEs play in shaping the global trade in goods and services (Kleinert, 2004: 26–28), FDI flows (Rugman & Brain, 2003: 3), R&D spending (OECD, 2002: 103; Lall, 2002: 54; WIR, 2005: 292–293; Kuzel, 2016: 284–296), technology transfers (Caves, 1982; Root, 1990: 11–14; Jones, 2005: 262–266; Jindra, 2006b: 30–71) as well as the diffusion of entrepreneurial skills or organisational and managerial methods (Root, 1990: 14–16; Jones, 2005: 191–193; Jindra, 2006a: 11–13). Referring only to selected characteristics describing the place of MNEs in the modern world economy, it can be indicated that, at the end of 2019, employment in their foreign subsidiaries was estimated at 82,360 thousand, their sales amounted to $31,288 billion and the value of their assets reached $112,111 billion. At the same time, the scale of business activity by MNEs accounted for 9.2% of global GDP and their sales were 1.7 times higher than global exports (WIR, 2020: 22).

2.3. Linking Global Cities and Multinational Enterprises

As already indicated in the introduction, relatively few studies combining the issues of GCs and MNEs have been published so far. Even though D. Chakravarty et al. (2021) identify 181 relevant global city articles, including both conceptual works and empirical studies, the majority of them (i.e., 100) focus on "the nature of global cities", placing the ongoing research mainly within economic geography and urban studies. The remaining ones are "MNE strategic decisions" (investment motivations, competitive dynamics, experiential learning, mode of entry) and "outcomes of MNE investment" (MNE performance, economic development and social impact), referring (although to various extents) to the achievements of international business and general management.

The studies differ in their geographical scope, as well as in the subjective and objective scope of their considerations. These are, for example, case studies on selected agglomerations (Indraprahasta & Derudder, 2019; Pan, Hall et al., 2020), as well as groups of cities in national (Lüthi et al., 2018), regional (Izumi et al., 2017) and global contexts (Derudder & Taylor, 2018; Romão et al., 2018). Other examples include studies covering enterprises from particular countries of origin (Chakravarty, 2019; Hutzschenreuter & Harhoff, 2020) or those undertaking investment in specific locations (Cheng & LeGates, 2018; Dahms, 2019) or representing individual sectors of the economy (Krätke, 2014; Zhang, 2018). There are also analyses focusing on selected foreign market entry modes (Blevins et al., 2016; Belderbos et al., 2020) or different value-chain activities (Csomós & Tóth, 2016; Belderbos et al., 2017; Castellani & Lavoratori, 2020). There are diverse issues discussed and a multitude of approaches adopted in the field.

Despite a generally growing interest from researchers, however, (Chakravarty et al., 2021: Appendix A), still few publications are devoted to relationships between GCs and MNEs – or more broadly, to foreign location choice at sub-national levels – and in particular those characterised by a comprehensive approach taking into account integration across disciplines and interactions between the analysed factors (Nielsen et al., 2017: 77).

These relatively few considerations combining the issues of GCs and MNEs focus primarily on the aspects of business location, and, more specifically, they treat city space as an important place for international investment. In this context, it is worth paying attention to some selected findings. For example, D. Chakravarty (2019) shows that, between 1990 and 2013, more than 50% of the Japanese MNE affiliates in North America were located in 23 global cities. M.E. Pilka et al. (2022) reveal that US global cities hosted 583 MNEs listed in the Forbes "Global 2000" with 4588 branches and a total number of employees exceeding 717,000. G. Csomós (2017: 12) draws attention to the fact that in 2015 as many as 365 companies from the Forbes "Global 2000" list (i.e., 18% of the world's leading MNEs) were headquartered in four cities: Tokyo, New York, London and Paris. KPMG and the Greater Paris Investment Agency (Beaudouin et al., 2018: 6) indicate, however, that the top 35 global cities attracted nearly 45% of the world's total international investment. Similarly, A. Goerzen et al. (2013: 339–440) indicate that, of the analysed samples of 6955 subsidiaries nested within 318 MNEs, 77% were located in global cities, with 35% in the top ten GCs (i.e., Chicago, Frankfurt, Hong Kong, London, Los Angeles, Milan, New York, Paris, Singapore and Tokyo). fDi Intelligence (2018/19: 20) points out that the two most important cities in the world (according to this list), i.e. Singapore and London, have been the top destinations for foreign investment globally, accounting for almost 5% of all greenfield FDI since 2003. Based on the information from FDI Markets database compiled by Financial Times Ltd, R. Belderbos et al. (2020) have demonstrated that, out of the 11,748 greenfield FDI projects identified by 1025 firms in 52 countries worldwide, cross-border investment in GCs accounted for 29% over the period 2008–12. Taking into consideration different value-chain activities, GCs were chosen most frequently as a location for knowledge-intensive service activities (56% greenfield FDI projects), followed by headquarters (55%), sales (44%) and R&D activities (39%), while the share of non-high-tech manufacturing investment reached only 8%.

The above findings confirm that GCs and MNEs are not sole players in the world economy (but symbionts) and indicate a significant concentration of MNE business activity in a relatively small number of urban locations. A. Goerzen et al. (2013: 440) aptly noted that "MNEs have a disproportionate propensity to locate subsidiaries in global cities, choosing these cities to a much larger extent than would be expected by the combined size of those cities."

In our opinion, these emerging strong relationships between GCs and MNEs and their consequences have not yet been sufficiently explored and explained and thus require greater attention and recognition by scholars in the broadest possible range of conditions. The aspect of location is crucial here, although more attention should be paid to its complexity resulting from, for example, high heterogeneity of both GCs and MNEs. It turns out not all global cities are equally attractive to MNEs, which is due to both their specific nature and the range of their location attributes, but also because of the potential of these enterprises or the motives behind their internationalisation. It is also worth remembering that modern MNEs can effectively achieve their business goals, not necessarily by engaging in FDI each and every time, but by, for example, establishing contractual and cooperative relationships with other companies operating on foreign markets.

Finally, it seems that, when designing and implementing future research, the achievements of international business and general management should be applied more comprehensively. Hence, the intention of the authors – and the aim of this paper – has been to overview the existing concepts and provide a comprehensive framework for further analyses conducted at the meeting point of GC and MNE considerations. The most important findings are presented later in the text.

3. Global Cities' attractiveness for MNE operations

MNEs are, by definition, companies that do business in different markets, often in different parts of the world. As explained by the OLI paradigm (Dunning, 1979, 1981a, 1988a, 1995, 2000, 2001; Dunning & Lundan, 2008: 95–109), competing in these markets with domestic companies as well as with other MNEs is possible thanks to the ownership-specific

"O" advantages, which allow the operating costs of a distant economic, social and cultural environment to be overcome. These advantages arise from the exclusive possession of or privileged access to tangible and intangible assets (e.g., production technologies or processes, better sources of raw materials, brand, expertise, product differentiation, management and marketing skills) that MNEs may transfer to their operations in foreign markets (Izumi et al., 2017: 276–277).

The first group of "O" advantages relates to "the exclusive possession and use of certain kinds of income-generating assets" (Dunning, 1988b: 25) – they are called asset-specific "Oa" advantages and explain mainly the initial act of internationalisation. The second type of MNE advantages derives from "the ability of a company to coordinate multiple and geographically dispersed value-added activities and to capture the gains of risk diversification" – these are referred to as transaction cost-minimising "Ot" advantages. Finally, institutional "Oi" advantages "cover the range of formal and informal institutions that govern value-added processes within firms, and between the firm and its stakeholders" (Dunning & Lundan, 2008: 100–101; Lundan, 2010: 60).

A company focused on the best possible use of the available "O" advantages is confronted by the option of selling them, or their right of use, to independent companies with the benefit of their use within their own organisation (Dunning & Lundan, 2010: 1231), i.e. it assesses the scale of internalisation "I" advantages. If internalisation turns out to be justified, the company will focus on choosing a location that offers the best conditions for the use/enhancement of their potential. In order to achieve this, "O" advantages must be compatible with the location "L" advantages of the host country/region (Jaworek, Kuczmarska et al., 2018: 156).

This may not be obvious at all, since the spatial distribution of location-bound resources, capabilities and institutions is rather uneven (Dunning & Lundan, 2010: 1231). Hence, "L" advantages stem from the location-specific factors such as environment (resources, stage of economic development, cultural/historic background), system (institutional framework), and policies (micro, macro, general and FDI policies) (Eden, 2003: 285). They do not have to be restricted to country-specific advantages and may encompass advantages linked to supra-national regions or geographic units within a host country, including the sub-national level (Dunning, 1997: 99–234, 357–372; Chadee et al., 2003; McCann & Mudambi, 2004; Ricart et al., 2004; Chan et al., 2010; Batschauer da Cruz et al., 2022).

Thus, individual locations will represent a different value for different MNEs (Nachum & Wymbs, 2005). The choice of markets and methods of operating (their service), however, is one of the most important strategic decisions conditioning MNE performance and development. As mentioned previously, the attractiveness of a given location will be determined by the degree of compatibility of its "L" advantages with the company "O" advantages. On the other hand, choosing the method of servicing foreign markets (the entry mode choice) will depend on the coexistence of various groups of advantages, namely: "O", "I" and "L" advantages – FDI (greenfield investment as well as M&A), "O" and "I" advantages – exports, "O" advantages – contractual and cooperative relationships (Dunning, 1981b: 32). Finally, it should be emphasised that the degree to which an MNE decides to engage in foreign operations will derive from "the long-term objectives of its stakeholders and the institutions underpinning its managerial and organizational strategy" (Dunning & Lundan, 2008: 100).

Translating the OLI paradigm into the issues of global cities, attention must be paid first to GC heterogeneity as well as the idiosyncratic nature of MNEs. Admittedly, as shown by the findings so far (Goerzen et al., 2013; Sassen, 2001, 2005), this interest in GCs – as places of business operations – results mainly from their high level of links with local and global markets, cosmopolitan cultural environments and the agglomeration of corporate services offered by the so-called advanced producer service (APS) companies (in such fields as consulting, advertising, accounting, law, and finance), although generalising GC location advantages can be misleading. GCs include metropolitan areas, city-regions, regional clusters and smaller urban agglomerations, which, just like large metro economies, successfully facilitate companies and industries in creating jobs, raising productivity and increasing the incomes of citizens over time (Dobbs et al., 2011; World Bank, 2015). GCs have different localisation attributes, the attractiveness of which may turn out to be substantially different for various MNEs.

Moreover, the pace of changes in city surroundings and the emergence of new factors changing the landscape of city performance, such as geopolitical shifts, global agreements on the future of sustainability and climate change, and technological innovations (JLL, 2017), mean that "the club of top GCs has opened and expanded far beyond the 20th century happy few (...), [and that] competition among global cities [as destinations for international investment] is more open than ever before" (Beaudouin et al., 2019: 2).

The places for MNE business operations are both established global cities (such as London, New York or Tokyo), which in the last few decades have played a role of corporate hubs, financial centres and often capital cities, specialised emerging global cities (such as Istanbul, Sao Paulo or Shanghai), which are business capitals, gateways and engines of international economic activity of the fastest-growing and most rapidly globalising economies, as well as high-income and high-livability *new global cities* (e.g., Brisbane, Cape Town, Oslo, San Diego, Santiago de Chile, Tel Aviv), which are smaller than the previous group but with efficient infrastructure and fewer social or environmental risks such as terrorism, air pollution, vehicle congestion, unaffordability or inequality. The latter group has a certain agility to shape their destiny and compete to become recognised destinations for talent, events and innovation (Clark, 2016: 117–127).

