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Editorial

The Business Services Sector in Central and Eastern Europe: Territorial Embeddedness, Human Capital, and Growing Complexity

Abstract

This special issue focuses on territorial embeddedness and growth prospects for the fast-growing Business Services Sector (BSS) in Central and Eastern European (CEE) economies. In this editorial, we introduce the topic of the special issue and outline the dimensions of territorial embeddedness of the Foreign Direct Investment (FDI) in the sector in question, taking into account the risk of relocation and the linkages between investors and local contractors. With regard to development perspectives, we draw on theory and empirical research in the field of industrial upgrading. The contributions to this special issue include six selected articles that deal with the territorial embeddedness of the business services sector in CEE, the role of human capital, the increasing complexity of services provided by this sector, office location factors, labour costs in the region, as well as the prospects of integrating the neighbouring Ukrainian economy into global value chains.

Introduction

In the era of increased European integration, transnational corporations have organised their production systems and included developing economies in the Eastern parts of the continent in the provision of sophisticated goods and services. A review of the motives and circumstances for the development of the offshore services industry leads to the conclusion that “ICT made it possible, wage differences made it profitable” (Baldwin, 2012, p. 2). As a result of the emerging international division of labour, the economies that joined the European Union in the 2000s (namely Central

and Eastern Europe – CEE) became important players on the global map of business services. Relatively low labour costs, considerable labour resources, improving transport accessibility of cities, political and economic stability are all important factors for locating business services centres especially in the Visegrád (V4) countries, i.e. in the immediate vicinity of Europe’s economic core.

The business services sector (BSS) in CEE countries has seen robust development since the early 1990s. Its origins date back to the economic reforms implemented in this part of the world after the fall of communism; the local economies

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were liberalised, while state-owned enterprises were privatised and opened up for foreign direct investment (FDI). Its significant proportion went to manufacturing and trade, which triggered a demand for tailored business services.

The current potential of the BSS in the V4 countries is evidenced by statistics, according to which in 2019, the sector employed over 520,000 people (as compared to nearly 350,000 in 2016), whereas the number of established services centres exceeded 1,900 (in 2016, it was over 1,300). In 2016–2019, the mean annual employment growth rate in this sector was 14.7% (Zawicki, 2020). In 2020, in the CEE region,¹ the BSS (BPO, SSC/GBS, IT, R&D centres) employed 790,000 persons in more than 3,000 centres, with the total employment projected to increase to 980,000 by 2022 (ABSL, 2020). In the neighbouring countries aspiring to EU membership (Bosnia and Herzegovina, Serbia, and Ukraine), this potential is estimated at additional 300,000 people (ABSL, 2020). The dynamic development of the BSS in the region is accompanied by its qualitative upgrading. Within a decade after EU's enlargement, it began to specialise in a number of knowledge-based service areas (Geodecki, 2020).

The extremely dynamic growth of this sector in the last decade has accelerated over the last five years. The opportunities and threats inherent in this process are not new, but they become especially pronounced in places where the economic structure has changed most profoundly as a result of this sector's growth. Such places undoubtedly include the capitals of the V4 countries as well as some other centres, such as Kraków (population just under 1 million), where over 100,000 people are employed in broadly-conceived business services. In 2009, Kraków hosted economic geographers who reflected on the challenges to the sector from the perspective of building the knowledge economy (Hardy et al., 2011). More than a decade later, many of these challenges are still relevant as well as new ones have emerged, such as those related

to the SARS-CoV2 pandemic and the shrinking human capital pool (cf. Bykova et al., 2021; Mazur-Bubak, 2020; Gal & Marciniak, 2020).

