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Artur Klimek

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To my wife, Aleksandra, and my daughters, Alicja and Amelia

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Introduction

Intangible processes shape the global economy. Value and utility are derived from constant flow of data between entities located in various spots in the world. Most users of the digital content would not be able to indicate its country of origin or explain the mechanics behind the provided service. Similar phenomenon occurs in the business relations, which are shaped by processes of the international supply of services. Data, information and knowledge flow seamlessly between entities engaged in global value chains (GVCs). Its crucial elements are multinational enterprises (MNEs) and the persistent transformations of their operations.

One of the major elements of the international sourcing of goods and services is offshoring. According to my best knowledge, no other activities concerning MNEs have recently been so dynamic and brought such profound changes to their structures, as reorganising the execution of the headquarters' services via various forms of offshoring arrangements. Many crucial business activities are provided by specialised vendors located in business services hubs. It is frequently visualised as employees from a distant and low-cost location providing IT or accounting services for a rich-country corporation. However, is it the real essence of white-collar services offshoring? Does it change over time? What is its impact on businesses and economies?

The importance of offshoring can be measured using various metrics, such as the value of the services offshored, number of jobs in offshore services, or the types of processes offshored. Because of the dynamics of offshoring, imperfections of statistical tools, and intangible nature of offshore activities, there are only estimations available regarding the size of offshoring. According to various sources, the value of the market of offshored advanced business services (ABS) is worth more than 1 trillion dollars annually and employs millions of people. Importantly, the trend has been growing steadily for the past two decades. However, the real importance of service offshoring may be much higher due to efficiency and knowledge gains, but also risks incurred by the operations. I attempt to shed more light on the topic of offshoring of white-collar services, which are not frequently highlighted in the discussion of international organisation of firms and markets. My aim is to present a comprehensive picture of the recent global and local landscapes shaping these activities.

Business decisions have economic implications. Economic conditions influence business decisions. Therefore I argue that it is not only necessary to focus on economic or business issues without presenting the interactions between those two. Especially when it comes to the issue of offshoring, which is very multidimensional and dynamic, thus calls for the analysis of the links between particular elements of the offshoring arrangements, rather than those elements themselves. A one-sided approach to offshoring is the main difficulty in understanding its essence. For example,

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the impact of offshoring on a host economy has been measured using changes in the job market, which is a part of economics. But the changes in the job market are closely linked to management practices and employees satisfaction with the jobs, which is the business part. An interdisciplinary approach brings many challenges and requires holistic thinking about the issue. But it will allow to use the findings in building business strategies, but also public policy regarding offshoring of ABS.

I investigate whether offshoring of white-collar services is a win-win situation for economies of different levels of development. Such an assumption is supported by the evidence that workers in offshored jobs in home countries can be employed in higher value activities, thus receive higher wages, while firms report higher efficiency. From a host country perspective, it means inflow of jobs and knowledge, as well as the inclusion in GVC. Or maybe it is a zero-sum solution, which means that jobs are transferred from high-cost economies to low-cost ones. As a result there is a loss of jobs in a source economy and the same number of new jobs is created in a host economy. There is also the third possibility – a negative-sum game. The main argument for such a situation is that the number of jobs created in a host economy is lower, than the number of jobs lost in a source economy. It is due to the fact that offshoring results in centralisation of many activities, thus jobs in many local units are axed and only a fraction of the original number is created in a host economy. Moreover, there is the question of whether the jobs created are a blessing for the host economy or maybe a burden. I will apply the multidimensional analysis to presented scenarios, both from the perspective of host and home economies.

The idea of offshoring of ABS has been predominantly analysed from the perspective of home countries. The other side of offshoring – host economies – has been to some extent neglected or at least stereotyped. There is vast literature regarding offshoring of business services to Asia, particularly to India. Indeed, the economy became a symbol of offshoring and outsourcing of business services globally. The economy is considered to use the foreign direct investment (FDI) into service sector to alter its sectoral structure. There has been a leap from agriculture into services requiring highly skilled workers.

However, the offshoring of services in not only about Asia. There are emerging locations in many parts of the world. I focus on ABS in Central and Eastern Europe (CEE) because of the enormous growth of FDI in professional services in recent years. From the perspective of the CEE countries, such a situation is new, as they focused on industrialisation during their dependence on the Soviet Union, and even after the fall of the Iron Wall, manufacturing was an important element of attracting FDI. It seems quite natural that after the large wave of investment in manufacturing, it was time for greater engagement in services. Anyway, the dynamic growth of offshoring of business services in CEE raises the question regarding its limits. The number of large firms that are still capable and interested in offshoring operations should decrease as many of them are already engaged in such operations. Moreover, the number of prime locations in CEE for offshoring is also limited, and many of them

have already experienced a saturation with offshoring processes and it is very difficult to locate more businesses there. Therefore it is crucial to understand the determinants and implications for host countries. The impact has to be confronted with the recent developments in knowledge-intensive services.

The fact that I discuss in this book the intangible activities, does not mean that the geographical location of services is of minor importance. I argue the opposite. In the global sourcing of services, the geography should be treated as an essential factor. In reality, the global sourcing means coordination of operations not only on the economy level, but more importantly on the local level of regions and cities. It requires global decisions and trends to be directly linked to precise locations, where the operations are executed. Not surprisingly, the Indian business services industry is illustrated by Bangalore, but the dependence on prime locations is also a fact in other countries: Ireland – Dublin, Czech Republic – Prague, Hungary – Budapest. Again, it does not mean that economy-wide elements could be neglected in order to focus on the detailed picture. It rather means that there are economy-wide factors attracting foreign enterprises into particular locations.

Besides the geographic dimension of offshoring, I focus on the business evolution of the phenomenon. The key issue is the robotisation and automation of services. It can be associated with the codification of knowledge and advancement in machine learning (ML). When I started my adventure with offshoring of ABS several years ago, the big issue was how to deliver the quality in transactional operations. Back then only few companies were experimenting with the automation of the processes. However, just a few years later the automation is the bread and butter of the industry, in spite of the fact that there are many failures in implementing the automation or many decision-makers do not fully understand the fundaments of automation and its potential value creation. There is also necessity to incorporate in the discussion on offshoring of services new issues such as data protection, artificial intelligence, and synergies between computers and humans.

The first chapter provides explanation of the basic definitions regarding offshoring and outsourcing of business processes. The notions are commonly used in the academic literature, professional publications and media. However, they are sometimes misunderstood or at least not precisely used. I aim at clarifying the notions with respect to business services. The chapter also deals with the history of white-collar jobs offshoring. This is one of the first attempts to put the development of the offshoring of support services in the historical framework. This chapter also presents the situation in home countries with respect to offshoring. This is the most commonly analysed approach to offshoring, both in manufacturing and in services. In general, the evidence underlines a negative impact of offshoring, but there is also vast evidence for positive impact of offshoring on employment, wages or productivity.

In the second chapter I aim at presenting offshoring of white-collar services from the statistical perspective. Again, the issue is that offshore business services

are difficult to grasp from the conceptual and methodologic point of view, thus difficult to measure and analyse them with the academic discipline.

The third chapter attempts to put the interdisciplinary and multidimensional issue of offshoring of white-collar services into the theoretical framework. Both business and economic theories will be considered to fit the developments in international provision of knowledge-intensive services. Moreover, the approach to ABS cannot be based on perfect competition and granularity of companies and destinations. In the industry we have limited number of large companies, frequently using their strong market position and limited number of preferred destinations. Therefore understanding particular decisions of firms regarding their ABS units is crucial in building a comprehensive picture of the phenomenon.

Chapter four presents the business approach to arrangements on international provision of ABS. This is an important part, where the macro perspective has been linked to organisational arrangements towards optimal execution of knowledge-intensive services. An important dilemma discussed here is the choice between captive offshoring and offshore outsourcing, meaning the decision between provision of services from within a firm or from an external vendor.

The fifth chapter introduces recent trends in offshoring of ABS. The industry is very dynamic and coming years may bring substantial redefinition of professional services and methods of their delivery. The most important element is the rise of automation solutions and application of artificial intelligence. This is not about science fiction, but rather discussion of the processes that are already taking place. The scale of the automation is rising significantly every year and the coming decade will change the industry profoundly. It will have a grave influence on business operations, but also on the economic environment.

Chapter six presents the global perspective on offshoring of business services. The discussion regarding the main trends is illustrated by cases of the three most important offshoring destinations: India, the Philippines and Poland. The third economy is the common element linking the global perspective on offshoring with the regional specifics of the CEE economies. The three distinctive cases exemplify the determinants and outcomes of hosting the vast amount of processes. I have selected three largest markets in the world to indicate their strengths and weakness and present what lessons can be learned by other economies.

Chapter seven presents the state of offshoring from host countries perspective. The analysis of potential results induced by locating offshoring activities in those economies, will also be used in the further part devoted to the policy recommendations. The macroeconomic perspective will be supplemented by microeconomic and business approaches. Thanks to presenting the three perspectives, I aim at bringing together somehow competitive views.

The recent decade was a period of unprecedented growth of employment and scope of activities of foreign-owned ABS firms in the CEE economies. I argue that this was a one-off period in their history, which changed their main specialisations

in FDI. The period has been depicted as a success story for the economies. It led the transformation of the economies from being manufacturing oriented towards more knowledge-intensive services. I analysed four CEE economies: Czechia, Hungary, Poland, and Slovakia. They are also referred to as the Visegrád Group (V4) economies. Besides these economies, there have been also newcomers to the industry: Lithuania, Bulgaria, Romania, Serbia, Croatia. Each of the latter economies have certain advantages, however they can be described as latecomers and their emergence rather supplements activities in the V4 economies, not replaces them.

Chapter eight provides results of the policy study. The question that was raised when working on the project was about the role of the current policies and their design towards the future of the ABS industry. I aim at assessing approaches of CEE governments towards FDI in professional services using the existing evidence, but more importantly I attempt to provide recommendations regarding FDI policies.

The book is a result of a four-year research project regarding operations of foreign-owned firms in business services. I treat this publication as an opportunity to put my detailed findings regarding the operations of foreign-owned firms in ABS industry in the V4 economies into a broader global context. The inference in the research project was carried out using two groups of research methods: qualitative and quantitative. The former approach was used to determine the cognitive framework, to analyse the institutional environment, and to identify a set of potential determinants of FDI inflows into the business services sector and their implications. The qualitative analysis was particularly useful in determining changes in economic policies of governments and their strategic plans for the coming years. At this stage, I also analysed legal acts related to the operations of foreign investors in the business services sector. The aims of the research were to identify determinants, effects and longevity of the investment projects in ABS.

This book goes beyond traditional understanding of FDI, international trade or business services. All of the elements have been blended together in order to present the full picture of global sourcing of knowledge-intensive business services. It is also a result of many meetings with representatives of authorities responsible for attracting foreign investors in ABS to particular economies, members of associations of offshoring companies, managers of foreign-owned companies operating in ABS. Conclusions of the book are also a result of numerous discussions with scholars during academic conferences and research seminars. In the course of working on the project I have spent many hours talking to leaders of offshoring units.

The main layers of the book are business and economics. However, the issue of offshoring is very interdisciplinary. Therefore, to deliver the complete picture, explanations rooted in history, political science, sociology, anthropology or geography will be included. It is because the book is about people, companies and places. Many issues presented in this book are illustrated using information on business events. Thanks to such an approach, the reader will have a full view on the issue of offshoring in the globalised economy. Pure economic or business approach might

lead to biased conclusions. I also see the accompanying approach as increasing complexity of analysing the phenomenon. However, the global economy is complex and it was a challenge to simplify some issues.

The book may be useful both for practitioners and theorists of international economics and international business. It may be used at lecture halls to supplement the discussion on global value chains, multinational firms, foreign direct investment. Students should gain from delivering both the context and multiple approaches to offshoring. I also aim at business practitioners, who are to decide about the international provision of services within their organisations. I identified various challenges in offshoring and possible scenarios of future development. This book should also provide new insights for the policymakers in the international scale, but especially in host economies.

1 Past developments and recent trends in offshoring of white-collar services

1.1 Offshoring and offshorability

Offshoring adds the international context to sourcing decisions of firms. International sourcing is defined as "the total or partial movement of business functions (core or support business functions) currently performed in-house or currently domestically sourced by the resident enterprise to either non-affiliated (external suppliers) or affiliated enterprises located abroad" (Eurostat, 2019).

There is no commonly accepted definition of offshoring, what makes systematic statistical analyses very difficult. The issue is even more evident for service offshoring, where the support of private research institutions enriches understanding of the industry and its economic impact (United States Government Accountability Office, 2004). A very simple definition of offshoring of services describes it as "the transnational relocation or dispersion of service related activities that had previously been performed in the home country" (Doh, Bunyaratavej, & Hahn, 2009, p. 926). Jensen, Larsen, and Pedersen (2013, p. 315) also use a similar approach to define offshoring as "the relocation of organizational tasks and services to foreign locations".

Statements that offshoring means moving activities from high-cost countries to low-cost ones, or from highly developed to less developed countries are no longer justified. Nevertheless, the common characteristics of the offshoring destinations has been a certain level of underdevelopment. It was the case for the Caribbean or Ireland, especially in the beginning of the interest in offshoring. The basic motive of the cost arbitrage was supported by the financial incentives and loose legal framework in host countries. The evidence from US offshoring firms confirms that the propensity of firms to source from a foreign supplier falls with the rising rigidity in the host country labour market (Kohler & Kukharskyy, 2019). Indeed, in many cases the cost-cutting motivation was dominating, however over the course of time the determinants, forms and outcomes of offshoring evolve significantly.

According to the evidence, the lower difference in wages between a home and host economies supports the decision about offshoring (Bunyaratavej, Hahn, & Doh, 2013). Moreover, they found that a higher level of education and cultural proximity were positively correlated with the decision on offshoring. There are not only factors related to the attractiveness of the foreign locations. Home market conditions may be crucial in the decision regarding offshoring in the first place. Rigid labour market conditions in a country of origin are one of the key factors in the decision regarding offshoring (Weng & Peng, 2018).

Offshoring has been considered as a process distinctive to foreign direct investment (FDI). In general, when a firm establishes a foreign subsidiary to serve a foreign

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market, it is considered as FDI. But when a company establishes a foreign subsidiary to deliver goods or services to home country, this is considered as offshoring. However, with respect to services such relations are far from being clear as processes are relocated from a home country, but then delivered to multiple countries or even globally. Frequently there is a hybrid solution when an office in a host country delivers some services for the purposes of production units in the same economy, but the rest is exported to third countries.

Therefore, it is more proper to treat offshoring as a part of FDI. Offshoring is a type of FDI when there is a relocation of activities from a home economy. FDI in this context is a broader statistical measure. It encompasses the transfer of capital from one enterprise in a home economy to another enterprise abroad. Thus the main role assigned to the foreign unit is irrelevant. To sum up, the notion of offshoring should be used in the context of FDI when a firm organises sourcing on international scale, including home and host economies.

In order to start the analysis of offshoring it is necessary to put it in the broader context of sourcing decisions by firms (Figure 1). There are four basic options of arranging sourcing with respect to geographical and organisational execution of tasks. A firm can decide about conducting processes inside an organisation or outside its boundaries. It is the question of whether to outsource processes to external providers. The second decision is whether to execute processes in a home economy or source them from abroad. The focus of this book rather on the geographical context of sourcing while the organisational form is of a secondary importance.

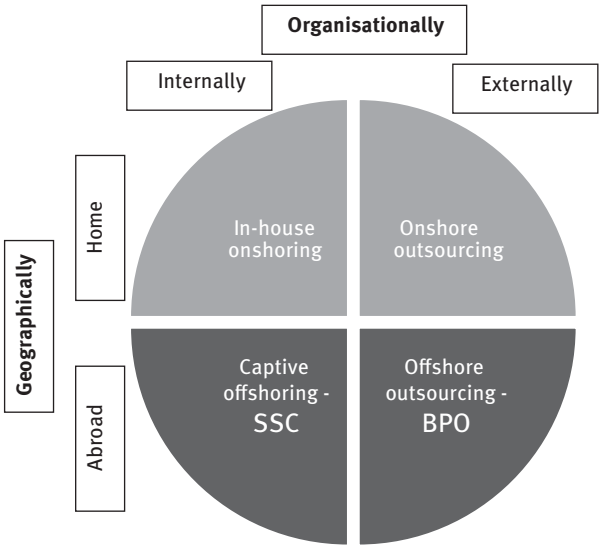

Figure 1: Organisational and geographical array of sourcing options (source: own elaboration).

Indeed, the economic and business literature has not been fully precise when it comes to disentangling offshoring and outsourcing. They have been sometimes treated as synonyms of sourcing from abroad. For example, Feenstra and Hanson (1996, p. 1) understand outsourcing as "the import of intermediate inputs by domestic firms". However, they are distinctive processes that relate to geographic (offshoring) and firm (outsourcing) boundaries (Massini & Miozzo, 2012). Even more important is the distinction from economics point of view. Outsourcing to an external partner in the same economy does not have an impact on the balance of payment and international trade position of an economy. It also does not mean the loss of jobs to another economy and other changes in the job market. Therefore in this book, the notion outsourcing, unless otherwise stated, means offshore outsourcing. It is also named offsourcing (Zorska, 2007).

From the business services perspective, the four sourcing options are not considered idiosyncratically. They are rather treated as ingredients of a business strategy. Nevertheless, the ratio between particular elements has neither been equal nor constant. Indeed, especially in recent decades the focus has been rather on the activities conducted abroad. Less attention has been paid to whether the activities are conducted within the boundaries of a firm or delegated to an external provider.

When the organisational forms of execution of white-collar services are considered, there are two basic options: a foreign shared services centre (SSC) – captive offshoring, and business process outsourcing (BPO) – offshore outsourcing. In this book, unless clearly indicated, offshoring of white-collar jobs means both captive offshoring and offshore outsourcing. There are also sections devoted to the distinction between the two modes. Anyway, there has been the same denominator – service activities provided from abroad.

Next to the notion of offshoring comes the issue of types of activities, which can be relocated abroad. "Offshorability" of services depends on their nature. Services are divided into two categories: personally-delivered and impersonally delivered (Blinder, 2007). The former category needs to be delivered in face-to-face contacts, for example, a high-class surgeon has to be present next to a patient during an operation. The latter category, thanks to electronic means of communication, can be delivered to any place in the world, for example, computer programing. Anyway, due to the advancement in the technology such division or at least approach to some tasks may be modified. The example might be some tests conducted on remote surgeon operations. On top of that comes the commoditisation of services. It means that the provision of services became less personal and less unique solutions are provided. In this way, the final solution for a client is a result of putting different and predefined modules together.

The other approach to offshorability of services is based on the possibility of computerisation. Tasks requiring the analytical thinking were divided into routine and non-routine ones (Autor, Levy, & Murnane, 2003). The former category can be easily executed by machines, which can make it faster, cheaper and without errors.

Thus, such services are also easy to be offshored. However recently, the category of tasks that can be processed by computers should decrease their offshorability. If they can be executed by a computer, it should be of less importance where it is done. Unfortunately the picture is not that straightforward. Even though computers can be "employed" in developed countries, there is still necessity to "train" the computers, what is frequently done by cheaper brainpower in locations such as India or CEE.

The non-routine tasks are more difficult to offshore as they require vast amount of contextual knowledge and are frequently of discrete nature. However, a certain level of standardisation of the cognitive tasks makes them good candidates for offshoring. Indeed, such tasks are supposed to be offshored to economies offering abundant brainpower in attractive prices.

There have been extensive developments and improvements in delivering services. It means that new categories of services have been created and it is feasible to deliver them over large distances. More importantly, the managerial approach to services has also changed. In fact, service activities inside firms have evolved from discretionary type towards well-structured processes, which are in turn more susceptible to offshoring. We can conclude the better the service processes are organised within an organisation, the easier is to offshore them.

The recent evidence suggests the modularity of white-collar services (Mol & Brandl, 2018). It means that a business process can be divided into modules, which can be executed onshore or offshore. Such fragmentation of business activities reduces their complexity and make them more prone to be offshored. The knowledge-intensive services tend to change their structure as service production became more modular and less dependent on interactions between a provider and a client (Brandl, 2019). Such changes put services into a new context of commoditisation and mass production. From this perspective, the offshoring may be a self-reinforcing process (Brandl, Mol, & Petersen, 2017).

However, implementing the modularity of business services is never frictionless or cost-free (Spring, Araujo, & Mason, 2013). Firms have to learn how to organise the provision of services using smaller modules, what is particularly difficult in the international environment. Additional issues in the modularity are dynamic changes in the service provisions, what make the learning process more difficult and requires constant adjustments.

1.2 Five waves of business services offshoring

Offshoring of services, especially those of higher knowledge content, is a phenomenon much younger in the global economy than offshoring of manufacturing operations. First companies moved their production to lower cost destinations already in 1960s. This trends was supported by decreasing barriers to trade in manufactured goods. Actually, the merchandise trade was the first area of international trade, which was

the subject to multilateral trade agreements under General Agreement on Tariffs and Trade (GATT) and later World Trade Organisation (WTO). The decrease in trade barriers and possibility to fragment the production processes led to international configuration of supply chains. Manufacturing hubs in Asia contributed greatly to the rise of offshoring of manufacturing operations and became the "factory of the world".

Offshoring of physical goods had profound changes on source and host economies and is still a hot political topic in relations between developed and developing economies. There have been even proposals to reinvent manufacturing in many developed economies in order to balance the dependence on the service sector and to boost innovativeness of economies (for example, in the UK, where the economy is highly reliant on services, especially those internationally tradable). Less pronounced, but of high significance are the developments in offshoring of business support services. It was a result of the increase in international trade, application of technology to services, and special distribution of production processes (Wilson, 1995).

The history of offshoring of white-collar services is both associated with the structural change within economies (that is transfer of employees and value added from one sector to another), but more importantly it is the results of the evolution of services themselves.

The tertiarisation of economies means that services create the main portion of economic activities, while primary sector (e.g. agriculture or mining) and secondary sector (manufacturing) record much lower shares. The dominant role of services have been witnessed in many developed economies for decades. Recently, however, also the emerging economies and those considered as manufacturing hubs report similar values. In year 2013 the share of services in the domestic product in Asia exceeded 50% for the first time in history (Klimek, 2017).

The role of services, frequently measured as a share of employment in services, share of services exports in total exports and share of services in GDP, increased in major developed economies in the period 2000–2014 (Kundu & Lahiri, 2015). However, the average share of services in exports ranges from 16.46% for the period 2000–2010 in Germany to 40.27% for the period 2010–2014 in the UK. It means that the importance of services, especially tradable ones, varies in particular economies and is still linked to the national peculiarities.

Nonetheless, this is not only about the macroeconomic picture. This is also a business case presented by the largest or the most valuable corporations. Recently, the firms with highest market values are rather in services (e.g. Amazon, Alphabet, Facebook, Netflix etc.) than in manufacturing. This also illustrates the broader trend that many manufacturing firms are redesigning their strategies to become more like service firms. A jet engine manufacturer, instead of selling jet engines, charges fees for the work done by the engines. In the same vain, car producers pronounce that their future is to provide mobility instead of selling physical products. Such a trend is called servitisation.

Several decades back, the trend was opposite, when self-services were replaced by cheap products. Gershuny (1979) brought cases when laundries were replaced by washing machines, and cars replaced the public transport. Nowadays, the technological and social changes lead to the emergence of new services replacing products. All in all, it confirms that services are multifaceted phenomenon.

The changes also take place in business services. In line with Miles et al. (1995), we argue that computer industry is a good example of a "service-product-again service" evolution. In the onset of computers, they were too large and too expensive for individual firms to afford them, so computing services were acquired. The technological change brought smaller and cheaper computers to most companies and meant revolution for them. The next step in the evolution was outsourcing of computer services to specialised providers. The beginning of large scale outsourcing of IT services is dated back to 1989, when Kodak decided to use an external provider and in literature the modern IT outsourcing was named "Kodak effect" (Vedder & Guynes, 2013). The case of the computer industry is also illustrated by selling by IBM (a company behind the development of personal computers) its hardware division and focusing on software.

MNEs due to investors' expectations, realisation of global opportunities, and immense competitive pressure are prone to implement flexible solutions helping them to achieve corporate goals. They also need to tap the talent pools in various parts of the globe. Placing some or most of tasks abroad in the form of offshoring have been one of the main trends within large international firms in recent decades. The role of offshore outsourcing and captive offshoring can be considered as an integral element of global work arrangements within MNEs, which allow them to get work done (Sebastian Reiche, Lee, & Allen, 2019).

The evolution of services offshoring can be divided with respect to scale, scope and complexity into five waves (Figure 2). The history of offshoring of back office activities is dated earlier than the common application of computers and modern communications tools. When American Airlines established their Caribbean Data Services in 1983 in the island of Barbados, the airline tickets for processing were delivered by planes and the digital results were sent back by a satellite (Metters & Veerma, 2008). The selection of Barbados was not only related to the relative proximity to the US, but rather its past as a British colony. It means speaking the same language and sharing the same heritage, when it comes to legal environment. The issue of a colonial past is relevant for many destinations of offshoring. Besides Barbados, which is still a part of the Commonwealth, there is also India, but even more evidently Philippines, which were the US colony.

A cultural proximity is very important for offshoring of services, which require frequent interactions between people in various destinations. Speaking the same language and working in the similar legal environment make such arrangements easier, cheaper and less risky. The issue of the cultural proximity can be also extended to CEE. It rather does not take the form of the language proximity (however,

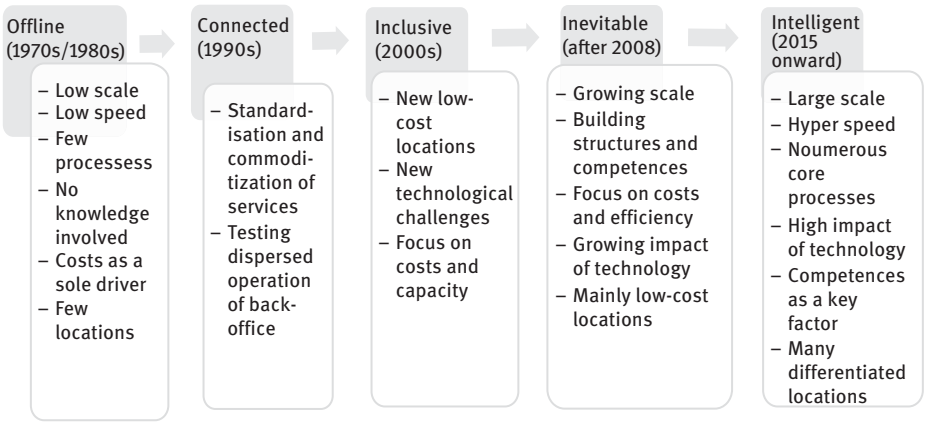

Figure 2: Waves of services offshoring (source: own elaboration).

German is relatively frequently used at ABS units in CEE), but rather fact that most of the economies belong to EU and share European values.

Even earlier, in the 1970s the paperwork was sent to the Caribbean by a ship and the turnover rate was around 4 weeks (Wilson, 1995). It meant that firms were very enthusiastic to place some mundane work in low-cost locations. The activities conducted there cannot described as knowledge-based or knowledge-intensive. They do not require reasoning, but rather repeating routine tasks. Therefore the critique by Freeman (2000) of bold claims that the "knowledge based industries and services" are crucial in ending postcolonial dependency of Barbados is fully justified.

According to Abramovsky, Griffith and Sako (2004) "in the 1980s, business services were not a very significant industry, since most of the tasks now outsourced to business services firms or plants were carried out within manufacturing or non-specialised plants or offices." From the very beginning of offshoring operations the main focus was on captive form of delivering services. It was rather that MNEs moved some operations to units in countries with process advantages. However, the offshore outsourcing was also present in the first wave and firms specialising in processing transactions for foreign clients emerged. So there was prevalence of in-house sourcing. However, the rise of complexity of processes and knowledge necessary to execute them contributed to the growth of domestic and international outsourcing.

The second wave means the beginning of applying computers in offices. It shaped the businesses in particular locations, but importantly led to new possibilities in international configuration of activities. It meant that non-core office activities could be easier disconnected from the headquarters. There have been several important locations for offshoring of services. Again, Barbados was one of them thanks to the favourable government policies and economic stability. The subsector named "Data processing" was the dominant in the island with the largest share of employment

(Freeman, 2000). The same study shows that this was also the subsector with the share of employment of women reaching 90%.