As shown by numerous reports and studies (e.g., Trujillo & Parilla, 2016; JLL, 2017; fDi Intelligence, 2020; Beaudouin et al., 2019), MNEs operate in and invest capital in each of these three city categories, which proves that each of these locations – in combination with the specific "O" advantages of an MNE and a specific set of external conditions – may offer the best opportunities for combining the highest returns with the lowest risks. Moreover, apart from global cities, there are many ordinary cities involved in the globalisation process (Zhou, 2013), which can become the GCs of tomorrow, adjusting their characteristics to the future preferences of MNEs and shaping their capacity to absorb growth and their preparedness for the big future challenges of sustainability, resilience and job creation.

A significant degree of differentiation can also be observed in relation to MNEs. First of all, these enterprises were traditionally associated mainly with large private corporations representing the world's most developed economies (Table 2), i.e. the countries of the so-called Triad (USA–Japan–EU) and operating within mining and manufacturing industries (Jones, 2005: 45–75, 76–108). At present, however, as emphasised by R. Aggarwal et al. (2011: 557), "scale is no longer a critical requirement for multinationality" and there is a sizable proportion of small and medium-sized enterprises in the international space.

At the same time, more and more MNEs represent emerging and developing economies (Pangarkar, 1998; Franco & De Lombaerde, 2003; Aulakh, 2007; Goldstein, 2007; Cuervo-Cazurra, 2008; Dura & Driga, 2013; Williamson et al., 2013; Marinov & Marinova, 2014; Paul & Benito, 2018; Amungo, 2020), including the countries of the so-called BRICS (Brazil, Russia, India, China and South Africa) and the post-communist transition economies (Andreff, 2002; Andreff & Andreff, 2017). Another interesting phenomenon has been the emergence of state-owned or state-shared enterprises in the area of international business (state-owned multinationals – Jaworek & Kuzel, 2015: 62–63; Clegg et al., 2018; Cuervo-Cazura, 2018; Kalotay, 2018) and the literature drawing attention to family businesses (family multinationals – Lubinski et al., 2013; Leppäaho & Metsola, 2020; Chung et al., 2021).

When referring to the diversity of modern MNEs, one must not ignore the fact that, in addition to mining and manufacturing enterprises, there is a whole range of entities representing services (Goerzen & Makino, 2007; Jones, 2005: 109–144), including: financial services, energy and communications, construction, and retailing. M. Kuczmarska (2018) highlights that there is also a distinction between MNEs representing traditional industries and enterprises operating in new technology sectors (mostly information and communication as well as professional, scientific

Table 2. The world's largest non-financial Multinational Enterprises

MNE name	MNE rank according to:			
	Forbes 2022[1]	Fortune 2022[2]	PwC 2022[3]	WIR 2022[4]
Saudi Arabian Oil Co., Saudi Arabia	3	6	3	35
Amazon, United States	6	2	5	47
Apple, United States	7	3	1	33
Toyota Motor, Japan	10	13	28	2
Alphabet, United States	11	8	4	36

Notes: [1]biggest public companies in four metrics: sales, profits, assets and market value (market value calculation as of 22 April 2022); [2]companies ranked by revenues in 2021; [3]companies ranked by market capitalisation as of 31/03/2022; [4]MNEs ranked by foreign assets in 2021

Source: compiled by the authors

and technical activities), the dissimilarity of which consequently translates into their internationalisation patterns.

By indicating the most important changes in the internationalisation of modern MNEs and taking into account the evolution of foreign expansion factors initially designated by enterprises representing developed countries, J.H. Dunning et al. (2008: 176) noted there has been an increase in the significance of asset-augmenting investment (formerly domination of asset-exploiting FDI), home-country-specific “O” advantages (previously practically only company-specific “O” advantages) and strategic alliances and networking (previously mainly greenfield FDI).

Accelerated internationalisation has also emerged, the commitment of home-country governments to promoting foreign expansion of enterprises has increased, and MNEs have crossed the line of intra-Triad business relations, becoming “largely regional”. Therefore, the importance of emerging and new global cities has increased among the locations offering potentially attractive conditions for MNE operations. What is more, in the aspect of strategic choices translating into different MNE internationalisation motivations, one could observe the coexistence of all the main types of motives for foreign activity described by J.H. Dunning (Dunning & Lundan, 2008: 67–74), regardless of the degree of the company’s involvement in international operations or its experience in international business.

Previously, it was assumed that most enterprises initially undertake their activities outside their home countries to acquire natural resources or gain (or retain) access to new markets (resource and market seekers respectively), and, only after reaching a certain level of multinationality, they tend to focus on strengthening their market position by improving the efficiency of operations (efficiency seekers) or acquiring new sources of competitive advantage (strategic assets or capability seekers). At present, however, there is a fundamental dominance of market motives (Galán & González-Benito, 2001; Buch et al., 2005; Buckley et al., 2007; Deng, 2009; Sharma & Bandara, 2010; Kowalewski & Radło, 2014; Kurtovic et al., 2014; Jaworek, Karaszewski et al., 2018), except that international activity may also be resource-, efficiency- and strategic asset-oriented (Kuzel, 2017: 17), regardless of MNE origins, business specialisation or maturity.

The attractiveness of cities for MNEs is perceived through the prism of achievable general advantages, which are the product of location-specific factors, company-specific attributes and capabilities – including the ability to reduce the liability of foreignness (Mehlsen & Wernicke, 2016) – and internationalisation motivations being a derivative of the implemented organisational strategies (assuming these strategies are designed for a specific period of time, meaning that they take into account economic, social, cultural and political conditions in the home country, host country and international environment factors). In other words, those “L” advantages offered by GCs and company “O” advantages, must give a real possibility of achieving the strategic goals of MNEs.

Despite the enormous potential, even the largest and best GCs are not always able to meet all MNE expectations. In this context, the actual attractiveness of cities will vary to a great extent. Referring to the fDi Intelligence report (2020), London, Paris, Dublin, Munich and Amsterdam, for example, are among the European cities of the future and are characterised by the greatest investment attractiveness. However, if we take “human capital and lifestyle” as the primary variable of the assessment – that is, a parameter recognised mainly by advanced-resource-seeking MNEs – then the top of the list should be the following: London, Madrid, Paris, Prague and, until recently, Moscow (fDi Intelligence, 2022; 2023).

For market-seeking MNEs, however, the potentially best locations are Paris, London, Munich, Dublin and Amsterdam, and for efficiency seekers they are Tbilisi, Minsk, Sofia, Bucharest and Kyiv (however, Minsk and Kyiv have now lost their appeal due to the Russian war in Ukraine – fDi Intelligence, 2023). Moreover, in the case of many MNE business operations, the location in the core city does not need to be desirable, as the proximity to the agglomeration and the developed infrastructure of the region itself should be enough. fDi Intelligence (2020) lists the following regions among the most attractive regions in Europe: Paris Region, Dublin Region, North Rhine-Westphalia, Baden-Württemberg, and Bavaria.

Finally, although global interconnectedness is more important for GCs than belonging to a given economy (Goerzen et al., 2013) (as shown by the example of London and New York, which do not compete but complement each other, being a conglomerate of transoceanic services facilitating economic globalisation – Taylor & Derudder, 2022), it is difficult to completely exclude the factors of a country or a group of associated countries (e.g., within the European Union, the Eurasian Economic Union, or the North American Free Trade Agreement) for perceiving their attractiveness from the perspective of MNEs.

4. Searching for a comprehensive framework

The aforementioned discussion outlines what the authors consider to be the most important aspects to understand the mutual relations of GCs and MNEs. They require ordering, clarifying and extension, however, taking into account the latest postulates reported in the literature. Hence, in this part of the study an attempt has been made to propose a comprehensive framework for further analyses and a platform for future research studies (Fig. 1 – a broadened platform of interrelationships). In the adopted perspective of considerations, the authors have taken into account issues that may be of fundamental importance for the analyses carried out at the meeting of GC and MNE discussions, and which seem not yet to have received sufficient attention. They have been grouped in the following five thematic categories: global trends, international and country-specific factors; heterogeneity and transformation of global cities; MNE internationalisation motivations and different market entry modes; global cities and global value chains (GVC); outcomes of MNE activity.

4.1. Global trends, international and country-specific factors

As has already been emphasised several times, GCs are locations that differ greatly in attractiveness for MNEs. This attractiveness is built by many factors of economic, political, infrastructural, institutional and even environmental or cultural natures. Whilst some are exclusive attributes of cities, others are derivatives of the city's geographical and geopolitical localisation on the globe, as well as host-country-specific factors.

The combination of these elements may constitute a unique value for MNEs. Whether it determines the choice of a given location, however, depends on the MNE's endogenous characteristics, treated here as factors predetermining the choice of location for business operations, including different home-country-specific factors that affect them (Dunning, 1980: 10; Dunning & Lundan, 2008: 106–107; Cantwell et al., 2010: 572; Demirbag & Glaister, 2010; Zhang, 2016; Beleska-Spasova et al., 2016; Yaprak et al., 2018).

It should also be noted that both the situation of GCs and the activity of MNEs will be affected by global trends (e.g., globalisation and economic integration, liberalisation, improvements in communications and transportation, technological progress, demographic trends, urbanisation) and other international factors (e.g., financial and economic crises, social turmoil, political and military conflicts, natural disasters, pandemics), changing both the landscape of city performance and the conditions for the functioning of enterprises.

4.2. Heterogeneity and transformation of global cities

Complementing the aforementioned topics regarding the heterogeneity of global cities, it should be noted that GC attractiveness for MNE business operations, which varies in time and space, results not only from their size (metros, smaller urban agglomerations, etc.) and different status in the GC hierarchy (established, emerging, new), but it is also a consequence of contemporary processes and phenomena reshaping international economy. Among them, the following factors are of major importance: urbanisation (OECD, 2020; Dobbs et al., 2011), global integration (Sassen, 2012) and technological change (Trujillo & Parilla, 2016: 7–9).

Although these processes are not the only ones shaping the conditions for the functioning of cities and enterprises (they also include demographic trends, financial and economic crises, political and military conflicts, geopolitical shifts, climate change, rising mass migration, natural disasters and pandemics such as COVID-19 (De Sherbinin et al., 2007; Malakar & Mishra, 2017; World Bank, 2020; NCE, 2018; JLL, 2017; GPCI, 2020: 6), they seem to be key in terms of the degree of influence on the attractiveness of GCs for MNEs. They cause changes in the spatial concentration of the drivers of modern economic growth: trade, innovation, talent and infrastructure connectivity, which is reflected in the shaping of GCs' "order" and the growing interest of MNEs in those locations that, for various reasons (e.g., historical events, political reasons, geographic location, level of socio-economic development) had not until recently been attractive destinations for their business operations.