This is not to imply that previous problems disappeared. A careful observer will notice that the share of the CEE countries in EU employment in the BSS is clearly higher than their corresponding share in value added. Despite the high level of the internationalisation of some services sectors – especially professional business services and IT services – factor price equalisation is far from being achieved. If “ICT made it possible, wage differences made it profitable” indeed, then wage differences are the most important driver of this sector's globalisation. Specifically, the CEE economies in 2017 had a 19% and 17% share of employment in professional and IT business services in the EU, respectively, yet only 7% and 5% share in value added, which adds up to about 2.5–3 times less value added per employee than the EU average (Geodecki, 2020). Therefore, in order to maintain the sector's cost competitiveness, wages must be correspondingly lower. The challenges to the emerging European economies resulting from this disparity are associated with insufficient territorial embeddedness, as argued by the authors of chapters contained in the book titled *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services* (Mamica, 2020).

The dimensions of embeddedness of the business services sector

Territorial embeddedness and the threat of relocation

Cost-benefit analyses undertaken in economic geography take into consideration “territorial embeddedness”, which is a concept that describes how actors are anchored to – or embedded in – a particular area (Hess, 2004; Białynicki-Birula & Pacut, 2020). In this meaning, low embeddedness can be associated with a high risk of relocation as soon as investors find out that they can achieve

¹ Excluding Slovenia and Croatia.

further cost reductions elsewhere. A considerable challenge to the growing service industries in Eastern European economies turns out to be the lack of sunk costs, since – unlike in manufacturing – the former require little or no investment in infrastructure (Hardy & Hollinshead, 2011). Concerns about relocation were mainly expressed at the early stages of investment (Pavlínek, 1998; Nölke & Vliegenthart, 2009; Domański & Gwosdz, 2009). However, Micek et al. (2010) note that the role of sunk costs in services can be played by localised capabilities that cannot be easily replicated in other locations.

From this perspective, an important dimension of local embeddedness can be the distinction between vertical and horizontal foreign direct investments (FDIs). A vertical FDI is undertaken in order to take advantage of international differences in labour costs – investors are thus interested in exploiting labour rather than the human capital. On the other hand, a horizontal FDI seeks market access and offers a much wider range of high-quality jobs (Markusen, 2005; Buch et al., 2005; Sass & Fifekova, 2011; Antràs & Yeaple, 2014).

In our view, revisiting the economic theory makes it possible to predict not only that simplified and routine tasks will be relocated to CEE, but also that the risk of relocation of the BSSs' vertical investments from CEE has been overstated. Although wages grow fast, productivity turns out to grow even faster (cf. Astrov et al., 2019; Schröder, 2020). In the microeconomic analysis of incentives for the fragmentation of production, companies that reach a sufficiently large scale of operations choose to split into two (or more) production blocks in order to lower their average costs owing to specialisation. The larger the scale of production, the greater the benefits, even if it entails incurring extra coordination costs resulting from the maintenance of service linkages. Offshoring a part of production and coordination services to cheaper foreign locations makes it possible to add Ricardian comparative advantages to economies of scale and to the benefits that accrue from the fragmentation

of production (Jones & Kierzkowski, 1990). In international trade theory, Grossman and Rossi-Hansberg (2006a, 2006b) discuss the benefits of international production fragmentation. Apart from the traditional exchange of wine for cloth, trade in tasks is becoming increasingly important. Two (or more) countries are involved in the production of one good and share tasks according to their level of productivity and the supply of both unskilled and skilled labour. Accordingly, skilled workers in the headquarter economy are engaged, e.g., in design, whereas unskilled ones in the factory economy are engaged in production.

A further explanation as to why factory economies can also be involved in design is provided by Markusen (2005), who identifies a third production factor, namely knowledge-based capital. Its owners – who have the necessary technology, know-how, and access to rich markets – may choose to engage skilled labour in the Global South for a fraction of the market wages offered in the Global North, even though these skills are (at least initially) scarce in the South. With the decreasing costs of long-distance communication (ICTs), globalisation has also reached the office (Baldwin, 2019). Not only production activities, but also more advanced accounting, human resources management, and Research & Development (R&D) tasks are being relocated to low-cost countries. The theory of FDI – together with Dunning's (1977) OLI (Ownership, Location, Internalisation) paradigm – helps explain why a large proportion of processes can be transferred abroad without capital control being lost. Apart from knowledge capital (ownership) and the benefits of low wages (location), it is also important to maintain control within the company (internalisation) over the quality of the most value-adding processes (Gupta et al., 2006; Moe et al., 2014; Radło 2016). If this is the case, the chances increase that a developing country attracts an efficiency-seeking foreign investment (Dunning, 2000; Narula & Pineli, 2017). Thus, also knowledge-intensive business services in CEE will grow as long as these countries

offer access to competitively-priced and abundant human capital.

