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Introduction

Today, discussions regarding the competitive advantages associated with the location strategies of multinational enterprises (MNEs) are widespread, as are discussions of the role played by global cities in modern globalization. Yet, the interest in these issues is actually relatively recent. For much of the last five decades, research on cities largely ignored the role of MNEs, while most of the research on MNEs ignored the role of cities. It was only a series of rather fragmented analytical developments allied with concurrent and profound structural changes in the global economy which spurred widespread interest in the relationships between MNEs and cities. Understanding how these analytical and structural changes took place is critical in order for us to make sense both of the current relationships, and also to identify the major influences on these relationships in the near future.

This paper is organized as follows. In the next section we discuss how thinking in economic geography about cities, location and competitiveness has shifted dramatically in the last three decades after being largely ignored for several decades. In the third section we illustrate the major features of modern globalization and in the fourth section we then combine the insights of the two previous sections in order to discuss how the field of international business (IB) subsequently began to shift its understanding of how to think about MNE location questions. The final sections then use the arguments in the previous sections to indicate the likely key influences on the future relationships between MNEs, competitiveness and cities.

Evolutions in Academic Thinking about Economic Geography

Today there is enormous interest in the role played by cities in shaping and being shaped by the activities of multinational enterprises. Yet, this interest is only relatively recent. In order to understand how we think today about the interrelationships between multinationals and cities it is necessary to consider how the analysis of these issues has emerged over the last five decades in the three fields of economics, geography and international business. Regarding both the analysis of cities and MNEs, previously these were three largely self-contained research fields following quite different trajectories, whereas nowadays they have become much more interrelated, and on some aspects almost entirely integrated (Iammarino and McCann 2013, 2017). However, to identify how the thinking in each of these fields has informed thinking in the others, it is necessary to understand how their trajectories have developed and why. This is also the basis on which we can consider how the thinking on these topics is likely to evolve in the coming decades.

Prior to the 1990s, the economic analysis of cities and regions was marginalised in many social sciences. The 1960s had actually seen a surge in interest in cities and regions within the discipline of economics, with major emphases on the role played by the city's tradeable export sectors versus its domestically-oriented non-tradeable sectors, its supply chain linkage structures, and the city's relationships with the wider hinterland regions (McCann 2013). However, much of this interest had waned during the 1970s and 1980s as economics became focused on issues regarding the microeconomic underpinnings of macroeconomics. Apart from a few exceptions (d'Aspremont et al. 1979), game theory, which dominated microeconomic thinking during this period, almost entirely ignored questions of geography and location, while the Keynesian approach to regions faded as macroeconomic orthodoxy

moved towards the monetarism and rational expectations schools. Even in industrial economics, apart from the work of a few scholars (e.g. Caves 1972; Buckley and Casson 1976; Casson 1987), issues surrounding the competitive behaviour of complex business organisations were largely sidelined in favour of simple theoretical constructs of (mostly game-theoretic) market behavior. For two decades during the 1970s and 1980s, neither cities nor MNEs were major research themes in economics.

Similarly, in terms of the discipline of geography, while the 1960s had seen major advances in spatial modeling and statistical analysis which also complemented many prevailing economic approaches, from the early 1970s onwards thinking about cities became dominated by a post-modern critique (Harvey 1973), in which cities were increasingly examined as settings for class-related conflicts regarding access to capital and power. In their analyses of cities the fields of geography and sociology became largely intertwined as to be almost indistinguishable from each other. This new hybrid tradition had no place for examining the geographical behavior of complex business groupings, and only a relatively few scholars (Dicken 1977, 1988; Hamilton 1974) still maintained the traditional economic geography approaches to the analysis of multi-location firm strategies. Within the broad subject area of geography the spatial investment behavior of these types of businesses became largely absent from mainstream research, as did the *economic* analysis of cities, again for two decades during the 1970s and 1980s.