The rise of offshoring of services is directly related to the standardisation and commoditisation of services. To make the service offshorable, it was necessary to design it in a standard way, which could be replicated by workers in a very distant location. Still in the 1990s many leading financial institutions in the US did not have the process map presenting basic procedures and they were prepared as a part of a research project (Frei & Harker, 1999). Moreover, the nature of business services was that they were idiosyncratic to particular firms and particular workers within firms (Metters & Veerma, 2008). This individual character made it impossible to replicate services easily and made it necessary to employ workers that have the tacit knowledge in each location.

The implementation of international professional standards and widespread of technological standards (spreadsheets, enterprise resource planning) allowed for unifying execution of many services across the world. Less stressed element of the revolution was introducing a similar curriculum at education systems in many countries. It led to training future employees possessing knowledge applicable to international firms and possibility to execute the business processes in various locations. Especially in the beginning of the offshoring of white-collar jobs, the human factor was crucial in the successful transfer of business services outside a home economy.

The increased possibility to provide services remotely was enabled by improvement in communication technologies. First of all people could be connected, virtual teams could be established, large amounts of data could be easily transferred between economies. All these combined with improvement in managerial possibilities to oversee activities conducted in remote destinations led to geographic dispersion of services provisions.

The presence of accountants or payroll specialist was not inevitable in the headquarters for the sake of information exchange or control. More important became receiving results of their work. As a result, many organisations (but still mostly the largest) leveraged shared services. The idea in that period was integrating operations of MNEs in different countries into centralised regional SSC (Davis, 2005).

In the third wave, the technology was a crucial element. It enabled many services, but at the same time created some challenges. The necessity to ensure that computer systems will work correctly once there is a change from year 1999 to 2000, led to the growth of the Indian IT sector. Fixing, the so called, “millennium bug” was simple and mundane. However, it led to other business opportunities. This wave of offshoring development is named inclusive, because resulted in adding new countries to the list of offshoring destinations. Besides India or the Philippines, it was the period of first investment projects in Central and Eastern Europe, or selected South American and African countries.

This is also reflected by the percentage of firms from developed economies that offshore business functions. Until year 2000 less than 10% of American firms

offshored ABS such as IT or administration, however in year 2007 the value reached almost 50% for IT, about 40% for product development and more that 30% for call centres and administration (Massini & Miozzo, 2012). The same study provides evidence that European firms were much constrained when it comes to offshoring and although the levels before year 2000 were similar to those of the US firms, the values in year 2007 reached more than 30% for IT and product development about 20% for call centres and administrative services. This was also a period of unprecedented growth of offshore outsourcing as foreign providers acquired skills to provide services to large MNEs. This was also in line with the development of IT and the need for expertise in this field.

From the perspective of ABS, the main factor of development was relying on specialised suppliers (sometimes within the boundaries of an enterprise) of headquarters services. It was directly associated with the growth of outsourcing of business services. This was also a period of the dynamic growth of the leading Indian BPO firms like Tata Consulting Services, Wipro or Infosys (in spite of the fact that their history is much longer).

Still in 2002 the business process offshoring was described as "a nascent industry" worth between 32 and 35 billion dollars, what made around 1% of the tasks that could be performed remotely (Agrawal, Farrell, & Remes, 2003). Therefore the dynamic growth of the industry was expected. According to Lewin and Peeters (2006), the offshoring of white-collar jobs was still in the early stage, nevertheless it was not solely aimed at reducing cost, but rather at building new competitive advantages through sourcing and managing human capital internationally. The future role of offshoring has been already highlighted. According to Dossani and Kenney (2007, p. 787) "services offshoring has the potential to reorganise the global economy more profoundly than did the movement of manufacturing from developed to developing countries".

However, this was also a period, when the scale of offshoring became so significant that attracted attention of stakeholders in home and host countries. The voice of analysts expecting millions of jobs to be transferred from the US had also political implications, however there was no negative change in the legislation or attitude of companies towards offshoring. It was actually a period of flourishing opportunities supported by the positive economic outlook in the 2000s. According to Garner (2004), the number of service jobs in the risk to be offshored was 14 million, while about 96 million were unlikely to be offshored in year 2000.

The fourth wave started when the Great Financial Crisis hit in year 2008 and companies started to look for the cost reduction in a more aggressive way. Ideally, all non-core activities should be offshored or outsourced. This resulted in a large wave of offshoring projects to lower-cost economies. When the economic conditions improved, the trend has not been reversed, but even strengthened by adding more complex activities to the list of possibly offshorable activities.

This wave could be also perceived as more globally oriented. There were three main factors contributing to the global growth of outsourcing and offshoring of business services: globalisation, development of knowledge-based economies, and impact of ICT on business transformation (Zorska, 2007). The positive impact of the internet penetration in an economy on the growth of international trade in services has been confirmed by Freund and Weinhold (2002). According to their estimation, the 10% increase in internet penetration led to 1.7 percentage points increase in exports and 1.1 percentage points increase in imports.

The growth of offshoring of knowledge intensive services over the past decade has been also related to the decoupling of production and consumption of services (Mol & Brandl, 2018). It means that a very important limitation of traditional services can be removed and thus increases the propensity of firms towards offshoring. This also helps to overcome the issue of time differences, as modern business services can be "stored" within the ICT network and accessed anytime and anywhere.

The word "intelligent" in naming of the fifth stage pertains both to the rising complexity of processes and technological sophistication. The recent wave of offshoring has been more than ever about using the technology to profoundly transform MNEs. Indeed, the technology has played a crucial role throughout the history of white-collar jobs offshoring. It enabled to move very complex functions abroad (Figure 3). Moreover, the technology has never been as integrated and overwhelming the business support functions as it is now. Out of the five milestones in the development of the offshoring, the last one seems to have the largest implications. During the first four stages, the offshoring was rather understood as moving abroad activities and jobs. In the last stage activities are still moved abroad, however new jobs in a host economy do not have to be created. The tasks in the fifth stage can be conducted by bots (specialised software) with a minimal input from human beings.

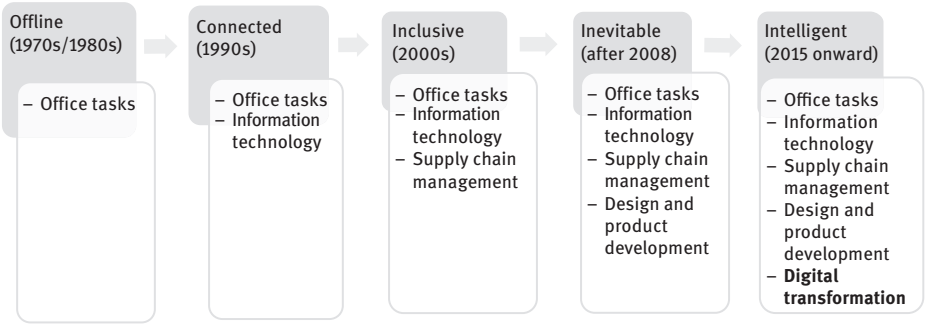

Figure 3: Waves of service offshoring by functions (source: own elaboration).

This again happens thanks to the standardisation, machine-oriented design of processes, and widespread use of technology. If we add the truly intelligent solutions based on artificial intelligence, a bot does not only execute the programmed tasks, but also "thinks" how to perform them in the most efficient way. More and more firms apply robotic process automation solutions and it is really difficult to find a single case of a company that stepped back. Even though the application of automation is not easy and there are many failures, it does not mean that firms are resigning after initial problems. The situation of offshoring may be significantly altered by the rising importance of automation of white-collar tasks.

1.3 Potential economic gains due to service offshoring

Offshoring of services is the economic phenomenon, which is highly divisive when it comes to the conclusions about its impact on a home economy. Supporters of offshoring claim that besides improving productivity and profits of firms engaged in offshoring, it also brings positive outcomes for workers by increasing wages and employment.

The opposite perspective on offshoring underlines millions of jobs transferred abroad and the race to the bottom when it comes to wages. Unfortunately, the conclusions regarding offshoring differ frequently due to the methodology applied. In this chapter we do not take an unequivocal position, but try to present various approaches and comment on the research methods that were applied.

Countries, which are prime locations of offshoring, are pictured as "winners" of the globalisation and fragmentation of business processes. Thanks to various advantages the countries are able to attract the footloose global companies, which will create thousands of jobs in shining skyscrapers. This would be an idealistic picture of the phenomenon. Conversely, the "winners" of offshoring from emerging countries are accused that they are "stealing" jobs from developed economies.

Although outsourcing and offshoring of services attracted less and later attention of policymakers and the public than offshoring of manufacturing (e.g Feenstra and Hanson, 1992; Bernard, Jensen and Schott, 2006; Ebenstein, Harrison, McMillan and Phillips, 2014), the concerns are touching new spheres, like data protection, privacy, quality of human capital or even the aspirations of the entire social groups. The white-collar jobs have been associated with the middle class in the industrialised economies. The shift of white-collar jobs towards emerging economies means also offshoring the prosperity of the middle class.

There are positive effects for a home economy due to offshoring of services. "Service offshoring has important policy implications because of its relevance for both service and manufacturing output as well as for connecting production stages in GVCs" (Atkins, Gilroy, & Seiler, 2019). A study of an early stage of offshoring

found that in the period between 1992 to 2000, the service offshoring increased labour productivity of 10 per cent in the United States, while offshoring of manufactured goods contributed only to 5 per cent growth (Amiti & Wei, 2006). A recent study for the German economy confirms that offshoring of services increases employment in firms (Eppinger, 2019). Moreover, the results were positive both for newly offshoring firms and those engaged in the process for many years.

Consequently, the study for the UK provided no evidence that international service outsourcing is harmful for the jobs in the economy (Amiti & Wei, 2004). They argue that thanks to rising efficiency due to outsourcing, the companies can increase employment in the same sectors. However to confirm this point, they employed broadly defined sectors. It means that when the sectors are narrowly defined there might be net loss of jobs, however then new jobs are created in a similar sector.

The economic outcomes of offshoring vary across economies. It is more than a simplistic division between advanced and emerging economies. Even within the group of advanced economies, there are those which gain due to being simultaneously a source and a host of offshoring processes. A good example is the UK, where many firms move processes abroad, but at the same time many foreign firms offshore their activities to the UK (Abramovsky, Griffith, & Sako, 2004). However, the total number of jobs cannot be the only indicator. It is important to investigate skills, roles and geographic distribution of the jobs relocated abroad and attracted to the economy.

1.4 Potential economic losses due to service offshoring

There is ongoing debate about the negative impact of offshoring of white-collar jobs in developed countries. Especially in the US, where many American firms and even public institutions offshored jobs, chiefly to India. Especially the latter case became a political issue. The discussion in the US gained momentum around year 2002, when some of the US states considered bills forbidding outsourcing of the public services to foreign providers (Kirkegaard, 2003). However, the discussion returns in almost every strategic discussion about the economic policy in the US. Offshoring of manufacturing processes to China and the perceived injustice in the bilateral trade relations, was the main theme of the presidential campaign by Donald Trump. Later it took a form of an open trade war between the two economies. Somehow in the background of the discussion was also offshoring of white-collar jobs, but this time the target was India.

Which countries are the main sources of offshoring of business services? The intuitive answer should be that developed economies are sourcing their services to less developed economies. There are also millions of people in jobs threatened by the offshoring. According to van Welsum and Vickery (2005) around 20% of total employment in selected OECD countries could potentially be affected by global

sourcing of services. For German manufacturing firms involved in services offshoring there was a decrease in the demand for white-collar workers between 0.1 and 0.16 percentage points in the period 1995–2004 (Winkler, 2013).

The evidence for Austria confirms that outward FDI to lower-cost countries of Eastern Europe hurts both employment and wages in the home economy (Onaran, 2012). The results of the analysis were robust both for low-skilled and high-skilled employees. However, there was one positive effect for services' wages due to the scope and skill-upgrading effect. It means that it is difficult to establish a direct link between offshoring and economy-wide effects. Moreover, the positive effects in services are in line with the expectations that offshoring will promote activities of higher value in a home country, while the lower-value operations may be offshored.

But this is not the case for all rich economies. The Japanese firms, which occupy an important position in the global market, are quite reluctant to offshore service tasks (Tomimura, Ito, & Wakusgi, 2013). This may be partly explained by the expected gains from relocating operations abroad. Offshoring of physical goods has been confirmed to have a positive impact on the productivity of firms, while the impact of services offshoring on the productivity of Japanese firms has not been unambiguously identified (Todo, 2013).

The issue of offshoring of business services is also important because of the relative ease of moving services abroad comparing to the manufacturing operations. Services can be relocated at lower sunk costs. For example, HSBC, a bank headquartered in the UK, decided to open at least 15 global service centres employing around 25,000 people in Asia due to low costs of investment and substantial savings in high-cost economies (BBC, 2005). The cost of setting up one service centre was about USD 20–30 million, while the bank expected savings of USD 20,000 per job offshored.

The cost of abandoning service operations in a home economy are relatively lower comparing to closing down a production unit. Moreover, the measures of services and manufacturing are different, what means that services are bytes of data instead of tonnes of goods. White-collar offshoring can also occur more rapidly as the progress in IT is faster than that of manufacturing. It means that we have experienced the erosion of manufacturing in many industrialised economies for decades, however relocating the white-collar jobs has been highlighted only recently.

When the employment is divided into three sectors: manufacturing, low-skill services and high-skill services, the positive impact of offshoring on the job market is the most significantly reduced in the last category – 38.3% (Burnett & Cutler, 2018). They argue that total employment in an economy may rise due to offshoring, however the large loss of permanent jobs in high-skilled services should be addressed by policymakers. These results are in line with the fears related to the loss of white-collar jobs in advanced economies. Such a large loss of permanent jobs in professional services may impact the middle-class, as such services have been associated with it.

A frequently applied method of detecting the impact of offshoring on a domestic job market is the analysis of changes in employees' occupations and incomes. If there is a positive change in any of these values, it proves the positive effect of offshoring and vice versa. However, the loss of jobs due to offshoring is difficult to measure (Garner, 2004). Chiquiar, Tobal and Yslas (2019, p. 188) put it this way "the lack of widely accepted measures and definitions of service tradability, the absence of high-quality data on service trade flows and the difficulty of measuring import competition at the occupational level are hampering progress in the literature."

The negative effects of offshoring have also been investigated using the level of tradability. When the tradability of services declined, which means less offshoring, the effects on wages and employment switched from negative to positive (Tobal, 2019). Tradability should be linked with the electronic transmission of services. Indeed, any service that can be transmitted via communication tools is prone to being offshored (Metters, 2008).

When we analyse the index of propensity to offshoring, not low-skilled jobs are in top positions, but rather those requiring some skills (Table 1). The analysis is

Table 1: Top 15 jobs by the propensity to offshoring (source: own elaboration based on Blinder, 2009).

Occupation	Propensity
Computer programmers	100
Data entry keyers	100
Electrical and electronics drafters	98
Mechanical drafters	98
Computer and information scientists, research	96
Actuaries	96
Mathematicians	96
Statisticians	96
Mathematical science occupations, all other	95
Film and video editors	95
Medical transcriptionists	95
Telemarketers	95
Telephone operators	95
Proofreaders and copy markers	95
Numerical tool and process control programmers	95

limited to the United States, however it is important for understanding the situation in offshoring, as the economy is main source of FDI in business services in many locations, including India, the Philippines or CEE. The offshorability does not depend much on the level of qualifications, but rather on the use of technology and communication tools. In the category of offshorable jobs, there are actually those that are included in the offshoring of ABS. Out of 15 jobs, 11 can be included in the business services. It means that belonging to the business services category makes the job offshorable.

The results for an economy due to offshoring have been well documented in the literature, however the gains and losses are not equally distributed within the economy (Brainard & Litan, 2004). It means that certain category of employees or certain areas are net losers, because they are directly affected and the profits are spread among other categories of citizens.

In spite of many studies it is difficult to state equivocally that offshoring of jobs is harmful for the job market in a home country. Even if there is a loss of jobs in one category of services, it may be offset by the rise in another category. In the case of the US IT market some low-skilled IT jobs were lost, but on the other hand more jobs requiring higher skills were created (Kirkegaard, 2003). Moreover, it is not possible to confirm that some occupations were lost only due to the economic situation, but also the technology change should be included (Kirkegaard, 2003). Even if some numbers of jobs affected by the offshoring are published, they are far from being accurate. According to various estimates in the beginning of 2000s there were between 150,000 and 250,000 layoffs a year due to offshoring (Brainard & Litan, 2004). Later studies confirm only slightly adverse effects of offshoring of services from the US to China and India (Liu & Trefler, 2011).

There are also arguments that receiving many offshoring projects does not bring solely positive results to a host economy. Main challenges of offshoring include income inequalities, uneven development, a gap between rural and urban areas, constrains in infrastructure and access to social services (Bardhan, Jaffee, & Kroll, 2013). On top of that, the positive impact of service offshoring on host economies may be overestimated. In the case of South Africa, which focused on service offshoring as a source of development, it was disappointing to see "'relatively low-skilled, low-technology activities with limited scope for cumulative productivity increases and negligible potential for generating foreign exchange" (Tragena, 2010, p. 21).

There are various ideas, how to limit the offshoring of jobs. Simple legal restrictions may not work and they may be wrongly addressed. Actually the issue cannot be how to stop the creative destruction, which is the foundation of the innovation. The real challenge is how to adapt the local job market to the dramatic technological changes occurring every day.

There is, however, the other side of the offshoring of white collar occupations. Most of studies applied the approach of services being transferred from rich to poorer countries. The missing piece is the potential transfer of new tasks between

rich economies. It means that estimated net loss due to offshoring may be much smaller. Especially when we analyse large developed economies being large exporters of services.

1.5 Contemporary forces shaping business services offshoring

There have been numerous changes in the global economy in recent years. From the perspective of MNEs, the large number of cross-border or even domestic mergers and acquisitions induced business transformation. Frequently, after joining two companies together there was a necessity to combine their departments of finance or HR. A frequently chosen solution was one of the offshoring modes, such as shared services or BPO. Besides removing duplicated functions within the new structures of the organisation, it should also lead to increased efficiency and lower costs.

Anyway, after the large growth of offshoring activities by MNEs, due to changes in the global landscape, there are concepts of reintroducing some processes into a home economy. Indeed, the issue of reshoring or backshoring is on the rise. Again, the changes are more profound in the case of manufacturing. Trade barriers, which were lifted after the Second World War (regional free trade agreements such as NAFTA, universal trade agreements such as WTO, or integration areas like the European Union), started to rise again recently (renegotiation of NAFTA, lack of progress in global trade talks, Brexit). It all has a big impact on international trade (and supply chains) in the case of physical goods.

The situation is slightly different when we analyse efforts of WTO in services. General Agreement on Trade in Services (GATS) was a result of trade negotiations of the Uruguay Round and entered into force in the beginning of 1995. However, according to some studies, the liberalisation promised by the agreement has not been achieved (Francois & Hoekman, 2009). Anyway, the rise of technological capabilities and intangible nature of knowledge-based services make restricting their international exchange more difficult. However, there have been recently introduced barriers to trade in services, for example limits of visas for natural persons providing services abroad, and they should be included in the design of global sourcing strategies.

The new context of offshoring has been recently provided by the political environment. For decades, the rise of globalisation was shaping international cooperation. Since a few years, with the milestone in year 2008 when the Global Financial Crisis hit, the sentiment towards globalisation is much more reserved. Actually the mainstream politicians build their political capital on promises of less globalisation and more protectionist approach. Donal Trump, the president of the United States – the main economy engaged in offshoring of manufacturing and services activities, regularly delivers cold rhetoric regarding the globalisation. There are also moves towards more isolationism of the US. China has been the main target when it comes

to manufacturing, India is a natural choice, when it comes to the white-collar jobs. However, due to geopolitical issue, the relations with India has been officially kept in the correct shape.

European integration is also weakened by the Brexit. On the one hand, the British economy is an important element of the global supply of services, but on the other, the economy is heavily dependent on services. When it comes to the importance of services, special attention should be paid to the business support services and financial services. However, due to Brexit thousands of jobs has been already lost. It also means the shift of jobs to other European economies is inevitable.

There is also a mounting pressure on largest MNEs to keep as many jobs as possible in their home economies. The negative publicity of offshoring has its implications in perception of the business issues by managers (Maloni, Swaim, Mutlu, & Wermert, 2019). There have been many businesses, which do not support or are even against more offshoring in the global economy. In general, from the business perspective, there is a more cautious approach towards offshoring, as the opposition towards relocation of processes is broad.

However, the situation is so dynamic that it is difficult to predict the ultimate effects of the changes. Already in the beginning of the 21st century Sambharya, Kumaraswamy and Banerjee (2005) concluded that "only those MNEs that can formulate and effectively implement strategies and structures consistent with these new demands for openness, transparency, and trust will survive and thrive in the increasingly borderless and time compressed age of IT and the Internet." Nowadays, the rising importance of the dynamically changing technological environment puts more pressure on MNEs and they need flexible solutions and expertise. Therefore the rise of advanced business services, which can be offshored and outsourced, fit those conditions perfectly.

2 Conceptualisation of advanced business services and offshoring

2.1 Advanced business services and knowledge intensive business services

White-collar jobs have been considered as based on specialised knowledge. Therefore it is natural to refer to them as knowledge-intensive services (KIS) or knowledge-intensive business services (KIBS). KIBS have been defined as "mainly concerned with providing knowledge-intensive inputs to the business processes of other organisations, including private and public sector clients" (Muller & Doloreux, 2009). Probably, the most frequently used characteristics of KIBS have been proposed by Miles et al. (1995), who define them as:

- "rely heavily upon professional knowledge;
- either are themselves primary sources of information and knowledge (reports, training consultancy etc.);
- or use their knowledge to produce intermediary services for their clients' production processes (e.g. communication and computer services);
- are of competitive importance and supplied primarily to business".

The definitions were prepared over a decade ago and need an update taking into consideration the progress in technology and changes in the strategies of companies towards offshoring and outsourcing of knowledge-intensive tasks. Moreover, new types of business services emerged and were not included in the definitions. Additionally, KIBS have been treated as a part of "production process". There is a natural connotation with the manufacturing sector, what means that services are subordinated the production processes. Already in the late 1970s and early 1980s the role of so call higher-order producer services (HOPS) became crucial for Western economies (Coffey, 2000). Anyway, it is possible that the "production process" is understood as any kind of business activity that is aimed at making something, thus it can be also a service.

Miles et al. (1995) point at potential sources of the rise of KIBS. Among others, the business services firms are results of "spin-off" of services from larger organizations. This is related to the specialisation of new firms and possibilities to offer their services to wider range of clients, not only internally. Moreover, the changes in firms lead to structural reorganisations and some non-core activities were contracted out.

KIBS have played a significant and documented role in the development of economies, regions, cities, and companies. For instance, broadly defined business services have positively contributed to the competitiveness of other enterprises (Commission of the European Communities, 1998) and they have also become key

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advantages of companies operating in other industries. KIBS firms have also been very innovative because of high average innovation intensity (Kam & Singh, 2004). Some also argue that improving competition conditions for the business services firms may have positive impact on the global position of the European economy (Roberts, 2003).

The definition and approach of Miles et al. (1995) does not encompass reorganisations that are aimed at consolidation of services within firms. These are frequently traditional professional services like accountancy, marketing or legal advices, which are not technology-based. This is the main characteristics of captive offshoring units. They were not originally technology-based, but they were technology-enabled. It means that thanks to the technology, firms could move support activities closely related with core-activities to distant locations. Moreover, they could organise a unit that serves function to many international locations.

KIBS and white-collar services are not perfect substitutes. Especially, when administrative or financial functions are embedded into a firm and spread across many units. What has changed recently, is that many of the business functions has been centralised and became the subject to dynamic technological changes. It all led to creating the new categories of business units, functions, and tasks. Therefore, it is necessary to introduce a new conceptual approach, which adapts benchmark understanding of KIS and KIBS to business reality.

Also a new naming is required to distinguish from the traditional understanding of business services with the high knowledge content. The notion of advanced business services (ABS) best describes the specifics of modern business functions and their organisation with respect to international division of labour. In the structure of ABS we can distinguish both domestic and foreign-owned enterprises. The majority of firms are foreign-owned, however there are also domestic firms that focus on establishing services centres.

The definition of electronic commerce can be also used to contextualise ABS. According to WTO (2020) the electronic commerce is understood as "production, distribution, marketing, sale or delivery of goods and services by electronic means". ABS could be also included in this very broad definition, however our focus here is more about the flow of data globally.

There have been the evolution of the notion of KIBS. It happened mostly due to the new opportunities for trading information-driven services across borders. Originally, KIBS were understood as local businesses, capable of creating knowledge, are selling their services to other firms. Frequently, there was a need for face-to-face contacts. Since the advancement of technology and emergence of new forms of organisations of firms, KIBS are undertaken within MNEs.

In the inception of the discussion on KIBS, they were seen without the context of international flows. Moreover, the analysis of location of ABS was predominantly focused on the geographic or regional development point of view. However, the rise of the communication technologies and improvement in management practices put

KIBS into international context through offshoring. Actually, offshoring was a great milestone in the development of KIBS. Therefore, it is important to refer to KIBS that are enabled through offshoring as ABS. Despite the fact that ABS share many features with KIBS, it should be pointed that not all offshore supporting functions are knowledge-intensive. Moreover, the context is changing due to the automation and introducing artificial intelligence.

After studying the literature related to KIBS, it is surprising that the role of MNEs and FDI has been almost neglected. In most of the contributions there is no link between KIBS and international operations of MNEs. Even if the interactions between them are put into the context, it is rather assumed that KIBS firms and MNEs exist next to each other. KIBS are frequently treated as a facilitation tool for international business. We argue that KIBS firms would not exist without MNEs not only as clients, but also as providers. KIBS is not only about outsourcing or offshore outsourcing, but more importantly about captive offshoring. It means that MNEs do not only purchase knowledge-based services from external partners, but produce them within their own boundaries. We assume that KIBS are results of international operations firms, therefore it is necessary to analyse them in connection. We think that thanks to such an approach we will fill an important gap in the literature.

There may be a discussion if ABS are synonyms of KIBS. We argue that yes, but several distinctive characteristics of modern business services have to be included:

- International context,
- Footloose nature,
- Codified knowledge,
- Prone to automation,
- Enabled by technology,
- Embedded into business operations.

2.2 Classification of business services

The phenomenon of business services is not new in the economic and business analysis. Anyway, their understanding and thus classification is ambiguous. It brings numerous challenges to measurement and statistical analysis of services (Klimek & Sass, 2019). The issue of classification of services is mainly related to their intangible nature and dynamic evolution of their provision. This is particularly the case for internationally tradable services and those of high knowledge content. Delineating between various categories of services is then necessary to analyse business operations of firms. Moreover, the classifications of services has been frequently based on the

methodology built for classifying manufacturing operations (Silvestro, Fitzgerald, Johnston, & Voss, 1992). They distinguish:

- **Professional services**,
- Service shop,
- Mass services.

The top category above is characterised by, among others, high input of human efforts, long contact, and discretion. However, thanks to the organisational and technological developments in recent years, the understanding of professional services does not have to include those elements, as some services can be executed without personal contacts, while the customisation can be achieved by using commoditised modules.

The use of official statistics in understanding of offshoring of knowledge-intensive services is of limited help, as advanced business services do not perfectly fit into any category of business services. From the perspective of classification, ABS are hybrids of several categories of services. The approach by analysts and officials vary between economies. Even in the case of V4 economies, there are significant discrepancies in naming and methodologies applied to comprehend these services.

Consequently, we aim at bringing the official classifications as close as possible to the business reality. The starting assumption about the classification is that it should bring the context of international tradability to knowledge-intensive business services. Thus, modes of international provision of services based on the regulations of WTO are linked to the operations of ABS firms (Table 2). Knowledge-intensive services, due to flexibility and complexity of their provision, do not fit only in one mode. The most relevant mode to deliver ABS is "Cross-border supply", which is directly related to the transfer of services across borders. This is the dominant mode of

Table 2: Four modes of supply of services and their relevance for offshoring (source: own elaboration).