Building local cooperation links

Even though the threat of relocation of services provision and production from CEE countries currently seems overstated, the CEE countries should urgently acquire the ability to perform those tasks that bring in higher added value. However, what prospects does offshoring, including services offshoring, offer for the economic development of CEE countries? A productive current of research on its consequences turns out to be the combination of Porter's (1985) concept of value chain with Wallerstein's world-systems theory (1974). By multiplying mono- and oligopolistic profits, modern capitalism has made it possible to separate the global core from periphery. The former is comprised of states – or, rather, economic entities supported by them – which implement high value-added processes. In the latter, in the absence of productive powers (List, 1909 [1841]), economic processes are characterised by low profitability, which is why political structures (states) also tend to be weak. Global supply chains involve asymmetric economic links between one area and another in terms of benefits, which enable the global core to perpetuate its dominant position (Wallerstein, 2004). A particularly intense period of the global value chain's (GVC) internationalisation took place in the 1990s and led to the relocation of a large part of economic activity, especially manufacturing, to previously peripheral countries (Baldwin & Lopez-Gonzalez, 2015). Companies from core countries tend to represent the initial and final links of value chains (headquarter services, R&D, design, and customer service), whereas those from peripheral countries focus on manufacturing, which is the least profitable industry (Wade, 2018; Stöllinger, 2021). This represents the second important dimension of territorial embeddedness; it stems from the fact that while global production sharing has helped developing countries to increase their exports, the value added does not always

increase proportionally (Milberg & Winkler, 2013, p. 240).

In the 1990s, after the post-socialist economies had opened up to the world, the fact that a low proportion of value added remained in the host economies was attributed to weak linkages between foreign subsidiaries and their local collaborators. This was due to both a skills mismatch and the liberal policies of CEE countries, which did not require investors to develop cooperation networks locally (Hardy et al., 2011). Researchers thus spoke of “enclaves” and “cathedrals in the desert” (Grabher & Stark, 1997; Hardy, 1998; Micek et al., 2011). With the progress of globalisation, a further inflow of investors and rapid learning (Domański & Gwosdz, 2009) as well as mutual interconnectedness between investors and local co-ops all increased (cf. Stryjakiewicz, 2007, on the development of the pharmaceutical sector in Poland, and Pavlínek, 2017, on the automotive sector in the Czech Republic and the entire CEE region).

The analysis of value-added flows – made possible by the development of inter-country input-output tables (Koopman et al., 2010; Timmer et al., 2015; OECD, 2021) – facilitated the comparison of the reach of backward and forward linkages (cf. Hirschman 1958). Their measurement reveals the extent to which the value created in the local economy is embodied in either meeting final demand or exports, and thus represents the intensity of linkages between producers/exporters and local suppliers (cf. Stehrer & Stoellinger, 2015; Grodzicki & Geodecki, 2016). Most analyses are conducted for the most globalised sector, namely the manufacturing industry. Less frequent attempts are made to estimate the linkages of services sectors with local suppliers and customers (cf. Geodecki, 2020). An important supplement to such a characterisation involves measuring the extent to which an economy (sector) is involved in business functions – from R&D and headquarter activities through production (manufacturing) to logistics, marketing, and sales (Hagemejer & Ghodsi, 2017; Timmer et al., 2019; Stöllinger, 2021).

Building a classification of business functions for the services sector remains a challenge, as most research is done on manufacturing industries or entire national economies.