In the international business (IB) field, the fact that location behaviour was explicitly incorporated into the 'OLI' (Ownership-Location-Internalisation) tripartite classification of the 'eclectic paradigm' (Dunning 1979, 1981) might suggest that cities were a central research theme for the analysis of multinationals. Yet, this was not the case. While the 1960s and early 1970s saw some important insights emerging about the role of cities by leading scholars in international business (Hymer 1972; Vernon 1960, 1991) for the most part these issues were largely ignored by the IB field (Iammarino and McCann 2013). The reason was that the 'L' in the OLI paradigm was generally taken to refer to a country, in a manner of a subscript, such that Luxembourg or New Zealand would receive broadly the same analytical treatment as the USA or Japan. This situation was justifiable because the vast majority of the prevailing research focused only on the 'O' and 'I' dimensions of multinationals' behaviour. Cities, regions and the specifics of sub-national location decisions and their impact were almost entirely absent in the international business field, again in this same period of between the late 1960s and 1980s.

It is only since the 1990s that the situation started to shift in favour of examining the role played by specific geographies in multinational firms' behaviours and investment choices, and the initial intellectual catalyst for this shift concerned the work of four scholars, primarily Krugman (1991a,b), Porter (1990), Glaeser et al. (1992) and Scott (1988), while the second intellectual catalyst arose from the later work of Sassen (2001, 2006) and Taylor (2004). At the same time, these catalysts were both fuelling and responding to the growing momentum arising from the much larger impacts of modern globalization which were beginning to impinge on all aspects of modern life. These various publications gained enormous traction firstly because they threw light on key aspects of the links between economic geography and productivity, and secondly because they provided explanations of the evolving global economy, and in particular on the economic geography of modern globalization. Yet, while understanding the economy of cities was an explicit intention of all of these scholars, understanding the role of cities in modern globalization was not an explicit intention of the work of Krugman (1991a,b), Porter (1990), Glaeser et al. (1992) or Scott (1988). Indeed, it was too early at the time to conceive the subsequent nature and scale of such relationships,

whereas it became the pressing priority of the later contributions of Sassen (1991, 2001, 2006) and Taylor (2004), whose work also built on the earlier ideas.

The work of Krugman (1991a,b) and Glaeser et al. (1992) examined the role played by cities in driving the economy via the effects of agglomeration economies. The research of both authors later spawned a very large economics literature which examined multiple theoretical and empirical aspects of city formation and the links between the growth of cities, trade, skills and knowledge generation. Yet, in these literatures the firm was never explicitly examined, but rather was treated as a market construct, typically characterized as a monopolistically competitive agent. In contrast, more detailed thinking about the actual nature of the firm and its strategy in this geographical context was taking place in the field of management. Porter (1990) articulated ideas from a different perspective which stemmed from his earlier work on firm competition (Porter 1985, which in turn linked back to some of Caves' (1972) early insights regarding multiplant and multinational firms. The focus of Porter's (1990) competitiveness analysis was the ways in which corporate investment decisions taken with respect to the sub-national geographical scale influence national economic performance via their impacts on innovation and competitiveness. His work emphasized the importance played by the size and location of domestic supply chains, the geography of competitor firms, and the local patterns of supporting institutions in shaping both local and national competitiveness and innovation. Porter (1990) broke with existing approaches to strategy by looking at these issues which were external to the firm, but through the lens of the firm itself, arguing that the interplay between the firm and its location setting or choice sets a critical framework for thinking about the knowledge drivers of innovation and competitiveness processes. Many of his ideas have been spurred by new generations of micro-level innovation surveys (Hong et al. 2012). Indeed, the emphasis on the institutional setting also underpinned the ideas of Scott (1988), who argued that the nature of the competitive, technological and institutional relationships between actors throughout the supply chains was a key demarcation line defining the logic of different production systems. His work was based on multiple observations from the USA and Europe and implied that the nature of knowledge generation and transmission processes was as much a response to, as well as a driver of, the geographical and institutional context. While the work of Krugman (1991a,b) and Glaeser et al. (1992) emphasized the role of cities, both Scott (1988) and Porter (1990) highlighted the importance of also considering the innovation role played by local, hinterland and regional settings embedded in, surrounding or encompassing cities. Taken together, within the broad world of economic geography, these four authors began to transform the ways in which we think about the relationship between cities, regions, space, competition and innovation. Importantly, their work was also extremely prescient, as their ideas were emerging just at the time that the global modern globalization was itself also commencing.