Mode	Description	Relevance for offshoring
Cross-border supply	**Flows of services from one economy into another economy**	**High – the main mean of transmission: telecommunications**
Consumption abroad	Service consumer moves from one economy into another economy in order to be served	None
Commercial presence	Service supplier from one economy establishes its presence in another economy in order to provide services	Low – most operations of ABS units are designed to be delivered outside a host economy
Presence of natural persons	Persons from one economy enter into another economy in order to provide services	Low – only in rare cases employees of ABS units move to another economy to provide services

offshoring units, which provide services to clients in other economies. It does not explain the operations of service centres, but rather focuses on the link between a service unit and its clients. Thanks to possibility of transferring services across borders it was possible to established centralised units, which can deliver their output to almost any place in the world. This is enabled by the communications links.

To some extent, firms providing ABS operate in a host economy to be closer to clients. The establishment of a company abroad (mode: "Commercial presence") is typical to firms providing outsourcing solutions and their aim is to follow customers. Large international service providers (e.g. Indian Infosys or French Capgemini) have their units in the key markets for their customers. When providers of services send their employees to work on assignments abroad, it is directly related to the mode: "Presence of natural persons". Those two modes are frequently applied by the same group of firms belonging to the offshore outsourcing category.

Before proceeding to details of the taxonomy of ABS, it is crucial to present their position within services. In doing so, the key approaches to the classification of services will be presented. According to the benchmark International Standard Industrial Classification (ISIC) there are four main categories of services:

- Trade, restaurants and hotels,
- Transport, storage and communications,
- **Finance, insurance, real estate and business services,**
- Community, social and personal services.

ABS can be considered within the third category above. However, the group is much broader, so ABS constitute merely a subset and require introducing further features allowing to distinguish them from other business services.

ABS, but also business services in large, have been considered as auxiliary operations to key corporate function. From the business perspective, it is important to distinguish two types of functions: core activities and support activities. The first group comprises of primary activities of an enterprise and yielding income (Eurostat, 2019). The same source enlists some of the secondary activities supporting the core functions:

- **ICT services**
- **Administrative and management functions**
- **Engineering and related technical services**
- **Research and development**
- Distribution and logistics
- Marketing, sales and after sales services
- Other support functions.

The top four types of services presented above are those included in the group of ABS. It means services of high knowledge content dominate the support activities. Moreover, they are subject to the vast internationalisation by applying arrangements allowing to deliver those services abroad either within or outside the boundaries of a firm.

Classification by the Eurostat (2016) divides knowledge-intensive services into four categories:

- **High-tech knowledge-intensive services**
- **Knowledge-intensive market services (excluding financial intermediation and high-tech services)**
- Knowledge-intensive financial services
- Other knowledge-intensive services

The services of our interest are present in the statistic classification in the first and the second group. However, we cannot treat the groups as directly corresponding to KIBS. Even within a short period of time there was evolution of approach towards business services (Table 3).

Table 3: Business services according to NACE code (Rev. 1.1) (source: own elaboration based on Eurostat, 2009).

NACE code
NACE code 72: computer and related activities
72.1 Hardware consultancy
72.2 Software consultancy and supply
72.3 Data processing
72.4 Database activities
72.5 Maintenance and repair of office, accounting and computing machinery
72.6 Other computer-related activities
NACE code 74: other business activities
74.11 Legal activities
74.12 Accounting, book-keeping and auditing activities; tax consultancy
74.13 Market research and public opinion polling
74.14 Business and management consultancy activities
74.2 Architectural and engineering activities and related technical consultancy
74.3 Technical testing and analysis
74.4 Advertising
74.5 Labour recruitment and provision of personnel
74.6 Investigation and security activities
74.7 Industrial cleaning
74.8 Miscellaneous business activities

The introduction of NACE Rev. 2 made significant step towards better encompassing KIBS in European statistics (Schnabl & Zenker, 2013). According to the Eurostat (2013) "the business services sector refers to the economic activities covered by NACE Rev. 2 Divisions 62, 69, 71, 73 and 78 and Groups 58.2, 63.1 and 70.2, and the enterprises or parts of enterprises that carry out those activities" (Table 4). The argument for treating the classification as a better reflection of knowledge-intensive services is dropping, previously listed, activities such as 74.6 *Investigation and security services* or 74.7 *Industrial cleaning*.

Table 4: Business services according to NACE code (Rev. 2) (source: own elaboration based on Eurostat, 2008).

NACE code
62 Computer programming, consultancy and related activities
69 Legal and accounting activities
71 Architectural and engineering activities; technical testing and analysis
73 Advertising and market research
78 Employment activities
58.2 Software publishing
63.1 Data processing, hosting and related activities; web portals
70.2 Management consultancy activities

An important element of the analysis should be adjusting the perspective to the heterogeneity of advanced services. Indeed, the perception of KIBS as homogenous has been considered as one of the flaws in the conceptual framework (Consoli & Elche-Hortelano, 2010). They argue that there are various occupational structures and skill requirements within KIBS sector. On the one spectrum of transactional services we can put basic software coding or call centre services, while on the other KIBS and back office functions (Massini & Miozzo, 2012). As a result of studying various classifications, we achieved an optimal approach to ABS (Table 5) and it is in line with the study presented by (Pina & Tether, 2016).

However, the available statistics still do not provide sufficient information on foreign ownership of KIBS firms, international flows of inputs and outputs by those firms. Therefore, their usefulness for investigating the recent trends in offshoring of KIBS is pretty limited. Also the methodology of calculating them is far from being robust. When offshoring has been measured using value-added data instead of traditional trade measures, its value was much greater (Atkins, Gilroy, & Seiler, 2019). It means that not only the value of service offshoring may be underestimated, but also its impact on particular economies.

Table 5: Types of advanced business services (source: own elaboration based on Pina & Tether, 2016; UK SIC 2003).

Accountancy (74.12)
Legal services (74.11)
Architectural and engineering activities (74.2)
Business and management consultancy services (74.14)
Software and IT services (72.2)
Specialist design (74.87/2)

3 Theory of offshoring of advanced business services

3.1 Specifics of theorising on offshoring

Offshoring of services is a younger sibling of the relocation of manufacturing processes abroad. It is directly reflected in the theoretical approaches to explaining both the tangible and intangible forms of offshoring. There are many similarities between them. In the beginning they were about cost reduction and access to capacity. Moreover, offshoring of white-collar jobs or offshoring of knowledge-based tasks, especially in its nascent stage, was rather about repetitive tasks, where the input of the brainpower of a human being was limited.

Anyway, both types of offshoring underwent significant changes making the technology, knowledge, process excellence indispensable elements. Therefore, the presentation of the theoretical framework will employ approaches created both for offshoring in general and those specific to knowledge-intensive services. Actually, the original theoretical background created to explain the manufacturing operations has been supplemented with elements directly related to services. Due to the rising complexity of tasks and greater expectations towards units providing the offshoring solutions, the divergence between manufacturing and services became wider.

We agree with Bunyaratavej et al. (2011) that the theoretical approach to offshoring of services requires an update and modification. It has been some time since their conclusion, but neither the universally accepted approach to the white-collar offshoring emerged nor the existing approaches coped adequately with the changes in the services offshoring. Especially the latter issue brings challenges to the theorists of economics and management. The inadequacy of the theoretical conceptualisation of ABS has been also pronounced for the recent developments in offshoring in both emerging and advanced Asian economies (Jones & Ström, 2018). This is due to the distinctive characteristics of the institutional, socio-cultural and corporate contexts in local economies, but also as a result of global interconnections.

The theoretical framework of offshoring of services, in comparison to manufacturing, is very different when it comes to the trade costs. Physical goods require costly and time consuming transportation, what makes them prone to trade barriers. When it comes to offshoring of services, it is much cheaper and faster to transfer the knowledge using the digital communication infrastructure. It is also more difficult to design trade policy tools that will stop the transfer of such services across borders.

Besides the implicit economic costs, there is a new set of externalities related to the issue of offshoring, such as the costs to the natural environment. The issue of pollution due to transporting the goods over large distance is very important. Such

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a situation does not concern the offshoring of services. Naturally, there is a certain level of emissions due to ABS operations, however it is present irrespective of the country of execution of the activities. Actually the modern technologies and commoditisation of the services reduces the necessity of personal contacts, so the emission due to long journeys should be also reduced. This is the element that requires more attention in the literature, and especially in the theoretical framework.

We also argue that there is no framework, which can accommodate both business and economic approach. From the idealistic point of view, an economic model of offshoring should put in a broader context the assumptions of a business model, which explains offshoring inside a business organisation. Such approaches can be observed in international economics and international business regarding some other issues, such as foreign direct investment. However, the theory of offshoring is so vague that is impossible to find the common ground. The goal of the chapter is to review recent developments in economic and business theory of offshoring and try to find the potential common elements.

Offshoring has been predominantly considered as the transfer of tasks from high-cost to low-cost economies. However, this should be considered in the broader context. The issue that should be addressed in the theory is the hybrid form of offshoring. By the word hybrid we mean a situation in which a firm, which specialises in the offshore outsourcing provisions for foreign clients, is also present in the home economy of the client. The flexibility of organising their operations due to the intangible nature of services means that they are present in various locations. For example, Indian companies, which provide services to clients in the United States have been attracted to invest in this economy in order to access knowledge sources, legitimate their presence in the industry and commission still more orders in the market (Ricart, Pisani, Agnese, & Adegbesan, 2011).

The issue, which is crucial in the theory of offshoring are time zones. The necessity to organise processes 24/7 makes it inevitable to fragment the provision of services in a few distant locations. One of the models adopted by Indian firms is to provide two shifts from India and the third one either from Mexico (for American clients) or from Africa (for European clients). The theoretical model provided evidence that under monopolistic competition, the existence of time zones reduces costs of services offshoring and makes such an option more profitable for firms offshoring the activities, but also for providers of the services (Kikuchi & Long, 2010). They also argue that the welfare effects of services offshoring may be negative due to the increased waste in firms becoming providers of offshore services. Anyway, offshoring due to the time differences may be profitable due to the necessity of organising process 24/7.

Conversely, relocating the tasks to a different time zone may increase welfare due to reducing the necessity of night shifts, thus avoiding higher costs and higher shift disutility (Matsuoka & Fukushima, 2010). In such a setting home country

workers do not need to work night shifts, but at the same time foreign workers in different time zone are also working during their day. However, there is a necessity that services delivered by a foreign provider are not consumed immediately (as for example call centre services). Such a situation is possible thanks to technology.

The arguments that time zones create business opportunities present only one side of the phenomenon. Actually, the time differences between economies may be treated as a form of a trade barrier. This is especially the case for provision of business services that require some level of interaction between employees in various locations. Time differences make such contacts more difficult or at least one side should adjust working time to the other side. This is the case for many Indian and Philippine call centres working night shifts in order to contact American clients.

In general, the time differences should be seen from two perspectives. First, the time differences between the headquarters and a unit providing services from abroad. Then it should be more favourable for a firm to establish a service unit in an economy of the same or similar time zone. Second, the perspective of contacts between a service unit and its clients – other subsidiaries of a MNE. Time differences are partly responsible for creating on particular continents the regional business centres, which operate in their time zones, thus the communication is easier. This is particularly important from the perspective of CEE as a host location. Sharing the same time zone with the large part of the Western Europe is one of the main advantages. This also partially explains why, in spite of much higher costs than in many Asian economies, offshoring of services is located in CEE. This also suggests why many American multinationals moved processes to CEE in order to serve the region of Europe and Middle East. On the whole, in spite of some theoretical proposition, the time differences should be still treated as an obstruction to the seamless provision of white-collar services across borders.

All in all, building a universal model of offshoring of advanced business services is not possible now. It is due to the vast diversification of services that are offshored, evolution (or even revolution) of ABS, and differences between key offshoring destinations. India is rather the case for outsourcing operations with the large role of domestic dominant firms. The Philippines focus on voice services and some niche services. V4 is rather a relatively high-cost location with focus on a spectrum of various business functions. There is also the issue of offshoring and nearshoring. India and the Philippines are selected by firms from distant locations (e.g. the US or the Europe). V4 economies are selected predominantly by EU firms looking for lower costs, but also sharing similar culture and institutional environment. Therefore, the models rather explain regional characteristics of offshoring in Europe or Asia, but do not comprehend the global perspective.

3.2 International economics and services offshoring

The phenomenon of offshoring of services has been well rooted both in international economics (IE) and international business (IB). Naturally, the level of analysis is different as IE tries to explain rather economy-wide determinants and results, while IB focuses on the decisions of firms and their international organisation. However, both approaches have common propositions and main objects – multinational enterprises. It is also argued that ABS are prerequisite condition of a truly global MNE (Jones A., 2005). In line with his idea, the level of multinationality of a firm should be considered through its corporate globality, which may help to understand the relationship between a firm and territorial spaces.

There are arguments that the theoretical approach used for international trade or foreign investment is not suitable for explaining the offshoring operations. According to Kshetri (2007) differences with traditional approach stem from: newness, which implicates lack or limited regulatory framework; more direct substitution for jobs in home economy; a higher degree of interactions between home and host country operations. Such arguments are amplified for offshoring of services that are knowledge-intensive.

When it comes to newness it is not only the fact that many aspects of white-collar jobs offshoring have not been sufficiently explained. It is rather connected to the fact that when the manufacturing activities are offshored, it means moving the existing processes abroad. In the case of knowledge-intensive business services, it is mostly about profoundly transforming or developing new activities abroad instead of at a home economy. The tasks are frequently created abroad from the very beginning and are also of a different nature – frequently optimised for machine execution.

The issue of international trade in services within MNEs has been already discussed in the late 1980s by Markusen (1987). His direct aim was not to discuss offshoring of services, however he brought the crucial elements for future understanding of the operations of MNEs with respect to services. First, he treated the producer services as jointly delivered to many units of MNEs. It meant that there were economies of scale and a two-plant enterprise was more efficient that two separate firms. His ideas well fit the current state of development of shared services centres, which are aimed at delivering services to numerous units of an enterprise. The ideal situation would be if all supporting services could be served from one central unit to all business units, thus sharing the costs.

One of the first approaches to conceptualise the offshoring of white collar jobs was also presented by Markusen (2005). Besides analysing home economy effects, he introduced factors influencing host countries. According to his approach, the offshoring is not harmful neither for a home nor host economy. Indeed, the positive effects of offshoring were analysed from the point of view of employees' situation in a home country once the processes had been moved abroad. Markusen confirmed

that workers made redundant due to offshoring might be employed in more productive industries in the home country. On the other hand, thanks to offshoring of white-collar jobs, the qualifications of host country workers will be utilised. Otherwise, they would not find suitable jobs and their skills would be wasted. We could generalise that in home economies there is room for companies offshoring processes and in host economies there is room for new foreign entrants. The job market will remain balanced.

The IE perspective on offshoring has been well explained by Grossman and Rossi-Hansberg (2008). Nonetheless, they have not focused purely on services, but introduced to the literature the notion of "trading tasks", which encompasses both material and service activities. It means that production processes can be divided into tasks and then fragmented internationally. Their theoretical framework allows for analysing the changes in factor prices in the home economy as a result of offshoring. They listed three effects related to offshoring: productivity effect (results of home country specialisation), the relative price effect (relatively cheaper goods) and labour-supply effect (impact on labour market). Trade is task may be also an important view on potential of robotisation of service tasks.

The specificity of trade in services has been explained by Markusen and Strand (2009). Their departing point was listing the barriers to trade in services, which make this trade different from the one in manufacturing goods. The barriers impose the mode of serving a foreign market with services. The authors did not focus specifically on ABS, but rather on any type of business services. Importantly, they took into consideration FDI and the role of MNEs in the international flows of services. Their study enriched understanding of MNEs with respect to services. One limitation is the they did not distinguish between captive offshoring and offshore outsourcing.

Grossman and Helpman (2002) focused on the contracting environment to explain decision about outsourcing to the North or South. Generally, outsourcing contracts are incomplete, with limited possibilities to verify the investment by partners. Such a framework could be also extended to offshoring to locations differentiated by the quality of the legal environment. This is associated with the risk of offshoring arrangement. The fixed costs of establishing a service unit abroad are much lower in comparison to manufacturing operations. However, the main risk is associated with data that are processed by the offshore units. Therefore is some industries, like banking, there are limited possibilities to contract out some processes due to the risks and legal barriers.

3.3 International business and service offshoring

From the IB perspective, the academic attention on the issue of offshoring has taken off after 2000, with numerous publications in the period 2010–2014 (Pisani & Ricart, 2015). This was also the result of the high tide of offshoring projects, as well as the

attention of policymakers and the general public. However, many explanations of the offshoring phenomenon can be described as ad hoc.

When analysing this strand of theory, the starting point should be the OLI paradigm by Dunning (1988), which explains the international expansion of a firm using the dimensions of ownership, location and internalisation. The Dunning's original model has been designed for manufacturing firms, therefore including a dimension specific to knowledge-intensive business services was bringing the model to the business reality. Graf and Mudambi (2005) in their analysis of offshore outsourcing added human capital to the benchmark model.

Moreover, the OLI model treats a firm's advantages in a static way, while the current global business environment requires dynamism and creation of advantages is a result of cooperation within a network (Contractor, Kumar, Kundu, & Pedersen, 2010). Graf and Mudambi (2005) besides factors pertaining to locations of outsourcing, also included qualities of firms active in foreign service operations, such as outsourcing objectives and experience. However, in the literature the dominant empirical approach uses the firm-level or multiple levels of analysis, but not a multilevel approach (Pisani & Ricart, 2015).

The framework of offshoring has been created to answer the question about what brings firms to move some of their processes abroad. Companies engage in offshoring when they perceive advantages in three main areas: disintegration advantages (D), location-specific resourcing advantages (L) and externalization advantages (E) (Kedia & Mukherjee, 2009). The model was also an extension of the OLI model. One element, the location was the same as in the original form, however the remaining factors took the opposite direction. First, the issue of disintegration was underlined. Many tasks, especially those related to KIBS, could be successfully separated from other business functions of an enterprise. But even more evident is the possibility of externalisation. This gives ground especially to offshore outsourcing, so the activities can be more efficiently executed by an external foreign partner, than a provider in home economy. The model has taken into consideration both manufacturing and services, however the main point was about modern offshoring of intangible business processes.

The literature survey also provided insight into the approach taken by researchers. They applied the headquarters – client perspective (Pisani & Ricart, 2015). This might be explained by the dominant and decisive role of the headquarters in arranging outsourcing contracts or establishing a shared services centre. This is also important because the initiative of transformation has to emerge in the headquarters (or at least be imposed by the top management).

However, when analysing the headquarters-subsidiary relations, we also need to mention the evolution of the structures of MNEs towards more autonomy of geographically dispersed units. It means that ABS subsidiaries and even the contractual outsourcing providers should be considered as valuable partners for the headquarters in the development of the entire organisation. It is important to go beyond the traditional

top-bottom approach. There should be a kind of network approach, with each member of the network having a relevant role to play. This is especially important when we take into consideration that ABS units should provide the knowledge-intensive content. Anyway, as it was earlier mentioned, the knowledge intensity of business services still varies significantly.

Consequently, ABS units should play much bigger role than just providing the transactional services. This is associated with the evolution of ABS towards more value added operations. When it comes to knowledge creation within a MNE, there are two opposite views with respect to offshoring, but the outcome should be the same – more knowledge. The opposite views can be linked to the theoretical approaches aiming either at internalisation or contracting out business activities.

There are strong arguments for internalising the creation of knowledge within the structures of a MNE. Incorporating ABS units into the structures is a way of improving their efficiency and at the same time the operations of the entire organisation. This is due to the fact that knowledge is difficult to be enforced by contracts (especially those of an imperfect form) with external partners. Anyway, there should be also a distinction between tasks that are rather transactional in form and those of higher intensity of knowledge utilisation.

We use here the notion of tasks, instead of services, as more granular approach is required. Within the process of delivering services, there might be tasks of higher knowledge content, which can be executed internally and those pieces of transactional type, which can be processed in any low-cost destination. Not only the knowledge content is crucial, but also the sensitivity of information. For example, the production process of a car component does not need any personal data. But processing payroll data or health data contains loads of very sensitive information. Therefore, firms should opt for internalisation of processing such data. The issue is also cybersecurity. Importantly, more and more information has been stored about individuals and firms in various, frequently connected systems, that may be potentially hackable.

The issue is that due to commoditisation of services, they are treated from the physical perspective as merely carriers of the information, not the content itself. Gigabytes of data have been treated as tons of goods exported. In the monetary term, the value of services has been calculated. But it has very little in common with the real value of data for firms or individuals. Due to the differences in the legal environment between countries and also the human factor, it is difficult to keep knowledge within boundaries of an organisation. Therefore the discussion between internalisation and externalisation of services should be seen in the broader context.

The issue of protecting knowledge when it comes to offshoring of knowledge-intensive processes is only one side of the matter. But even more complex is establishing an ecosystem that will stimulate the creation of the knowledge in the international environment.

The successful knowledge creation requires internationally coordinated units. Thus offshoring may foster the formation of knowledge and new competences of a firm by tapping talent pools in various locations. This is also the case for offshore outsourcing, as firms can access not only their proprietary foreign knowledge capacity, but also resources of other organisations. Indeed, global outsourcing allows to access worldwide sources of knowledge (Verwaal, 2017). So, both outsourcing and offshoring are important sources of knowledge, however they have some limitations. This should be also seen from the perspective of the type of knowledge that is searched abroad. If a firm searches for similar and competitive to the existing knowledge abroad, it is known as the knowledge exploitation, but if a firm aims at accessing knowledge from new areas that are distant to the existing resource, it is known as knowledge exploration (Mukherjee, Lahiri, Ash, & Gaur, 2019).

It is also important to analyse decision-making by firms about engagement in offshoring and selecting the location for the activities. It is postulated that the decision about choosing an optimal location depends on the characteristics of a host economy, but at the same time it should be aligned with the strategy of a firm (Jensen & Pedersen, 2011). Moreover, there is a need to distinguish between the standard routine activities and those of high knowledge content as this highly influences the location choice.

3.4 Transaction costs approach to offshoring

The approach, which is particularly useful and frequently applied to explaining the issue of captive offshoring and offshore outsourcing, is the transaction costs theory. Its foundations, laid by Coase (1937), explained the existence of a firm as a way to avoid the transaction costs by internalising processes. The transaction costs mean the additional expenses that need to be added to the price of goods or services. The transaction costs usually arise due to searching for information, bargaining, or enforcing the contract between parties in a marketplace. Williamson (1981) extended the discussion on the transaction costs and investigated the structure of a firm. He explicitly asked about which activities should be performed within a firm or outside it, and also why. This gives a rise to the analysis of the profitability of outsourcing.

Until now we have been studied the theoretical framework for offshoring in the broad sense of the phenomenon. It means that both activities of captive business centres and business process outsourcing have been put together and the integrated framework was provided. Anyway, to fully understand and cope with the complexity of business services, it is worth introducing a separate treatment of outsourcing. Till now we have also applied two main levels of the analysis – economies and firms. However, it is argued that besides considering locations and firms, it is also important to introduce process-level factors to understand location distance and governance model choice (Gerbl, McIvor, Loane, & Humphreys, 2015). Their major

alteration to the existing theoretical framework was also introducing a possibility of local and nearshore outsourcing. It increased the complexity of the framework, however it was brought much closer to the reality.

Due to the increased global competition and the need to transform the structure of a firm, offshoring and outsourcing are used to perform also core processes of enterprises. Therefore the boundaries of many firms shrank organisationally (many processes have been outsourced) and expanded geographically (many processes have been offshored) (Contractor, Kumar, Kundu, & Pedersen, 2010). This is an important extension of the theory as the two solutions offer still lower transaction costs. The focus on outsourcing and offshoring is also considered in a broader context of corporate restructuring and vertical disintegration of firms (Massini & Miozzo, 2012). However, the picture of modern MNEs is more complex and this is no longer about a simple choice between performing processes in-house or by an external partner. This is also not solely about considering domestic and international sourcing. All of these possibilities have to be considered simultaneously in order to execute a cohesive global strategy. Therefore, when we return to the main issue of transaction costs economics, which is about the boundaries of firms, we should perceive them in the global context and include various contractual partners.

Besides the expected gains from offshoring, there are various drawbacks and hidden costs of moving the activities abroad. This is particularly important for ABS, as they include interactions between stakeholders from different countries. It is easier to manufacture the same physical item of the same quality in an offshore destination as in a home country and any differences cannot be spotted (besides the label "Made in . . . "). But the execution of sourcing knowledge-intensive activities may be dramatically different between particular locations. One of the important elements are cultural differences (e.g. language, education) between providers and users of the service. Thus, it all increases the transaction costs.

The hidden costs of offshoring may also result in failing to meet the expected outcomes (Zheng & Wang, 2017). From the business perspective, it increases the costs of such operations, therefore the threshold above which a firm is capable of being engaged in offshoring is higher. It means that only larger organisations may execute such operations. It also leads to self-selection of companies into offshoring depending on their productivity and size. From the economic perspective, it means that all locations are not the same. There is still room for improvement in order to compete for new projects.

3.5 Agglomeration economies and advanced business services

Agglomeration economies, that is, the positive externalities stemming from clustering in a geographic location are confirmed to improve the performance of firms. Three types of agglomerations economies were described by Marshal (1920): knowledge

spillovers from other firms, pool of specialised labour created by industry demand, and pool of other inputs as a result of industry demand. Indeed, an important element of his approach was the role of a firm.

The pioneers in the new economic geography (NEG) assumed that firms are homogenous (e.g. Krugman, 1991). However, such an approach is not in line with the vast evidence that firms are different by many characteristics. The most important is the productivity. It is also confirmed that firms cluster in areas of the high value of GDP, which indicates the large size of an economy. Agglomeration economies lead to uneven distribution of businesses across geographic units. This is a force that strengthens the strongest regions and diminish the probability of locating a new business in weaker regions. Anyway, only the most productive firms gain from operations in the most prosperous regions (Baldwin & Okubo, 2006). To include the heterogeneity of firms they merged the NEG approach with Melitz (2003) model of monopolistic competition. The authors also stated that the standard approach to measuring agglomeration economies overestimates their influence. The productivity gains due to agglomeration economies are questioned as the high level of concentration in a region may have a negative effects on economic performance (Drucker & Feser, 2012).

When it comes to the geographic scope, the agglomeration economies are predominantly measured on a regional level. Another approach to the agglomeration economies is measuring them on a city level. Behrens, Duranton and Robert-Nicoud (2014) provide evidence on the agglomerating and sorting of firms to operate in large cities. There is also agglomeration among workers. Coniglio (2001) assumes the existence of skill premium as a function of number of skilled workers in a region. Another example of spatial agglomeration is sorting, which occurs among workers (Combes, Duranton, & Gobillon, 2004). Most productive workers move to most productive locations thus increasing their productivity even more.

When the agglomeration economies are discussed, the notion of a "global city" should be introduced. It is considered as offering global interconnectedness, cosmopolitanism, and abundance of advanced business services (Goerzen, Asmussen, & Nielsen, 2013). The notion of a global city does not fully correspond to the meaning of megacities, when the vast population is considered. In the case of a global city it is more important to analyse the business related functions, as being a part of a global value chain. However, the agglomeration at the level of cities is not universally confirmed. According to Coe and Townsend (1998) more important is clustering in the region. This was analysed in the case of South-East region of England and its service-based growth.

There is an evidence that the agglomeration economies occur in a different way in services than in manufacturing. Basile, Benfratello, & Castellani (2009) analysed the European regions and the factors of attractiveness of a particular region were not connected to the attractiveness of the other regions in the economy. It also means there no direct links to other activities in other regions. They interpreted the

finding as the lack of exports in services. Actually, when we observe ABS, the lack of cooperation with other regions is rather the result of high exports of services and no need to include partners from other regions. The providers of services are directly linked to their foreign customers.