Currently, the combination of location-specific factors of GCs that differ in area and population size (i.e., the world's largest cities, city-regions, metros and other urban areas) allows them to play a leading role in the world in terms of the distribution of international production (Parilla et al., 2015; Beaudouin et al., 2019). It should be noted, however, that, due to various production factors in their area and their various functions within the

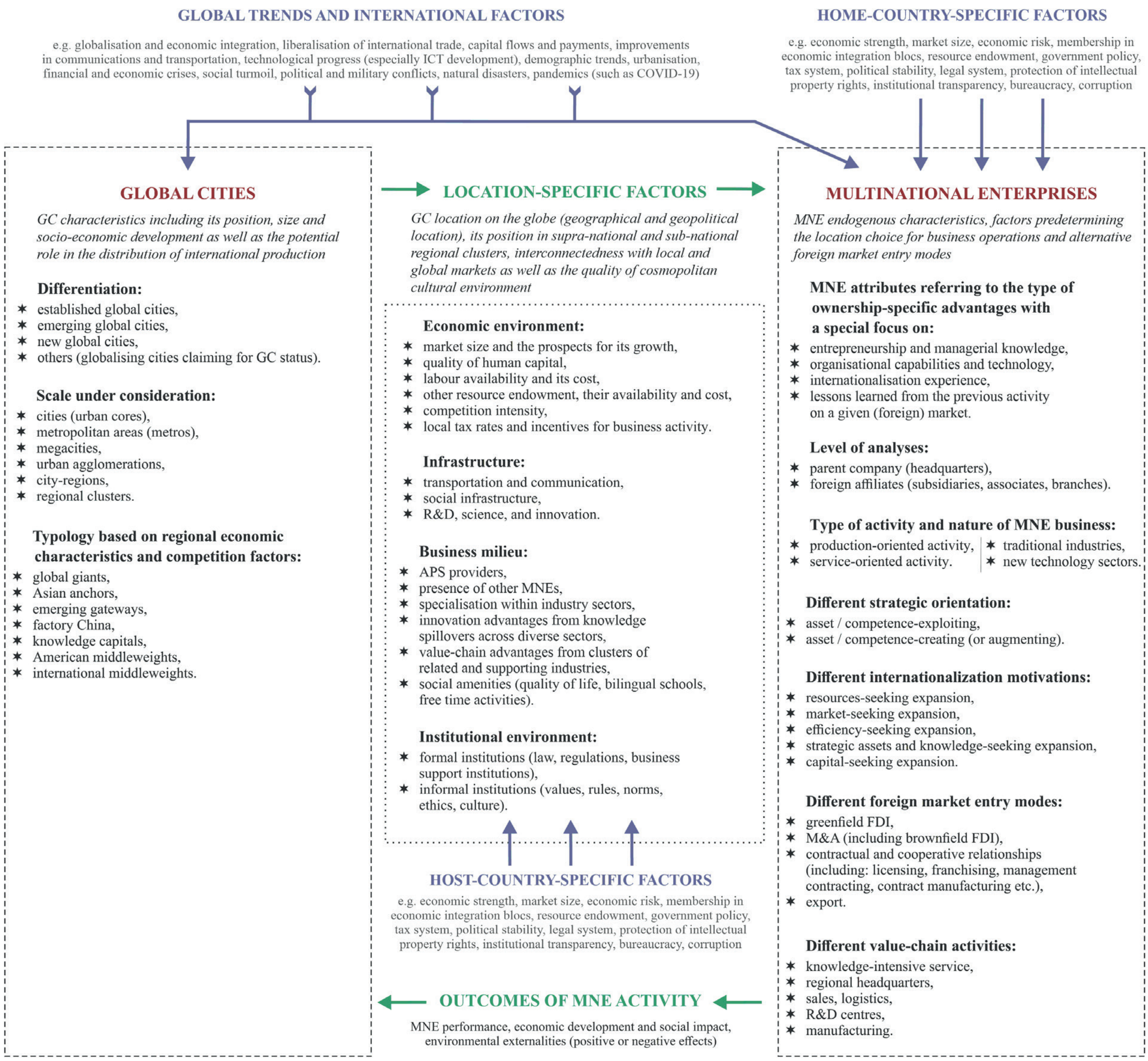

Fig. 1. Global Cities and Multinational Enterprises – a broadened platform of interrelationships
Source: compiled by the authors in the course of literature review

international system of production and exchange, the spectrum of these world leaders is very wide.

And so, apart from the "traditional" GCs concentrating corporate headquarters and serving as the command-and-control centres for the world's largest advanced economies (the so-called "global giants", i.e., London, Los Angeles, New York, Osaka-Kobe, Paris and Tokyo), the following types of GCs can currently be distinguished: Asian anchors, emerging gateways, factory China, knowledge capitals, American middleweights and international middleweights (Trujillo & Parilla, 2016: 15–16). Global Cities belonging to all the above categories build their location attractiveness for MNE business operations based on unique competitive assets, often associated with regional economic characteristics.

"Asian anchors" (e.g., Beijing, Hong Kong, Seoul, Shanghai, Singapore) are business and financial nodes anchoring inward investment in Asia, mainly in the Asia-Pacific region. "Emerging gateways" (e.g., Pretoria, Mumbai, Shenzhen, Warsaw, Rio de Janeiro) are large business and transportation entry points for major national and regional emerging markets in Africa, Asia, Eastern Europe and Latin America. "Factory China" (e.g., Shenyang, Shijiazhuang, Suzhou) are Chinese cities distinctly reliant on export-intensive manufacturing to power economic growth and global engagement. "Knowledge capitals" (e.g., Seattle, Stockholm, Zurich) are mid-sized, highly productive knowledge creation centres in the United States and Europe with talented workforces and elite research universities. "American middleweights" (e.g., Riverside, Sacramento, San Antonio) are mid-sized US metro areas striving for a post-recession niche in the global economy. Finally, "international middleweights" (e.g., Sydney, Toronto, Barcelona, Berlin) are mid-sized cities in Australia, Canada and Europe globally connected by people and investment flows, but where growth lagged after the last financial crisis (Trujillo & Parilla, 2016: 15–16).

Therefore, it must be pointed out that the factors that influence the transformation of GCs have not only changed their "layout" on a world scale but have also led to the crystallisation of a large group of cities with a high degree of specialisation, performing various functions within the international system of production and exchange. This is particularly visible among GCs constituting regional development centres and acting as accelerators of MNE expansion in spaces belonging to their zones of direct influence. In this context, Hutzschenreuter and Harhoff (2020) show for example that companies that place their first affiliates in a host country near its capital are then characterised by a higher pace of expansion deep into that country, which is particularly evident in emerging economies.

4.3. MNE internationalisation motivations and different market entry modes

The formation of a new GC "order" and the growing interest of MNEs in locations that had never been at the top of the hierarchy of global cities, or even at its lower levels (second-tier or third-tier cities) also reflect the changes that have taken place in the area of international business in the last few decades. They concern in particular the internationalisation motivations and the extended range of foreign market entry modes used.

In this first aspect, undertaking foreign expansion is nowadays not so much motivated by the desire to use the resources owned by an enterprise (asset/competence-exploiting orientation), but the need to overcome their shortages in the home market (asset/competence creating or augmenting orientation). This way of thinking was presented in the theories proposed by H.C. Moon and T.W. Roehl (1993, 2001) and J.A. Matthews (2006), but was also reflected in the modifications to the OLI paradigm, thanks to the separation of strategic assets or capability-seeking expansion (Dunning, 1995: 474; Eden & Dai, 2010: 20–21).

The changes indicated above have been observed mainly among multinational enterprises from emerging and developing economies (such as BRICS and post-communist transition economies), often referred to as newcomers and latecomers in international business, although it should be emphasised that these terms refer to the moment when foreign expansion commenced rather than to the origin of these enterprises. Nevertheless, it was this intense internationalisation of emerging MNEs in the last three decades that attracted researchers' attention (e.g., Kumaraswamy et al., 2012; Lorenzen & Mudambi, 2012; Andreff & Andreff, 2017; Saas, 2017; Williamson & Wan, 2018; Amungo, 2020).

First of all, it was emphasised that these enterprises conduct international business operations both in developed markets as well as emerging and developing markets (including the least developed ones), even though their expectations in terms of the chosen directions of internationalisation may differ significantly. Research has shown that MNEs from emerging and developing economies direct their expansion towards developed countries when they aim at accessing new strategic assets, and that their main motivation is market access. They tend to invest in other developing countries when labour-seeking is the most important principle (Makino et al., 2002; Kedia et al., 2012).

Internationalisation motivations and destinations for international MNE expansion representing emerging and developing countries and those from developed economies can differ in many ways (Sethi et al., 2003; Cuervo-Cazurra & Genc, 2008; Gaur & Kumar, 2009; Guillén & García-Canal, 2009; Gammeltoft et al., 2010; Amighini et al., 2015; Crescenzi et al., 2016). This is due not only to country-level and industry-level determinants, such as different types (obligating, pressuring or supporting) of home country environment (Cuervo-Cazurra & Genc, 2011), but may also be related to the general (relatively low) home country level of economic and technological development, which is the reason for seeking strategic resources (not available domestically) outside the home country (mainly in developed countries) (Awate et al., 2015).

With regard to MNE market entry modes, modern enterprises use various methods of foreign expansion, treating them not so much as alternative, but coexisting and complementary (e.g., sales based mainly on a network of franchise stores, but with the participation of own retail outlets and on-site production with supplementary exports). Thus, we are increasingly dealing with a combination of different entry modes (Benito et al., 2009; Pyo, 2010; Benito et al., 2011), or the hybridisation of the methods of foreign expansion used, both in relation to MNE internationalisation patterns in general and in terms of the conquest of individual markets. Additionally, as indicated by G.R.G. Benito et al. (2011: 804), such a combination may occur at the outset of a foreign market entry and as the effect of increasing MNE involvement in a host country, leading over time to the development of quite "sophisticated mode packages".

It is also emphasised that modern MNEs can control and coordinate business operations to a large extent, even if they are not implemented "inside" an enterprise (Buckley, 2011: 270). Therefore, it has become justified to consider MNEs as complex network systems integrating operations of diverse and geographically dispersed units linked by capital ties or cooperative relations. Conceptually, it is aptly expressed by M. Forsgren et al. (2005: 97) and described by P. Dicken (2015: 130–132), among others, who present MNEs as "networks within networks". The main structure of relations remains an internal network co-created by a parent company and its foreign affiliates, while entities related by non-capital ties and cooperating with them form an external network. Thanks to integration capabilities, MNEs are capable of effectively achieving their business goals, not necessarily by undertaking greenfield FDI or implementing mergers and acquisitions each time, but by establishing contractual and cooperative relationships (i.e., licensing, franchising, management contracting, contract manufacturing, trade agreements, etc.) with other enterprises.

4.4. Global cities and global value chains

Traditionally, GCs (especially in advanced economies) have been locations of higher-level value chain activities (e.g., design, R&D, marketing, financial services) and leadership centres including corporate, regional and divisional HQs and country offices. This was mainly because of their role as globally connected information, innovation and technology hubs and because of the high concentration of APS firms in their area (Pedersen & Tallman, 2016; Belderbos et al., 2017; Adler & Florida, 2019). Currently, due to the aforementioned processes, i.e. urbanisation, global integration and technological change and the resulting changes in spatial concentration of the drivers of modern economic growth (trade, innovation, talent and infrastructure connectivity), GCs (both from developed and from emerging and developing countries) can host all possible value-chain activities.

What is more, as argued by D. Chakravarty et al. (2021: 12): "It is likely that emerging market global cities and MNE leadership in these cities will have an increasingly important role to play in shaping GVCs [global value chains] of the future." P. Pananond (2015) emphasised, however, that not all MNEs enjoy the same level of comfort in choosing the directions of foreign expansion due to their initial (often relatively low) position in the value chain and the dynamic interrelationships with GVC leaders. This mainly concerns emerging MNEs, whose experiences show that internationalisation motivations should now be perceived "in a more nuanced manner".

One possible answer is the proposal of K. Moghaddam et al. (2014), who presented a modified (in relation to the classic approach of J.H. Dunning) typology of international expansion motivations and specific value-chain activities undertaken by MNEs. According to this typology, there are six types of internationalisation motivations, namely: end-customer-market seeking, natural resource seeking, downstream and upstream knowledge seeking, efficiency seeking, global value consolidation seeking, and geopolitical influence seeking expansion. They reflect the aspirations of newcomers and latecomers in international business to conduct more advanced and sophisticated activities along global value chains (Pananond, 2013), while at least some of them may result in MNEs locating their business operations in global cities. These include, in particular, the following cases: end-customer-market seekers (basically all types of GCs), natural resource seeking (mainly factory China), downstream knowledge seekers (mainly emerging gateways, Asian anchors, American and international middleweights), upstream knowledge seekers (mainly global giants and knowledge capitals), global value consolidation seekers (mainly emerging gateways and factory China), geopolitical influence seekers (mainly emerging gateways).

4.5. Outcomes of MNE activity

An important but relatively poorly recognised issue is the question of MNE outcomes related to their business operations in GCs. This is about the consequences of MNE location within global cities and their impact on performance of both the parent company and its affiliates as much as it is about the MNE influence over GC socio-economic development and natural environment.