Industrial upgrading in the business services sector

The second school in the GVC current identified by Bair (2005), represented, among others, by Gereffi and his students, focuses not so much on the asymmetry of benefits as on the industrial upgrading prospects of peripheral countries. Gereffi (1999) and Amsden (2001) associate this capacity with occupying technologically-sophisticated capital- and skills-intensive economic niches. Accelerated learning from collaborators in value chains (cf. Collier & Venables, 2007; Pietrobelli & Rabelotti, 2011; Baldwin & Lopez-Gonzalez, 2015) led Milberg and Winkler (2013) to propose that in the globalisation era, functional advancement in value chains has become synonymous with economic development. Gereffi et al. (2005) identify several types of value chains that differ in terms of power asymmetry and the concomitant ability of suppliers to attain an increasing share of value added. Their three key characteristics include the complexity of transactions, the ability to codify them, and capabilities in the supply base. The classification of value chains with the use of these characteristics informed later studies into industrial upgrading (Coe & Yeung, 2015; Dicken, 2015).

The majority of analyses of industrial upgrading, especially in CEE countries, are conducted for manufacturing industries (cf. Domański & Gwosdz, 2009; Pavlínek, 2017). In the last decade, however, more attention was directed to the services sector affected by globalisation in the wake of the the revolution with regard to the ICTs (Wirtz et al., 2015; Baldwin, 2019; Geodecki, 2020), although research on upgrading in services tends to concern non-European countries. Fernandez-Stark and Gereffi (2010), as well as Fernandez-Stark et al. (2011), studied selected branches

of services mainly in Latin America in order to describe the process of industrial upgrading in the offshore services industry (especially their acquiring the capacity to shift to more value-added activities). The relationship of local actors with lead firms in the industry is crucial. Taking advantage of the fact that in the IT industry the capacity to provide services is more likely to be codified than not after acquiring the ability to serve their Western buyers, Indian IT companies began to provide similar services at home. In this way, Indian IT providers became independent players earning high profits after eliminating Western companies as intermediaries to access clients from affluent markets (Fernandez-Stark et al., 2011; Dicken, 2015).

Thus, given that artificial intelligence and machine-learning enhance the ability to codify transactions (Brynjolfsson & McAfee, 2014), two other factors have become the key drivers of advancement. The first one comprises capabilities in the supply base – particularly relevant in services where the physical capital is less important and the human capital becomes the crucial resource. The other factor involves transaction complexity that reflects both the level of the human capital and the level of managerial capabilities to capture these types of tasks in the value chain that require more knowledge and offer the potential to generate economic rents based on learning.

Contributions to this special issue

This special issue consists of articles devoted to the topics mentioned above. In the article titled “The Dimensions of Territorial Embeddedness of the Business Services Sector in Central and Eastern Europe,” Tomasz Geodecki proposes a range of measures of territorial embeddedness in order to outline the above-mentioned challenges. The author uses these measures to determine the level and dynamics of the embeddedness of the BSS in CEE economies when compared with their Western European counterparts. The analysis of unit labour costs as well as backward and

forward linkages in this sector enables the author to gauge the intensity of relationships with local collaborators, thus making it possible to assess the risk of relocation. The rapidly improving skills of employees in the Central European BSS as well as the growing importance of knowledge-intensive services in the structure of value added can further contribute to the importance of CEE as a location for business services in Europe. The study relies on basic statistical data and calculations with the use of the input-output tables. The availability of data made it possible to carry out this analysis up to 2014. Geodecki's paper also provides the background for the subsequent articles, which describe the situation and dynamics of change in the sector in years to come.

Innovations and the trajectory of technological upgrading in the services sector are of a slightly different nature than in manufacturing, which is due to, among other things, their perishability. In other words, it is impossible to store services, which induces their providers to locate service centres in places where the human capital is available in abundance (Fernandez-Stark et al., 2011; Morrar, 2014). In the modern services sector, technical change becomes important insofar as production techniques are not capital-intensive so that the barriers to the entry of potential competitors can be constructed from a different raw material. Therefore, competition in the services sector tends to be based on competencies and the human capital (Sirilli & Evangelista, 1998). In their article, Zoltán Gál and Robert Marciniak discuss this key resource by comparing the market position of the Hungarian business services centres with their counterparts in the other Central and Eastern European countries. The development of the service sector in the region is reflected in the analysis carried out for the period 2015–2020. The paper presents the dynamics of the sector's development in the context of a still large but gradually decreasing number of employees associated with the limited supply of human resources and competences. The authors propose a range of recommendations,

including more effective promotion of investments and human-resource development policies.