The technology improvements decrease the necessity of concentration of KIBS in metropolitan areas in order to serve their multinational clients as Keeble and Nachum (2002) or Muller and Doloreux (2009) argued. Indeed, the presence of KIBS units in metropolis or metropole regions is not necessary to provide services to firm located nearby, but rather helps companies reaching foreign clients, for example, the presence of an international airport. We approach agglomeration economies in ABS with respect to MNEs, therefore we need to include global networks in our analysis. Mouleart and Gallouj (1993) put is as "agglomerations in global networks". This is connected to the role of ABS in GVC. Despite the development of communication technologies, KIBS are very prone to concentration is some areas (Shearmur & Doloreux, 2008; Marek, 2015, p. 42). However, we argue that the recent wave of FDI in ABS in Central and Eastern Europe is different from the earlier development in the Western Europe and forces of agglomeration are weaker. Klimek (2018) used detailed plant-level data, whose advantages were pronounced by Martin, Mayer and Mayneris (2011). However, the meaning of the word "plant" is not fully appropriate for analysing services. Therefore the "office-level approach" was introduced. Indeed, offices are best describing the premises where services are produced. The findings of Klimek (2018) confirm a certain level of agglomeration of ABS in Poland, however it was only due to the concentration of supply factors. It means that locations offering abundance of skilled labour were preferred locations for foreign firms' investment projects. The same study did not find any support for demand-side factors, like the size of a local economy measured by the regional GDP.

The conceptual approach to agglomeration of modern business services can be well described as "new geographic concentrations of technical talent and service providers offering upstream technical and knowledge-intensive business services to regional and global clients" (Manning, Ricart, Rosatti Rique, & Lewin, 2010). They list three main reasons of the development of new locations intensively providing services. The first one is the emergence of local talent pools, which can be tapped and used extensively by MNEs in their global context. Second reason is the need of MNEs to conduct a broader search of talents, also in non-obvious location in emerging economies. The last argument is linked to the emergence of global service providers, which execute their internationalisation strategies by following their global customers and establishing service centres in multiple locations.

There is also an inconsistent evidence regarding the link between financial performance of firms and agglomeration economies (Stavropoulos & Skuras, 2016). The net level of positive effects stemmed from agglomeration economies depends on the prior characteristics of firms. Those with weak performance gain most from clustering and those with strong performance (and the best assets) have little to

gain (Myles Shaver & Flyer, 2000). However, their study is limited in time and employs quite a small sample. There is also the question of whether there are differences in measuring agglomeration in services in comparison to agglomeration in manufacturing (Jones & Wren, 2016). This confirms the need for detailed analysis of agglomeration economies, especially in business services, which were frequently neglected.

Pooling of firms in the same location may have both positive and negative effects. When it comes to ABS, the positive elements include: pool of qualified workers, proximity to educational institutions, commercial properties market. However, we can also mention the negative aspects, such as: competition for workers or higher rents for property. A firm must consider the overall balance before undertaking FDI in a particular location.

Summing up the theoretical approaches to offshoring of ABS, they range from detailed business frameworks to more general economic models. The main approach is that the models try to explain offshoring, irrespective if it is within the boundaries of a firm or not. We agree with such an approach to the theory, however some governance issues should be also raised.

When considering the theoretical background of offshoring of white-collar jobs we have to avoid oversimplification and stereotypes present in the public discussion regarding the process. For a home economy it is pictured as losing jobs and crucial competencies, while for a host economy it is presented as exploitation of cheap skills. The knowledge-intensive services that are provided in the global network are far from this approach. Unfortunately, it is still dominant strain in the policy discussion, but also in many business studies. The proper conceptual framework and theoretical models of offshoring are crucial for analysing the policy implications of offshoring. Without such a base, there are many inconsistent and inconclusive results expected. Again we come back to the issue of defining and measuring not only ABS, but services in general. The new statistical approach is necessary to understand the role of ABS in the global and domestic economies.

All in all, we argue that due to the dynamic changes in the ABS industry, the universal model is far from being prepared. The evolution of the industry is related to the rising complexity of modes, forms and networks that provide business services. The participants of ABS are changing and next to human workers there is a rising role of robots, and artificial intelligence solutions.

4 Business perspective on offshoring of white-collar jobs

4.1 Motives of offshoring of advanced business services

Multinational enterprises are economic organisations characterised by the high level of efficiency. These units were first to introduce various solutions increasing productivity (such as production lines, containers, or just-in-time manufacturing). MNEs were also directly associated with the development of offshoring of production activities to less advanced economies. These processes profoundly influenced both the operations of the largest corporations and the structure of the entire global economy.

There was one type of operations relatively resistant to the international division of work. These were services provided by the headquarters such as human resource management, research and development or accounting. They were highly embedded into operations of the central office, thus top managers preferred to use the services as tools of control over core operations dispersed globally. Moreover, the potential cost savings were not significant, as those services have only been auxiliary activities and their share in total costs of MNEs have been rather negligent. Anyway, due to advances in the communication technology, standardisation and codification of knowledge, services of headquarters became traded across borders.

Motives of establishing a centre providing headquarters' services can be divided into two groups: expansion and consolidation. However, they may not be idiosyncratic and frequently occur simultaneously. A firm may decide to consolidate its operations in a single foreign ABS unit placed in a location with lower salaries in order to decrease operational costs. But at the same time, the newly established structures may be used to acquire new talents and expand operations into new segments of the market or new foreign markets. For example, a Dutch company decided to establish a centralised ABS unit in Poland as a result of efforts to consolidate its white-collar operations previously spread across Europe. At the same time the company used the unit to expand into new markets and to modify its business model in order to get involved into e-commerce.

Both operational and strategic performance of offshoring were confirmed to be positively affected by low costs and resources availability, however the existence of local networks negatively impacted operational performance of offshore outsourcing operations (Caniato, Elia, Luzzini, Piscitello, & Ronchi, 2015). It may be explained by the fact that operational performance is expressed in monetary terms, but strategic performance comprehend more sophisticated elements.

In most cases, even if the cost-saving motives are crucial in the beginning, it evolves over time into building competitive advantages (Tate, Ellram, Bals, & Hartmann, 2009). The offshoring is also a way of strategic learning and business development (Jensen, 2009). His study also confirms that the initial objectives of

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offshoring change over time and as the relationship between home and host firms matures, new opportunities may be derived from the partnership. It means that offshoring of ABS due to its knowledge components may be used to higher extent as a tool of business development, not only a method of costs' reduction. Such a conclusion has an extensive implications for both host and home economies. The earlier attention was that offshoring may reduce employment in home economies, however it may be also used as a competitive advantage for home country firms. Moreover, it is also important from the perspective of incentive policies of host countries, as the offshoring of ABS is rather about skills and talents, not only costs.

Knowledge gains are not exclusively related to ABS, as they can be also observed in less knowledge-intensive services or manufacturing. Anyway, the ABS are designated to add knowledge to the organisation. The potential gains depend on the design of the offshoring process. The baseline approach is that there is an initial transfer of knowledge from an onshore company to an offshore unit to build its initial capacity. Afterwards, the new knowledge is created at the offshore company. To strengthen the process of transferring knowledge from the onshore to an offshore company, it is recommended to build informal links between staff in the units and improve interactions between them (Chen, McQueen, & Sun, 2013).

There is also the issue of economies of scale. It is important both for captive offshoring and offshore outsourcing arrangements. It means that some operations require a scale that can be provided from abroad. This is important in the context of the newest technologies like AI or ML, which require vast financial and organisation investments.

Researchers distinguish between effects derived from offshore outsourcing and captive offshoring. Due to the fact that outsourcing means employing external expertise, the expected effects can be greater. There may be also value creation by improving management of internal and external resources with respect to changes in the external environment (Mukherjee, Gaur, & Datta, 2013). Thanks to the flexibility of outsourcing solutions, a company can better adapt to changing demand for its products and services. However, there is also a danger of the erosion of internal resources over a longer period of time. It is especially important when we analyse the competitive advantage, which should be derived from unique resources controlled by a firm, not purchased on open markets (Barney, 1991).

The offshore outsourcing of ABS is more complex than manufacturing outsourcing (Ellram, Tate, & Billington, 2008). It is predominantly linked to the knowledge element of the process. It also requires more human interactions, what includes elements of cultural distance and personalities of partners. However surprising, the cultural element was not confirmed as important for the performance of offshoring operations (Caniato, Elia, Luzzini, Piscitello, & Ronchi, 2015). Therefore, the array of motivations is much broader and includes many indirect effects. According to Tate, Ellram, Bals, and Hartmann (2009) there are following gains of offshore outsourcing identified using case study approach:

- cultural aspects,
- reduction of risk,
- entry into new markets,
- increase of market share,
- increased reputation,
- access to resources,
- process improvements.

International outsourcing of knowledge-intensive process is complex and management should be ready to tackle many pitfalls (Luo, Zheng, & Jayaraman, 2010). They argue that the key to successful operation is proper integration of outsourced processes into the structure of a company.

From the managerial perspective, the decision about engagement in offshoring irrespective of its mode, is predominantly based on the attitude of the decision-makers, available resources and experience of the organisation (Pla-Barber, Linares, & Ghauri, 2019).

The business perspective adds to the policy implications of ABS operations in host economies. Onshore businesses must transfer knowledge to their offshore units in order to make them effective. The transfer takes a form of interactions between employees in the onshore and offshore units. In fact, it may be a transfer of knowledge between home and host economy. Even though there are claims that the transfer is limited. It is in principle against the main goals of offshoring and headquarters should boost it instead of curbing it.

An issue related to offshore outsourcing is "knowledge at risk", which means that a company offshoring knowledge intensive processes can be affected by the loss of knowledge or suboptimal performance of the offshoring arrangement (Williams & Durst, 2018). It is crucial as knowledge and its flawless use are core competencies of MNEs.

Despite the complexity of offshoring of ABS, the decision-makers do not always employ a rational approach to the international configuration of processes. Some companies decide to use offshoring of ABS because of the "herd behaviour" or "bandwagon effect" (Agrawal, Agrawal, Taylor, & Seshadri, 2019). It means that managers in a parent company fear of losing competitive advantage or distance to competitors, who have already started offshoring of some operations. It is a kind of peer pressure, also increased by the supervisors or investors. This is especially the case for large multinational firms operating in oligopolistic industries. No surprise that frequently used indicator for relevance of offshoring is the Fortune 500 ranking of companies. At the moment it would be difficult to mention any of the large firms that has not been involved in the offshoring of physical goods or business services.

The offshore outsourcing of advanced services may positively influence building the resources of onshore firms. This is determined by: commitment, trust building,

knowledge building, and the interconnectedness of resources between onshore and offshore firms (Jensen, 2012).

After taking the decision to offshore processes. it is required to reconsider the organisation of a firm. It is especially important when the number of offshored processes and their complexity increases. Jensen, Larsen and Pedersen (2013) propose three stages in the process of redesigning the organisation: disintegration, relocation and reintegration. All these result in a profound transformation of business processes within a firm. The decision about offshoring, despite frequent internal resistance, should be used as an opportunity to improve operations of the entire organisation. Therefore, the approach of "cut" onshore and "paste" offshore, should be replaced with "extract" onshore, "transform" cooperatively, and "implement" offshore.

4.2 Modes of delivery of advanced business services

Offshoring and outsourcing have been treated similarly in the literature. However, from the economic and business points of view they bring different implications. The evidence from business confirms that different approaches to their roles should be applied. Rottman and Lacity (2004) identified twenty good practices for outsourcing and offshoring and found that half of the number was more important for offshoring, five were applicable only to offshoring and five were good both for outsourcing and offshoring. It means that approaches to outsourcing and offshoring should be specifically designed to a particular mode. Also the results may differ as a firm opting for outsourcing to a provider in the same economy cannot gain from the costs differences, which are present in the case of offshoring to lower-cost economy (Weber, 2004). However offshoring brings many additional risks that should be taken into consideration in the final calculation.

To fully understand the phenomenon of foreign firms in ABS is necessary to investigate modes of FDI. There are two basic modes of FDI: a greenfield investment and cross-border merger and acquisition. From the perspective of an enterprise, this is the decision whether to build or buy. In most cases, the companies opt for building a new company abroad from the scratch. There are many arguments for such a decision. In a greenfield project the size and outline of the foreign unit is upon decision of the firm. Moreover, the motivations towards FDI in ABS are different than in market oriented projects. When it comes to ABS, the main motivations are cost cutting and access to talent pools. FDI in ABS does not take into consideration the acquisition of a strong brand or technology. Moreover, this is not the market game to buy potential competitors.

From the perspective of a contact with an end user the ABS can be divided into:

- Front-office processing (e.g. customer service)
- Middle-office processing (e.g. controlling, information risk management, compliance)
- Back-office processing (e.g. accounting, HR).

We can notice the tendency towards more middle and front functions, once ABS units proved that they are capable of executing back-office functions. The evolution towards more sophisticated operations requires a more complex approach to offshoring, than it was in the case of offshoring of the very mundane tasks. "Back offices collect, manage, and process information as an intermediate input to the production of goods and services" (Wilson, 1995). Actually, ABS with their higher knowledge content do not fit the basic office tasks, but should be rather associated with middle-office processing.

The previously presented distinction between captive offshoring and offshore outsourcing does not fulfil the topic of business strategies towards ABS. The definition of advanced business services can be best illustrated by the analysis of business functions executed at service units (Figure 4).

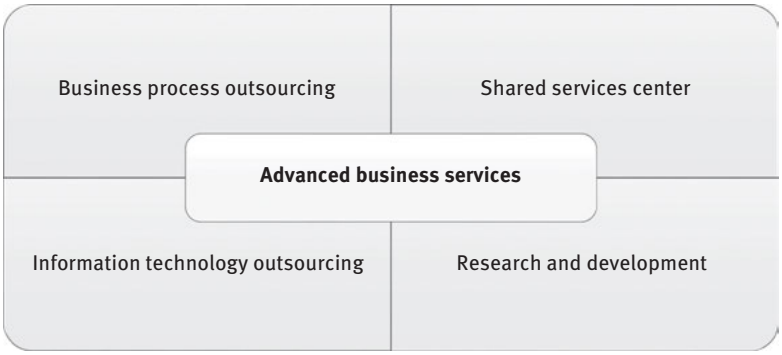

Figure 4: Scope of advanced business services (source: own elaboration).

Two dominant types of units are business process outsourcing (BPO) facilities and shared services centres (SSC). They represent delegating tasks to either an external provider or an internal specialised unit. The choice between the internal and external offshoring depends on the attitudes of the decision-makers in an organisation. If they are focused on decreasing the costs of operations, access to resources or imitation then the external offshoring is what they opt for, however if their main aim is to improve competitiveness, they opt for internal offshoring arrangements (Pla-Barber, Linares, & Ghauri, 2019).

Moreover, it may be also assumed that the operations within internal offshoring are more firms-specific, not very commoditised. Again, the offshore outsourcing is a preferred option for cost-cutting operations, while market-seeking firms should choose captive offshoring as optimal arrangement for their knowledge-intensive activities (Paz-Aparicio, Muñoz-Bullón, Sanchez-Bueno, & Ricart, 2018). ABS are considered as requiring more integration between the provider of services and their clients, thus the preferred option should be captive offshoring. It is in line with fact that the complexity of offshore services has been increasing. The decision of companies to use captive

form in this respect can be linked to the transaction costs of buying services from an external vendor. This is also one of the unique features of service offshoring in comparison to manufacturing offshoring, where such a dilemma is not existent. The captive offshoring and offshore outsourcing should be perceived as the unbundling of corporate functions or vertical disintegration, which means that the "cut and paste" approach does not explain fully the motivations of firms towards new forms of provision of services (Sako, 2006). It can be also interpreted as a method of reorganisation of an enterprise and adjusting its operations to the changing market environment. Such findings are important not only for the strategic operations of the firm, but have also economic implications for home and host economies. It is expected that the internal offshoring can be treated as a longer term arrangement, as it is rather motivated by strategic, not tactical approach.

The particular types of ABS are meant to be executed internationally, not within one economy. Such comment is necessary as outsourcing of business services is frequently delivered to other firms in the same economy. It is even the case for India, where the share of sales of the ABS industry to local partners is rising in recent years.

When discussing the mode of arrangements in offshoring, a hybrid solution of concurrent offshoring has to be introduced. The hybrid solution means combining key characteristics of offshore outsourcing (buy) and captive offshoring (make). However, it is argued that this solution should not be located in-between the internal and external arrangement, but rather as a next step in offshoring arrangement of organisations competent to take advantage of executing some processes within the boundaries of an organisation and some outside it (Jensen & Petersen, 2013).

There is also another hybrid approach to delivery of ABS. The build-operation-transfer (BOT) "provides an opportunity to leverage the unique talent of a third-party provider to establish offshore operations and then transfer the operations to full control of the customer company after a specified time frame" (Youngdahl, Ramaswamy, & Verma, 2008). Such arrangements are important for operations requiring a high level of expertise and knowledge. This process can be seen as opposite to outsourcing, because it internalises the operations executed in a separate unit outside the boundaries of a firm.

Such a model provides not only an operating unit, but also training and transfer of knowledge to the client's company. The solution can be also cost efficient as its establishment has been delegated to an experienced partner, what saves time and money. The advantages of employing a contract partner to build such a unit are especially visible in foreign markets, where the clients firm lacks the experience, especially with respect to recruitment, but also faces various legal or cultural barriers (Jensen & Petersen, 2013). The model has been recently applied by firms in services offshoring, whilst its origin are from construction and engineering (Orzes, Sartor, Nassimbeni, & Fratocchi, 2017).

Figure 5 presents the evolution of the structures of many multinationals. The overall trend is to slim down the organisations, by centralising business processes

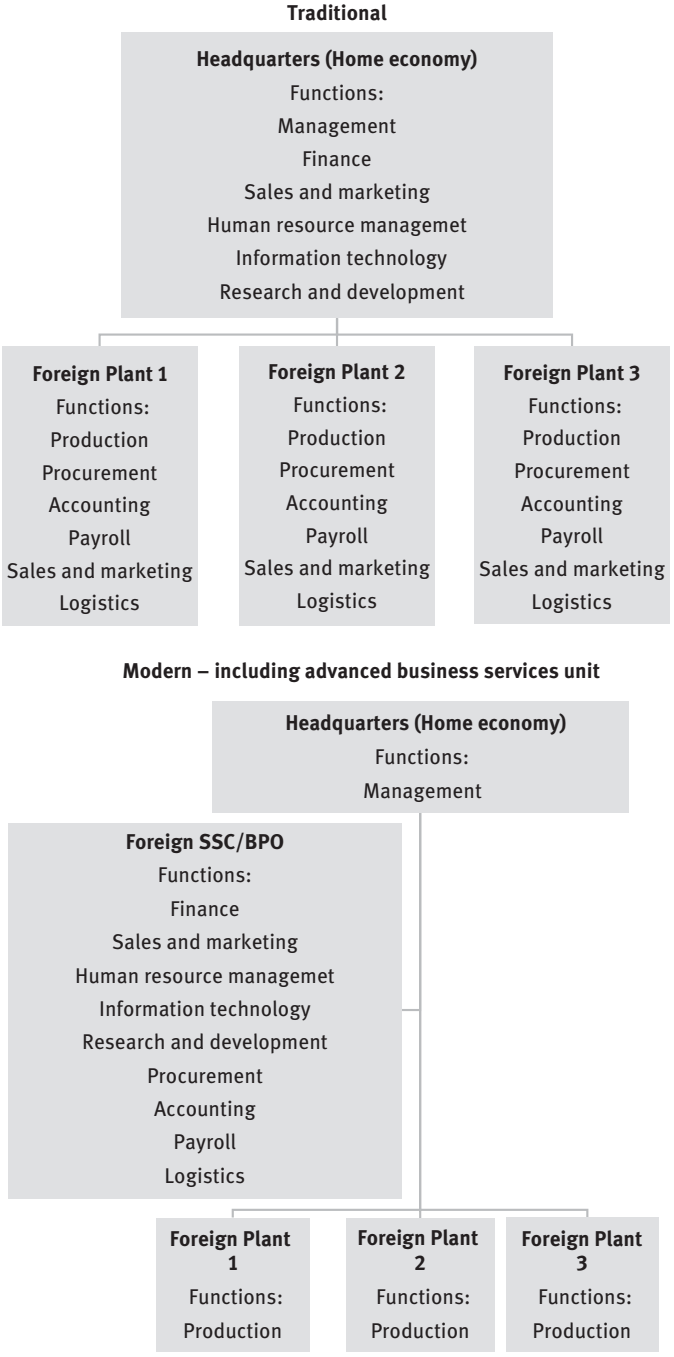

Figure 5: Structure of multinational corporation (source: own elaboration).

in a specialised unit. This goes much further than building a SSC to perform non-core processes. Thanks to developments in technology and organisation, but also rising maturity of the ABS units, they can also apprehend many core processes, such as sales management or strategic procurement.

However, the transfer of business activities between units of a MNE has international implications. This is an unprecedented transfer of knowledge, but indirectly also power within the organisations. It is because it is more than just supporting functions. Indeed, further development of the model of SSC may mean that very core processes are executed away from the headquarters. In such a situation there is a threat of losing the core competences by the headquarters, but also by the entire organisation in the case of contracting out.

The ABS units within MNEs can be also named service factories. These are units specialised in efficient delivery of business services. In this approach, the SSC/BPO unit should be placed on the same level of the company's structure as manufacturing units. This could also have managerial implications. However, such simplistic view on SSC/BPO reduces the knowledge content of their work.

4.3 Shared services centres

The crucial type of service provision arrangements in offshoring are shared services centres. It means moving non-core activities to a separate specialised unit, but still within the boundaries of an organisation. "Shared services generally refers to the centralization of back-office services within a firm to a single location. The geographically dispersed units of a service firm then 'share' the services of a central facility rather than have all the services provided locally" (Metters & Veerma, 2008, p. 6). The functions that are commonly executed within SSC are: finance (89%), human resources (63%) and information technology (53%) (Deloitte, 2019, p. 7). Shared services do not have to be located in another country with respect to the headquarters, however this is frequently the case and we focus on such arrangements in this book.

Other definitions do not provide an explicit description of shared services, but rather underline some approaches to executing the back-office services. One of them is treating the shared services as "internal customer service" (Soalheira & Timbrell, 2014). This definition stems from dividing customers of an organisation into external and internal. Treating internal units as customers requires a focus on quality of services and customers' satisfaction. SSCs are also described as "internal outsourcing" (Aksin & Masini, 2008). It means that functions are taken from particular business units and placed in an organisationally separate unit.

The traditional approach to shared services has been based on three most frequently used terms "centralization", "transaction(s)" and "cost saving" (Soalheira & Timbrell, 2014). Five main motives of establishing SSC has been identified by Yusof et al. (2016):

- Cost saving,
- Increasing service performance,
- Reducing redundancy,
- Improving organisation learning,
- Focusing on core business.

According to other studies, the main motives of establishing shared services were cost arbitrage, labour quality, regulatory understanding, and proximity to headquarters (Deloitte, 2019). Therefore the top locations for SSC were in descending order: India, United States, Poland, Costa Rica and Mexico. The arguments are still valid today when it comes to placing SSCs within organisations. However, if the main element of building SSC is to reduce costs, it puts in jeopardy all efforts to build such a unit. Cost saving might be easier achieved by outsourcing. Therefore it is crucial for modern SSCs to pronounce their strategic role within an organisation.

The trend of establishing SSCs is especially visible among large enterprises. More than three quarters of Fortune 500 firms already operate using the SSC model (Richter & Brühl, 2017). The expected gains from organising services as shared services, lead many firms to apply such an organisational change. A very early example of SSC is the unit established by General Electric in 1985 (Metters & Veerma, 2008).

The SSC model is not homogenous. There are several approaches to establishing SSC within an organisation. Aksin and Masini (2008) propose four configuration of units depending on the needs and characteristics of the corporation:

- Business-minded optimisers – optimal for medium and large enterprises with streamlined processes,
- Cost watchers – optimal for enterprises focused on low costs of operating a SSC
- Focused adapters – optimal for small enterprises with many processes not supported by integrated information systems, however the quality of services is crucial,
- Immature service providers – optimal for enterprises highly committed to SSC by vast investment and aimed at providing services also to external clients.

Depending on the levels of consolidation and external service receivers, Ulbrich and Borman (2012) distinct four trajectories of SSC:

- Centralised service centre,
- Outsourced shared services,
- Collaborative shared services,
- Decentralised shared services.

The first and second type of the centres in the list above are results of the excessive process standardisation, while the next one is a result of low process standardisation. The collaborative type provides balanced standardisation of services. However, each of the trajectories are associated with some risks that may harm the original aims of establishing the unit.

Creating a functional SSC requires a strategic approach to service transformation in the areas of simplification, standardisation, consolidation, outsourcing, and insourcing (Akkiraju, Nayak, & Goodwin, 2009). These elements of the decision making process should be taken at the proper time and to an appropriate extent. It also means that there might be an evolution of the approaches. For example, in the beginning of the transformation a company chooses insourcing to proceed to outsourcing after some years. The approach to SSC should be a part of an overall corporate strategy and should also take into consideration external factors, like the technology change. There is a dynamic evolution of the role of SSC within multinational corporations. "SSC organizations are and will increasingly become more global, complex, and digital, as they seek to provide nimble and efficient services, stronger customer service, and high-impact business outcomes" (Deloitte, 2019, p. 2).

The common point regarding SSC is that, even in a captive form of operations, they are treated in subordination to other operations. The bargaining power of SSC units is lower as they are frequently treated as merely solutions to cut costs. Indeed, the changing nature of a SSC from being on the periphery of an organisation into the strategic role also altered its business model to become more modular, codified, and contractual (Mezihorak, 2018). This is related to the increased control of employees in a SSC, but also decreasing the complexity of activities by dividing them into smaller tasks. However, such an approach to a SSC may limit its inputs into the transformation of the core operations of MNEs and at the same increase the possibility to externalise (outsource) process executed in SSC.

In this vain, SSCs have been created as a result of a hybrid approach to the practise and expertise, with end-to-end processes cutting across particular roles, departments and functions (Herbert & Seal, 2012). It means that SSCs should be aimed at working with organisation-wide issues and employ best practises in various areas. Such an approach means that a SSC should play central role in the management of the organisation. However, it is rarely postulated that SSCs should go beyond the traditional role of providing back-office services.

The geographic scope of operations of service units underlines the distinction between regional and global service centres. Depending on the core structure of the organisation and geographical diversification of processes, the headquarters may decide to establish one or several units providing services. However, they are never numerous within an organisation.

The choice is rarely for one particular location of offshoring, but rather an array of locations fulfilling business objectives. For example, a British firm located their offshore operations in four destinations, each having a distinctive role to play. SSC in Malaysia (Kuala Lumpur) has been designed to serve operations in East Asia. It is also linked to the language skills and employees there speak main Asian languages. Operations in Poland (Wroclaw) have been mostly focused on EMEA region, sharing similar time zone to the headquarters as an additional asset of the location. The unit in Costa Rica (close to San José) is aimed at supporting operations in Americas.

The last unit in India (Pune) is a back-office to support operations of all other SSCs. It also requires the organisation of the unit as a 24/7 operations.

It is in line with the "follow-the-sun" benefits, which arise when processes are executed constantly within the organisation, what provides customer service or shortens the time of development on new product or service (Lewin & Peeters, 2006).

Regional units are organised into a global network with activities in the key offshore locations. There are frequently three such units in:

- Americas
- Europe Middle East and Africa (EMEA)
- Asia, Pacific, Australia and Oceania (APAC).

SSCs share many characteristics with BPO. However, the most important distinction is the level of control over activities taking place within a particular type of service. SSC is a default mode for many companies that are willing or are obliged to keep control over processes and data. This is particularly the case for financial institutions dealing with a lot of regulations towards the secrecy and compliance.

The model of shared services has not only been applied by business enterprises. There is a growing trend among public institutions to implement centralised operation models. The motives of establishing a public SSC are pretty similar to those in the private sector, however not all objectives can easily be met, especially when the public institutions have less possibilities for cost reduction (Tammel, 2017). Therefore if the cost reduction is difficult to achieve, the shared services in the public sector focus on quality and consistency of services, improvement of service delivery, internal exchange of knowledge and access to external skills (Paagman, Tate, Furtmueller, & de Bloom, 2015). This confirms that application of SSC may also support broader set of objectives, not only the business related.

All in all, successful operations of a SSC are rather focused on quality and even excellence of operations, not only the cost reduction. From the perspective of offshoring, implementing the model of a SSC does not require the establishment of a unit abroad, however then the cost arbitrage does not occur and access to skills is limited only to a home economy.

Many businesses face an issue that their expectations have not been fully met or the situation of an organisation deteriorated after introducing a SSC. There is even evidence that costs of operations have increased, while the performance suffered (Meijerink & Bondarouk, 2013). The process of creating a SSC is a very complex organisational change project (Davis, 2005). He also focused on cost reduction and concluded that significant progress in this matter in firms has been achieved after a long period of trials and errors. Anyway, there is a significant gap in the research regarding the performance of SSCs and most of conclusions have been drawn from the limited number of observations or case studies.