In the literature, there is a general agreement that "L" advantages can enhance the performance of an MNE and its foreign affiliates. As pointed out by D. Chakravarty et al. (2021), however, such conclusions are drawn mainly in relation to country-level factors (e.g., Pan & Chi, 1999; Meyer & Peng, 2005), less frequently in relation to the sub-national level of "L" advantages (Kim et al., 2010; Dai et al., 2013) and only occasionally in relation to specific GC attributes.

The few studies available on how the location of MNE business operations in GCs impacts their performance prove that it is the above location-specific factors creating unique economic, institutional and cultural environment in GCs that causes MNEs to not generally suffer negative performance consequences from the costs of liability of foreignness such as cultural and geographic distance (Nachum, 2010). They tend to gain opportunities to access and become embedded in local and global knowledge-rich environments (Nachum, 2010) and to benefit from access to academics and practitioners (Owen-Smith & Powell, 2004), as well as to resources and knowledge drawn from global city networks (Zhang et al., 2018).

What is more, the availability of rich GC assets, together with supporting institutional and well-connected infrastructure systems, makes MNE affiliates more likely to be profitable in relation to other locations (Chakravarty, 2019). They use favourable conditions to develop interorganisational network relationships, which is another factor helping to mitigate the liability of foreignness and outsidership (Elango, 2009). Because of good GC global connectivity, foreign affiliates can link more easily to useful agents (who are parts of the GVCs in particular industries) in other locations in the world (Sigler & Martinus, 2017).

However, apart from the performance benefits discussed above (e.g., concerning sales, productivity, profitability, survival, market share, innovation, customer satisfaction), one should also keep in mind potential disadvantages and risks arising from MNE concentration in GCs. The few studies on the subject indicate they might include greater capital and operating costs as well as increased competitive pressures from local and foreign companies (Shaver & Flyer, 2000; Miller & Eden, 2006). They are associated with a range of complexities related to GC heterogeneity in terms of concentration of APS providers, operating costs, competitors and clusters of firms from certain countries or industries (Chung & Song, 2004; Stallkamp et al., 2018). This leads to the conclusion that the balance of MNE performance outcomes (benefits vs. downsides) may not be easy to establish and will depend on the circumstances under consideration, the time of the analysis, the locations taken into account (i.e., particular GCs) or the adopted perspective of considerations.

Similarly, considering MNE influence on socio-economic development in GCs, there is evidence for both positive as well as negative economic and social outcomes. The former ones mainly boil down to the direct and indirect effects of MNE activities in host countries, described by J.H. Dunning and S.M. Lundan (2008: 291–662). While this was true for domestic economies (as a whole), similar effects can also be identified for GCs. They include the benefits of technology transfer, local market structure, levels of employment and human resource development (Jacobs et al., 2016; Verginer & Riccaboni, 2021), average labour productivity and wages (Sun & Chen, 2017), effects experienced through linkages between MNEs and other firms operating in GCs (McDonald et al., 2020), and increased competition and knowledge spillovers to the GC economy (Cantwell & Piscitello, 2005; Yang et al., 2020).

Even though studies on MNEs and GCs do not clearly recognise the sustainability dimension, MNEs conducting business operations in GCs – especially those from the ICT sector – may also play an important role in GC sustainability transition, providing smart city technology-based solutions and may contribute to more sustainable modes of energy consumption (van den Buuse & Kolk, 2019), helping to counteract the negative effects of growing urban population (Czupich, 2019). This is especially important in those regions of the world where practical activities related to the implementation of a smart city idea are still in their infancy (Kola-Bezka et al., 2016). In addition to this, by implementing their corporate social responsibility strategies, MNEs may have an impact on GCs in terms of environmental issues, such as climate change, pollution and resource depletion, as well as social and ethical issues (e.g., poverty, rights, responsibilities) inside and outside the company, often in connection with local communities and workers (Kolk, 2016).

Negative outcomes resulting from the presence of MNEs in GCs are usually related to socio-economic polarisation that accompanies the transformation of cities into GCs. These outcomes include increasing income inequality and occupational polarisation, migration and disembeddedness of influential elites with local communities (Chakravarty et al., 2021). Growing income inequality and occupational polarisation in GCs result from an increase in the demand from MNEs (mainly APS firms but also R&D firms and others) for higher-end staff (professionals, managers) as well as the declining demand for middle-income (i.e., manufacturing) jobs (Sassen, 1991). The polarisation discussed above is also related to the migration into GCs of highly skilled international workers as well as a large number of unskilled ones (Chiu & Lui, 2004; Koll-Schretzenmayr et al., 2009; Gornig & Goebel, 2018), which not only changes the demographic structure of GCs and their surrounding areas (Buzar et al., 2007), but also fosters an influx of elites that are not involved in the affairs of local communities (Sassen, 1991), the dissemination of a precarious work model among immigrants, including highly educated ones (Wang et al., 2017) and the growing group of GC residents with no access to healthcare or decent living spaces (Kathiravelu, 2016; Ye, 2016).

5. Final remarks and conclusions

The above considerations indicate that contemporary GCs and MNEs are not sole players but symbionts in the world economy, with a significant scope and complexity of mutual interrelationships. However, these interrelationships remain largely unrecognised. That is why the ambition of the authors was to integrate economic geography, urban studies and international business perspectives in order to organise current considerations and identify new, potentially important research areas.

Using mainly logics of the OLI paradigm as the theoretical background (in the version taking into account its latest extensions and modifications), the most important existing concepts presented in the literature have been reviewed above, with particular emphasis on their evolution, both in relation to GCs and MNEs, including an indication of the approaches and postulates resulting from the latest research. A comprehensive approach to the discussed issues allowed for the proposition of a comprehensive framework for further analyses (Fig. 1), which may be an important contribution to the scientific discussion, hopefully becoming useful for researchers in designing their future interdisciplinary and multifaceted studies on the relationships between GCs and MNEs.

According to the authors, these studies may specifically address the following overlapping research areas:

- GC attractiveness (their metropolitan and regional areas) for MNEs, taking into account such considerations as: global trends (globalisation and economic integration, liberalisation, improvements in communication and transportation, technological progress, demographic trends, urbanisation, climate change, rising mass migration), geographical and geopolitical city location on the globe and related international factors such as financial and economic crises, social turmoil, political and military conflicts, natural disasters and pandemics, and a host-country-specific factors (e.g., economic strength, market size, economic risk, membership in economic integration blocks, resource endowment, government policy, tax system, political stability, legal system, protection of intellectual property rights, institutional transparency, bureaucracy, corruption);
- The formation of new GCs as a result of changes in the spatial concentration of modern economic growth drivers (i.e., trade, innovation, talent, infrastructure connectivity), implementing diverse functions within the international system of production and exchange;
- Internationalisation motivations and destinations for international MNE expansion, taking into account not only the category of the MNE country of origin (i.e., representing emerging, developing and developed economies), but also the moment of foreign expansion commencement (i.e., newcomers and latecomers in international business) and their affiliation to traditional industries or new technology sectors;
- Hybridisation of entry modes used by MNEs, in particular the use by MNEs of contractual and cooperative relationships with other firms operating in GCs for their business purposes;
- Changes in global value chains related to the growing importance of GCs from emerging and developing countries as hosts for value-chain activities and the growing aspirations of newcomers and latecomers in international business in terms of conducting more advanced and sophisticated activity along global value chains;
- Positive and negative consequences of MNEs' location within GCs and their impact on performance of both the parent company and its affiliates;
- Benefits and downsides for GCs resulting from conducting business operations in their area by MNEs, in particular those related to the processes of socio-economic development, sustainability transition and migration, energy transition, and ethical issues related to poverty, rights and responsibilities.

The proposed research areas focus on the junction of analyses concerning two important groups of entities from the point of view of development and shaping processes characteristic for the modern world economy, i.e. GCs perceived as engines of economic growth and MNEs treated as primary agents of globalisation. The intention was to present their mutual relations in the broadest possible range of circumstances. Such a comprehensive approach seems justified and necessary (especially in view of the previously indicated shortage of similar research work). It allows us to capture the multiplicity and complexity of interrelationships, which is particularly important for further discussion and building new research approaches.

The challenge remains, however, to capture and recognise the issues discussed above in a holistic manner in the course of research work (which tends naturally to focus on selected aspects). This outlined multiplicity and variability of the relationships between GCs and MNEs causes fundamental difficulties for researchers in this respect, whereas limited availability of information and data at subnational levels is the main limitation on the recommended research directions. Despite the indicated problems, such inquiries should nevertheless be undertaken. They deal with issues that are too important to be ignored in the long run. The authors hope this text will give inspiration to scholars researching economic geography, urban studies and international business and facilitate the creation of a collaborative platform for researchers of different specialties in order to undertake joint interdisciplinary projects and research work.

References

Abrahamson, M. (2004). Global cities. New York, US and Oxford, UK: Oxford University Press.

Acuto, M. & Leffel, B. (2021). Understanding the global ecosystem of city networks. *Urban Studies*, 58(9): 1758–1774. DOI: https://doi.org/10.1177/0042098020929261.

Acuto, M. (2011). Finding the global city: An analytical journey through the 'Invisible College'. *Urban Studies*, 48(14): 2953–2973. DOI: https://doi.org/10.1177/0042098010392081.

Adler, P. & Florida, R. (2019). Geography as strategy: The changing geography of corporate headquarters in post-industrial capitalism. *Regional Studies*, 54(5): 610–620. DOI: https://doi.org/10.1080/00343404.2019.1634803.

Aggarwal, R., Berrill, J., Hutson, E. & Kearney, C. (2011). What is a multinational corporation? Classifying the degree of firm-level multinationality. *International Business Review*, 20(5): 557–577. DOI: https://doi.org/10.1016/j.ibusrev.2010.11.004.

Amighini, A., Cozza, C., Giuliani, E., Rabellotti, R. & Giada Scalera, V. (2015). Multinational enterprises from emerging economies: What theories suggest, what evidence shows. A literature review. *Economia e Politica Industriale*, 42: 343–370. DOI: https://doi.org/10.1007/s40812-015-0011-8.

Amungo, A. (2020). The Rise of the African Multinational Enterprises (AMNE): The Lions accelerating the development of Africa. Cham, Switzerland: Springer. DOI: https://doi.org/10.1007/978-3-030-33096-5.

Andreff, W. (2002). The new multinational corporations from transition countries. *Economic Systems*, 26(4): 371–379. DOI: https://doi.org/10.1016/S0939-3625(02)00065-1.

Andreff, W. & Andreff, M. (2017). Multinational companies from transition economies and their outward foreign direct investment. *Russian Journal of Economics*, 3(4): 445–474. DOI: https://doi.org/10.1016/j.ruje.2017.12.008.

Aulakh, P.S. (2007). Emerging multinationals from developing economies: Motivations, paths and performance. *Journal of International Management*, 13(3): 235–240. DOI: https://doi.org/10.1016/j.intman.2007.05.001.

Awate, S., Larsen, M. & Mudambi, R. (2015). Accessing vs. sourcing knowledge: A comparative study of R&D internationalization between emerging and advanced economy firms. *Journal of International Business Studies*, 46(1): 63–86. DOI: https://doi.org/10.1057/jibs.2014.46.

Batschauer da Cruz, C.B., Eliete Floriani, D. & Amal, M. (2022). The OLI paradigm as a comprehensive model of FDI determinants: A sub-national approach. *International Journal of Emerging Markets*, 17(1): 145–176. DOI: https://doi.org/10.1108/IJOEM-07-2019-0517.

Beaudouin, N., Grotto, L., Missoffe, A., Behmaras, I.M. & Scheidhauer, C. (2019). Global cities investment monitor 2019: New rankings, trends and criteria. Available at: https://medias.businessimmo.com/default/0002/46/145460/globalcitiesinvestmentmonitorweb.pdf (Accessed 15 August 2020).