At this stage the international business literature was still not generally engaging with these debates and the links between MNEs, competitiveness and cities were still largely absent from the IB world. However, as we will see shortly, the onset of modern globalization gave an enormous spur to the international business world to engage in these discussions. Yet, in order to understand exactly why this is the case, it is useful at this stage first to map out the key features of the current phase globalization, especially as they relate to cities and the interaction between cities and multinational enterprises (MNEs), so as to lay the foundations on which the IB field was able to begin to engage in discussions of geography and competitiveness.

Modern Globalisation

Much has been written about the nature and scale of current globalization and its implications for international business (Guy 2009), but for our purposes it is useful simply to sketch out a few key features and highlights as they concern the interrelationships between multinationals, economic geography and cities. Following Iammarino and McCann (2013) it is clear that the advent of contemporary globalization was largely driven by a mixture of technological and institutional changes, which to some extent were connected but in many ways were also largely unrelated to each other. The opening up of both the former communist countries along with the BRIICS countries (McCann 2009) between 1988 and 1991, of which China was by far the most important, transformed the labour supply and labour prices available to international investors, although the reforms driving the opening up of each of these economies were not particularly interconnected with each other. This global opening up of markets was also accompanied by major institutional changes such as the establishment of the EU Single Market, NAFTA and the WTO in 1991, 1994 and 1995 respectively, the planning for which long pre-dated the wider opening up of the labour markets. Meanwhile for firms, the ability to take advantage of these institutional changes was dramatically increased by technological changes, such as growing containerization (Levinson 2008) allied with roll-on roll-off logistics and satellite GPS systems, but the opportunities offered by these transportation and communications technologies burgeoned with the establishment of the world-wide-web from 1991 onwards, which facilitated the integration of many different types of digital technologies within a common global platform (McCann 2008). These new opportunities also included dispersed management and data control systems.

These institutional and technological changes allowed for totally new forms of corporate restructuring via out-sourcing and off-shoring and the establishment of highly integrated global value-chains and production and innovation networks, which transformed the nature and patterns of modern international trade. Not surprisingly, modern globalization was overwhelmingly driven by the behavior and responses of multinational enterprises (Iammarino and McCann 2013). Between the 1970s and the turn of the new Millennium the number of MNEs grew by more than tenfold (Iammarino and McCann 20013), growing at 1000-2000 firms per annum and 10,000-20,000 MNE affiliates per annum, while the sales of MNE foreign affiliate were more than 2.5 times larger than global exports (McCann 2009; Iammarino and McCann 2013) and up to a third of the global trade of industrialised countries was simply intra-firm transactions (McCann 2008).

Yet, these enormous changes did not lead to a simple convergence of countries and greater intensity of globalization per se. Rather the transformational technological and institutional shifts led to the formation of highly integrated global regions, in which groups of neighbouring countries became more deeply intertwined with each other (Rugman 2000). The global economy became partitioned primarily into three major trading blocs with much deeper levels of local cross-border trade integration, namely Europe, North America and South and East Asia, to the extent that globalization is actually global regionalization. Contemporary globalization, characterized primarily by high density and intensity cross-border value-chains, displays a very different logic to the earlier empire era of globalization, where processes were characterized by long distances and long supply lines. Ironically, rather than making the world flatter or more even as many commentators had assumed (O'Brien 1992; Cairncross 1997; Friedman 2005), these changes made the world more uneven, at least in terms of economic geography. In particular, during the 1990s, these changes gave prominence to certain types of city-regions within each of the global regions, and in particular those which were already well connected into the global trade and knowledge systems. The importance of different dimensions of connectivity as drivers of global and city change underpinned the insights of Sassen (2001, 2006) and Taylor (2004), who emphasized 'global cities' were those cities

which displayed particular combinations of economic and social openness allied with key infrastructure and decision-making assets, thereby allowing them to act as key nodes in the newly-emerging global knowledge and trade networks. In particular, global cities are the primary homes or hosts of major MNE knowledge-related investments and this is the key defining feature of what a global city is (Iammarino and McCann 2013, 2015). These global cities are increasingly the beneficiaries of modern globalization, being the centres of political power, corporate decision-making, knowledge generation and exchange, and the movements of human capital and ideas. The evidence from the 1990s and early 2000s is unmistakable, with global city-regions emerging as the early winners in the new era of globalization (e.g. Yeung 2009; Iammarino and McCann 2013, 2015; McCann and Acs 2011).