The expectations of delivering value may be hindered by misunderstanding the concept of SSC. It may be confused with central staff department (CSD). Strikwerda (2014) enlists multiple differences between those two, but the most important are:

- Orientation – SSC is business unit oriented, while CSD is headquarters oriented,
- Costs – SSC has budget based on demand, while CSD on corporate objectives and headquarters budgets,
- Location – SSC is optimally located with respect to inputs' costs and availability, while CSD is located at site of headquarters.

The problem is that the challenges to a SSC are arising simultaneously and mostly occur in the process of building the unit. Four main challenges are: power struggles, cost efficiency, survival in the long run, and leveraging knowledge (Knol, Jenssen, & Sol, 2014). All of them are important, but the focus is on tensions between a SSC and business units, which should delegate some of their competences to the new unit designated to transform and implement those processes. This is frequently related to redundancies in the business units and an unwelcome approach towards a SSC. Such tensions increase when the SSC unit is being located abroad.

Critical findings regarding SSCs are not only important from the perspective of particular units. The complications in adaptation of the SSC model may also influence the performance of the entire ASB industries in host economies. The fact is also that the largest and most efficient organisations already deployed SSC units. It means that new units may be established by companies having less managerial experience or prerequisite resources, thus reducing the positive outcomes of the solution. From the perspective of host economies it may mean the reduction in the number of newly established units.

4.4 Business process outsourcing

Business process outsourcing (BPO) is a contractual relationship between a company moving its non-core business activities to an external service provider. If the external provider is located abroad, it is described as offshore business process outsourcing. Indeed, most relationships take the latter form and the notion business process outsourcing is also used to refer to foreign operations. Actually, BPO takes its most complex form when combined with offshoring. In such a case there is a possibility of double profits. Besides the potential gains from moving some processes outside a company, what can decrease costs and increase efficiency, we can also add gains stemmed from executing the activities in low cost locations and exploiting the economies of scale. When we analyse offshoring of ABS, the historical fact is that firms moved many processes to India, the Philippines or CEE in order to merely reduce costs. However, nowadays these locations provide a critical mass of knowledge, talents and organisational skills to execute large scale and knowledge-intensive processes for

large international clients. It is well illustrated in the following statement. "The BPO industry is heterogeneous, differentiated by horizontal process domains such as HR, logistics, or finance, and vertical specializations such as medical transcription in the health sector and check processing and imaging in banking" (Mehta, Armenakis, Mehta, & Irani, 2006, p. 326).

BPO should be viewed from a firm's perspective as strategic outsourcing and transformational outsourcing. The strategic outsourcing is defined as "the organizing arrangement that emerges when firms rely on intermediate markets to provide specialized capabilities that supplement existing capabilities deployed along firm's value chain" (Holcomb & Hitt, 2007, pp. 466–467). The very important element of fast development of firms was the strategy of staff transfer to the clients' firms (Massini & Miozzo, 2012). Thanks to such an approach the learning curve was very steep and integration into clients' organisations was facilitated. It means that frequently the entire departments have been outsourced. This is somehow similar to the process of creating own SSC, when workers have been transferred (at least to some extent) to the new unit. However due to the cost cutting approach the number of transferred employees could not be high.

Transformational outsourcing means employing an external provider experienced in bringing changes to the organisation (Chew & Gottschalk, 2013). Such a transformation executed by an external management team may be performed faster and the internal resistance may be limited. It does not mean that each stakeholder will be satisfied with the results, anyway long-term goals may be achieved. The transformational outsourcing suits the issue of offshore ABS, as an organisation needs to change itself before the relocation of processes is possible.

The growth of BPO arrangements has important implications both for clients and vendors. Especially, when the client is from a developed economy and the vendor from an emerging one. The difference in the competences and capabilities can bring high value to both sides. The core areas of vendor firms, like management, employees and organisation may be impacted by the interaction with client firms (Brandl, Jensen, & Lind, 2018).

The abundance of BPO providers, smaller and bigger, should increase the turnover rate and shorten the time span of contracts. However, especially in transactional services, offshore outsourcing arrangement are prone to be renewed (Manning, Lewin, & Schuerch, 2011). It means that such arrangements are stable and offshore service providers are treated as long term partners, what helps both parties to increase investment in the cooperation.

Moreover, BPO has been considered as an integral part of a corporate strategy. Therefore, many firms opt to have only one strategic long-term provider of outsourced business services. Thanks to such an approach the transaction costs of negotiating with multiple partners many short-term contracts are avoided. Moreover, it is stressed that both sides need to invest time, money and efforts in establishing a successful cooperation network.

In opposition to selecting one strategic partner, there is an option of having multiple vendors in various areas. Then the issue that arises is coordination of work, especially, when end-to-end processes are at stake. One of the advantages of multiple providers is the distribution of risk. Putting all data and processes in one vendor may be harmful and may lead to a certain level of a long-term dependence. Also when the issue is the security, a successful cyberattack on one unit means loss of lots of valuable data. Moreover, the distribution of risk may be also related to the need to geographically disperse the operations.

An additional advantage is gaining access to knowledge of many partners and not trusting that the one selected provider is the best long-term choice. This is the case, especially when we take into consideration the dynamic changes in technologies related to execution of business services. All in all, the strategy of having a few providers of business services is a challenging task due to the increased necessity for coordination.

There is an interplay between BPO and SSCs in strategies of enterprises. Both modes have been affected by the automation, however the outcomes for particular arrangements are far from being clear. According a consultancy, the captive offshoring is the thing of the past and outsourcing is something that will dominate future service deliveries (HfS Research, 2017). The example of such development may be a decision of an American engineering firm, Caterpillar, to move around 100 jobs from its financial centre in Northern Ireland to the outsourcing firm Accenture (Campbell, 2019). Important is that the outsourcing firm does not have any unit in Northern Ireland, so the jobs will be moved out of the region. It can be also interpreted that BPO further unbundles the core and support operations. SSCs have been pretty frequently created in proximity to existing manufacturing units, however in the case of BPO mode it is a very rare situation. On the other hand, another consultancy claims that companies plan to reduce the number of processes outsourced (Deloitte, 2019). BPO and SSC require different initial capabilities and can bring different results. When a company starts its own SSC, it is required to build a team that leads the new unit. The team is responsible for the transfer of processes to SSC. However, the drawback may be limited flexibility in comparison to BPO and the necessity to relay predominately on own knowledge of the organisation.

4.5 Information technology outsourcing

The necessity to identify a separate type of outsourcing units is related to the size of its market and different scope of operations comparing to BPO. IT services were pioneers when it comes to outsourcing, as many companies were not able to run IT operations on their own due to the sophistication of the activities. This type of services was technology-based. However, recently due to the evolution of many activities within companies, BPO is also highly technology-based. The rise of ITO can be dated in the end of

1990s when Indian firms were employed to solve the "millennium bug" at Western firms' IT systems. Again we can combine outsourcing with offshoring.

Information technology outsourcing (ITO) means moving the IT processes to an external provider. More specifically ITO is defined "as the transfer of an organization's staff, IT infrastructure, processes, applications, and other IT-related activities to an external entity that possesses the capability to provide such service" (Pati & Desai, 2005, p. 282). The role of ITO can be measured by its dynamics and size. ITO value in 1994 was estimated at $50 billion, in 2000 it was already $152 billion, and in 2014 – $344 billion (Willcocks, Lacity, & Sauer, 2017, p. 3).

It is postulated that ITO should be viewed from the strategic perspective of a firm, which can gain valuable knowledge to be used in the business value creation (Pati & Desai, 2005). However, the evidence suggests that increased specificity of contracts and higher intensity of knowledge negatively influenced the longevity of outsourcing arrangements (Manning, Lewin, & Schuerch, 2011). Such finding is somehow counter-intuitive as the cost of investment in more complex processes is high and changing the partner requires a new round of negotiations and testing.

There is an ongoing evolution when it comes to ITO and offshoring of IT. "Early offshoring consisted of simple outsourcing contracts involving straight-forward simple tasks along the lines of call centres, help desks and simple software maintenance. Gradually, simple software maintenance became ever more sophisticated software development. As the education and sophistication level of foreign software developers increased, offshoring increased in volume and involved more sophisticated development. New technologies that increased bandwidth and the ability to offshore new and more complicated processes further increased the volume and sophistication of offshoring work" (Vedder & Guynes, 2013, p. 133).

The recent trends regarding the proportions in allocation of financial resources towards an in-house IT department and offshoring processes in American firms indicate that till 2021 the values will roughly remain the same as they were in 2016 (Agrawal, Agrawal, Taylor, & Seshadri, 2019). It means that companies are still interested in offshoring solutions, however they plan to keep a certain amount of the activities internally in order to deliver the support to end users or to develop proprietary solutions for their organisations.

4.6 Research and development units

The last category of ABS and frequently the smallest one, when it comes to headcount, are research and development (R&D) units. They are also not that numerous as the other three types. However, due to their explicit knowledge creation they are crucial elements of MNEs' strategies. They are also very difficult to establish and gain expected results. It explains why, according to a study, shared services R&D units are present only in 4% of survey corporations (Deloitte, 2017, p. 7).

If the main aim of establishing a SSC providing back or middle office services was cost arbitrage or scale of operation, the R&D units are fundamentally focused on knowledge. The study of 1,722 R&D projects confirmed that the wage difference, knowledge infrastructure difference, science and engineering talent pool size and political risk in host countries are main determining factors of choosing location for R&D activities (Demirbag & Glaister, 2010). The factors are similar to those deciding about any other knowledge-intensive offshoring, what helps to put the distinctive R&D activities also in the context of offshoring. R&D units could be described as SSCs for innovation. Indeed, in most cases the R&D units are a result of the captive offshoring strategy. It is justified by the importance of R&D and innovation within the strategies of firms. Moreover, the issue of confidentiality of operations within R&D units is the key.

Not all firms are capable of creating a R&D unit abroad. The propensity of having offshore R&D operations is rising with the size and productivity of a firm (Murphy & Siedschlag, 2018). Recent studies provide evidence that the role of innovation offshoring in the overall level of innovation of firms has been decreasing (Rosenbusch, Gusenbauer, Hatak, Fink, & Meyer, 2019). It can partly be explained by the spread of this strategy among firms, thus it is difficult to achieve unique results. However, another interpretation may be that firms engaged in offshoring innovative activities may actually decrease their internal innovative competences.

The offshoring of R&D activities is a part of strategic competences of an enterprise. Therefore, R&D is less likely to be offshored than for example production activities (Murphy & Siedschlag, 2018). The same study confirms that, in general, the support activities are less frequently offshored than core activities. Anyway, the focus on R&D is important as it can be translated into firms' behaviour of keeping a higher level of control over knowledge creation processes. Moreover, we should note that firms are aimed at retaining competences related to the R&D functions and avoid conducting them abroad or by an external partner. This may partially explain why the R&D units are not as numerous as other units providing business support services.

4.7 Managing advanced business services units

Very little attention has been paid to the issue of the specificity of managing offshore operations. The lack of interest of researchers may be explained by treating the offshore service units as a merely another type of a subsidiary. However, it is not the case. Frequently the position of ABS within the structures of a MNE has not been pronounced and has been kept quite low. Sometimes an ABS unit, even within the structures of a firm, has been treated as an external element. Such an approach to management of ABS units puts the entire organisation in disadvantage.

On the other hand, many organisations claim that after several years of development, their SSCs reached the level of fully-integrated units and they are treated as any other part of the core businesses. This is somehow associated with the fact,

that ABS units have been created as a result of transferring tasks from many core units within an organisation.

In spite of the fact that the value added and the complexity of tasks is increasing, there is, in general, little progress in moving SSC upwards in the organisational hierarchy. This happens despite the fact that these units already control vast sources of knowledge and participate in creating new knowledge for the organisation. However, further centralisation of many more core operations may be against the interests of top management, as they would have to delegate most of their competences to SSCs. It also depends on the position of the head of a SSC within the structures of a company. There are companies, where this manager is a member of the top management team and has a direct access to the chief executive officer.

Many support units still focus on the cost reduction instead of delivering value to the entire organisation, what should be the future of ABS. They should not only execute simple tasks, but also restructure the organisation. This should change the direction of information and commands. The management of ABS units should not only accept tasks delegated by the headquarters, but should proactively build new competences to transform the entire organisations. In many ABS units there are functions related to transformation, however their role is mostly about incremental improvements of the existing processes, not profound changes of the organisation.

The approach of centralising transformation is important because of the technology behind many business processes. At the moment, the technology applied is more complex and its operations cannot be performed in a small scale by non-specialised units. Especially, when artificial intelligence is taken into consideration. Deploying the technology requires vast scale and human capital – the features of many SSCs. There must be a centralised unit with sufficient capacity to perform processes. Moreover, the centralisation is the key to automation of many tasks. Therefore, the concept of creating ABS units is fully justified. However, the issue is how to introduce the change to the entire organisation and boost performance of the ABS units.

Many ABS units are rather new establishments and they are still in the phase of increasing the scale, not efficiency. Frequently, the units are managed by people, who are effective managers, however they acquire many skills on the job. This is particularly the case for medium-level managers. The issue is that they frequently lack the broader perspective. It is partially linked to the role prescribed by the headquarters. The problems with SSCs is that the management of them may be blurred by the fact that they are surrounded by various principals (Boon, 2018). This leads to rising uncertainty related to the relations with particular stakeholders sometimes giving opposite orders or manifesting diversified expectations towards the SSC. On top of that, the power struggle significantly influences the efficiency of the unit and its possibility to leverage knowledge. The rivalry between different units within a MNE may be also seen in the context of coopetition, which merges cooperation and competition, and can lead to improvement of the business performance (Luo, 2005).

The important element in the management of an ABS unit is a constant change, ability to adapt and acquire new skills. Therefore one of the biggest challenges is to manage the HR functions. Not surprisingly, in many hierarchies of ABS units, next to the general manager is the HR manager and administrative structures are organised around the two positions. Managing HR is one of the most important elements. This is both connected to recruiting good candidates, but also retaining them in very competitive job markets.

The issue that should be closely analysed by the management is the quality of services provided via offshoring. Before considering the quality, the distinction between services provided to internal and external clients should be raised, but also the issue of business clients (B2B) and individual customers (B2C). It is confirmed that the quality in provision of services via offshoring is more important that offshoring of physical objects due to, for example, dealing with the personal data (Thelen, Honeycutt Jr, & Murphy, 2010). The same study confirms that there are perceived differences in quality when it comes the country of origin of services. This is important implications for managers planning their international provision of services. Managers should focus on providing services from locations adjusted to the expectations of the customers. It means that the price cannot be the only argument, however it frequently is. It means that when it comes to quality services, they should be provided from the location that is consider as trustworthy. This is a major challenge for voice services provided to the US from India or the Philippines.

This issue is also important in B2B arrangements. There have been frequent complains about cooperation with foreign providers of services (irrespective of internal or external nature). It means that the quality may be the main challenge in successful implementation of SSC or BPO model. It exacerbates the issue of the rivalry between services providers and business units. To avoid this, the proper communication and positioning of services providers is crucial. Managers cannot picture a SSC or BPO unit as a remote provider, but should rather decrease the distance to the core operations. Such solutions are important especially when the offshoring is considered as moving jobs from high to lower cost economies. This may result in the resistance in the source economies.

5 New trends in advanced business services

5.1 Global business centres

The ABS industry is quite a new in the global economy, but it also evolves every day. Someone might argue that the supporting business activities are not very relevant to core businesses. It is a very naïve and superficial view. The value of the office work globally is estimated for more than 10 trillion dollars annually. So introducing any solutions that will bring savings in providing the support functions may be a major innovation. Our focus is more about the quality than quantity of offshoring. We look for the answers to the following questions: What are future areas of development of ABS? How an ABS unit can leverage activities of a MNE? How can an ABS unit contribute to building advantages of the entire organisations?

The growing maturity of offshore ABS units leads to upgrading their operations and improving their position within structures of MNEs. The increasing trend is transforming the operations of a SSC into a global business centre (GBS). The new form of SSC is also referred to as intelligent business solutions (IBS). According to the survey by a consultancy, 61% per cent of respondents consider their ABS units as GBS (Deloitte, 2017, p. 10). SSON (2019) claims that the landscape for ABS is changing faster than ever before and there are many new developments in the industry. Establishment of a GBS is the answer to profound changes within MNEs. Digitalization helps companies to centralize operations and processes dispersed in many locations (Bhattacharaya, Lang, Reeves, & Augustrinraj, 2018, p. 10).

GBS can be described using five characteristics (Deloitte, 2013):

- Multi-function
- Multi-region
- Multi-location
- Multi-sourced
- Multi-business.

Some experts envision significant evolution of business services and "the BSCs [business services centres] are entering the next phase BSC 4.0 – the intelligent multimode global super-office." (ABSL CZ, 2018, p. 9). Companies change names of their service subsidiaries to underline the evolution towards a greater geographic and functional scope of the operations, rising maturity of the processes taking place in the unit, but also its position within the structures of multinational firms. It is the evolution from providing services as somehow an external unit to being a crucial part of the management process. The example of the evolution and naming was an ABS unit of an American oil firm – ExxonMobil in Hungary. On the 15th anniversary of the operations in Budapest the official name ExxonMobil Business Support Center Hungary was changed to ExxonMobil Global Business Center (Gaál, 2019).

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Centralisation increases the application of end-to-end processes within GBS units. Moreover, the process ownership and responsibility of GBS units are rising. The model of consolidated operations proved to be appropriate in many areas. However, it does not end with putting accounting for tens of business units under one roof of GBS. There are still functions that can be more effectively executed in particular locations, than from one central unit.

This relates to processes that are even closer to the core activities of the companies. The list includes logistics, value chain management, production planning, sales planning. In some companies such operations have been already moved to an ABS unit. This may be the remedy for decreasing number of jobs in transactional activities in offshoring locations. Moreover, the activities will be rather of middle or even front office, not the back office. As a default we should assume that many back office jobs are prone to automation, but it may be of limited impact (at least in the coming years) for the middle or front office activities.

The idea of creating a GBS unit is sometimes not an optimal solution. According to Davis (2005) fully centralised global operations are unlikely to replace regional deliveries of business services due to different needs of clients, differences in business environment and legal frameworks between regions and trading blocks. This could be understood as "one size does not fit all". Time zones or legal regulations induce the existence of regional services centres. In general, the operations of foreign firms in ABS in CEE are globally oriented. They aim at standardisation and codification of processes, so they can be delivered to any place in the world. Indeed, rare are cases when services by a centre are provided only to one country. Only 4% of centres in Poland and 1% in Warsaw implemented such a model (ABSL, 2018, p. 23). Building a centre to serve only one market is somehow against the main assumption of an ABS unit, that is consolidation of auxiliary services from different countries, in order to improve process execution. Anyway, this can still be important if the consolidation of many units from one country took place in a single service centre. However, this does not have to be the case if we look from the expansion perspective and the service centre was established in order to boost the home country's operations.

We assume that ABS units are created by multinational firms. However, a SSC unit may be also established by a domestic firm with operations in only one country. However, their structure and scope of operations is very different from the global or regional peers. For example, foreign-owned ABS units in Hungary provide services according to three geographic dimensions. First, the largest amount of services is provided for European clients. Such a model is chosen by many global firms, which have vast operations in Europe or even more frequently by large European firms relocating support functions to Hungary. Second option is that services are provided globally and Hungary is the core location for ABS for a multinational. It is also related to the fact that some firms include CEE economies in their global delivery chain. The third option is providing service for businesses in North America. For the largest multinational

corporations, ABS enable to operate 365 day a year and 24 hours a day. They create a global network of units at different geographical locations and time zones.

There is also evolution of SSC from transactional into knowledge-based activities. It is indicated by names of the units: centre of expertise, centre of competence, or centre of excellence. Indeed, the process excellence is the key element of the strategy of such units. The move towards higher value added activities is the central evolution of SSC. According to SSON (2019, p. 2) "A strong and obvious commitment to Centres of Expertise is a driving force in modern-day Shared Services".

We focus on GBS as the evolution of captive offshoring, however there are also opinions that the rise of GBS model have been linked with the propensity of firms towards outsourcing. According to Wirtz, Tuzovic, and Ehret (2015) "business service providers can provide solutions reducing a firm's complexity and coordination problems across the supply chain, thus allowing the firm to free resources for new innovations". One of the consultancies in Poland had many processes in their SSC, however they decided to outsource the lower value-added tasks to a large Indian provider with operations in Poland. Thanks to such move the SSC could focus on more value-added and knowledge-intensive activities under the umbrella of GBS.

5.2 Automation and machine learning in business services

The notion of AI has usually been associated with driverless cars, autonomous drones, or machines imitating human behaviour. However, from the business perspective more important are less impressive activities that help to reduce costs and errors. Robotic process automation (RPA) or robotic desktop automation (RDA) means executing office tasks by employing bots – computers equipped with software performing business processes without or with just minor human assistance. It is accompanied by the development of new smart software such as BluePrism, Microsoft Cognitive Services, or UiPath. The development of the technology is still in its nascence as the value at the end of 2016 was estimated for $5 billion (Willcocks, Lacity, & Sauer, 2017, p. 6).

A very recent trend in automation of white-collar tasks is intelligent process automation (IPA), which means supporting processes using AI and ML. Automation here means more than just machines using documents or numbers to perform tasks. This is about direct interactions between a human being and a machine. It may take a form of so-called chatbots (officially: intelligent virtual agents, IVAs). Such software can replace a worker in contacts with customers, recruitment process, or technical support. Moreover, a bot can work around the clock with the same efficiency. The automation solutions provide scalability, that means they can serve 10 or 1000 customers per hour. Such flexibility is not possible with human beings.

The idea of employing machines to do things previously executed by human beings is not new. In fact, for hundreds of years it raised the public's anxiety. The introduction of a new technology in textile manufacturing in the 18th century led to

Luddite riots aimed at destroying the mechanised looms. There has also been a lot discussion about robots in modern industry replacing human hands and performing many tasks faster and with higher precision. This explicitly threatened the employment of blue-collar workers. However, the other side of automation is incorporation of machines mimicking the human brain. This, in turn, can threaten the position of while-collar workers.

What is different when we compare the robotisation in manufacturing with the automation of ABS is that in the latter, barriers are lower and incentives greater. The lower level of barriers means that new solutions are more affordable for businesses, thus the return from the automation is faster. Both lower barriers and higher profits are closely linked to the characteristics of firms implementing the automation solutions in services – large multinational firms. They have incentives to apply advanced solutions, because they can spread them to operations in many divisions and countries. What is important is that such firms have already made an important step toward automation – they already standardised many of their tasks related to office functions.

To clarify notions used in the discussion about automation, it is important to explain the notion of digitalisation first. It means transforming processes conducted in the manual way into binary data. The evolution towards the digitalisation of business services was the first step towards automation. Still just a few years ago, schemes presenting the workflow in services were just emerging. Within a short period of time, precise procedures, that can be executed by machines, have been developed. The necessity to involve human being is decreasing significantly. In just a few years the main role of human beings in ABS will be solving only the most complex tasks.

AI, in early days, was understood as "making a machine behave in ways that would be called intelligent if a human were so behaving" (McCarthy, Minsky, Rochester, & Shannon, 1955). According to Nilsson (2009) "artificial intelligence is that activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment". A narrower understanding and a more humble role of AI was presented by Kaplan and Heanlein (2019), who defined it as "a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation".

Kaplan and Heanlein (2019) distinguish three systems of AI: analytical AI, human-inspired AI, and humanized AI. Analytical AI is the basic form of intelligence using analysis of past facts to programme future behaviour. Human-inspired AI adds emotions to the cognitive intelligence. This type of AI observes emotions and reacts accordingly. If we add to the cognitive and the emotional intelligence social skills, we obtain the humanized form of AI. In other words, having these three types of intelligence, the machine can imitate the behaviour of a human being.

From the perspective of ABS firms, great gains can be associated with each type of AI, however when we take into consideration the structure of current

knowledge-intensive business services, the analytical type is particularly worthy of attention. The business functions are associated with analysis of business processes, gathering data, solving current problems and finding solutions aimed at avoiding problems in the future. Moreover, the processes in ABS industry are frequently performed according to the rules imposed externally, like International Financial Reporting Standards (IFRS). It means that processes are typical to many firms and the potential of automation is high. Moreover, the larger the number of companies applying automation, the more widespread and affordable the solutions become. It means that in just a few years most processes related to ABS may be automated. It is confirmed that various forms of automation may replace humans in executing many tasks. Actually it is already happening and many ABS firms have implemented automation solutions. However, from the business perspective it will require significant reengineering of business process. At the moment, thanks to the flexibility of a human brain, even the most complex business problems can be solved. But in order to make application of machines in business services easier, it may be better to adapt processes to the way computers operate than to train computers to solve complex human-oriented processes.

Although the attention is currently focused on the analytical type of AI, there are significant gains from other forms of AI. If emotions are included, such a machine can be a very useful tool of customer service, recruitment or marketing. Such solutions could replace human beings more broadly from the provision of services, even in business-to-customer relations. Social intelligence is not relevant to solving many of business problems, however equipping AI with the social elements would again increase the number of tasks, where AI could be applied. AI may help introducing automation into non-routine tasks and involving high levels of skill (Autor, Levy, & Murnane, 2003). However, the opinions on AI have not been only positive and optimistic. Acemoglu and Restrepo (2019) concluded that "The considerable promise of AI implies that we need to devote care and serious thought to its implications and to the question of how best to develop this promising technology platform – before it is too late."

The introduction of first computers led to new ideas for AI. As it was earlier mentioned, already in the 1950s there was a promise of building really intelligent machines. However, after several decades there are still no solutions ready to replace human brain in many tasks. Actually, the introduction of computers created many jobs. From the perspective of the ABS subsector, the important jobs such as: record keeping, calculation, or repetitive customer service are those substantially substituted by computers (Autor, Levy, & Murnane, 2003). So the development of technology modified the jobs, but not replaced them. Naturally it is difficult to compare the events in the technology development, however the end of most jobs should not appear any time soon. Anyway, it does not change the opinion, that there is a revolution expected in job markets and jobs' content.

Automation of ABS is considered by companies as the core disruption in recent years. However, the bold declarations have not materialised yet. According to Deloitte

(2017, p. 16) 42 percent of ABS firms have not started any robotic process automation (RPA) preparations and only 4 percent automated multiple processes. Anyway, automation is gathering pace, and new solutions emerge constantly.

The process of automation has started some time ago at leading companies. Observing the path we can distinguish four steps (Figure 6). First, managers in organisations start treating services as processes that can be divided into smaller tasks and instructions of delivering them should be prepared. As a result, the knowledge that was once of a tacit nature becomes codified. When the first step is completed and there is enough information about services provided in various units of an organisation, it is possible to standardise many of them and implement common solutions. In the third stage, it is possible to consolidate tasks in one or few units. This is the phase when a shared service centre may be created or the activities may be outsourced to an external service provider. Consolidation also requires achieving a certain scale of activities, because only then it is justified to arrange their execution within new structures. When the processes are standardised, consolidated and streamlined, there is room for applying automation.

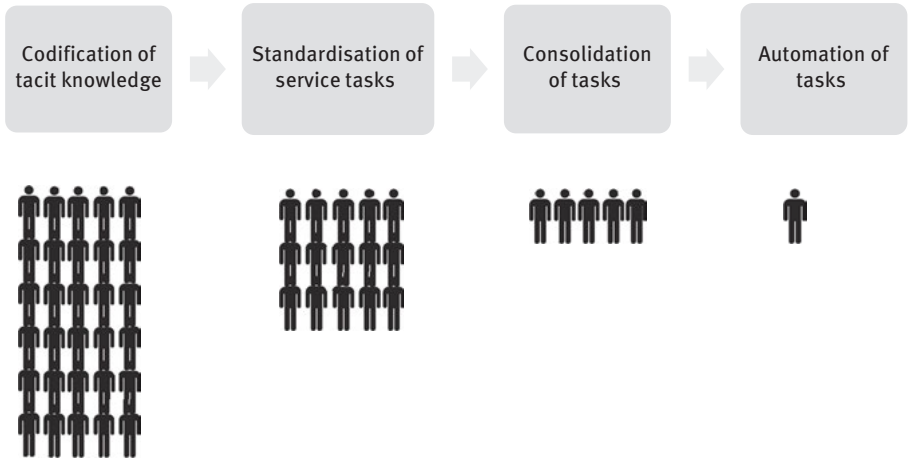

Figure 6: Process of transformation of headquarters' services and headcount (source: own elaboration).