Beaudouin, N., Missoffe, A. & Scheidhauer, C. (2018). Global cities investment monitor 2018: New rankings, trends and criteria. Available at: https://gp-investment-agency.com/wp-content/uploads/2018/07/Global-Cities-Investment-Monitor-2018-web.pdf.

Beaverstock, J.V., Doel, M.A., Hubbard, P.J. & Taylor, P.J. (2002). Attending to the world: Competition, cooperation and connectivity in the world city network. *Global Networks*, 2(2): 111–132. DOI: https://doi.org/10.1111/1471-0374.00031.

Belderbos, R., Du, H. S. & Goerzen, A. (2017). Global cities, connectivity, and the location choice of MNC regional headquarters. *Journal of Management Studies*, 54(8): 1271–1302. DOI: https://doi.org/10.1111/joms.12290.

Belderbos, R., Du, H.S. & Slangen, A. (2020). When do firms choose global cities as foreign investment locations within countries? The roles of contextual distance, knowledge intensity, and target country experience. *Journal of World

Business, 55(1): 1–13. DOI: https://doi.org/10.1016/j.jwb.2019.101022.

Beleska-Spasova, E., Loykulnanta, S. & Nguyen, Q.T.K. (2016). Firm-specific, national and regional competitive advantages: The case of emerging market MNEs – Thailand. *Asian Business & Management*, 15: 264–291. DOI: https://doi.org/10.1057/s41291-016-0009-8.

Benito, G.R.G., Petersen, B. & Welch, L.S. (2009). Towards more realistic conceptualisations of foreign operation modes. *Journal of International Business Studies*, 40(9): 1455–1470. DOI: https://doi.org/10.1057/jibs.2009.54.

Benito, G.R.G., Petersen, B. & Welch, L.S. (2011). Mode combinations and international operations: Theoretical issues and an empirical investigation. *Management International Review*, 51(6): 803–820. DOI: https://doi.org/10.1007/s11575-011-0101-4.

Blevins, D.P., Moschieri, C., Pinkham, B.C. & Ragozzino, R. (2016). Institutional changes within the European Union: How global cities and regional integration affect MNE entry decisions. *Journal of World Business*, 51(2): 319–330. DOI: https://doi.org/10.1016/j.jwb.2015.11.007.

Buch, C.M., Kleinert, J., Lipponer, A. & Toubal, F. (2005). Determinants and effects of foreign direct investment: Evidence from German firm-level data. *Economic Policy*, 20(41), 52–110. DOI: https://doi.org/10.1111/j.1468-0327.2005.00133.x.

Buckley, P.J. (2011). International integration and coordination in the global factory. *Management International Review*, 51(2): 269–283. DOI: https://doi.org/10.1007/s11575-011-0075-2.

Buckley, P.J. & Casson, M.C. (1998). Analyzing foreign market entry strategies: Extending the internationalization approach. *Journal of International Business Studies*, 29(3): 539–561. DOI: https://doi.org/10.1057/palgrave.jibs.8490006.

Buckley, P.J. & Ghauri, P.N. (2004). Globalisation, economic geography and the strategy of multinational enterprises. *Journal of International Business Studies*, 35: 87–98. DOI: https://doi.org/10.1057/palgrave.jibs.8400076.

Buckley, P.J., Clegg, L.J., Cross, A.R., Liu, X., Voss, H. & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38(4): 499–518. DOI: https://doi.org/10.1057/palgrave.jibs.8400277.

Buzar, S., Ogden, P., Hall, R., Haase, A., Kabisch, S. & Steinfiihrer, A. (2007). Splintering urban populations: Emergent landscapes of reurbanisation in four European cities. *Urban Studies*, 44(4): 651–677. DOI: https://doi.org/10.1080/00420980601185544.

Callies, G.-P. (2011). Introduction: Transnational corporations revisited. *Indiana Journal of Global Legal Studies*, 18(2): 601–615. DOI: https://doi.org/10.2979/indjglolegstu.18.2.601.

Cantwell, J. & Piscitello, L. (2005). Recent location of foreign-owned research and development activities by large multinational corporations in the European regions: The role of spillovers and externalities. *Regional Studies*, 39(1): 1–16. DOI: https://doi.org/10.1080/0034340052000320824.

Cantwell, J., Dunning, J.H. & Lundan, S.M. (2010). An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies*, 41: 567–586. DOI: https://doi.org/10.1057/jibs.2009.95.

Carlos, A.M. & Nicholas, S. (1988). "Giants of an Earlier Capitalism": The chartered trading companies as modern multinationals. *The Business History Review*, 3(62): 398–419. DOI: https://doi.org/10.2307/3115542.

Castellani, D. & Lavoratori, K. (2020). The lab and the plant: Offshore R&D and co-location with production activities. *Journal of International Business Studies*, 51: 121–137. DOI: https://doi.org/10.1057/s41267-019-00255-3.

Castro, F.B. (2000). Foreign direct investment in the European periphery. The competitiveness of Portugal (Doctoral dissertation). Available at: http://etheses.whiterose.ac.uk/2612.

Caves, R.E. (1982). Multinational enterprises and technology transfer. In A. M. Rugman (Ed.). New theories of the multinational enterprise, 254–279, London, UK and New York, US: Routledge.

Chadee, D.D., Qiu, F. & Rose, E.L. (2003). FDI location at the subnational level: A study of EJVs in China. *Journal of Business Research*, 56(10): 835–845. DOI: https://doi.org/10.1016/S0148-2963(02)00471-X.

Chakravarty, D. (2019). Foreign direct investment in global cities and co-ethnic clusters: Characteristics, performance, and survival. *AIB Insights*, 19(3): 7–11.

Chakravarty, D., Goerzen, A., Musteen, M. & Ahsan, M. (2021). Global cities: A multi-disciplinary review and research agenda. *Journal of World Business*, 56(3): 101182. DOI: https://doi.org/10.1016/j.jwb.2020.101182.

Chan, C.M., Makino, S. & Isobe, T. (2010). Does subnational region matter? Foreign affiliate performance in the United States and China. *Strategic Management Journal*, 31(11): 1226–1243. DOI: https://doi.org/10.1002/smj.854.

Cheng, Y. & LeGates, R. (2018). China's hybrid global city region pathway: Evidence from the Yangtze River Delta. *Cities*, 77: 81–91. DOI: https://doi.org/10.1016/j.cities.2018.01.015.

Chiu, S.W.K. & Lui, T.-l. (2004). Testing the global city-social polarisation thesis: Hong Kong since the 1990s. *Urban Studies*, 41(10): 1863–1888. DOI: https://doi.org/10.1080/0042098042000256297.

Chung, H.M., Dahms, S. & Kao, P.T. (2021). Emerging market multinational family business groups and the use of family managers in foreign subsidiaries. *Management International Review*, 61: 57–89. DOI: https://doi.org/10.1007/s11575-021-00437-y.

Chung, W. & Song, J. (2004). Sequential investment, firm motives, and agglomeration of Japanese electronics firms in the United States. *Journal of Economics & Management Strategy*, 13(3): 539–560. DOI: https://doi.org/10.1111/j.1430-9134.2004.00022.x.

Clark, G. (2016). Global cities. A short history. Washington DC, US: Brookings Institution Press.

Clegg, L.J., Voss, H. & Tardios, J.A. (2018). The autocratic advantage: Internationalization of state-owned multinationals. *Journal of World Business*, 53(5): 668–681. DOI: https://doi.org/10.1016/j.jwb.2018.03.009.

Coetzee, Z., Bezuidenhout, H. & Mhonyera, G. (2020). Effective strategies followed by multinational enterprises expanding into Africa. *Journal of Economic and Financial Sciences*, 13(1): 1–12. DOI: https://doi.org/10.4102/jef.v13i1.511.

Cox, H. (1997). The evolution of international business enterprise. In: John, R. (Ed.). Global business strategy, 9–46, London, UK: International Thomson.

Crescenzi, R., Pietrobelli, C. & Rabellotti, R. (2016). Regional strategic assets and the location strategies of emerging countries' multinationals in Europe. *European Planning Studies*, 24(4): 645–667. DOI: https://doi.org/10.1080/09654313.2015.1129395.

Csomós, G. & Tóth, G. (2016). Exploring the position of cities in global corporate research and development: A bibliometric analysis by two different geographical approaches. *Journal of Informetrics*, 10(2): 516–532. DOI: https://doi.org/10.1016/j.joi.2016.02.004.

Csomós, G. (2013). The command and control centers of the United States (2006/2012): An analysis of industry sectors influencing the position of cities. *Geoforum*, 50: 241–251. DOI: https://doi.org/10.1016/j.geoforum.2013.09.015.

Csomós, G. (2017). Cities as command and control centres of the world economy: An empirical analysis, 2006–2015. *Bulletin of Geography. Socio-Economic Series*, 38: 7–26. DOI: http://dx.doi.org/10.1515/bog-2017-0031.

Cuervo-Cazurra, A. (2008). The multinationalization of developing country MNEs: The case of multilatinas. *Journal of International Management*, 14(2): 138–154. DOI: https://doi.org/10.1016/j.intman.2007.09.001.

Cuervo-Cazurra, A. (Ed.). (2018). State-owned multinationals: Governments in global business. Cham, Switzerland: Palgrave Macmillan. DOI: https://doi.org/10.1007/978-3-319-51715-5.

Cuervo-Cazurra, A. & Genc, M. (2008). Transforming disadvantages into advantages: Developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39: 957–979. DOI: https://doi.org/10.1057/palgrave.jibs.8400390.

Cuervo-Cazurra, A. & Genc, M.E. (2011). Obligating, pressuring, and supporting dimensions of the environment and the non-market advantages of developing-country multinational companies. *Journal of Management Studies*, 48(2): 441–455. DOI: https://doi.org/10.1111/j.1467-6486.2010.00964.x.

Czupich, M. (2019). The role of ICT in the smart city concept. *Olsztyn Economic Journal*, 14(1): 63–74. DOI: 10.31648/oej.3646.

Dahms, S. (2019). Foreign-owned subsidiary knowledge sourcing: The role of location and expatriates. *Journal of Business Research*, 105: 178–188. DOI: https://doi.org/10.1016/j.jbusres.2019.08.013.

Dai, L., Eden, L. & Beamish, P.W. (2013). Place, space, and geographical exposure: Foreign subsidiary survival in conflict zones. *Journal of International Business Studies*, 44(6): 554–578. DOI: https://doi.org/10.1057/jibs.2013.12.

De Sherbinin, A., Schiller, A. & Pulsipher, A. (2007). The vulnerability of global cities to climate hazards. *Environment and Urbanization*, 19(1): 39–64. DOI: https://doi.org/10.1177/0956247807076725.

Demirbag, M. & Glaister, K.W. (2010). Factors determining offshore location choice for R&D projects: A comparative study of developed and emerging regions. *Journal of Management Studies*, 47(8): 1534–1560. DOI: https://doi.org/10.1111/j.1467-6486.2010.00948.x.

Deng, X. (2009). Patterns of internationalization of Chinese firms – Empirical study based on strategic approach. *Journal of Public Affairs*, 9(4): 301–312. DOI: https://doi.org/10.1002/pa.331.

Derudder, B. & Taylor, P.J. (2018). Central flow theory: Comparative connectivities in the world-city network. *Regional Studies,* 52(8): 1029–1040. DOI: https://doi.org/10.1080/00343404.2017.1330538.

Derudder, B., Taylor, P., Witlox, F. & Catalano, G. (2003). Hierarchical tendencies and regional patterns in the world city network: A global urban analysis of 234 cities. *Regional Studies*, 37(9): 875–886. DOI: https://doi.org/10.1080/0034340032000143887.