The article by Jakub Głowacki, one titled "The Potential of Developing Complex and Unique Fintech Solutions in Kraków's Business Services Centres," deals with the complexity and uniqueness of tasks undertaken by employees in the BSS in Kraków, which is one of the most important centres in CEE. The methodology adopted for the study refers to the concept of Product Space as proposed by Hidalgo and Hausmann (2009), in which the ability to create added value for the world's economies results from the limited distribution of managerial capabilities on the global scale. The research was based on surveying over 316 employees of the BSS's companies. The technical change that has taken place over the last five years is associated with a change in the degree of the complexity and uniqueness of the provided services. The analysed companies show a great potential for development in the area of new financial technologies.

In her article titled "Sustainable Urban Development and Office Location", Małgorzata Zięba identifies the criteria for locating new office-space investments by developers. Based on the literature of the subject, the author concludes that the most important factors include accessibility, proximity, availability of amenities, facilities and urban services, quality, the influence of planning, as well as fiscal tools and public investments (Rebelo, 2011). The empirical study covers the Kraków office market, which is the second largest real estate market in Poland. The findings show that developers emphasised access to well-developed public transportation networks as well as access to urban amenities and services as crucial features of a good location that would be attractive to end users. Therefore, the attractive location for an office building is, to a large extent, consistent with the principles of sustainable urban development.

The article by Simon Greaves, one titled "Why Poland's Yacht Builders Are Among World Leaders," appears to be more loosely related to the BSS in that the author discusses the factors that

affect the development of superyacht production in Poland. However, it turns out that competitiveness factors in this manufacturing industry are similar to those in the BSS. The key ones include labour cost and path dependency, which is consistent with the observations that Poland, like other countries in the region, owes its competitiveness in the manufacturing industry to low-cost but relatively well-trained labour (cf. also Nölke & Vliegenthart, 2009; Stehrer & Stöllinger, 2015). Such conclusions are supported by the observation that prior production levels, especially in the case of luxury goods, reflect not only cost, but also the level of productivity associated with having the right capabilities (Amsden, 2001). Greaves' paper supports the observations concerning the competitiveness factors characteristic of CEE countries, since it is for their sake that business-services companies choose to invest in this region.

Last but not least, the objective of Rodion Sevastyanov's article, titled "The Prospects of Ukraine's Integration into Global Value Chains Within the Framework of European Integration", is to explore the current determinants of Ukraine's foreign economic activity in the context of European integration. The theoretical framework for the study is provided by the concept of global value chains (GVCs), which builds on the idea of 'global production networks', as formulated by Henderson et al. (2002). The author argues that GVCs are a powerful driver of productivity growth, job creation, and the increasing living standards. For this reason, Ukraine can generate growth by moving to higher-value-added tasks and embedding more technology and know-how in its agriculture, manufacturing, and services. The author's research proves that the economic ties between Ukraine and the EU have strengthened significantly in the recent years. Statistical trends also demonstrate that foreign trade within GVCs tends to increase. For example, based on a recent analytical survey, most agricultural and industrial products exported from Ukraine accounted for 42.1% of the country's total international sales in 2020; moreover, over 70% of the Ukrainian

IT software development exports are estimated to be outsourced to third parties.