The change in headcount can be best illustrated by a case of an ABS unit, which used to hire 20 financial specialists. Once the process was automated, there were still 15 positions, but 7 of them were taken by bots, 2 bot trainers and 6 financial specialists solving the most complex and non-repetitive cases. And this is not the end of the evolution, so the number of human beings in the process is still expected to fall.

Actually, when all new processes are taken into consideration, the hybrid approach to ABS units will be the most appropriate. It means that many processes will be conducted by bots supported by humans. Moreover, there are no arguments yet that the highly demanding mental processes will be soon performed by machines. An important view on AI is the cooperation with human beings. Machines and people are complementary in the "organizational decision-making processes typically characterized by uncertainty, complexity, and equivocality" (Jarrahi, 2018). Thus, for managers of ABS firms it is important to understand that machines should augment human beings, not to replace them.

Nowadays, the main focus of researchers is the displacement effects of labour caused by automation. The evidence confirms that labour's share in the value added has been recently reduced (Autor & Salomons, 2018). They conclude that recently the automation is not aimed at labour-augmenting but rather at labour-displacing. In other words, there are no gains in the labour's productivity, but there is a trend towards replacing it with cheaper machines (Zeira, 1998; Autor, Levy, & Murnane, 2003). The interest in AI is rather from manufacturing perspective, sometimes from the customer services, but not much from business services.

The biggest impact of automation is for middle-level occupations. The literature on automation underlines the notion of tasks in understanding presented by Grossman and Rossi-Hansberg (2008). This is because automating a task does not mean automating an occupation (Bessen, 2016). Tasks requiring high skills are not possible to automate due to their cognitive nature, whilst those of low-level are also not possible to automate due to detailed manual handling (Mandelman, 2017). Moreover, the introduction of various information technologies had positive impact on autonomy of workers and widening the span of control (Bloom, Garicano, Sadun, & Van Reenen, 2014). This may lead to making firms flatter and elimination (not only reduction) of middle-skilled jobs.

According to McKinsey Global Institute (2017) "while few occupations are fully automatable, 60 per cent of all occupations have at least 30 per cent technically automatable activities". Their approach is that many occupations are quite resistant to automation, however thanks to automation of some tasks, the productivity may rise.

Studies confirm that office and administrative jobs are in the same category of jobs highly threatened by automation as production occupations (Frey & Osborne, 2017). As a social consequence, the automation is expected to decline the number of routine-based jobs, erode wages of medium-skilled workers, and benefit those in non-routine occupations (Wright & Schultz, 2018). According to a consultancy "more than 1 million jobs are at risk in four countries alone: the United States, Poland, India, and the Philippines" (A.T. Kearney, 2017). Interestingly, according to World Economic Forum (2018), the jobs that are on decline are expected to fall of 18 percentage points already in 2022 in comparison to year 2018. The titles in the declining category include among other: accounting, bookkeeping and payroll clerks, data entry clerks, telemarketers, client service and customer workers. Importantly, those are the

jobs, which create the bulk of operations within white-collar services in CEE. The jobs on the rise are: digital transformation specialist, data analysts and scientists, process automation specialist.

There are several completely unexplored areas related to automation of business services. First, it is necessary to introduce an international setting for the automation, with particular attention on offshoring. Offshorability (the possibility of conducting processes in offshore location) of jobs does not equal automation of jobs (Frey & Osborne, 2017). Cashiers have been replaced by automation teller machines, however the activity must be performed at a specific place. Anyway, there is direct link between routineness and offshoring (Goos, Manning, & Salomons, 2014). It would mean that routine tasks were once moved from advanced economies to low-cost locations, but now the tasks will be transferred to bots. It means there will be no direct increase in the number of jobs in advanced economies due to the downfall in the offshoring. Only limited number of jobs may be created to support bots. The issue is how to attract the remaining jobs and where to locate bots.

Offshoring of tasks, when measured on the sample of American firms, led to the larger size and higher productivity by firms offshoring some tasks (Monarch, Park, & Sivadasan, 2013). However, according to their evidence such firms suffered a large decline in employment and output relative to their peers. It means that jobs were partially moved abroad. If we employ automation in host countries, it means that the jobs may be replaced by machines.

The other neglected element of the analysis are also changes in firms due to automation. According to Aghion, Jones, & Jones (2017), the internal organisation of firms may evolve due to introducing AI. They based such an opinion on an earlier analysis of UK firms and proposed a simple of model of a firm with "high-skilled" and "low-skilled" occupations (Aghion, Bergeaud, Blundell, & Griffith, 2017). They focused on the position of particular occupations, even analysed outsourcing, but they did not include offshoring in their framework.

An important element that cannot be overlooked is the dominance and concentration of market power by a relatively limited number of firms. They are also called superstar firms (Autor, Dorn, Katz, Patterson, & Van Reenen, 2017). According to their results, the growing dominance of such firms leads to the decline of labour share in value-added and sales of firms. The notion of superstar firms can be stretched to multinational enterprises. They are predominantly capable of introducing advanced technologies like AI. MNEs also dominate when it comes to offshoring of white-collar jobs.

5.3 Transformation of business services and their execution

The impacts of the transformations in the ABS industry can be observed in the job market, financial performance of firms, global organisation of firms, and flows of

FDI. The issue that was also raised is whether MNEs will conduct more service operations in a home economy or maybe abroad. One of the threats for the industry of services offshoring is its expected decline. There are arguments against further development of captive offshoring as well as against outsourcing abroad. Sometimes the expectations are that the growth of one type will be at the expense of the other. Captive activities are supposed to be limited due to the automation and the rise of specialised providers. Technology is at the same time expected to limit scope of outsourcing as well as platforms offering freelance service providers instead of institutionalised providers.

However, there is still plenty of room in the market to grow. Still around 60% of IT activities and around 80% of office tasks are executed in-house (Willcocks, Lacity, & Sauer, 2017, p. 19). Thus it is considered that they can be outsourced. However, it is not always an option as companies tend to keep a certain level of control over data and processes. The statement about the large portion of processes still inside an organisation may mean that companies opt for captive offshoring. Actually, the vast study of literature and business cases does not give an unequivocal answer to the idiosyncratic decision between captive and outsourced business services mode.

According to Avendus, a consultancy, the analysis of global market for ABS can be divided into two main types of activities: business process management (BPM) and information technology (IT) services. The notion of BPM comprises activities considered as SSC and BPO in this book. The current state of offshoring and its further potential of growth can be seen by the comparison of values of global sourcing and global usage of particular services (Figure 7). Value of global IT services is more than three times larger than BPM, however IT services are still to a limited extend globally sourced. Only around 15% of global sourcing means that there is still a significant potential for further development. The BPM sourcing may in turn seem more saturated with more than a third already provided from abroad. However, as more and more processes have been streamlined and tasks commoditised it is expected that the share of international sourcing will continue its growth.

ITO services have been disrupted by the cloud computing and a new type of activities emerged – cloud sourcing. It is directly connected to delivering ITO services, however it impacts various types of operations of enterprises. Thanks to cloud sourcing the other, technological innovations can be included in the delivery package of services, like big data analytics or automation.

Transformations of ABS are linked to changing working conditions. According to some statements, workers of the futures will be part time independent contractors with high qualifications. Anyway, it is pretty simplistic to think that flexible work arrangements in the form of “crowdsourcing, contract work, part time work and job sharing will promote the inflow of new creative minds and well educated workforce into BSCs” (ABSL CZ, 2018, p. 7). I argue that highly qualified and scarce employees cannot be treated just as an input. The economy of sharing jobs (also known as a gig economy) is frequently associated with companies treated their

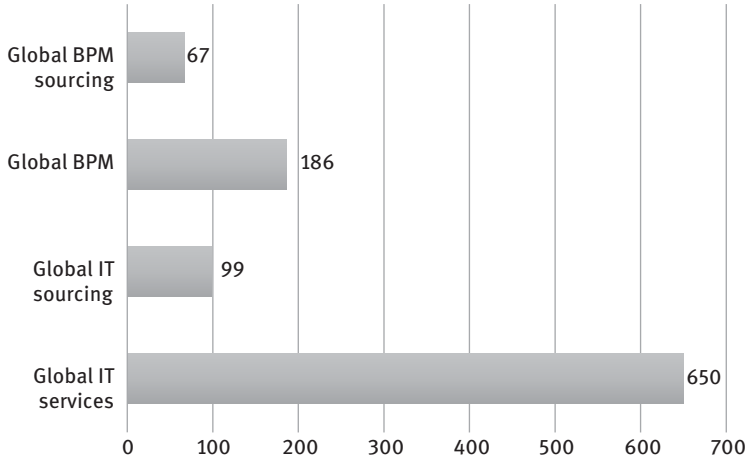

Figure 7: Global advanced business services market (2016, in billion USD) (source: own elaboration based on Avendus, 2017).

workers like contractors in order not be liable for their social contribution. Opinions from the United States, where the gig economy is already advanced, that it is a way of exploiting workers using modern technology (New York Times, 2017).

When we link the gig economy to automation in ABS units, there is a large mismatch between creativity and exploitation. BCG in their report claims that gig work is good both for companies and workers, however they conclude that "freelancers aren't the only option for companies looking to source critical talent in a flexible way" (Wallenstein, de Chalendar, Reeves, & Baily, 2019). There are more arguments against possibility of using freelancers as a source of long-term competitive advantage. The example of the ridesharing company Uber reveals that only 4% of its drivers are providing their services for longer than one year (McGee, 2017). In the knowledge-intensive activities such a high rate of turnover would make it impossible to train workers. There is also an issue of accessing sensitive corporate and personal information by short-term contractors.

The issue are also employment relations, increased job insecurity and risk of marginalisation of certain categories of workers (Drahokoupil & Fabo, 2019). The answer to the problems with weakening linkages between employers and employees in the service sector may be creating work ecosystems, which will govern this special relationship (Subramony, et al., 2018). However, there are the same concerns raised about access to data assessment, or retention.

The offshoring and outsourcing of services are currently in the phase of significant commoditisation. It means that there are exact procedures and instructions helping to execute the transaction in a repetitive manner. The highlighted result of the commoditisation is automation and employing specialised software executing

ABS. However, a less pronounced development in the delivery of services is the rise of micro providers and platforms allowing them to offer their services as a part of a global value chain. It gives the individuals possibility to serve as contractors to BPO or captive offshoring units and to work in locations, where such service units are not present (Lehdonvirta, Kässi, Hjorth, Barnard, & Graham, 2019). It may be an opportunity, but also a threat to established providers of services. On the one hand, it will help with the shortage of skilled labour in main service clusters. It will also eventually unbundle the services from the geographical locations. It is important as services are already frequently transmitted electronically, however the clustering becomes even more important. As a result the basic characteristics of ABS will be fully utilised. It also means that the talent pool will be greater and accessible from very distant locations.

However, there are also threats to the established organisations. The competition from micro providers may squeeze margins as new large group of vendors enters the global market. Anyway, many processes cannot be transferred to those providers due to the complexity, necessity of interactions with stakeholders or the secrecy and data protection.

5.4 Cybersecurity and data protection

The most important characteristics of advanced business services is dealing with processes based on data. The greater scope of operations in an ABS unit the more data, also of the sensitive nature are collected, transformed, and exchanged with other units within the enterprise, but also with external partners. Such activities are subject to rising regulations and risks. Various economies introduced specific laws regarding data storing, protection and transfer. One of the most important is General Data Protection Regulation (GDPR) introduced by the EU. The issue of offshoring is important in this context as it introduces the transfer of data across borders. It means that companies organising a global or regional centre need to take into consideration the restrictions to the flow of data. The issue is that in many cases it has not been regulated yet, so it induces firms to introduce internal regulations.

The limitations of data transfer may be also a business opportunity for companies working within the same legal framework. For example, EU firms may be willing to choose one of EU economies to work with data, as the regulations are common. There is also an issue of data localisation. It means that they should be stored and processed within the border of a country. The case may be Russia with its regulations regarding localisation of all personal data or China requiring the same for personal, as well as business and financial data.

The issue is also transferring important data to economies, which have not been considered as role models with respect to data protection. In such a case the providers from those economies must prove that they are able to operate using the best

international practices. However, the issue is that there is a limited guarantee that the local authorities will not access the data of foreign companies. Unfortunately, companies transferring their data have not been concerned much about the issue and sometimes recklessly focus only on the costs of operations.

There is also an issue of cybersecurity. A cyberattack may endanger the existence of the entire organisation due to a breach of data. The fact that companies possess large amount of data means the value of them is rising significantly. It is exacerbated by offshoring, as the centralised units managing data may be targets of such attacks. Therefore a very important issue is data management in the offshore outsourcing and captive offshoring arrangements.

It is stressed that the security issues related to data are multifaceted and require treating many aspects as interrelated. According to Nassimbeni, Sartor and Dus (2012) there are three main dimensions of the security issues related to outsourcing and offshoring of ABS:

- Organisation dimension – related to efforts of an enterprise to implement policies and procedures on data security,
- Legal dimension – related to the legal environment for the enforcement of the cooperation between an enterprise and its data operators,
- Technical dimension – related to the ability of introducing technical solutions aimed at increasing the security of data.

Problems later resulting in the security issues regarding offshoring and outsourcing can relate to the following activities (Nassimbeni, Sartor, & Dus, 2012):

- Activity selection,
- Entry mode choice,
- Location choice,
- Supplier selection,
- Contract drafting,
- Management of the transition,
- On-going project.

The list includes activities prior to the foreign assignment of tasks, change management and execution of the project. From the managerial perspective, it requires a holistic approach to planning the offshoring process, and the security issues should be a central point in the decision-making. It is also important to state that the security issues require to treat offshoring not as a low-cost solution, but rather a complex and strategic objective of an enterprise. It means that the appropriate amount of human and financial resources should be devoted to the organisation of the transaction, which should accompanied by a regular oversight by the top management of an enterprise. Failures in the aspect may have damaging consequences for the company.

There have been many cases of security issues related to data when it comes to the outsourcing. Probably the most striking was the case of the American National Security Agency, which was affected by the leak of information by a contractor in 2013. There have been many other cases of cyberattacks, not directly related to offshoring or outsourcing, however they were also results of the exchange of data between firms.

The security issue is also the reason why some companies are reluctant towards offshoring and especially outsourcing of the valuable content. The banking or insurance sector as those employing rather captive offshoring, not offshore outsourcing due to regulations. It does not only involve dealing with the financial data of their clients, but it is also related to internal processes, like HR management.

The four main trends presented in this chapter refer to distinctive elements of the ABS execution. However, they should be perceived as a total unity due to the fact that they are interdependent and aim at increasing the efficiency of provision of knowledge-intensive services. They all have a grave impact on the young ABS industry and its transformation should be perceived as a new normal.

6 Global perspective on advanced business services

6.1 Landscape of international sourcing of advanced business services

International trade in services has been in the shadow of merchandise trade. This was not due to the negligent role of the international transactions in services, as their absolute values and dynamics have been robust. In 2017 the value of global trade in services increased 7.8 per cent and reached USD 5.4 trillion, what makes around one third of global merchandise exports (UNCTAD, 2018, p. 34). The difficulty to understand the trade in services is connected to its intangible form, technological change, and variety of modes. This unfortunately is reflected in the quality of official statistics and national and international level (Klimek, 2018).

The picture becomes even more blurry when we analyse particular subcategories of services. When we move towards ABS, the issue is that they are frequently organised within enterprises, not in arm's length contracts. It makes grasping and measuring them particularly challenging. When it comes to FDI in ABS, the conventional measures fail even more than in the case of trade. The values of flows of FDI or stocks of FDI in the case of services are usually very insignificant when compared with investment in manufacturing.

The second distinctive element of the analysis of FDI in services is the number of people employed. When it comes to services, there is a disproportion between the number of employees and the value of investment. In most cases, a very low investment value is reflected in the high number of jobs created. However, in some cases services are used not only for real business operations, but rather for tax optimisation. Then the value of flows is very high and the number of employees low. It should be addressed in new regulations regarding trade in services and e-commerce. But grasping all business configurations and innovations in the structure of enterprises is not possible with the current framework of public statistics.

The recent developments in trade in services are highly linked with the global sourcing of business services (Lewin, 2011). It means the flows of foreign direct investment or international trade in services cannot be separated from each other. Moreover, they should not be separated from the global supply chains and the operations of MNEs. The business services are not standalone operations. They are always connected to the operations of particular firms and their decisions. Therefore it is necessary to analyse all elements of the global context to comprehend the recent developments. One more element should be linked to the development of internationalisation of business services – technology. It all creates an ecosystem for further developments of offshoring of ABS.

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The liberalisation of trade in services has been the subject of many years of international negotiations. The empirical studies provide an evidence of potential gains for developed and developing economies. The benefits for the latter group of countries are much higher than in the case of manufacturing liberalisation (Nielson & Taglioni, 2004, p. 11).

The factors behind the development in trade of KIBS are similar to those responsible for offshoring. According to Wyszkowska-Kuna (2016) the three factors increasing trade in KIBS are: growing demand to services supporting economic processes; reorganisations of corporations; and development of technology.

The starting point to analysing trade in ABS should be presenting a broader context of trade in services. The commercial services create a much broader category and they directly present the importance of services in economies. The leading exporters and importers are large and developed economies (Table 6). Only two emerging economies made the top 10 – China and India. Interesting is the fact, that particular economies report similar values when it comes to imports and exports of services. We can expect a certain level of the intra-industry trade in services. This is the phenomenon of simultaneous exporting and importing items from the same industry. It has been first discovered using merchandise trade data, however there is also an evidence about such a situation also in service (Lee & Lloyd, 2002). Without going into further details we can conclude that large exporting economies are at the same time large importers of services.

Table 6: Top exporters and importers of commercial services in 2017 (source: own elaboration based on WTO, https://www.wto.org/english/news_e/pres18_e/pr820_e.htm).

Exporter	Value (USD bn)	Importer	Value (USD bn)
United States of America	762	United States of America	516
United Kingdom	354	China	464
Germany	296	Germany	319
France	249	France	244
China	226	United Kingdom	218
Netherlands	216	Netherlands	211
Ireland	182	Japan	196
Japan	180	Ireland	189
India	179	Singapore	171
Singapore	165	India	150

The US, which for many years have been the economy with the largest deficit in merchandise trade, report large surplus in trade in services. Likewise, other developed economies also report high values of trade surplus in services. The emerging countries in the list provide a very contrasting picture of the trade in services. China, is spite of its record values of merchandise trade surplus report also a large trade deficit in services. It can be interpreted as the high focus on manufacturing sectors induces the necessity to buy many services from abroad. The focus of India on services sectors is confirmed by a high value of trade surplus in services. The size of commercially traded services in India is very similar to the value of the entire offshoring sector. We can conclude that main part of trade in services in this country is due to its large ABS sector.

However, the countries active in offshoring are quite diversified when it comes to the level of development. One of the outliers is Ireland. It was the important spot for offshoring at its nascent stage, however in spite of the high level of development and erosion of cost advantage, it is still among important destinations. Moreover, studying the case of Ireland as a very mature destination for offshoring, may also bring lesson for economies that are less experienced with offshoring.

Ireland can provide both positive and negative lessons. When it comes to negative issues, we can point at the high level of dependence on foreign-owned firms. Impact of foreign firms in Ireland is much greater than in most of developed economies, when measured as a share of foreign multinationals in employment, exports or R&D expenditures (Antràs & Yeaple, 2013). In the times of prosperity in the global economy such close ties with GVCs may bring the higher level of economic growth, however when the economic situation becomes stringent, it may impact the host economy really harsh. Ireland experienced such a situation during the Great Financial Crisis. The end of the second decade of the 21st century also brings a lot of uncertainty when it comes to the global economy. This may again impact Ireland negatively. There are also cases of firms that are moving their activities from Ireland to CEE in order to find still lower costs. Especially when we discuss the US firms. They gained a lot of experience in Europe, therefore it was not difficult to start operation in another EU economy.

The factors that have attracted foreign firms to Ireland have been mostly associated with the national policy. Ireland offered well educated employees, support towards global business, and stable low-taxes policy (Barry & Bergin, 2013). Among the industries of special focus were pharmaceuticals and computer production, but later it added IT services and financial services.

There are various measures to indicate the role of particular locations to offshoring of services. According to forecasts by Everest Group (2019) the countries that dominate ABS industry by employment are as follows:

- India,
- Philippines,
- Poland,
- China,
- Canada.

There are different dynamics expected when it comes to various types of services and the attitude of firms in the industry towards global deliveries of services. However, the leaders have large advantage of being first-movers. According to Everest Group (2019) India will still grow in the coming years, the Philippines will be important location of BPO, but will face slowdown in the voice services. China is the large market for business services, however its international expansion is limited, while internal markets is still expected to grow dynamically.

When it comes to Europe and Middle East, Poland will be the largest player in the region, but there are also some evolutions in the geography – Ireland will gain due to Brexit, Lithuania, Ukraine and Israel will gain due to the focus on IT services. The same report confirms, that the US will remain the largest services market, but will focus on domestic activities. It is therefore crucial to distinguish locations that are important onshore and offshore providers. Due to sizes of the domestic economies the US or China are large providers of ABS, but their business models are very different from offshoring locations.

The ranking presented above will be used to analyse the top three economies with respect to their ABS industries. Moreover, ABS do not require the large investment in physical equipment, what should increase the possibility to distribute it to other non-core locations. Anyway, we can observe the opposite situation. The position of top economies may be strengthened due to introducing more technology and knowledge.

The global situation is dynamic with respect to attractiveness of particular locations in offshoring of business processes. Between 2009 and 2019 the relative attractiveness of Asia suffered significant loss towards European destinations (Figure 8). It may be associated with the rising number of European countries that joined the list of important destinations for offshoring. The investment in Europe can be attractive in certain locations due to the available knowledge and in other due to cheap labour. It shows that Asia and Europe are key locations for ABS.

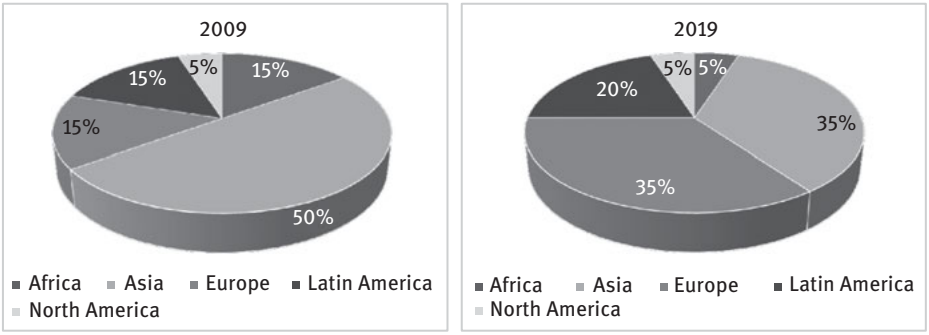

Figure 8: Share of regions in top 20 best offshoring destinations (source: own elaboration based on AT Kearney data).

Asia still holds the highest competitiveness when it comes to ABS (Figure 9). It is mostly due to the costs and availability of employees. The North America on the other hand is praised for competences of labour. Europe is pictured as a region with numerous attractive destinations, however it represents an overall low attractiveness. It is mostly due to the higher costs, than in Asia, and the lower knowledge base comparing to the North America. The reason is also the construction of the indicator emphasising the importance of cost factors.

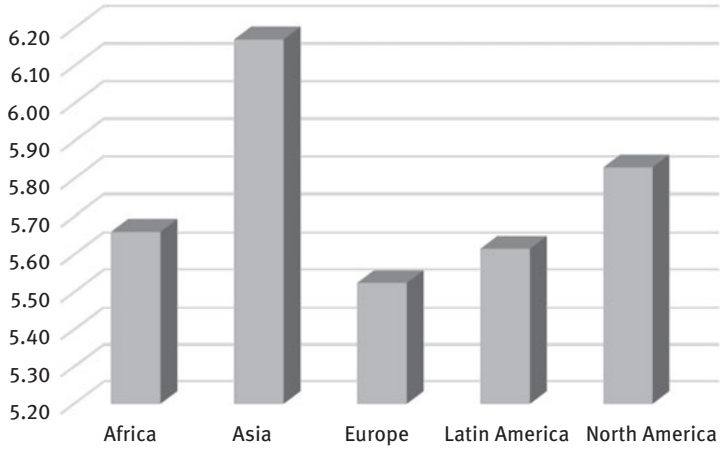

Figure 9: Regional attractiveness for offshoring of advanced business services (2019) (source: own elaboration based on AT Kearney).

All in all, the global situation is dynamic and there are newcomers to the industry. Some operation can be conducted in Asian economies, like Sri Lanka, Bangladesh, however still dominant positions of India, the Philippines and China do not seem to be in jeopardy. In Europe, besides the locations such as Poland or Hungary, there are new locations such as Lithuania or Serbia.

There are even continents that can be described as newcomers to ABS, for example Africa. There are some operations in South Africa or Kenya, however they are frequently just offshore outposts of Indian firms. The case of Kenya confirms that a latecomer to BPO industry faces various challenges. The industry has been rightfully identified as a potential source of the long term development, however local firms first could not tap into already competitive global market, but when foreign firms have been invited to Kenya, they have great advantage over incumbent firms (Mann & Graham, 2016).

Another African destination is Nigeria. In 2019 one of the largest BPO firms from this country announced plans to enter into the Japanese market, once it has been

already present in Britain. The company employs around 800 workers in three locations in Nigeria (Obayagbona, 2019). Due to the digital nature of professional business services it is possible to deliver them from very distant locations, from where it would not be viable to establish physical relations. Anyway, the scope of services provided can still be assessed as basic, as telesales or data management are dominant.

There are also smaller locations that establish themselves as global locations. For example, there are over 200 BPO firms in Sri Lanka and the industry is expected to reach USD 5 billion in 2022 (SLASSCOM, 2019). Bangladesh BPO industry employed 50,000 people and reported sales of USD 300 million in fiscal year 2017–2018 (Uddin, 2019). It expects further growth in spite of the lack of talents. Even small Mauritius aspires also to play an important role in BPO using its status of a financial offshore centre.

Thanks to the progress in technology and codification of knowledge, the foreign cooperation in providing services is possible even in a case of very negative circumstances. Such an example is Pakistan with its political and economic problems. In spite of many adverse factors making the face to face contacts almost impossible, some Pakistani IT services providers succeeded in providing services to foreign clients (Sinkovics, Choksy, Sinkovics, & Mudambi, 2019). The authorities of Pakistan expect that the industry will grow from USD 3.5 billion to USD 20 billion in coming years, due to the incentives such as zero income tax on IT exports or income tax exemptions (Syed, 2019).

The locations such as Sri Lanka or Pakistan do not play a significant role in the industry yet, however due to its dynamism the position of particular economies may alter soon. Especially if the demographics play the determining role in the size and scope of activities of the ABS industry in these countries. The destinations are important particularly for outsourcing operations, however they are not key locations when it comes to the captive model of services provision.

The international distribution of ABS is skewed towards just few dominant locations. This is similar to the pattern observed within particular economies. This somehow counterintuitive observation is associated with the fact that ABS are predominantly conducted by larger business organisations. In order to meet the scale of their operations, the ABS industry in a host economy should also be of a larger scale. In other words, the ABS operations need to be large enough to be worth attention in the headquarters and provide value by delivering multiple processes. The ABS industry needs to be of a certain maturity in order to create the unique knowledge that may be used in the entire organisation. These facts seem be neglected in most of the industry analysis.

Another odd fact is that ABS are intangible and easy to transfer, however the geography still plays the crucial role. Even the technological progress does not mitigate the issue of distance. The estimation of a gravity model for trade in services provided evidence that the distance creates large costs, however they are declining over time (Head, Mayer, & Ries, 2009). However, the issue is the appropriate econometric methodology. When a Poisson pseudo-maximum likelihood method has been applied

instead of commonly used ordinary least square method, the influence of geographic distances on trade in services was negligible (Kandilov & Grennes, 2012).