Dicken, P. (2015). Global shift: Mapping the changing contours of the world economy. New York, US: Guilford Press.

Dobbs, R., Smit, S., Remes, J., Manyika, J., Roxburgh, C. & Restrepo, A. (2011). Urban World: Mapping the economic power of cities. Available at: https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Urbanization/Urban%20world/MGI_urban_world_mapping_economic_power_of_cities_full_report.pdf.

Dunning, J.H. (1979). Explaining changing patterns of international production: In defence of the eclectic theory. *Oxford Bulletin of Economics and Statistics*, 41(4): 269–295. DOI: https://doi.org/10.1111/j.1468-0084.1979.mp41004003.x.

Dunning, J.H. (1980). Trade, location of economic activity and the multinational enterprise: Some empirical tests. *Journal of International Business Studies*, 11(1): 9–31.

Dunning, J.H. (1981a). International production and the multinational enterprise. London, UK: George Allen & Unwin.

Dunning, J.H. (1981b). Explaining the international direct investment position of countries: Towards a dynamic or developmental approach. *Weltwirtschaftliches Archiv*, 117(1): 30–64. DOI: https://doi.org/10.1007/BF02696577.

Dunning, J.H. (1988a). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies*, 19(1): 1–31. DOI: https://doi.org/10.1057/palgrave.jibs.8490372.

Dunning, J.H. (1988b). Explaining international production. London, UK: Unwin Hyman.

Dunning, J.H. (1989). Multinational enterprises and the growth of services: Some conceptual and theoretical issues. *The Service Industries Journal*, 9(1): 5–39. DOI: https://doi.org/10.1080/02642068900000002.

Dunning, J.H. (1993). Multinational enterprise and the global economy. Wokingham, UK: Addison-Wesley.

Dunning, J.H. (1995). Reappraising the eclectic paradigm in an age of alliance capitalism. *Journal of International Business Studies*, 26(3): 461–491. DOI: https://doi.org/10.1057/palgrave.jibs.8490183.

Dunning, J.H. (1997). Alliance capitalism and global business. London, UK and New York, US: Routledge.

Dunning, J.H. (2000). The eclectic paradigm as an envelope for economic business theories of MNE activity. *International Business Review*, 9(2): 163–90. DOI: https://doi.org/10.1016/S0969-5931(99)00035-9.

Dunning, J.H. (2001). The eclectic (OLI) paradigm of international production: Past, present and future. *International Journal of the Economics of Business*, 8(2): 173–90. DOI: https://doi.org/10.1080/13571510110051441.

Dunning, J.H. (Ed.). (1993). The theory of transnational corporations. London, UK and New York, US: Routledge.

Dunning, J.H. & Lundan, S.M. (2008). Multinational enterprises and the global economy. Cheltenham-Northampton, UK: Edward Elgar Publishing.

Dunning, J.H., & Lundan, S.M. (2010). The institutional origins of dynamic capabilities in multinational enterprises. *Industrial and Corporate Change*, 19(4): 1225–1246. DOI: https://doi.org/10.1093/icc/dtq029.

Dunning, J.H., & Wymbs, C. (2010). The challenge of electronic markets for international business theory. *International Journal of the Economics of Business*, 8(2): 273–301. DOI: https://doi.org/10.1080/13571510110051432.

Dunning, J.H., Kim, Ch. & Park, D. (2008). Old wine in new bottles: A comparison of emerging-market TNCs today and developed-country TNCs thirty years ago. In K. P. Sauvant (Ed.). The rise of transnational corporations from emerging markets: Threat or opportunity?, 158–180, Cheltenham-Northampton: Edward Elgar.

Dura, C. & Driga, I. (2013). The rise of emerging multinationals from Russia – models, drivers and internationalization strategies. *Review of International Comparative Management*, 14(3): 387–399.

Eden, L. (2003). A critical reflection and some conclusions on OLI. In: Cantwell, J. & R. Narula (Eds.). International business and the eclectic paradigm: Developing the OLI framework, 277–297, London, UK: Routledge.

Eden, L. & Dai, L. (2010). Rethinking the O in Dunning's OLI/eclectic paradigm. *Multinational Business Review*, 18(2): 13–34. DOI: https://doi.org/10.1108/1525383X201000008.

Elango, B. (2009). Minimizing effects of 'liability of foreignness': Response strategies of foreign firms in the United States. *Journal of World Business*, 44(1): 51–62. DOI: https://doi.org/10.1016/j.jwb.2008.03.012.

fDi Intelligence (2018, December / 2019, January). Global cities of the future 2018/19 winners. Available at: https://www.fdiintelligence.com/article/73580.

fDi Intelligence (2020, February/March). European cities and regions of the future 2020/21. The best and the brightest among Europe's investment destinations. Available at: https://www.fdiintelligence.com/content/download/76859/2553325/file/fDi%20European%20Cities%20and%20Regions%20of%20the%20Future%202020-21.pdf.

fDi Intelligence (2022, February/March). European cities and regions of the future 2022/23. The best and the brightest among Europe's investment destinations. Available at: https://www.fdiintelligence.com/content/download/80712/2625526/file/FDI_170222%20ECOF.pdf.

fDi Intelligence (2023, February/March). European cities and regions of the future 2023. The best and the brightest among Europe's investment destinations. Available at: https://www.fdiintelligence.com/content/download/82064/2683542/file/fDi_0223_ECOF.pdf.

Forbes (2022). Global 2000: The world's largest public companies. Available at: https://www.forbes.com/lists/global2000/?sh=170727715ac0.

Forsgren, M., Holm, U. & Johanson, J. (2005). Managing the embedded multinational: A business network view. Cheltenham-Northampton, UK: Edward Elgar Publishing.

Fortune (2022). Global 500 list. Fortune Magazine. Available at: https://fortune.com/ranking/global500/.

Franco, A. & De Lombaerde, P. (2003). Latin American multinationals: A historical and theoretical approach. *Global Economic Review*, 32(1): 81–102. DOI: https://doi.org/10.1080/12265080308422913.

Friedmann, J. & Wolff, G. (1982). World city formation: An agenda for research and action. *International Journal of Urban and Regional Research*, 6(3): 309–344. DOI: https://doi.org/10.1111/j.1468-2427.1982.tb00384.x.

Galán, J.I. & González-Benito, J. (2001). Determinant factors of foreign direct investment: Some empirical evidence. *European Business Review*, 13(5): 269–278. DOI: https://doi.org/10.1108/EUM0000000005795.

Gammeltoft, P., Barnard, H. & Madhok, A. (2010). Emerging multinationals, emerging theory: Macro- and micro-level perspectives. *Journal of International Management*, 16(2): 95–101. DOI: https://doi.org/10.1016/j.intman.2010.03.001.

Gaur, A.S. & Kumar, V. (2009). International diversification, business group affiliation and firm performance: Empirical evidence from India. *British Journal of Management*, 20: 172–186. DOI: https://doi.org/10.1111/j.1467-8551.2007.00558.x.

GaWC (2018). Globalization and World Cities Research Network, Loughborough University. Available at: https://www.lboro.ac.uk/microsites/geography/gawc/world2018t.html.

Goerzen, A. & Makino, S. (2007). Multinational corporation internationalization in the service sector: A study of Japanese trading companies. *Journal of International Business Studies*, 38(7): 1149–1169. DOI: https://doi.org/10.1057/palgrave.jibs.8400310.

Goerzen, A., Asmussen, C.G. & Nielsen, B.B. (2013). Global cities and multinational enterprise location strategy. *Journal of International Business Studies*, 44(5): 427–450. DOI: https://doi.org/10.1057/jibs.2013.11.

Goldstein, A. (2007). Multinational companies from emerging economies: Composition, conceptualization and direction in the global economy. Basingstoke, UK and New York, US: Palgrave Macmillan.

Gornig, M. & Goebel, J. (2018). Deindustrialisation and the polarisation of household incomes: The example of urban agglomerations in Germany. *Urban Studies*, 55(4): 790–806. DOI: https://doi.org/10.1177/0042098016669285.

GPCI (2020). Global Power City Index 2020. Mori Memorial Foundation, Japan. Available at: http://mori-m-foundation.or.jp/pdf/GPCI2020_summary.pdf.

Guillén, M.F. & García-Canal, E. (2009). The American model of the multinational firm and the "new" multinationals from emerging economies. *Academy of Management Perspectives*, 23(2): 23–35. DOI: https://doi.org/10.5465/amp.2009.39985538.

Hall, P. (1966). The world cities. London, UK: Weidenfeld and Nicolson.

Heenan, D.A. (1977). Global cities of tomorrow. *Harvard Business Review*, 55: 79–92.

Hutzschenreuter, T. & Harhoff, P.L. (2020). National capital city location and subsidiary portfolio expansion: The negative effect of geographic distance to the capital city at inception on the speed of subsequent investments. *Journal of International Business Studies*, 51: 1107–1132. DOI: https://doi.org/10.1057/s41267-020-00305-1.

Iammarino, S., McCann, P. & Ortega-Argilés, R. (2018). International business, cities and competitiveness: Recent trends and future challenges. *Competitiveness Review: An International Business Journal*, 28(3): 236–251. DOI: https://doi.org/10.1108/CR-10-2017-0070.

Ietto-Gillies, G. (2002). Transnational corporations and international production: Concepts, theories and effects. London, UK and New York, US: Routledge.

Indraprahasta, G.S. & Derudder, B. (2019). World city-ness in a historical perspective: Probing the long-term evolution of the Jakarta metropolitan area. *Habitat International*, 89: 102000. DOI: https://doi.org/10.1016/j.habitatint.2019.102000.

Izumi, P.K., Burnier, P.C., Ogasavara, M.H. & Bastos de Figueiredo, J.C. (2017). Attributes of foreign subsidiaries and the location strategy of multinational firms in global cities in Latin America. *Latin American Business Review*, 18(3-4): 273–294. DOI: https://doi.org/10.1080/10978526.2017.1354707.

Izumi, P.K., Pachicoski Couto, C.A. & Ogasavara, M.H. (2016). Global cities in the context of international business: From oblivion to tendency in scientific production. *Review of International Business*, 11(3): 49–63. DOI: https://doi.org/10.18568/1980-4865.11349-63.

Jacobs, W., Van Rietbergen, T., Atzema, O., Van Grunsven, L. & Van Dongen, F. (2016). The impact of multinational enterprises (MNEs) on knowledge-intensive business services (KIBS) start-ups: Empirical evidence from the Dutch Randstad. *Regional Studies*, 50(4): 728–743. DOI: https://doi.org/10.1080/00343404.2014.932905.

Jaworek, M. & Kuzel, M. (2015). Transnational corporations in the world economy: Formation, development and present position. *Copernican Journal of Finance & Accounting*, 4(1): 55–70. DOI: https://doi.org/10.12775/CJFA.2015.004.

Jaworek, M., Karaszewski, W. & Szałucka, M. (2018). Foreign direct investment determinants among Polish companies: Greenfield investment vs. acquisitions. *Trends Economics and Management*, 12(31): 19–30. DOI: https://doi.org/10.13164/trends.2018.31.19.

Jaworek, M., Kuczmarska, M. & Kuzel. M. (2018). Location factors of foreign direct investment: A regional perspective. *Olsztyn Economic Journal*, 13(2): 153–165. DOI: https://doi.org/10.31648/oej.2768.

Jindra, B. (2006a). The theoretical framework: FDI and technology transfer. In Stephan, J. (Ed.), Technology transfer via foreign direct investment in Central and Eastern Europe, 6–29, Basingstoke, UK and New York, US: Palgrave Macmillan.

Jindra, B. (2006b). Empirical studies: Approaches, methodological problems and findings. In Stephan, J. (Ed.), Technology transfer via foreign direct investment in Central and Eastern Europe, 30–71, Basingstoke, UK and New York, US: Palgrave Macmillan.