References

- ABSL (2020). *EMEA's Business Services Landscape: A snapshot of 18 countries in the region*. ABSL.
- Amsden, A. H. (2001). *The Rise of "the Rest": Challenges to the West from Late-Industrializing Economies*. Oxford Scholarship Online.
- Antràs, P., & Yeaple, S. R. (2014). Multinational firms and the structure of international trade. *Handbook of International Economics*, 4, 55–130.
- Astrov, V., Holzner, M., Leitner, S., Mara, I., Podkaminer, L., & Rezai, A. (2019). *Wage developments in the Central and Eastern European EU member states*. wiiw Research Report.
- Bair, J. (2005). Global capitalism and commodity chains: Looking back, going forward. *Competition & Change*, 9(2), 153–180.
- Baldwin, R. (2012). Global supply chains: Why they emerged, why they matter, and where they are going CEPR Discussion Papers 9103. *Discussion Papers: CEPR*.
- Baldwin, R. (2019). *The Globotics Upeaval: Globalization, Robotics, and the Future of Work*. Oxford University Press.
- Baldwin, R., & Lopez-Gonzalez, J. (2015). Supply-chain trade: A portrait of global patterns and several testable hypotheses. *The World Economy*, 38(11), 1682–1721.
- Białynicki-Birula, P., & Pacut, A. (2020). The determinants of territorial embeddedness of offshoring and outsourcing firms: A conceptualisation of the problem. In Ł. Mamica (Ed.), *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services* (pp. 28–37). Routledge.
- Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. WW Norton & Company.
- Buch, C. M., Kleinert, J., Lipponer, A., Toubal, F., & Baldwin, R. (2005). Determinants and effects of foreign direct investment: Evidence from German firm-level data. *Economic Policy*, 20(41), 52–110. <https://doi.org/10.1111/j.1468-0327.2005.00133.x>
- Bykova, A., Grieveson, R., Hanzl-Weiss, D., Hunya, G., Korpar, N., Podkaminer, L., Stehrer, R., & Stöllinger, R. (2021). *Avoiding a Trap and Embracing the*

- Megatrends: Proposals for a New Growth Model in EU-CEE*. Wiiw Research Report no. 458.
- Coe, N. M., & Yeung, H. W.-C. (2015). *Global Production Networks: Theorizing Economic Development in an Interconnected World*. Oxford University Press.
- Collier, P., & Venables, A. J. (2007). Rethinking trade preferences: How Africa can diversify its exports. *World Economy*, 30(8), 1326–1345.
- Dicken, P. (2015). *Global Shift: Mapping the Changing Contours of the World Economy*. 7th Edition. Guilford Press.
- Domański, B., & Gwosdz, K. (2009). Toward a more embedded production system? Automotive supply networks and localized capabilities in Poland. *Growth and Change*, 40(3), 452–482.
- Dunning, J. H. (1977). Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach. In B. Ohlin, P.-O. Hasselborn, & P. M. Wijkman (Eds.), *The International Allocation of Economic Activity* (pp. 395–418). Palgrave Macmillan.
- Dunning, J. H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, 9(2), 163–190. [https://doi.org/10.1016/S0969-5931\(99\)00035-9](https://doi.org/10.1016/S0969-5931(99)00035-9)
- Fernandez-Stark, K., Bamber, P., & Gereffi, G. (2011). The offshore services value chain: Upgrading trajectories in developing countries. *International Journal of Technological Learning, Innovation and Development*, 4(1–3), 206–234.
- Fernandez-Stark, K., & Gereffi, G. (Eds.). (2010). *The Offshore Services Global Value Chain*. Center on Globalization, Governance & Competitiveness, Duke University.
- Gál, Z., & Marciniak, R. (2020). Budapest: The development and specific features of outsourcing, offshoring and the global business services sector. In Ł. Mamica (Ed.), *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services* (pp. 98–113). Routledge.
- Geodecki, T. (2020). The development of European business services value chains: The perspective of emerging economies. In Ł. Mamica (Ed.), *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services* (pp. 66–84). Routledge.
- Gereffi, G. (1999). International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics*, 48(1), 37–70.
- Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104. <https://doi.org/10.1080/09692290500049805>
- Grabher, G., & Stark, D. (1997). *Restructuring Networks in Post-Socialism: Legacies, Linkages and Localities*. Clarendon Press.
- Grodzicki, M. J., & Geodecki, T. (2016). New dimensions of core-periphery relations in an economically integrated Europe: The role of global value chains. *Eastern European Economics*, 54(5), 377–404.
- Grossman, G. M., & Rossi-Hansberg, E. (2006). The rise of offshoring: It's not more wine for cloth anymore. In *Symposium The New Economic Geography: Effects and Policy Implications*. Jackson Hole, Wyoming, August 2016.
- Grossman, G. M., & Rossi-Hansberg, E. (2008). Trading tasks: A simple theory of offshoring. *American Economic Review*, 98(5), 1978–1997.
- Gupta, S., Puranam, P., & Srikanth, K. (2006). Services sourcing in the banking and financial services industries. *Exploding Myths and Describing Emerging Best Practice, Report on Study Conducted Jointly with The Capital Markets Company (Capco, London Business School), London: The Capital Markets Company NV and London Business School*.
- Hagemeyer, J., & Ghodsi, M. (2017). Up or down the value chain? A comparative analysis of the GVC position of the economies of the new EU member states. *Central European Economic Journal*, 1(48), 19–36.
- Hardy, J. (1998). Cathedrals in the Desert? Transnationals, Corporate Strategy and Locality in Wrocław. *Regional Studies*, 32(7), 639–652.
- Hardy, J., & Hollinshead, G. (2011). The embeddedness of software development in the Ukraine: An offshoring country perspective. *European Planning Studies*, 19(9), 1633–1650.
- Hardy, J., Micek, G., & Capik, P. (2011). *Upgrading Local Economies in Central and Eastern Europe? The Role of Business Service Foreign Direct Investment in the Knowledge Economy*. Taylor & Francis.
- Henderson, J., Dicken, P., Hess, M., Coe, N., & Yeung, H. W.-C. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy*, 9(3), 436–464.
- Hess, M. (2004). 'Spatial' relationships? Towards a reconceptualization of embeddedness. *Progress in Human Geography*, 28(2), 165–186.