At the same time, within many of these same countries which contained the key global cities, there were also many regions which barely benefitted from the global changes, facing both increased international competition and also less state protection. The competitiveness of many of these regions appeared to be declining in some sectors. In particular, many relatively routinized activities and occupations in both manufacturing and services industries were moving overseas. These types of activities often reflected middle skills, middle income and middle management types of roles and the out-sourcing and off-shoring of many of these roles gave rise to a greater levels of job polarization (e.g. Autor 1998; Goos et al. 2009; Acemoglu and Autor, 2010; Kemeny and Rigby 2012; Kok and Weel 2014; Castellani and Pieri 2015). The resulting skewed income distributional changes (Robert-Nicoud 2008; Milanovic 2012) tended to favour higher income groups in industrialised countries along with all income groups in the emerging economies, while the lower and middle skills cohorts within the industrialised economies faced the most difficult transitions. In many OECD countries, these income differences, driven by MNE out-sourcing and off-shoring, were also reflected in greater interregional differences, according to whether or not the local cities reflected the knowledge and trading characteristics of the global cities. Indeed, modern globalization means that the distinction between a city's tradeable and non-tradeable sectors has recently re-emerged again as a key defining marker of a city's economic fortunes, after having largely fallen away from academic thinking since the 1970s. Similarly, growing job polarization means that the links between the city and its wider regional hinterland area are again becoming mainstream economic discussions, after being sidelined for the last four decades. Understanding modern multinationals is thus essential for understanding these wider social and geographic changes.

International Business, Cities and Economic Geography

The shifting academic debates along with the emerging realities of the current phase of globalization have given rise to a new interest in questions about cities, regions and economic geography on the part of international business scholars, and in some sense a rediscovery of the importance of the 'L' in the OLI paradigm. For many research questions, it is no longer acceptable either analytically or empirically to discuss the competitiveness of MNEs simply using the traditional framing of the 'L' of the eclectic paradigm as relating just to different countries. By the late 1990s the sheer scale of out-sourcing and off-shoring along with the vast quantities of detailed location-specific data becoming available highlighted the critical competitiveness role played by particular city-regions rather than countries as hosts for MNE investments. Early indications of this shift were evident in Dunning (1998, 2000, 2001) but real substance to the new impetus was provided by scholars explicitly working at the interface between IB and economic geography (Cantwell and Iammarino 1998, 2000, 2002, 2003, Cantwell and Janne 1999; Cantwell and Piscitello 2002, 2005; McCann and Mudambi 2003, 2005). These various lines of research examined the different types of geographical linkages

and networks within which MNEs operate, and the ways in which these linkages and networks both shape and are shaped by MNE behaviour. The emerging evidence suggested that the 'goodness of fit' between the MNE's 'O-I' and its 'L' dimensions are critical for competitiveness (Beugelsdijk et al. 2010; McCann and Ortega-Argiles 2018). More specifically, of all of the financial, technological, and institutional underpinnings of the MNE's goodness of fit, the most important concerns the knowledge relations of the firm. In particular, the ways in which both the internal logic and organisation of the MNE dovetail with the external knowledge relations of the local city-region are seen to be crucial (Iammarino and McCann 2006, 2013, 2015, 2018; Malecki 2010; McCann 2011). Many elements of these ideas had already been partly pre-figured by the work of Penrose (1959, 1995), Teece (1977), Pavitt (1984), and others (e.g. Grindley and Teece 1997) on firm capabilities, organizational capacity, knowledge accumulation, knowledge spillovers and appropriation, but the newly evolving research lines regarding clusters and cities explicitly began to address these issues in much more detail (Goerzen et al. 2013).