JLL (2017). The Universe of City Indices 2017: Decoding City Performance. Jones Lang Lassale IP, Inc. and The

Business of Cities Ltd. Available at: https://smartnet.niua.org/content/6d17d68b-22ea-4c35-9986-0f3bf9cd1317.

Jones, G. (2005). Multinationals and global capitalism: From the nineteenth century to the twenty-first century. New York, US: Oxford University Press.

Kalotay, K. (2018). State-owned multinationals: An emerging market phenomenon? *The Journal of Comparative Economic Studies*, 13: 13–38. DOI: http://dx.doi.org/10.2139/ssrn.3091541.

Kathiravelu, L. (2016). Migrant Dubai: Low wage workers and the construction of a global city. London: Palgrave Macmillan. DOI: https://doi.org/10.1057/9781137450180.

Kedia, B., Gaffney, N. & Clampit, J. (2012). EMNEs and knowledge-seeking FDI. *Management International Review*, 52(2): 155-173. DOI: https://doi.org/10.1007/s11575-012-0132-5.

Kim, T.-Y., Delios, A. & Xu, D. (2010). Organizational geography, experiential learning and subsidiary exit: Japanese foreign expansions in China, 1979–2001. *Journal of Economic Geography*, 10(4): 579–597. DOI: https://doi.org/10.1093/jeg/lbq014.

Kleinert, J. (2004). The role of multinational enterprises in globalization. Berlin-Heidelberg-New York: Springer-Verlag.

Kola-Bezka, M., Czupich, M. & Ignasiak-Szulc, A. (2016). Smart cities in Central and Eastern Europe: Viable future or unfulfilled dream? *Journal of International Studies*, 9(1), 76–87. DOI: 10.14254/2071-8330.2016/9-1/6.

Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, 51: 23–34. DOI: https://doi.org/10.1016/j.jwb.2015.08.010.

Koll-Schretzenmayr, M., Ritterhoff, F. & Siebel, W. (2009). In quest of the good urban life: Socio-spatial dynamics and residential building stock transformation in Zurich. *Urban Studies*, 46(13): 2731–2747. DOI: https://doi.org/10.1177/0042098009345536.

Kowalewski, O. & Radło, M.J. (2014). Determinants of foreign direct investment and entry modes of Polish multinational enterprises: A new perspective on internationalization. *Communist and Post-Communist Studies*, 47(3–4): 365–374. DOI: https://doi.org/10.1016/j.postcomstud.2014.10.003.

Krätke, S. (2014). Global pharmaceutical and biotechnology firms' linkages in the world city network. *Urban Studies*, 51(6): 1196–1213. DOI: https://doi.org/10.1177/0042098013494420.

Kuczmarska, M. (2018). Internal development determinants of Polish companies in the USA: Traditional industries vs. new technologies. *Journal of Positive Management*, 9(4): 3–15. DOI: https://doi.org/10.12775/JPM.2018.151.

Kumaraswamy, A., Mudambi, R., Saranga, H. & Tripathy, A. (2012). Catch-up strategies in the Indian auto components industry: Domestic firms' responses to market liberalization. *Journal of International Business Studies*, 43(4): 368–395. DOI: https://doi.org/10.1057/jibs.2012.4.

Kurtovic, S., Todorovic, J.D. & Siljkovic, B. (2014). Determinants of foreign direct investments and transition countries of the Western Balkans. *International Journal of Economic Perspectives*, 8(2): 43–57.

Kuzel, M. (2016). Ku (globalnej) innowacyjności: działalność badawczo-rozwojowa największych korporacji transnarodowych świata (Towards the (global) innovativeness: Research and development by the world largest transnational corporations – in Polish). In: Żemigała, M. (Ed.). Horyzonty współczesnego zarządzania (Horizons of contemporary management), 275–301, Warsaw, Poland: Faculty of Management Scientific Publisher, University of Warsaw.

Kuzel, M. (2017). The investment development path: Evidence from Poland and other countries of the Visegrád Group. *Journal of East-West Business*, 23(1): 1–40. DOI: https://doi.org/10.1080/10669868.2016.1180659.

Kuzel, M. (2020). Configuring organisational resources and coordinating business operations in the practice of Polish MNEs: Towards excellence in international management? In: Soliman, K.S. (Ed.). Education excellence and innovation management. A 2025 vision to sustain economic development during global challenges. *Proceedings of the 35th International Business Information Management Association (IBIMA) Conference*, 6707–6717, Seville, Spain: IBIMA.

Lall, S. (2002). Linking FDI and technology development for capacity building and strategic competitiveness. *Transnational Corporations*, 11(3): 39–88.

Leppäaho, T. & Metsola, J. (2020). Family firm internationalisation: A network perspective. Cham, Switzerland: Palgrave Macmillan. DOI: https://doi.org/10.1007/978-3-030-28520-3.

Lichtenstein, P.M. (2016). Theories of international economics. London, UK and New York, US: Routledge.

Lorenzen, M. & Mudambi, R. (2012). Clusters, connectivity and catch-up: Bollywood and Bangalore in the global economy. *Journal of Economic Geography*, 13(3): 501-534. DOI: https://doi.org/10.1093/jeg/lbs017.

Lubinski, C., Fear, J. & Fernández Pérez, P. (Eds.). (2013). Family multinationals: Entrepreneurship, governance, and pathways to internationalization. New York, US: Routledge.

Lundan, S.M. (2010). What are ownership advantages? *Multinational Business Review*, 18(2): 51–70. DOI: https://doi.org/10.1108/1525383X201000010.

Lüthi, S., Thierstein, A. & Hoylerc, M. (2018). The world city network: Evaluating top-down versus bottom-up approaches. *Cities*, 72(B): 287–294. DOI: https://doi.org/10.1016/j.cities.2017.09.006.

Makino, S., Lau, C.M. & Yeh, R.S. (2002). Asset-exploitation versus asset seeking: Implication for location choice of foreign direct investment from newly industrialized economies. *Journal of International Business Studies*, 33(3): 403–421. DOI: https://doi.org/10.1057/palgrave.jibs.8491024.

Malakar, K. & Mishra, T. (2017). Assessing socio-economic vulnerability to climate change: A city-level index-based approach. *Climate and Development*, 9(4): 348–363. DOI: https://doi.org/10.1080/17565529.2016.1154449.

Marinov, M. & Marinova, S. (Eds.). (2014). Successes and challenges of emerging economy multinationals. Basingstoke, UK and New York, US: Palgrave Macmillan. DOI: https://doi.org/10.1057/9781137369413.

Mathews, J.A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23(1): 5–27. DOI: https://doi.org/10.1007/s10490-006-6113-0.

McCann, P. & Mudambi, R. (2004). The location behavior of the multinational enterprise: Some analytical issues. *Growth and Change*, 35(4): 491–524. DOI: https://doi.org/10.1111/j.1468-2257.2004.00259.x.

McDonald, F., Gammelgaard, J., Tüselmann, H. & Dörrenbäche, C. (2020). How TNC subsidiaries shine in world cities: policy implications of autonomy and network connections. *Transnational Corporations*, 27(1): 35–61.

Mehlsen, K. & Wernicke, G. (2016). Global cities and liability of foreignness. *European Journal of International Management*, 10(1): 78–94. DOI: https://doi.org/10.1504/EJIM.2016.073983.

Meyer, K.E. & Peng, M.W. (2005). Probing theoretically into Central and Eastern Europe: Transactions, resources, and institutions. *Journal of International Business Studies*, 36(6): 600–621. DOI: https://doi.org/10.1057/palgrave.jibs.8400167.

Miller, S.R. & Eden, L. (2006). Local density and foreign subsidiary performance. *The Academy of Management Journal*, 49(2): 341–355. DOI: https://doi.org/10.5465/amj.2006.20786081.

Moghaddam, K., Sethi, D., Weber, T. & Wu, J. (2014). The smirk of emerging market firms: A modification of the Dunning's typology of internationalization motivations. *Journal of International Management*, 20(3): 359–374. DOI: https://doi.org/10.1016/j.intman.2014.01.002.

Moon, H.C. & Roehl, T.W. (1993). An imbalance theory of foreign direct investment. *Multinational Business Review*, 1(1): 56–65.

Moon, H.C. & Roehl, T.W. (2001). Unconventional foreign direct investment and the imbalance theory. *International Business Review*, 10(2): 197–215. DOI: https://doi.org/10.1016/S0969-5931(00)00046-9.

Moore, K.J. & Lewis, D.C. (2000). Multinational enterprise in Ancient Phoenicia. *Business History*, 2(42): 17–42. DOI: https://doi.org/10.1080/00076790000000219.

Nachum, L. (2010). When is foreignness an asset or a liability? Explaining the performance differential between foreign and local firms. *Journal of Management*, 36(3): 714–739. DOI: https://doi.org/10.1177/0149206309338522.

Nachum, L. & Wymbs, C. (2005). Product differentiation, external economies and MNE location choices: M&As in global cities. *Journal of International Business Studies*, 36: 415–434. DOI: https://doi.org/10.1057/palgrave.jibs.8400151.

NCE (2018). Unlocking the Inclusive Growth. Story of the 21st Century: Accelerating Climate Action in Urgent Times. New Climate Economy, The Global Commission on the Economy and Climate. Available at: https://newclimateeconomy.report/2018/wp-content/uploads/sites/6/2018/09/NCE_2018_FULL-REPORT.pdf.

Nielsen, B.B., Asmussen, C.G. & Weatherall, C.D. (2017). The location choice of foreign direct investments: Empirical evidence and methodological challenges. *Journal of World Business*, 52(3): 62–82. DOI: https://doi.org/10.1016/j.jwb.2016.10.006.

OECD (2002). Foreign Direct Investment for Development: Maximising benefits, minimising costs. Organization for Economic Cooperation and Development, Committee for International Investment and Multinational Enterprise (CIME). Available at: https://www.oecd.org/investment/investmentfordevelopment/1959815.pdf.

OECD (2020). Cities in the world: A new perspective on urbanization. Organization for Economic Cooperation and Development. Available at: https://read.oecd.org/10.1787/d0efcbda-en?format=pdf.

Owen-Smith, J. & Powell, W.W. (2004). Knowledge networks as channels and conduits: The effects of spillovers in the Boston biotechnology community. *Organization Science*, 15(1): 5–21. DOI: https://doi.org/10.1287/orsc.1030.0054.

Pan, F., Hall, S. & Zhang, H. (2020). The spatial dynamics of financial activities in Beijing: Agglomeration economies and urban planning. *Urban Geography*, 41(6): 849–864. DOI: https://doi.org/10.1080/02723638.2019.1700071.

Pan, F., Yang, C., Wang, H. & Wójcik, D. (2020). Linking global financial networks with regional development: A case study of Linyi, China. *Regional Studies*, 54(2): 187–197. DOI: https://doi.org/10.1080/00343404.2019.1599844.

Pan, Y. & Chi, P.S. (1999). Financial performance and survival of multinational corporations in China. *Strategic Management Journal*, 20(4): 359–374. DOI: 10.1002/(SICI)1097-0266(199904)20:4<359::AID-SMJ31>3.0.CO;2-9.

Pananond, P. (2013). Where do we go from here?: Globalizing subsidiaries moving up the value chain. *Journal of*

International Management, 19(3): 207–219. DOI: https://doi.org/10.1016/j.intman.2013.03.002.

Pananond, P. (2015). Motives for foreign direct investment: A view from emerging market multinationals. *Multinational Business Review*, 23(1): 77–86. DOI: https://doi.org/10.1108/MBR-02-2015-0008.

Pangarkar, N. (1998). The Asian multinational corporation: Strategies, performance and key challenges. *Asia Pacific Journal Management*, 15: 109–118. DOI: https://doi.org/10.1023/A:1015425228856.