- Hidalgo, C. A., & Hausmann, R. (2009). The building blocks of economic complexity. *Proceedings of the National Academy of Sciences*, 106(26), 10570–10575.
- Hirschman, A. O. (1958). *The Strategy of Economic Development*. Yale Studies in Economics: Vol. 10. Yale University Press.
- Jones, R. W., & Kierzkowski, H. (1990). The Role of Services in Production and International Trade: A Theoretical Framework. In J. R. Winthrop (Ed.), *The Political Economy of International Trade: Essays in Honor of Robert E. Baldwin* (pp. 31–48). Blackwell.
- Koopman, R., Powers, W., Wang, Z., & Wei, S.-J. (2010). *Give credit where credit is due: Tracing value added in global production chains*. National Bureau of Economic Research.
- List, F. (1909 [1841]). *The National System of Political Economy*. Longmans, Green & Co.
- Mamica, Ł. (2020). *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services*. Routledge.
- Markusen, J. R. (2005). *Modeling the offshoring of white-collar services: From comparative advantage to the new theories of trade and FDI*. National Bureau of Economic Research Cambridge, Mass., USA.
- Mazur-Bubak, M. (2020). Impact sourcing: Theoretical analysis in relation to corporate social responsibility in a globalised market. In Ł. Mamica (Ed.), *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services* (pp. 52–65). Routledge.
- Micek, G., Działek, J., & Górecki, J. (2010). *Centra usług w Krakowie i ich relacje z otoczeniem lokalnym*. Wydawnictwo Uniwersytetu Jagiellońskiego.
- Micek, G., Działek, J., & Górecki, J. (2011). The discourse and realities of offshore business services to Kraków. *European Planning Studies*, 19(9), 1651–1668.
- Milberg, W., & Winkler, D. (2013). *Outsourcing Economics: Global Value Chains in Capitalist Development*. Cambridge University Press.
- Moe, N. B., Šmite, D., Hanssen, G. K., & Barney, H. (2014). From offshore outsourcing to insourcing and partnerships: Four failed outsourcing attempts. *Empirical Software Engineering*, 19(5), 1225–1258.
- Morrar, R. (2014). Innovation in services: A literature review. *Technology Innovation Management Review*, 4(4), Article 4.
- Narula, R., & Pineli, A. (2017). Multinational Enterprises and Economic Development in Host Countries: What We Know and What We Don't Know. In G. Giorgioni (Ed.), *Development Finance: Challenges and Opportunities* (pp. 147–188). Palgrave.
- Nölke, A., & Vliegenthart, A. (2009). Enlarging the varieties of capitalism: The emergence of dependent market economies in East Central Europe. *World Politics*, 61(4), 670–702.
- OECD (2021). *Guide to OECD's Trade in Value Added Indicators* (2021 Edition). OECD Publishing.
- Pavlínek, P. (1998). Foreign direct investment in the Czech Republic. *The Professional Geographer*, 50(1), 71–85.
- Pavlínek, P. (2017). *Dependent Growth: Foreign Investment and the Development of the Automotive Industry in East-Central Europe*. Springer.
- Pietrobelli, C., & Rabellotti, R. (2011). Global value chains meet innovation systems: Are there learning opportunities for developing countries? *World Development*, 39(7), 1261–1269.
- Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press.
- Radło, M.-J. (2016). *Offshoring, Outsourcing and Production Fragmentation: Linking Macroeconomic and Micro-/Business Perspectives*. Palgrave Macmillan.
- Rebelo, E. M. (2011). Urban planning in office markets: A methodological approach. *Land Use Policy*, 28(1), 83–95.
- Sass, M., & Fifekova, M. (2011). Offshoring and outsourcing business services to Central and Eastern Europe: Some empirical and conceptual considerations. *European Planning Studies*, 19(9), 1593–1609.
- Schröder, J. (2020). *Decoupling of labour productivity growth from median wage growth in Central and Eastern Europe*. wiiw Research Report.
- Sirilli, G., & Evangelista, R. (1998). Technological innovation in services and manufacturing: Results from Italian surveys. *Research Policy*, 27(9), 881–899.
- Stehrer, R., & Stöllinger, R. (2015). *The Central European Manufacturing Core: What is Driving Regional Production Sharing?* FIW Research Reports.
- Stöllinger, R. (2021). Testing the smile curve: Functional specialisation and value creation in GVCs. *Structural Change and Economic Dynamics*, 56, 93–116.
- Stryjakiewicz, T. (2007). GlaxoSmithKline: Regional and local networking in a post-communist economy. In Wever, E., & Pellenberg, P. (Eds.), *International*