On one hand, we can regard these lines of research as attempting to investigate those elements of the 'L' which had been largely neglected for more than three decades. On the other hand, however, many of the new lines of research on cities and clusters uncovered issues which had never before been articulated in IB research, even in a very sketchy manner. What becomes apparent from these lines of research, which were essentially aiming to marry conceptual ideas with the emerging empirical realities of modern globalization, is that 'good' investment location decisions in the 'correct' cities play a key role in driving both the activities and competitive performance of the MNE's subsidiaries as well as its overall corporate performance. The dynamics of modern globalization means that issues of ownership, organisation and internalization cannot be divorced from location questions (Guy 2009). Yet, following the seminal insights of Krugman (1991a,b), Porter (1990), Glaeser at al. (1992) and Scott (1988), identifying which are the 'correct' city-region choices for MNEs typically requires us to step out of the traditional 'O' and 'I'-dominated lines of IB thinking and to explore the evidence emerging from economic geography regarding the dynamics of the wider geographical context. Issues regarding different notions of distance (e.g. Beugelsdijk et al. 2017; Boschma 2007), local patterns of technological relatedness (e.g. Boschma and Iammarino 2010), the nature of knowledge diffusion processes (e.g. Ortega-Argilés 2012; Ortega-Argilés et al. 2007; Prenzel et al. 2017), cities and agglomeration-related knowledge spillovers (e.g. Iammarino and McCann 2013), local entrepreneurial settings (e.g. Acs et al. 2015), and the quality of local governance systems (Charron et al. 2013; Ascani et al. 2016), are all nowadays regarded as being important influences on both the MNE location decision and also the decisions regarding the specific role of each MNE subsidiary. In turn, the renewed interest on the role played by tradeables as well as connectivity in driving the performance of places has also spurred interest on the part of economic geographers regarding the investment drivers of MNEs (Dimitropoulou et al 2013; Wren and Jones 2012) and the consequence for local economic development and territorial equality (Crescenzi and Iammarino 2017). These growing two-way exchanges of knowledge between the fields of international business and economic geography in some ways themselves mirror the modern locational dynamics of MNEs. Yet, not all cities benefit from MNEs and not all MNEs benefit from cities (Simmie 1988). Identifying which cities and regions are likely to benefit from hosting which particular types of MNEs remains a major challenge, especially for calibrated territorial policy approaches, as is the identification of which types of MNEs will benefit from investing in which types of cities and regions.

Competitiveness Challenges for MNEs and Cities

As we have seen, the convergence of many lines of thinking regarding the relationships between MNEs, competitiveness and cities has been an emerging process over more than two decades. Yet, while there are now many common and agreed elements in the literature, there are also still major analytical and empirical challenges ahead relating to which types of MNE-city combinations are beneficial. These questions are extremely broad and will heavily depend on the context but for our purposes here we can point to five emerging challenges which in the coming years will be facing all MNE-city investment choice combinations, namely (i) diversity (ii) demography (iii) protectionism (iv) automation and (v) industrial policy.

In terms of industrial diversity the economic geography consensus in the early 1990s (Glaeser et al. 1992) appeared to be that sectorally diverse cities provide better growth and investment settings in the long term. This is because of the more diverse patterns of knowledge spillovers afforded by these environments offer a wider array of partially uncorrelated investment possibilities (Mills 1972), greater learning opportunities and therefore a greater adaptability and resilience to shocks. Yet, more recent empirical evidence (de Groot et al. 2009; De Melo et al. 2009; Beaudry and Schiffauerova 2009) suggests that this is not the case and that either specialised or diverse cities can both offer long term advantages. From the perspective of the MNE it depends on what the MNE establishment is aiming to achieve and how these objectives can be met by locating in a particular city. In particular, certain MNE activities may be very specialised and therefore locating a particular establishment orfunction in a similarly specialised location may help the MNE achieve its objectives, whereas MNE activities reliant on wider and general purpose knowledge may benefit more by locating in diverse cities. Moreover, it also depends on the internalisation strategies of the firms, because MNEs may wish to carefully control the flows of knowledge across the firm's organization and ownership boundaries, and this would be especially important in terms of limiting any unintended knowledge outflows (Grindley and Teece 1997; Iammarino and McCann 2006; McCann and Mudambi 2005). In addition, as well choosing between diverse or specialised cities the variety of MNE location possibilities also ranges from locating in certain types of clusters which are not necessarily in cities (Maskell et al. 2006), through to locating away from large urban agglomerations in cases requiring secrecy (Simmie 1997). Global cities tend to be sectorally and structurally diverse, but this logic suggests that only certain types of MNEs and MNE affiliate activities are likely to be attracted to global cities, with a large share of MNE investments also being targeted at other types of places. Indeed, the overall geographical pattern of MNE investments may come to somewhat mirror the geographical distribution of different city types, as Hymer (1973) had originally suggested (Iammarino and McCann 2013).