The presentation of the global perspective requires also detailed business approach. Such insight into the ABS industry are provided by the analysis of leading companies providing BPO (Table 7). The dominant location for BPO firms is India with its 6 large companies, which are mostly focused on IT operations, however these are not their exclusive activities. The service firms can be described as multinational corporations with the global footprint. Their role is not only described by their global reach, but also by their revenue and employment. The list includes only companies above 100,000 employees, however there is significant level of diversity in this group. The size of employment explains the quest of this firms towards multiple destinations globally. India is the main country of origin of ABS firms, however the

Table 7: Leading business process outsourcing firms (source: own elaboration based on companies data).

Company	Country of headquarters	Employment (2019)	Revenues bn USD (2018)	Notes
Accenture	Ireland	452,000	41.6	US origin, the headquarters were moved from Bermuda to Ireland in 2009
Capgemini	France	212,800	13.2	Employment in India – ca. 100,000
Cognizant	United States	288,200	16.12	Employment in India – ca. 150,000
DXC Technologies	United States	130,000	20.75	Employment in India – ca. 43,000
HCL Technologies	India	143,900	8.63	
IBM	United States	350,600	79.59	
Infosys	India	143,900	8.63	
NTT Data	Japan	120,000	14.6	As of 2016
Quess Corp	India	318,000	1.22	
Tata Consultancy Services	India	436,641	20.9	
TechMahindra	India	121,840	4.99	Employment as of 2018
Wipro	India	171,425	8.47	

country is also important destination for large foreign MNEs operating in services. Indeed, all of the companies are significantly engaged in India. We can conclude that foreign firms employ a much greater number of workers in India, than Indian ABS firms employ in other countries.

The main focus of this book is on companies providing services across borders, therefore India, the Philippines and Poland are the best examples of the state of the industry in the global scale. The analysis of the global top destinations for ABS is very useful to draw the context for the analysis of current operations and possible future scenarios.

The selected three economies are dominant locations in their regions and specialisations. India is the main global location, but it is not only about the quantity of processes and number of people employed. There is a large diversification when it comes to the scale and scope of particular providers. The Philippines are the largest destination when it comes to the call centre operations. Poland is an import nearshoring location for European firms, but at the same time attracts North American firms looking for offshore high impact activities. All of the analysed economies have their advantages, however there are significant threats for their future positions. The issue is that the industry in which they operate is highly globalised, concentrated and footloose. The last feature has been repeated for the production activities of MNEs. However, the rise of ABS industry brings a new meaning to the issue of the ease of moving operations between countries. This is especially the fact for BPO and ITO operations, as the captive activities are more localised.

Poland is treated here as the link between large economies being endowed with capabilities to host a large volume of advanced business services and smaller economies of CEE. Such an analysis is also crucial for the choice between the long distance offshoring and nearshoring. Another perspective focuses on the cost arbitrage. Indeed, with respect to costs, developing Asian economies are indisputable leaders of the global offshoring. When we include young and vast populations, Asia becomes the focal point in many offshoring strategies by MNEs. Less obvious is the selection of CEE consisting mostly of small economies with aging populations, and smaller cost advantage. Moreover, the activities of foreign-owned ABS firms in host economies have been chiefly analysed through the lens of employment. Anyway, this may also not be fully adequate for the industry prone to automation.

6.2 India

India is a distinctive country when it comes to the role in ABS. India has features making it a favourable location for ABS, however there are also some elements making it an unlikely destination for a vast wave of knowledge-intensive activities. The main advantages of India are low labour costs and a vast pool of talents. It is also the country, where English is widely spoken, and due to the colonial past,

there are links to major world economies. The price advantage of the largest white-collar offshoring destination is crucial for decision about offshoring. In 2002, the costs of providing call centre services in the US were more than 3 times that of India (Dossani & Kenney, 2003).

However, not everything was the result of natural equipment with resources. An important element was the strategic planning by Indian authorities. The establishment of new technologies in Bangalore, a few years after the independence, was one of the milestones in the development of the Indian IT and services sector. The development of Indian, so called, information technology and business process management (IT-BPM) industry was also an interplay between human accumulation in the country and the entry of multinational firms (Patibandla & Petersen, 2002). The initial stock of human capital has been upgraded and expanded thanks to operations of MNEs. This mixture also led to creation of the world-class IT companies. The Indian-origin firms are the largest participants in the ABS sector in India, but also expanded rapidly in foreign markets. The successful expansion of the firms also supports the export of ABS from India. The fact that India is home to leading BPO companies makes a unique combination. The size and the expertise of Indian firms is supported by cooperation with service firms in other countries.

Among main disadvantages of the economy we can list: low level of development, low level of education, or infrastructure underdevelopment. Anyway, sometimes anecdotal opinions about the humble quality of Indian service provision, are not reflected in the position of Indian firms in the BPO industry. They are important players in the global market and accumulated sufficient amount of expertise to grasp the newest technologies. It is not only about learning about the newest trends, but also building tools to utilise the latest advancements. The leading Indian firms are in the forefront of the changes in ABS.

We should also consider the large Indian BPO firms as internally diversified. It means that the main advantage of the firms is derived from large scale of operation and lower costs. However, important divisions of the companies deal with the newest technologies and build potential for the future.

The development of the industry that started with a few millions of dollars revenue is almost a constant growth. In spite of already high base, the industry still increases both in financial and employment terms. The IT-BPM industry grows several percent every year and the linear trend indicates that it may soon break the value of USD 200 billion (Figure 10). It is expected that the value of the IT-BPM sector will rise to USD 350–400 billion in 2025 (NASSCOM/McKinsey, 2015). The growth of the sector is mostly dependent on the international expansion and the global trends towards outsourcing of IT and business services.

Such an exposure to international markets brought not only opportunities, but also discipline. The dependence on foreign markets is also a risk as any restrictions in main markets of the United States or European Union may have damaging consequences for the industry. Anyway, recently the domestic market is providing a new

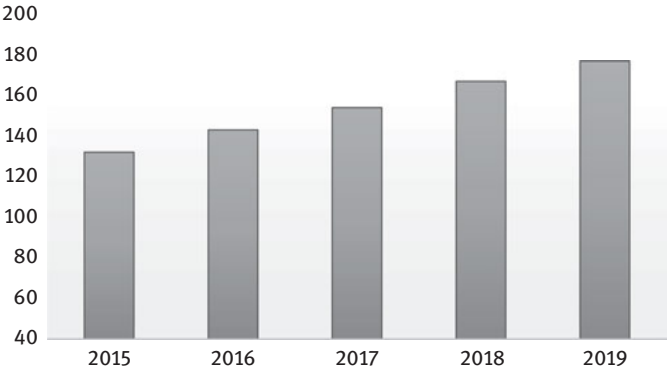

Figure 10: Indian advanced business service industry revenues (in USD billion) (source: own elaboration based of NASSCOM data).

impetus to the development of the industry. It is related to serving the indigenous clients, however India is also an important location for many MNEs. So the role of MNE is still in a centre of the development of the industry. There are few main providers of services responsible for most of revenue and employment. However, there are also small and medium sized firms active in niches or offering still lower prices of services.

According to an industry body, NASSCOM, the share of India in the global offshoring of IT and BPM was about 45% in 2016 (NASSCOM, 2016). The industry contributed to around 7.7% of Indian GDP in the same year making it relevant from the policy point of view. The role of advanced services in employment or GDP should be also supplemented by the information about Indian exports. "Computer, communication and other services" account for more than 70% of all commercial goods export in the period of years 2014–2018 (WITS, 2020). It means that the balance of payment and stability of the economy are reliant on the developments in a very narrowly specialised industry. For many years this has been a successful approach, however as it was already mentioned the relatively new industry is under an immense pressure for transformation.

Moreover, the industry has a kind of oligopolistic structure. In the case of the Indian ABS it means that there are few large players and the barriers of entry are high. Automation and digitalisation may bolster the issue of limited competition. The scale necessary to provide services to large international companies means that the largest companies should increase their market share. Naturally, there is room for innovative and disruptive start-ups, however their role have not been significant in recent years. This is also one of the factors behind the stagnation in the industry when it comes to number of jobs or revenues. Moreover, the start-ups in services industry are closely linked through funding and advice to incumbent companies.

Another issue worth underlying is also the geographic concentration of Indian exports in ABS. Two dominant trading partners (that is, the US and the UK) account for nearly 80% of exports (KPMG, 2016, p. 13). Recent trade tensions between the US and their main trading partners may also harm the service sector in India. It is related to the new visa requirements regarding the minimum wage and increased difficulty to apply for H1B visas (Avendus, 2017, p. 17). This could potentially impact the costs of operations of Indian firms in the US and decrease the number of employees sent to the country. The evidence suggests that the unofficial restrictions on visas are already in place. The rejection rate for visas by Indian firms rose from 6% in 2015 to 24% in 2020 (Sangani, 2020). If Indian firms face limitations in accessing the American market, it may support indigenous firms or firms from third countries. Some Indian firms have already faced legal problems related to visas in the US. Infosys paid a hefty fine in California as a result of the settlement with the Attorney General, who accused the company of visa misclassification of its workers delegated to the US, thus avoiding payroll taxes (Firstpost, 2019).

The positive picture of the growth of the industry may be somehow scattered by the fact, that the strategies of firms in IT-BPM can be described as generic and there is a risk that other aspiring firms from low-cost nations may copy the model. The operations of Indian multinational firms well describes the concept of low-cost partner presented by (Ramamurti & Singh, 2009). According to their concept, companies providing services for clients in high-income countries are mostly focused on cheap labour, abundance of talents, and process excellence. However, the pressure for costs is the major threat for their expansion.

The imitation is already happening in Asia, but also in South America and Africa. Especially when it comes to outsourcing of many services, the distance already plays a minor role. Therefore new advantages of Indian firms should stem from new technologies and expanding the scope of operations. This is particularly a viable option for the largest and financially robust firms. Conversely, smaller Indian service providers may seriously suffer because of the rising international competition. On top of that, there are also opinions that even the largest firms do not focus enough on the innovation both in terms of technology and organisation.

Indisputably, the growth of the Indian IT-BPM industry is directly related to the favourable demographics. Thanks to the large and young population, the industry may utilise the constant inflow of new workers to the industry. Such a situation also helps to avoid increasing the costs of employment, though they are also dynamically rising in this country.

The demographics is also one of the arguments behind the expected dynamic development as the supply barriers are not relevant and the main limitations may be on the demand side or protectionism policies in key markets. In recent years the industry added around 200,000 jobs annually (Figure 11). This number is slightly lower than the number of people employed in the entire ABS industry of the third largest – Poland. It confirms the leading role of India in offshoring of knowledge-intensive

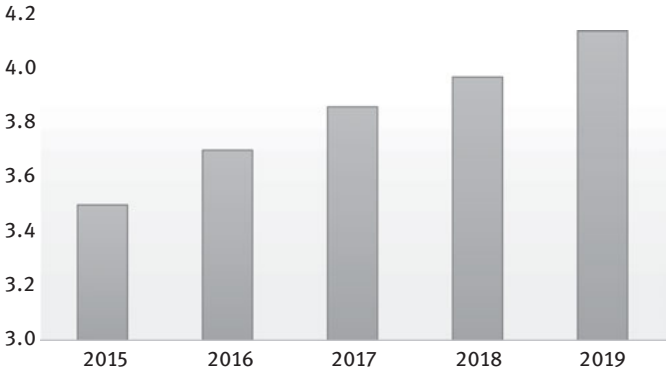

Figure 11: Indian advanced business services industry employment (in million) (source: own elaboration based of NASSCOM data).

services. Despite the constant rise of the employment in the industry, there are already signals that due to automation and trade tensions, the largest BPO firms in India cut the employment for the first time in 20 years (Sood, 2018).

The impact of ABS cannot be measured only using the number of direct employment. For example, in India in 2013 there were around 3 million directly employed, but the indirect employment was around 9.5 million people (NASSCOM, 2013, p. 12). If we use the same multiplier, in 2019 more than 12 million jobs in India were dependent on the IT-BPM services.

In spite of the size of the labour market and focus on IT education, even in India there is a shortage of highly qualified specialists. Especially in the new areas requiring expertise in AI or automation. First, many of the candidates graduate from low-level colleagues and their grades are highly inflated. It may also mean that their real development potential is much weaker than expected. The second issue is chiefly linked with the fact that the newly required skills have not been yet trained in the sufficient number. The speed of changes in the services provided has not been adequately matched with the supply of new candidates. The solution is to focus more on internal training and reskilling current employees.

It is expected that by 2025 around 70% of the workforce in the IT-BPM industry in India may be irrelevant with today's skills. It again urges the need for reskilling the current employees, but also introducing changes to the education system. Some business representatives claim that more than a half of currently employed workers cannot be retrained in new areas, what can lead to redundancies at various levels of the companies' structures (The Times of India, 2017).

One of the solutions for the shortage of local talents may be immigration. The international scope of operations of the Indian companies requires also international staffing. Already in 2013 the number of foreigners is the sector was around 100,000 (NASSCOM, 2013, p. 12). Again, India should attract immigrants having

very high qualifications. However, the pool of available talents is still relatively small. Another group consists of immigrants looking for jobs in ABS, however not having superb qualifications and thus may be employed at entry-level positions.

There is a lot that India could do when it comes to attracting more international talents. However, recent changes to policy on immigration actually reduced the possibilities for incomers and create the unwelcome atmosphere towards foreign workers. India has very positive internal demographic indicators, anyway to fully grasp both international market opportunities and gain access to knowledge, the country needs to be more open. The ratio of foreign employees in a very internationalised and export-oriented industry is merely 2%, what is a value several times lower than for example in many CEE economies.

India is the largest provider of ABS, however not offering the best quality. In many cases the cooperation with Indian suppliers is below expected performance, what increases costs of the process and raise questions about the entire models of SSC or BPO within MNEs (Kerling, 2019). This is also a threat for development of the industry in India in the perspective of increased automation.

Main Indian locations of ABS units excluding ITO are: Bangalore, Chennai, Mumbai, Hyderabad and Pune, making it in total 1,492 delivery centres (SSON Analytics, 2019). Importantly, the Indian ABS industry is not only about Bangalore (Figure 12). Mostly due to the saturation of the tier one locations, the role of tier two and tier three locations is rising. It is accompanied by the incentives aimed at attracting investors to the secondary locations. As a result, the employment in the top urban locations dropped in favour of other locations in a short period of time. We can conclude that the core of ABS operations in India is in smaller cities. Such distribution is more profitable for businesses, as they can operate at lower costs of property rental and employees' salaries, but importantly it is positive for the development of the entire economy, which is not dependent on a single location. In the worst case scenario it can also help to mitigate structural changes in employment.

Businesses operating in ABS in India has access to various forms of support. Business can use IT-SEZ (information technology special economic zones) designed for boosting infrastructure investment, exports and employment (India Brand Equity Foundation, 2019). A firm operating in such a zone may expect tax holiday on its export earnings for first 5 years and exemption from excise duties and customs. Next to IT-SEZ there are also Software Technology Parks of India (STPI). The construction of the two solutions is similar, however in STPI investor may expect unlimited period of tax exemptions on export profits.

The big disruption is related to automation. However, main Indian companies (TCS, Infosys, Wipro, HCL, TechMahindra, Mindtree or Cognizant) offer solutions supporting intelligent automation (Avendus, 2017, p. 23). Again, the development of new technologies may increase the market power of the largest firm and elevate barriers for smaller firms to participate in the market. This is also related to the fact

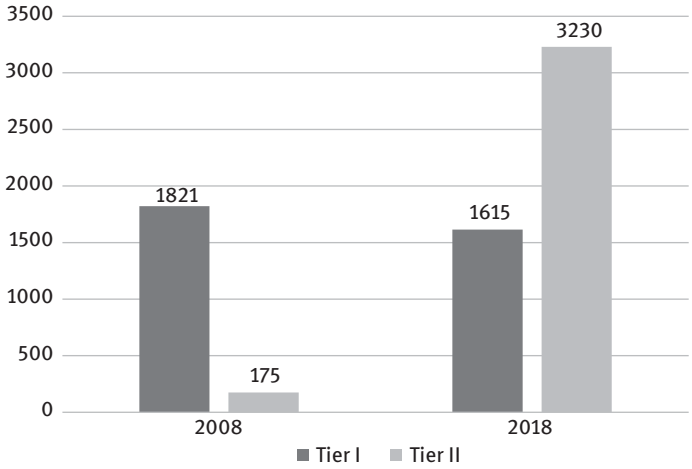

Figure 12: Employment by size of the city/town in India (in thousand) (source: own elaboration based on India Brand Equity Foundation, 2019).

that knowledge-based services have in general much higher barriers of entry than traditional services (e.g. hairdressing, cleaning). In year 2018 there have been 11 Indian companies accounting for around half of the Indian exports of ABS and employing nearly 40% of ABS workers (India Brand Equity Foundation, 2019, p. 13). At the same time around 15,000 small ABS firms were responsible for around 10% of exports and less than 20% of jobs.

The rise of digitalisation and automation increases the use of other IT-related services. The dynamically growing is cyber security. As businesses collect and use even more sensible date, the threat of security breaches rises. This calls for more advances cyber security solutions. This is surely one of the IT services that will be important in coming years. Anyway, there are as solutions using AI in order to detect a potential threat. Growth sources according to NASSCOM (2019) are following:

- Industrial automation,
- Robotics,
- Cloud,
- Internet of Things,
- Augmented Reality/Virtual Reality,
- Blockchain.

There is a new proposition of knowledge process outsourcing (KPO), which means more focus on higher value activities (Mehta, Armenakis, Mehta, & Irani, 2006). The future success of Indian sector depends on the utilising the opportunities. India have more capabilities than any other country, when it comes to ABS. Especially when it comes to automation. Naturally it will influence the employment level in the country.

However the country, that is in control of vast outsourcing operations, is equipped with capabilities to build strong base for automation. It will depend on the strategic orientation of companies, however it is also related to qualifications of employees. Actually, Indian ABS is quite distinctive when it comes to contingency plans for the future. The narration in most publications is rather bold, however also indicates potential threats in order to treat them seriously and take action. It was well communicated by NASSCOM (2015).

Besides the positive narration proposed by main companies, consulting firms and industry organisations in ABS industry in India, there are many concerns related to the industry. First, we should view the holistic situation of the Indian economy and the position of ABS industry. In spite of the fast economic growth, the country is still on a low level of development measured by, for example, GDP per capita. So it is in a stark contrast to discuss the newest technologies in the society of millions of poor people. Moreover, when we analyse the impact of the industry on Indian welfare in broader terms we need to remember, that ABS industry specialises in delivering services to companies located abroad. There is growing consumption of the ABS inside the Indian economy, however it is highly related to the presence of the foreign MNEs as the services have been designed for such organisations.

The fast growth of ABS sector helped India to move directly from primary into tertiary sector economy. The focus on ABS means that the industry employs staggering 5 million people. However, these is only a tiny fraction of the entire working population. For the sustainable development it is called for the aggressive policy towards a decent work for masses (D'Costa, 2011). Taking from the experience of advanced economies of Europe and North America or even emerging peers like China, developed manufacturing sector is a necessary step on the development path. It is discussible if omitting the important step or significantly reducing its role, may harm the economy.

The issue of weak industrial development means that the export structure ranges from low-wage manufactures to high-wage services (D'Costa, 2011). It means that few companies in a specialised and a very competitive industry are responsible for the major part of Indian exports and inflow of foreign exchange. It is difficult to describe such a composition of production and international trade as sustainable. This may significantly harm the economy in the case of any problems with the ABS industry. The same applies to the UK and the Brexit situation. There is great need for the diversification of recipients of ABS exports.

All in all, Indian services are dominant in the global market. They have prerequisite conditions of such a position: scale and expertise. Many critics argue that it is mostly about the scale while the quality still suffers. However within such a vast industry there is a large diversification of competences. Anyway, some of the cultural issues are not possible to change in just a few years. Moreover, there is a threat that automation will shrink the number of employees, while increasing incomes of those having unique competences in-demand in the market. Importantly, the industry representatives acknowledge future challenges (Figure 13).

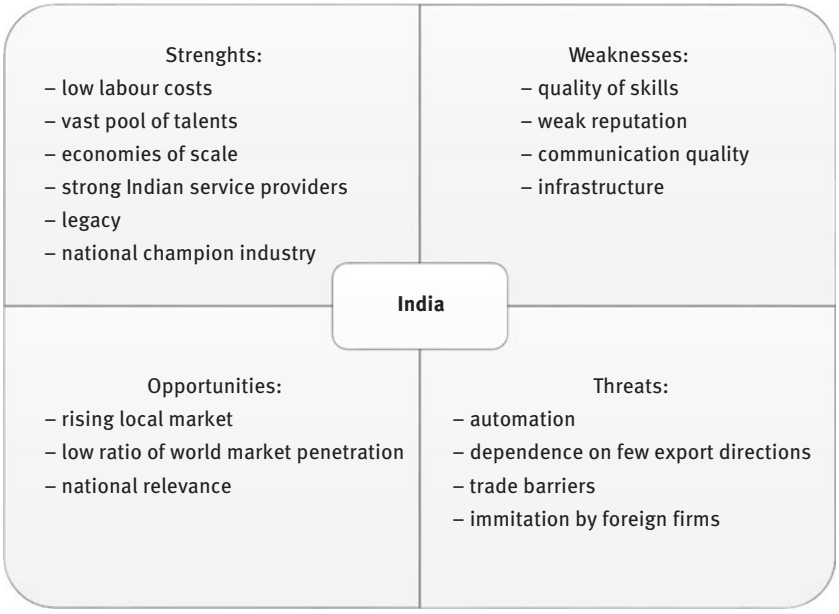

Figure 13: SWOT analysis of Indian advanced business services industry (source: own elaboration).

The expectations towards significant contribution of ABS to the economy of India cannot be met as companies, people, knowledge and wealth are clustered only in a few locations. Nonetheless, the values are changing towards smaller cities. In spite of the fact that smaller location play a larger role, the number of cities, with significant operations of ABS is still low. The concentration of ABS cannot be compared by any measure with the distribution of manufacturing companies, which are spread across the country. The type of operations within ABS companies is also very little related to the real life of India. The ABS firms are somehow extraterritorial units, just using Indian labour to provide highly specialised operations for foreign clients.

6.3 The Philippines

The Philippines, the second largest destination for ABS in the world, try to penetrate new areas of development. From the broader perspective, the ABS industry employs there around 1 million people and generates exports of around USD 20 billion annually (IMF, 2017, p. 3). There was a dynamic growth of the industry. In year 2000, the employment was around 3,000 people and annual national revenues around USD 40 million (Sallaz, 2019, p. 20).

However, still today the country is titled "the call centre (or voice) capital of the world" (IMF, 2017, p. 3). It is due to the main advantage of the Philippines – good quality of English with quite a neutral accent. This is linked to the colonial past of the country as a former US colony. This also helped to build successful business relationships with the large market for voice services. However, it is also considered as a post-independence continuation of Filipino exploitation by the United States (Padios, 2018).

An industry body, Information Technology and Business Process Association of the Philippines (IBPAP), in a forecast for the industry, expects that the employment will reach 1.8 million people and 73% of them in mid to high-value jobs in 2022. The revenue will reach 40 billion USD (IBPAP, 2016). One might be sceptical about the possibility to achieve the ambitious goal, however earlier expectation about growth in the period 2011–2016 have been actually met.

Anyway, the statistics are very patchy and no recent estimations has been available. This is somehow surprising citing the importance of the industry to the economy. Moreover, there are large discrepancies in data. According to official statistics, as of 2016 there were 851 establishments belonging to the BPO industry (this name is used to refer both to BPO and SSC units in the country), which employed 575,600 workers, including 504,227 in voice services (Philippine Statistics Authority, 2018). The study confirmed that the majority of workers was providing voice services. The characteristics of employees were similar to other main offshoring economies. The dominant age group was 15–30 and women were in majority. There were also no reports about unionisation, what means that businesses were quite free with contracts, however the demand for workers caused that most of them were paid more than the minimum wage. The statistics also confirmed that the dynamic development of the industry caused many vacancies hard to fill. Other numbers were released by another official body – the central bank of the country. There were 851,782 employees in the industry (Bangko Sentral ng Pilipinas, 2015, p. 11).

The Philippines are also a distinctive case when it comes to the role of the BPO industry in the entire economy. Besides the fact that there are 1 million people employed in a country with population of 100 million, the importance of the sector is best illustrated in the balance of payment statistics. As of 2017, the main positions in the inflows were remittances from Filipinos working abroad (USD 28.2 billion), BPO industry (USD 16.9 billion), export of goods (USD 16.2 billion), FDI (USD 7.9 billion) and tourism (USD 5.0 billion) (Bangko Sentral ng Pilipinas, 2018, p. 14). The role of BPO is more important than in any other large economy. This also confirms that some economies are using ABS in order to skip the manufacturing phase of development and focus on services as the main source of economic activities and international position. Such an importance calls for a greater attention of the authorities when it comes to the ABS industry.

Some elements of the less positive scenario have already materialised. It was confirmed by the head of IBPAP that the growth in the number of new jobs in 2018

missed the expected 100,000 (GMA News Online, 2018). The ABS industry in the Philippines needs to prepare for new normal growth rates, lower than historical. In the beginning of the decade 2004–2013 the sector was rising around 50% annually, while in the end of the period the growth rate was closer to 10% (Bangko Sentral ng Pilipinas, 2015).

This is related to fewer investors opening their premises in the Philippines. It touches another issue of the protectionist pressures in the United States and some doubts about the local politics of president Rodrigo Duterte. The large role of the ABS industry and the potential threat is the change of policy towards offshoring and outsourcing in the US has been signalled officially by the IMF (2017). This again shows that the dependence on one source of investors may be very dangerous for an economy, especially in such a globalised industry. There is another threat for the Philippines, which is related to the praised feature of BPO activities – they are export oriented. It is very good in times when the global trade is rising, however may occur very painful during slowdown.

The Philippines, in spite of the large population, are not important consumer of ABS services. The situation is different in India, where in spite of the great dependence on external customers, there is a growing internal market. In the case of Poland, which is also a minor user of ABS services, the unrestricted access to the European market may be a cushion, in the case of global protectionist moves.

The Philippines focus on specific areas of expertise (IBPAP, 2016):

- Contact centres and BPO
- IT and software development
- Animation and game development
- Health information management
- Global in-house centres

They are different than those provided by India or CEE economies. It may be an advantage of the industry in the Philippines, as there is less international competition. However, there are also new economies entering the industry and the advantage is not given forever.

However, when the industry representatives mention the impact of technology, they do not focus on automation, AI or ML. There are rather general statements regarding foundational capabilities in technology. Automation and new technologies may be particularly harmful for employment in the Philippines. This is linked to the fact that in 2016 around a half of ABS workers in this country were employed in task that were routine and not requiring abstract thinking (Asian Development Bank, 2018). Such jobs are very prone to automation. There are also low sunk costs, as establishment of ABS firms does not require a vast investment. The expansion of a call centre company to employ around 4,500 people requires a site of 2,700 seats, what costs around USD 13.5 million (Canivel, 2019).

Naturally, the development of new technologies will create a certain number of jobs, however according to a probable scenario, such jobs will be less numerous and requiring new advanced skills. It means that fewer people in such jobs will be better off, however the majority of ABS workers may suffer. It calls for new skills or reskilling current workers. Unfortunately in many cases it will not be possible as the requirements and expectations towards a call centre worker and a data scientist or a machine learning professional are totally different. It means that there will be a nett loss of jobs in the sector. It all depends on the relationship between the number of new jobs and destroyed jobs.

From the geographic point of view, the authorities in the Philippines identified the need to expand ABS industry outside the capital city Manila. Already in year 2013 as a joint initiative of authorities and a business association, the "Next Wave Cities Programme" has been introduced and included the following locations: Baguio City, Davao City, Dumaguete City, Iloilo City, Lipa City, Metro Bulacan, Metro Cavite, Metro Laguna, Metro Naga and Metro Rizal (GMA News Online, 2013). The idea of broadening the distribution of BPO investors is also in the interest of businesses, as they can access a bigger pool of candidates and the rental costs of office space are lower. It is also positive from the perspective of an economy, as investments and jobs are more equally distributed and the capital city's infrastructure is less stretched due to the inflow of new citizens.