Parilla, J., Trujillo, J. L., Berube, A. & Ran, T. (2015). Global MetroMonitor 2014. An uncertain recovery. The Brookings Institution, Metropolitan Policy Program. Available at: https://www.brookings.edu/wp-content/uploads/2015/01/bmpp_gmm_final.pdf.

Paul, J. & Benito, G.R.G. (2018). A review of research on outward foreign direct investment from emerging countries, including China: What do we know, how do we know and where should we be heading? *Asia Pacific Business Review*, 24(1): 90–115. DOI: https://doi.org/10.1080/13602381.2017.1357316.

Pedersen, T. & Tallman, S. (2016). How we facilitate conversations in global strategy and the location of MNE HQs. *Global Strategy Journal*, 6(2): 124–126. DOI: https://doi.org/10.1002/gsj.1114.

Petersen, B., Welch, L.S. & Liesch, P.W. (2002). The internet and foreign market expansion by firms. *Management International Review*, 42(2): 207–221. https://www.jstor.org/stable/40835918.

Pilka, M. & Sluka, N. (2019). US global cities as centres of attraction of foreign TNCs. *Bulletin of Geography. Socio-Economic Series*, 46(46): 137–147. DOI: http://doi.org/10.2478/bog-2019-0039.

Pilka, M.E., Sluka, N.A. & Szymańska, D. (2022). The world's largest foreign TNCs in U.S. global cities: Observations in studying industrial composition. *Cities*, 120: 103432. DOI: https://doi.org/10.1016/j.cities.2021.103432.

PwC (2022, March). Global top 100 companies by market capitalization. PricewaterhouseCoopers. Available at: https://www.pwc.com/gx/en/audit-services/publications/top100/pwc-global-top-100-companies-by-market-capitalisation-2022.pdf.

Pyo, M.C. (2010). Why firms provide goods to foreign markets using a combination of entry modes: Foreign direct investment and export. *Seoul Journal of Business*, 16(2): 67–93. Available at: https://hdl.handle.net/10371/75578.

Ricart, J.E., Enright, M.J., Ghemawat, P., Hart, S.L. & Khanna, T. (2004). New frontiers in international strategy. *Journal of International Business Studies*, 35(3): 175–200. DOI: https://doi.org/10.1057/palgrave.jibs.8400080.

Robins, N. (2012). The corporation that changed the world. How the East India Company shaped the modern multinational. *Asian Affairs*, 1(43): 12–26. DOI: https://doi.org/10.1080/03068374.2012.642512.

Robinson, J. (2006). Ordinary cities. London, UK: Routledge.

Romão, J., Kourtit, K., Neuts, B. & Nijkamp, P. (2018). The smart city as a common place for tourists and residents: A structural analysis of the determinants of urban attractiveness. *Cities*, 78: 67–75. DOI: https://doi.org/10.1016/j.cities.2017.11.007.

Root, F.R. (1990). International trade and investment (6th ed.). Cincinnati, OH US: South-Western Publishing Co.

Rosińska-Bukowska, M. (2020). Global business networks. Concept – structure – competitiveness. Łódź, Poland: Łódź University Press. DOI: http://dx.doi.org/10.18778/8220-046-1.

Rugman, A.M. & Brain, C. (2003). Multinational enterprises are regional, not global. *Multinational Business Review*, 11(1): 3–12. DOI: https://doi.org/10.1108/1525383X200300001.

Sass, M. (2017). Latecomers may be admitted: Foreign direct investment between the CEE Countries. In: Szent-Iványi, B. (Ed.). Foreign direct investment in Central and Eastern Europe. Studies in economic transition, 99–126, Cham, Switzerland: Palgrave Macmillan. DOI: https://doi.org/10.1007/978-3-319-40496-7_5.

Sassen, S. (1991). The global city: New York, London, Tokyo. Princeton, NJ: Princeton University Press.

Sassen, S. (1994). Cities in a world economy. Thousand Oaks, CA US: Pine Forge/Sage.

Sassen, S. (2001). Global cities and global city-regions: A comparison. In: Scott, A. (Ed.), Global city-regions: Trends, theory, policy, 78–95, Oxford, UK: Oxford University Press.

Sassen, S. (2012). Cities in a world economy. Los Angeles: Sage.

Scott, A.J. (2002). Global cities-regions: Trends, theory, policy. New York, US: Oxford University Press.

Sethi, D., Guisinger, S., Phelan, S. & Berg, D. (2003). Trends in foreign direct investment flows: A theoretical and empirical analysis. *Journal of International Business Studies*, 34(4): 315–326. DOI: https://doi.org/10.1057/palgrave.jibs.8400034.

Sharma, K. & Bandara, Y. (2010). Trends, patterns and determinants of Australian foreign direct investment. *Journal of Economic Issues*, 44(3): 661–676. DOI: https://doi.org/10.2753/JEI0021-3624440305.

Shaver, M. & Flyer, F. (2000). Agglomeration economies, firm heterogeneity, and foreign direct investment in the United States. *Strategic Management Journal*, 21(12): 1175–1193. DOI: https://doi.org/10.1002/1097-0266(200012)21:12<1175::AID-SMJ139>3.0.CO;2-Q.

Short, J., Breitbach, C., Buckman, S. & Essex, J. (2000). From world cities to gateway cities: Extending the boundaries of globalization theory. *City*, 4(3): 317–340. DOI: https://doi.org/10.1080/713657031.

Sigler, T.J. & Martinus, K. (2017). Extending beyond 'world cities' in World City Network (WCN) research: Urban positionality and economic linkages through the Australia-based corporate network. *Environment and Planning A: Economy and Space*, 49(12): 2916–2937. DOI: https://doi.org/10.1177/0308518X16659478.

Stallkamp, M., Pinkham, B.C., Schotter, A.P. & Buchel, O. (2018). Core or periphery? The effects of country-of-origin agglomerations on the within-country expansion of MNEs. *Journal of International Business Studies*, 49(8): 942–966. DOI: https://doi.org/10.1057/s41267-016-0060-x.

Sun, Z. & Chen, J. (2017). Global city and precarious work of migrants in China: A survey of seven cities. *Urban Geography*, 38(10): 1479–1496. DOI: https://doi.org/10.1080/02723638.2017.1281056.

Sundaram, A.K. & Black, J.S. (1992). The environment and internal organization of multinational enterprises. *Academy of Management Review*, 17(4): 729–757. DOI: https://doi.org/10.2307/258806.

Taylor, P.J. (2001). Specification of the world city network. *Geographical Analysis*, 33(2): 181–194. DOI: https://doi.org/10.1111/j.1538-4632.2001.tb00443.x.

Taylor, P.J. & Derudder, B. (2022). NY-LON 2020: The changing relations between London and New York in corporate globalisation. *Transactions of the Institute of British Geographers*, 47(1): 257-270. DOI: https://doi.org/10.1111/tran.12498.

Taylor, P.J., Walker, D.R.F. & Beaverstock, J.V. (2002). Firms and their global service networks. In: Sassen, S. (Ed.). Global networks, linked cities, 93–116, New York, US: Routledge.

Trujillo, J.L. & Parilla, J. (2016). Redefining global cities: The seven types of global metro economies. https://www.brookings.edu/wp-content/uploads/2016/09/metro_20160928_gcitypes.pdf.

Van den Buuse, D. & Kolk, A. (2019). An exploration of smart city approaches by international ICT firms. *Technological Forecasting and Social Change*, 142: 220–234. DOI: https://doi.org/10.1016/j.techfore.2018.07.029.

Verginer, L. & Riccaboni, M. (2021). Talent goes to global cities: The world network of scientists' mobility. *Research Policy*, 50(1): 104127. DOI: https://doi.org/10.1016/j.respol.2020.104127.

Wang, H., Li, W. & Deng, Y. (2017). Precarity among highly educated migrants: College graduates in Beijing, China. *Urban Geography*, 38(10): 1497–1516. DOI: https://doi.org/10.1080/02723638.2017.1314170.

WBC (2020). World's best cities: A ranking of global place equity 2021. Resonance, Vancouver and Montréal, Canada and New York, US. Available at: https://www.bestcities.org/rankings/worlds-best-cities.

Wilkins, M. (2009). The history of multinational enterprise. In: Rugman, A.M. (Ed.). The Oxford handbook of international business (2nd ed.), 3–38, New York, US: Oxford University Press. DOI: https://doi.org/10.1093/oxfordhb/9780199234257.003.0001.

Williamson, P. & Wan, F. (2018). Emerging market multinationals and the concept of ownership advantages. *International Journal of Emerging Markets*, 13(3): 557–567. DOI: https://doi.org/10.1108/IJoEM-08-2017-0319.

Williamson, P., Ramamurti, R., Fleury, A. & Fleury, M. (Eds.). (2013). The competitive advantage of emerging market multinationals. Cambridge, UK: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9781139506694.

WIR (2005). World Investment Report: Transnational corporations and the internationalization of R&D. New York, US and Geneva, Switzerland: United Nations Conference on Trade and Development. Available at: https://unctad.org/system/files/official-document/wir2005_en.pdf.

WIR (2009). World Investment Report: Transnational corporations, agricultural production and development. New York, US and Geneva, Switzerland: United Nations Conference on Trade and Development. Available at: https://unctad.org/system/files/official-document/wir2009_en.pdf.

WIR (2011). World Investment Report: Non-equity modes of international production and development. New York, US and Geneva, Switzerland: United Nations Conference on Trade and Development. Web Table 34. Available at: http://unctad.org.

WIR (2017). World Investment Report: Investment and the digital economy (methodological note). Geneva, Switzerland: United Nations Conference on Trade and Development. Available at: https://unctad.org/system/files/official-document/wir2017chMethodNote_en.pdf.

WIR (2020). World Investment Report: International production beyond the pandemic. Geneva, Switzerland: United Nations Conference on Trade and Development.

WIR (2022). World Investment Report: International tax reforms and sustainable investment (annex tables). Geneva, Switzerland: United Nations Conference on Trade and Development. Available at: https://unctad.org/topic/investment/world-investment-report.

World Bank (2015). Competitive Cities for Jobs and Growth: What, who, and how. Available at: https://olc.worldbank.org/system/files/Competitive-Cities-for-Jobs-and-Growth.pdf.

World Bank (2020). Global Investment Competitiveness Report 2019/2020: Rebuilding investor confidence in times of uncertainty. Available at: https://openknowledge.worldbank.org/bitstream/handle/10986/33808/9781464815362.pdf?sequence=4&isAllowed=y.

Yaprak, A., Yosun, T. & Cetindamar, D. (2018). The influence of firm-specific and country-specific advantages in the internationalization of emerging market firms: Evidence from Turkey. *International Business Review*, 27(1): 198–207. DOI: https://doi.org/10.1016/j.ibusrev.2017.07.001.

Ye, J. (2016). Class inequality in the global city. Migrants, workers and cosmopolitanism in Singapore. New York, US: Palgrave Macmillan.

Zhang, H.R. (2016). Literature review on country-specific advantage. *Journal of Service Science and Management*, 9(2): 111–118. DOI: 10.4236/jssm.2016.92014.

Zhang, X. (2018). Multiple creators of knowledge-intensive service networks: A case study of the Pearl River Delta City-Region. *Urban Studies*, 55(9): 2000–2019. DOI: https://doi.org/10.1177/0042098017700805.

Zhang, X., Li, Y. & Yuan, Y. (2018). Behind the scenes: The evolving urban networks of film production in China. *Urban Geography*, 39(10): 1510–1527. DOI: https://doi.org/10.1080/02723638.2018.1477297.

Zhou, Z. (2013). Study on globalizing cities: A theoretical frameworks and China's modes. Hackensack, NJ: World Century Publishing Corporation.

Zorska, A. (2007). Korporacje transnarodowe: Przemiany, oddziaływania, wyzwania (Transnational corporations: Evolution, impacts, challenges – in Polish). Warsaw, Poland: Polskie Wydawnictwo Ekonomiczne.