The skills profiles of cities are increasingly related to their demographics (MGI 2016), with younger cities tending to be characterized not only by more skilled labour markets (OECD 2015; McCann 2017) and higher graduate inflows, but also by more outward-looking and international populations, with the global cities being the most marked in this regard (Florida 2017). In the most advanced economies at least, the differing cultures of cities and regions are likely to become increasingly important as locational determinants, especially where MNEs engage in knowledge-seeking strategies. Today MNEs are increasingly moving away from top-down organizational structures to those involving more two-way corporate knowledge and decision-making flows facilitated by highly autonomous subsidiaries acting as corporate knowledge-gathering assets. As such, the location choice of which cities to invest in will become increasingly specific for each MNE, but in general younger cities and city-regions with advantageous skills-demographics profiles will still tend to be more attractive to MNEs.

There is now a great deal of interest in the potential impacts of increased automation, robotization and the use of big data on the economy (Dobbs et al. 2015), and these changes

are likely to impacts on MNEs and their location behaviour in two main ways. Firstly, most of the advances in artificial intelligence technologies and big data are themselves spearheaded by multinational firms, so the investment and location decisions that MNEs take are likely to heavily influence the geography of the knowledge spillovers generated by these new technologies. Secondly, automation is likely to alter the cost-benefit calculations undertaken by MNEs in their own location choices because the relationships between capital, land and labour are likely to be significantly altered in a variety of different ways for different MNE functions. Increased automation is likely to lead to changes in both the quantity and quality of labour inputs required in both manufacturing and service industries relative to capital, and the locational effects of these changes are unlikely to systematically favour global cities. In fact, artificial intelligence advancement may allow MNEs to better identify and exploit specific technological and market niches, and innovations driven by the exploitation of these niches will require more specific alignments of knowledge assets and factor inputs, all of which are brought together in a changing portfolio of geographical contexts. Furthermore, recent research has shown that the effects that foreign manufacturing MNEs exert on stimulating job-creation in services via demand linkages in local labour markets can act as a powerful catalyst of regional structural change (Massini and Miozzo 2012; Ascani and Iammarino, 2017). The geography of MNEs and their affiliates will thus evolve according to how the geographical distribution and portfolio of these knowledge-related niches and structural shifts emerge during the coming decades. In the same way that the global geography of MNEs changed dramatically between the pre- and post-1990s periods in response to technological and institutional changes, there is no reason to suggest that global cities will necessarily be the major winners of global production and innovation networks in the coming decades, even though they have been the main beneficiaries during the last two decades (e.g. Alfaro and Chen 2014). Indeed, there is growing evidence to suggest that catch up processes in intermediate cities (OECD 2012) are driving increasing shares of economic growth and the emerging geography of MNEs may well reflect these trends.

These issues regarding diversity, demographics and automation also lead directly to the question of industrial policy. For nearly four decades since the 1970s through to the post 2008-crisis period, industrial policy was very much on the back-burner both as an analytical issue and also as a policy schema. However, the turmoil caused by the 2008 crisis allied with new lines of thinking (e.g. Rodrik 2007) have given rise to both a renewed interest in, and a sense of urgency regarding, the need for revised and novel industrial policies to complement market processes and to help nations, regions, cities and localities better cope with the consequences of the ongoing globally disruptive changes. Some of the key themes of modern territorial industrial policies (McCann and Ortega-Argilés 2013a; Iammarino et al. 2017) such as the 'smart specialization agenda' of the EU (McCann and Ortega-Argilés 2013b,c), include promoting greater technological embeddedness within places and greater technological connectivity between places and within global value-chains (McCann and Ortega-Argilés 2015), driven in part by enhanced technological and knowledge networks between SMEs and MNEs (Coe et al. 2008; McCann and Ortega-Argilés 2016). On the other hand, on a macro level, growing evidence on the existence of several different modes of regional economic performance and competitiveness in Europe, responding to different development challenges and opportunities, requires a renewed policy approach: one that would strengthen global cities and core regions, pursuing at the same time new ways to promote opportunities and foster capabilities in industrial declining and less connected cities, regions and industrial clusters (Iammarino et al. 2017). However, given that connectivity and positioning in global value-chains are such central considerations, the new generation of policies will also need to take account of the issues regarding a region/city's evolving diversity, demographics and

technological trends just described above, in order to be appropriately tailored to the national and local contexts (e.g. Bannò et al. 2015).