- Business Geography: Case Studies of Corporate Firms* (pp. 276–291). Routledge.
- Timmer, M., Miroudot, S., & de Vries, G. (2019). What Countries Do When Exporting: Measuring Functional Specialization in Trade. *VoxEU. Org, 1*.
- Timmer, M. P., Dietzenbacher, E., Los, B., Stehrer, R., & De Vries, G. J. (2015). An illustrated user guide to the world input-output database: The case of global automotive production. *Review of International Economics, 23*(3), 575–605.
- Wade, R. H. (2018). The developmental state: Dead or alive? *Development and Change, 49*(2), 518–546.
- Wallerstein, I. (1974). *The Modern World-System, I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century. With a New Prologue*. Academic Press.
- Wallerstein, I. (2004). *World-Systems Analysis*. Duke University Press.
- Wirtz, J., Tuzovic, S., & Ehret, M. (2015). Global business services: Increasing specialization and integration of the world economy as drivers of economic growth. *Journal of Service Management, 26*(4), 565–587.
- Zawicki, M. (2020). The degree of embeddedness of the business process outsourcing sector in the Visegrad Group in the context of its current development trends and case study findings. In Ł. Mamica (Ed.), *Outsourcing in European Emerging Economies: Territorial Embeddedness and Global Business Services* (pp. 142–152). Routledge.