Yet, whether modern policies can be realistically made specific to local contexts – 'place-sensitive' – while also allowing for a region/city's positioning in global value-chains, in addition depends on the disruptive trade effects of populist and protectionist pressures, especially those originating from within the UK and the US (*The Economist* 2017). In this regard, the different cultural attitudes of cites are likely to play a different role in, and also respond differently to, the current populist political trends towards trade and people flows' protectionism. Although it is not clear how these trends are going to play out in the coming years, we do know that global trade has slightly fallen since the 2008 global financial crisis, although these falls have been more or less offset by further out-sourcing. The result is that global trade-GDP shares have remained more or less static since 2010 (Timmer et al. 2016). The cities that are likely to emerge strongest from these trade-related shocks, in addition to the structural, demographic, and technology-related pressures, are those which are best able to accommodate the needs of MNEs. Again, a simple story would suggest that the already-global cities are those which are best-placed to play these roles. Yet the local pressure on land prices and availability, infrastructure bottlenecks, and tight labour markets in most global cities would suggest that many second and third-tier emerging cities and city-regions may actually be the real winners of further globalization in the coming decades. In particular, those second and third-tier cities and regions with open and internationalist cultures and a strong local knowledge and skills base are likely to provide ideal investment locations for many foreign MNE activities, at the same time promoting connectivity through the internationalization of domestic firms, both large and small (Crescenzi and Iammarino 2017).

The one major exception to these general archetypes is the case of African mega-cities. Many of Africa's cities have faced rapid population growth in recent decades and now count amongst the largest cities in the world. Yet, their development path has not followed the path typically observed in East Asian cities, Latin American cities, or even cities in central Europe. In these cases urbanization and industrialization were dominated by manufacturing industry, with service activities subsequently being developing on the back of the production sectors. Indeed, this development path is implicit in most economic geography, international trade and international business models, and multinationals are widely understood as being critical drivers of these industrialisation processes (Markusen and Venables 1997). Yet, many African cities outside of South Africa have largely skipped over the manufacturing-industrialisation phase (Collier and Venables 2017) and moved straight towards a service dominated economy. The result is urbanization and city growth with almost no productivity growth, and with a very limited urban presence of multinationals in any productive activities. There is a strong presence of primary and extraction-related multinationals in many of these countries, and while the local headquarter functions tend to be in the major cities most of their activities are elsewhere. The only other multinational presence in these cities are those firms servicing local consumption markets. The case of African cities in which there are no real production activities and no real presence of multinationals in these sectors challenges much of our conventional thinking, although an analysis of these issues is beyond the scope of this paper.

Conclusions

Interest in the links between MNEs, cities and regions and competitiveness is relatively recent and has arisen both because of analytical breakthroughs primarily outside of the field of international business, along with profound structural changes in the global economy. The welcome shifts in thinking which we now observe within some strands of IB research also

allow us to consider the likely future trajectory of MNE locational behaviour. When we consider the possible roles played by diversity, demographics, automation and artificial intelligence technologies, industrial policy and protectionism on the future geography of MNEs, the common elements which consistently emerge are the knowledge and technological bases of the cities. Different cities and regions may come to play both important and also rather differing roles in globalization than has been the case in the previous two decades. It is well known that a significant and growing share of economic growth in the future will emerge from developing and emerging countries (MGI 2011), so the geography of MNEs will automatically change due to these increasing movements from the OECD countries of the Global North to and from the cities of the Global South (Crescenzi et al. 2016). Yet, even within the former, there may well be profound changes due to a variety of different influences, and there is no reason to suppose that only the global cities will be the maim winners in these processes. Global interdependence and connectivity make public policy – both in the Global South and in the Global North – all the more important (e.g. Phelps 2008; Neilson 2014; Iammarino et al. 2017). By redefining the basis for how to deal simultaneously with maintaining competitiveness and addressing uneven territorial development at the centre of policy efforts, nations, cities and regions could start to redress some of the economic, social and political challenges which are eroding their capacity to lead at the global scale, and which have become all too evident as sources of social division and conflict in the most recent years.

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