The case study of Iloilo City confirms the positive impact of the ABS industry on the willingness of young citizens to remain in the city, instead of moving to the capital city or abroad (Beerepoot & Vogelzang, 2015). The presence of ABS jobs changes the consumption pattern and helps to move up the class status. The contradictory arguments for the same city were provided by Andriesse (2017). He argues that in spite of a certain size of ABS industry, the poverty incidence has not improved significantly and in year 2015 was almost at the same level as in year 2006. Beerepoot and Vogelzang (2015) question the longevity of the investment projects, as the industry is prone to automation. In the light of their findings, we can argue that the evolution of ABS may have different consequences for different regions of the Philippines. The tier two or tier three locations are important for now, as they can offer a kind of relief to the labour and property market of the capital city. However, the smaller locations do not have enough scale and expertise to be relevant in the core transformations that is taking place in the ABS industry. The locations may useful for delivering middle-skilled workers, however according to the expectations such workers are first to be replaced by the technology. The top locations, like Manila, may face some decrease in the number of workers, however the few highly skilled workers may be better off and the size of the industry measured by revenues will still be significant for the entire economy.

It is argued that the offshoring industry in the Philippines contributes to building a new middle class (Beerepoot & Vogelzang, 2015). Anyway, this can be of a little help, when we analyse the services provided as a part of a very footloose and globalised

chain. There are some arguments for having such operations in the Philippines, however they may not keep up with the global pressure on automation. Voice calls can easily be replaced by intelligent virtual assistants (IVAs). The issue of concern may be also the expansion of foreign BPO companies, what caused the local BPO firms almost to disappear (Mann & Graham, 2016).

The Philippines, similarly to India, share the great disadvantage – the time zone difference with its main clients. The model of work also induced inconvenient and unhealthy working hours. It is manifested in the so called zombie generation, people working night shifts in order to adjust to the needs of customers in the US or Europe. BPO and to lower extent SSC operations can be perceived as a source of a middle-term income in the economy. However, in the long term, there are more headwinds in the Philippines, than in India or Poland. The issue is actually the attitude towards automation. If Philippines provide world-class solutions to automate business processes, they have a great chance to play a relevant role in this global industry. However, there are still many threats and the main of them may the IT literacy. Still in year 2012, only 14% of schools in this country had access to the internet (Vergel de Dios, 2016, p. 14). The IT development was addressed in some legal acts, however the progress can be described as insufficient. The access of individual users in the Philippines may be described as "good enough" and it is claimed that masses of the working poor have limited access to the digital content (Uy-Tioco, 2019). According to the same research the low access to the internet is linked to deep economic and social inequalities.

The fact that BPO/SSC investors are focused on selected cities facilitates the process of preparing the appropriate incentives. In the case of the Philippines, it is also argued that a well-designed support by local policymakers may be more efficient than the regional incentives due to the faster reaction (Kleibert, 2014). The author also argues that a proactive policy towards investors intending to offshore their business services, may be successful for less endowed cities. Two cases of Bacolod and Baguio show that the former location that was initially on a weaker position, however managed to attract twice as many jobs as the more attractive peer-city. The question that arises is whether the investment are of a long-term type. Moreover, there is threat that local authorities will compete with each other in giving more generous packages for investors, what may be negative for the entire economy. Another threat, but this time for investing firms, is also the election cycle and possibility of changing the approach of a newly elected officials.

Another challenge is the mismatch between qualifications of employees and the needs of the industry. Currently, the industry association tries to partner with the government to reskill the workforce (GMA News Online, 2018). Such a programme is costly, requires a long term approach, and engagement of various stakeholders. It is understood that IBPAP looks for governmental support as there may be many positive externalities created, what means that the private sector would pay for the upgrade of skills of many people who may be no longer employed in the sector. Another important issue, but rather from the perspective of the internal discussions within IBPAP, is how

to divide the cost among participating firms, as the employees are quite mobile in the industry. All in all, the issue is about who is going to pay, but the stake is the future of the industry in the Philippines. Especially, when we consider the technology development that is already affecting the sector. The remedies should be quite prompt and precise in order to be successful. The situation of the Philippine ABS industry is summarised in (Figure 14).

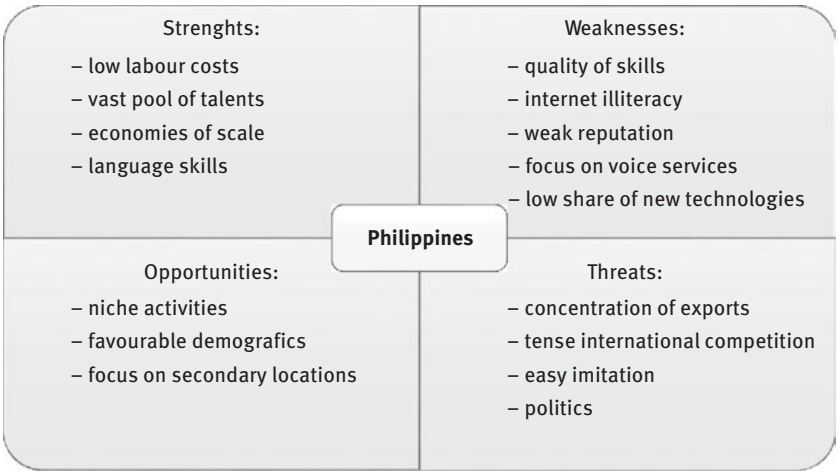

Figure 14: SWOT analysis of the Philippine advanced business services industry (source: own elaboration).

Besides the quantity of jobs that have been created in the Philippines, it is necessary to look at the quality of jobs. The workers in the country face the same dilemma as in many other destinations of ABS – an overqualification. However, when low and mid-level workers in the ABS industry acknowledged the mismatch between their high academic qualifications and the type of work they do, they used the industry to upgrade their positions (Beerepoot & Hendriks, 2013). Moreover, the workers in the industry were using their experience in order to increase their employability in the international labour market. From the perspective of the Philippines, which face a large emigration is an additional threat.

Foreign companies try to take an advantage of still favourable conditions in spite of rising uncertainties related to the authorities approach to economic zones or tax incentives (Canivel, 2019). Another example of high trust in the business potential of the country was expressed by Swedish BPO firm – Transcom, which opened its fifth Philippine site in the capital city and plans to employ around 1,000 worker thus expanding its employment in the country to around 11,500 (Canivel, 2019). Importantly the new investment still uses the legal framework of economic zones.

It is also argued that the position of ABS workers in the Philippines have very little in common with the knowledge economy. They are described as occupying "subordinated positions, providing low-skilled labour to the global economy" (Uy-Tioco, 2019). They are rather considered as in-between blue collar factory workers and highly qualified white-collar workers. It is also because of their income, which is enough to fulfil basic needs, but is not enough to aspire to the real middle class.

The relatively pessimistic perspective on the sector in the Philippines cannot be only one sided. From the perspective of developing economies, it seems that the jobs are attractive, especially when we put them into the context of ABS, which should be knowledge-based. However, we need to remember about the level of development of the country and the level from which it started.

6.4 Poland

The largest economy of Central and Eastern Europe within just a few years became a globally relevant location for FDI in knowledge-intensive services. Moreover, the economy can be described as a latecomer due to the fact that the dynamic growth in the ABS industry started around year 2004, when Indian or Philippine ABS centres already occupied the top international positions. The importance of ABS industry in Poland can be defined quantitatively by the number of employees in industry, number of foreign investors, or sizes of locally established units. The qualitative approach should take into consideration the complexity of business processes, qualifications of employees, or working conditions. However, these are narrow measures that pertain chiefly to the characteristics of the ABS industry or its firms, but broadening of the perspective is required by including the macroeconomic view.

In many comments regarding the topic of ABS in Poland, one fact, has been frequently underlined – the dynamic growth of the industry (e.g. Kedziora, Piotrowicz and Kolasinska-Morawska, 2018). Poland has not been an obvious location of ABS. Before the economic transformation in the 1990s, the main sectors of activities were manufacturing and agriculture. After the transformation, the large impact of foreign investors in manufacturing meant that the economy will be still focused on producing physical goods. There have been prerequisite conditions for the growth of production: abundant and qualified labour force to be employed in factories, the favourable location making the logistics easier, and the relatively large internal market. Also the policy of attracting producers of goods was the dominant in the beginning of transformation. However, the rising costs and upgrade of qualifications helped to aspire to attract investment requiring higher skills.

Naturally, we cannot fully separate the manufacturing and ABS investments in Poland. Many of ABS units were created in the same cities, where the prior manufacturing operations had been placed. For example, 3M or Volvo Group had large production plants in Wroclaw and later decided to establish service units

there. It means that the good reputation as a production location could be used to gain further investment projects in services.

Anyway, the link between manufacturing and services becomes weaker. The foreign-owned ABS units have not been established to serve only manufacturing subsidiaries in Poland, but to deliver services regionally or globally. It means that in the portfolio of units served by a Polish ABS centre may be also a manufacturing unit in the same country, however it is not the determining factor. Moreover, there have been many ABS units created by firms without any core operations in Poland, but in other European countries. The notion of core operations has been used here due to the fact that ABS are not only auxiliary units of manufacturing firms, but also of many service firms. Additional element weakening the link between the core operations and the ABS functions is the fact that the discussion both includes captive offshoring and offshore outsourcing. There are many BPO units in Poland and in other CEE economies.

The current position of Poland with respect to the ABS industry in the global setting has not be so evident still a few years ago, as many drawbacks of the country as a potential destination for knowledge-based services have been mentioned. The low quality of ICT infrastructure and unprepared institutional environment have been indicated as the main causes of treating Poland as a latecomer to the global outsourcing and offshoring market (Zorska, 2007). This was the nascent period of development of advanced services in Poland and various external and internal conditions helped to establish the current strong position within a global network of ABS units. One of the most important events was the accession to the European Union in 2004, what led to improvement of institutional and infrastructural environment, but also international reputation of the country.

The key factor supporting the development of the industry was the supply of qualified workers. Poland in recent three decades has witnessed the surge in the number of university students and graduates. Broad aspirations towards the university education led to changing the structure of society. The manufacturing investments in the beginning of the transformation required a vast number of people mostly with vocational training. The usability of social or humanistic higher education has been dubbed as there have been a limited number of open positions for those graduates. It meant that people with university degrees have been employed in jobs not matching their qualifications. They were frequently overqualified. It also led to a large wave of emigration after the accession to the EU. Again, Polish emigrants have been frequently overqualified abroad. Thanks to the expansion of the ABS industry thousands of jobs for university graduates have been created.

In the beginning Poland was mostly attractive due to the salaries arbitrage, however over the course of development, the cost reduction motive became less important for locating ABS in the country due to the focus on services' quality and efficiency improvement (Malik, 2018). Moreover, the ABS industry in Poland and globally has been evolving and requires new competences and higher qualifications. It means that

smaller locations will be hindered in attracting such investments, because they will not offer the world-class knowledge. There is also a factor of attractiveness of the smaller locations as places to live. The prime locations in Poland (and in other countries) appeal to foreign employees, who look for an attractive and vibrant city to live. Therefore, it is still possible for smaller locations to attract some services, but they do not have advantages to become important destinations.

The situation with respect to employment in ABS in Poland may be considered as sustainable (Figure 15). There is no high dependence on the industry, however the scale of operations created the critical mass for the development of the sector and utilisation of newest technologies.

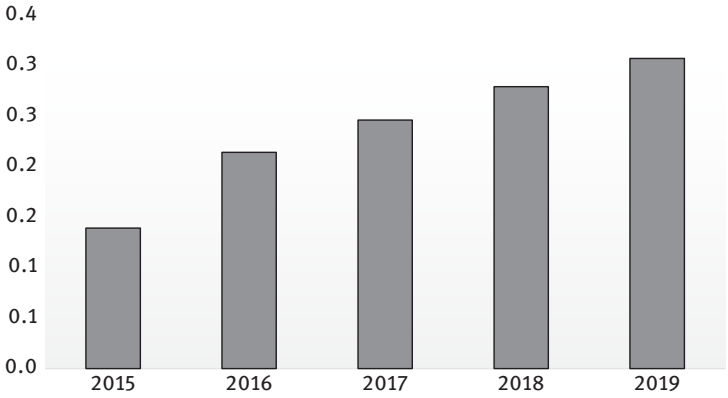

Figure 15: Polish advanced business services industry employment (in million) (source: own elaboration based on ABSL data).
Note: The value for year 2015 was calculated using another method than the remaining periods.

The employment in the ABS firms is rising and it is expected to expand also in 2020. However, the important issue is the slowing down dynamics in the number of new projects. According to the ABSL already in year 2019 the number of new centres may reach maximum 70, what means 6 less than a year earlier and 36 less in comparison to the record year 2015 (Błaszczak, 2019). There are several reasons for the slowdown. First, the industry has been growing for many years and reached the significant size. It means that the base effect is also in place. However, there is a certain expansion of the companies already operating in the industry. For example, the Swiss bank UBS announced in 2019 adding 350 posts to its existing 2,500 in Poland, what will induce investment of around EUR 21 million (EMCC, 2019). Similarly, the German pharmaceutical company Merck plans to increase number of employees in its Polish ABS unit from 350 to 450 in HR, accounting, purchasing and IT functions (EMCC, 2020).

Moreover, both the demand and supply sides are changing. When it comes to demand, the large multinationals aiming at building business support structures in

Poland or in other CEE economies are already there. It means the number of new potential entrants in lower than some years ago. The solution might be attracting businesses from regions other than Europe and the North America. The obvious answer is Asia, which is already the economic hub of the world. It means that more Asian MNEs should be interested in locating their business centres Poland. Naturally, there is a large hindrance due to the fact that Asia is the key location for ABS. However, a certain level of local responsiveness in operations of MNEs is necessary. Anyway, earlier plans to attract manufacturing investors from China or India to Poland have not been successful.

Moreover, there is a visible trend of saturation in the labour market. The candidates that could have been employed have already been working in the ABS industry. Moreover, the ABS industry in Poland and globally is changing very dynamically, thus the new competences are required. However, the social changes, education systems or legal framework do not catch up with the business dynamism. Actually there is a huge demand for flexibility, but the prize offered is not very attractive. It is somehow contrary to what was declared by companies and industry consultancies, that Poland has been chosen due to the quality of human capital, not costs. But when the salaries are rising and increase in social security contribution is expected, investors are reluctant to add new centres and more jobs.

The issue in Poland, and in other CEE countries, is the status of ABS as a humble industry when it comes to job attractiveness. It is also translated into approaches of fundamental, but also applied sciences. This is also connected to the fact that the firms are not much rooted in host economies. When talking to employees of the industry they frequently give impression that they are focused on their global roles and do not need to include the local context. The foreign-owned ABS units seem to be well positioned within global networks, but do not seek much of cooperation with local partners, like universities. Frequently they see the higher education institutions as suppliers of talents, but not as partners is solving crucial business cases. When we talk about upgrading the sector and including more knowledge it is crucial to work with local partners.

This is also associated with the position of the ABS units. Initially, they used just the transactional knowledge, however they need to go up in the value creation. It has not been much pronounced either in literature or business cases, that the transactional type ABS units should provide new knowledge to the entire organisation. Anyway, the ABS units must evolve from those obeying rules of the headquarters to becoming engaged in the strategic decisions and giving orders to other units in the headquarters.

The main weakness of Poland is associated with the lack of distinctive processes, which are deeply embedded in the economy. On the one hand, we can argue that Poland provides complementary solutions to those in other offshoring locations. On the other hand, the solutions may be easily transferred to other locations. There is also no language restrictions to do so, as the processes are predominantly provided in English or a local language other than Polish. The issue of languages, however,

should be seen in the broader context of changes in the society of Poland. The dependence on expatriates and immigrant workers means that the destination must be also an attractive place to live. Therefore the infrastructure linking the cities where ABS is located to the rest of the world is crucial. Top destinations in Poland are always equipped with an international airport offering multiple connections.

Poland has been put in the attractiveness analysis somewhere between Ireland and India (Mroczek, 2019). The Poland's talent pool is greater than that of Ireland's, however the quality of skills and government support are weaker. When we compare Poland to India, besides obvious demographic disadvantage, there are better skills and a more favourable location (Figure 16).

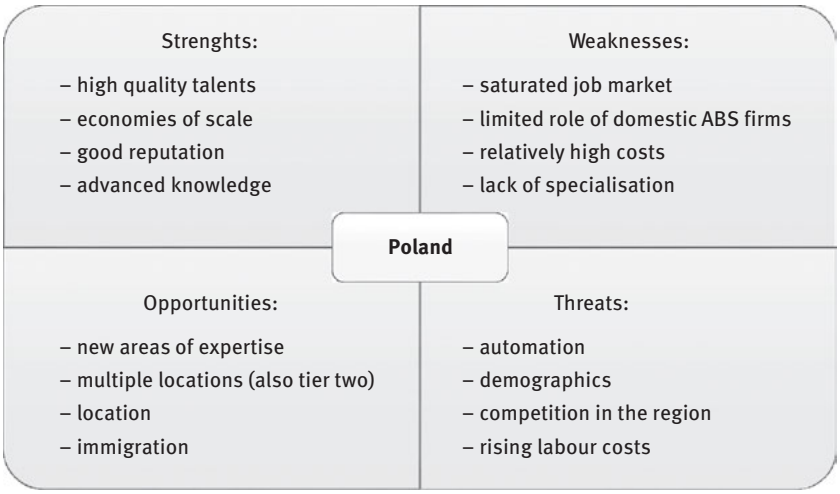

Figure 16: SWOT analysis of advanced business services industry in Poland (source: own study).

In summary, the three analysed countries have different characteristics and they specialise in various aspects of ABS. The issue is which of the areas are aligned with national advantages, provide highest value to the economy, and may be a source of a long-term development. Out of the three economies, India and Poland are distinctive cases. The large Indian-owned ABS industry offers many opportunities for development in the coming years. Especially its roots in IT industry and the legacy, if properly used, may be very useful in development of ML or AI. The trainers and operators of various types of robots are already very numerous is this country.

Poland, due its European position is destined for providing tailor-made advanced solutions. We can expect that in coming years the number of transactional jobs will drop, but the number of highly specialised employees will increase. The issue is the availability of talents is crucial. However, much depends also on the companies and their strategy of training new skills. The industry is so dynamic that there should be

right mixture of general education (provided by universities) and specific knowledge (provided by companies).

Again, in the mentioned economies the understanding of ABS is somehow different. In the case of India, it is mostly about IT services. In the Philippines, it is about voice services. In the case of Poland, it is mostly about advanced support activities and finance. Anyway, the role of the ABS industry is much broader. Actually most of the Asian economies focus on tertiarisation and ABS may become very useful tools in achieving the structural change in the economies (Klimek, 2017). This is also connected to the fact that many Asian economies envisage using the ABS industry to skip the industrialisation phase. It is particularly the case in India and the Philippines. This is because the development of services does not require much investment in physical infrastructure, but rather in education. The last element is a part of national development policies and some progress has been made, however not enough in order to describe India or the Philippines as knowledge-driven economies.

The situation in Poland is quite different, this is because the general level of education and qualifications is higher than in Asian peers, however the lack of direct policies towards education and ABS is also connected to the fact that, besides some declarations, the role of the industry in recent years seem to be neglected. For some unknown reasons, the industry in Poland seems to be below the radar. This situation is convenient for local authorities and the industry. However, in the longer term such a negligence and expecting that market forces will solve all issues is too optimistic. The ABS industry in Poland is too large and has too many external links to be so little discussed from the policy perspective.

7 Host country perspective – focus on Central and Eastern European economies

7.1 Overview of advanced business services in Central and Eastern Europe

The Central and Eastern European economies in a short period of time became important destinations for offshoring of white-collar jobs. According to ABSL (2015, p. 4) the employment in the industry was around 335,000 in the first quarter of 2015 in the region.[1] Anyway, the dynamics is very high and in 2019 the number of employed in the industry in the same group of economic according to our estimations is around 850,000.

The CEE economies are not homogenous. We can distinguish several groups when it comes to the level of economic development, institutional quality and level of integration with the global economy. One of the distinctive subsets are countries of the Visegrád Group (V4): Czechia, Hungary, Poland and Slovakia. Since the beginning of the transformation in the 1990s, the four economies have been preferred destinations for manufacturing investment by Western European firms. After a decade, the same economies started attracting new type of investment – advanced business services. This created an exceptional situation and a unique period of analysis, as the number of new investment projects in services by foreign MNEs is high and sufficient time has elapsed to assess the effects of the projects already completed.

It is important to focus on CEE as it has been neglected in the offshoring studies. According to the literature analysis for the period of time 1995–2014, only 2% of IB publications pertained to offshoring of services in the said region, meanwhile 39% focused on Asia (Pisani & Ricart, 2015). This proves a significant gap, especially if we add that till 2012 there has been no single publication in leading business academic journal pertaining to the region.

The starting point of the analysis is the application of the generally accepted measure of international operations of MNEs – FDI flows. Nevertheless, the inflow of FDI may be skewed by various activities, which are put under the umbrella of services. It is clearly visible when the share of services in total FDI is being analysed. In the case of Hungary the share of services is disproportionally high in comparison to the remaining V4 economies (Figure 17). The level of 60% percent in Czechia, Poland and Slovakia is justified by the sectoral structures of the economies. The value of around 90% of services in total FDI in Hungary is not justified, when the factual significance of manufacturing sector in the country is taken into consideration.

1 Bulgaria, Czechia, Hungary, Poland, Romania, Slovakia.

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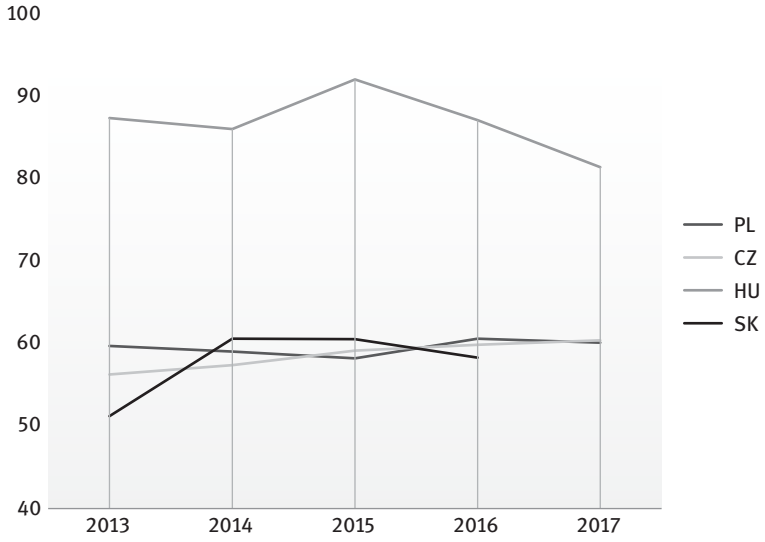

Figure 17: Share of services in total FDI in selected economies (in %) (source: own elaboration based on Eurostat data).

To mitigate problems with interpretation, it is required to apply a more detailed approach to FDI. When the category of the interest, that it, knowledge-based services are separately taken into consideration, then a more realistic picture of the activities emerges (Figure 18). It shows that, in spite of the large impact on the job market, the flow of foreign long-term capital remains relatively low. It calls for a new approach to understanding FDI and new measures to be elaborated. Therefore, further analysis will be conducted using data better related to ABS.

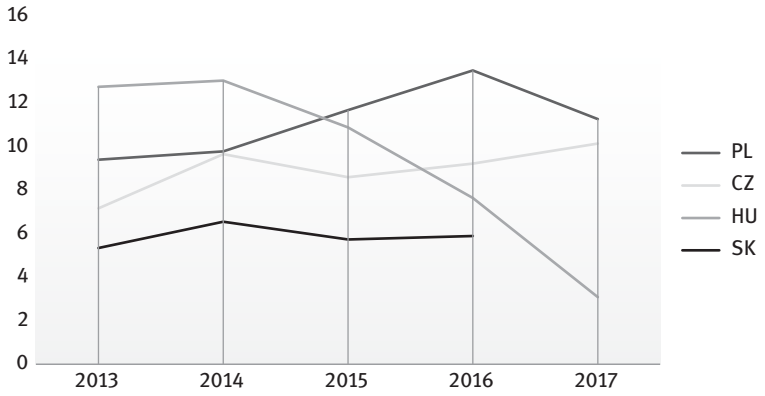

Figure 18: Share of professional, scientific activities as a percentage of service FDI (source: own elaboration based on Eurostat data).

The analysis of the ABS industry in the CEE economies is important also from the development perspectives as the economies are still in the process of transformation. The question arises of whether FDI in knowledge-based services will be a source of a sustainable long-term development, or whether it will curb the future growth. There is a threat that the business services investments contribute to the exploitation of resources of talents in host countries. Such an assumption may justified by the fact that the service centres focus on a large number of well-educated talents. In many large cities there is already a dense competition not only between foreign investors and local companies, but also between foreign investors. Still in 2011 it has been concluded that CEE attracts offshoring in manufacturing and IT services, but not of the advanced level (Jensen & Pedersen, 2011).

An important perspective, which should be included in the analysis of determinants and effects of inflowing FDI in ABS, is the regional or sub-national distribution of foreign capital within economies. The need to apply a more detailed geographic approach, which has been already proposed by Mullen and Williams (2005) citing the lack of evidence and inconclusive findings in existing literature. They prove that FDI has positive impact on regional productivity and growth. They also claim that there are spillover effects and indirect effects, however they do not quantify magnitude of particular effects. Moreover, they focus on FDI in a broad meaning, without sectoral distinguishing into manufacturing and services FDI. Moreover, their results do not comprehend the issue of knowledge-intensive services, which are unique in their impact on host economies. Anyway they underlined the knowledge spillover, however its link to the FDI is described as "intriguing".

There is a high level of competition among CEE countries for ABS projects. Moreover, due to the saturation in the V4 locations, there are newcomers to the industry, such as Bulgaria, Romania, Balkans or Baltic economies, which are attracting or willing to attract white-collar services to their shores. The important country in the ABS industry is Romania with the employment in 280 services centres estimated at 131,000 in 2018 (ABSL RO, 2020). One of the main advantages is the potential of the industry estimated at 300,000 jobs. It means there is still room for further expansion, while still maintaining the cost advantage. The pattern of origin of investors and types of activities is typical as for the other CEE economies. The size of the industry in Romania makes it the second most important location for ABS in CEE. Anyway, the main difference with Poland is that in Romania, the operations are concentrated in the capital city – Bucharest and other locations belong to the category of second and third tier cities. This may be also one of the limitations for further development of the sector. Nonetheless, the expected dynamics in coming years is much higher than in V4 economies, which actually reached their limits. It is all due to the demographic reasons, which increase the pressure on rising salaries. The revenues of the industry in 2018 reached USD 4.5 billion and 12.5% more than in the previous period (Romania-Insider.com, 2019).

Bulgaria or Lithuania also became important destinations. The latter country has an advantage of location close to Scandinavia. There are new ABS projects ongoing in the capital city Vilnius. One of the examples in the Finnish company Metso, which opened business centre responsible for finance, accounting and logistics (Invest in Lithuania, 2019). The representative of the company underlined that Estonia and Poland were taken into consideration in the location selection process.

7.2 Environment for offshoring of advanced business services in Central and Eastern Europe

The process of establishing foreign-owned ABS units started around year 2004, when many of the CEE economies joined European Union, what further boosted their integration with the economy of the Western Europe. This was particularly important for the free transfer of services and introducing the legal framework allowing for seamless coordination of processes across borders. In other words, very cost competitive locations of CEE, became part of the same economic grouping as source economies for offshoring. Additionally, the short geographic and institutional distance allowed even smaller corporations to engage in offshoring. Besides the tangible elements of the institutional environment, there have been improvements in the perceiving of the attractiveness of CEE as a destination for knowledge intensive services. The risks and complexity of offshoring to Eastern Europe was much lower than executing the same processes in Asian locations.

The empirical firm-level approach to the determinants of inflowing investments led to the conclusion that regions offering the vast number of skilled workers, but at the same time at the reasonable costs, were key determinants to locate foreign-owned ABS in V4 economies (Klimek, 2016). The specific factors, which were statistically significant in the estimation of a negative binomial regression model and have positive signs of coefficients, were the number of university students and quality of human capital measured as population aged 30–34 with tertiary educational attainment. On the other hand, the higher salaries had adverse effect on the number of firms. The same study confirmed that a very useful approach to analysis of determinants of FDI, especially in ABS industry, is the regional approach. Therefore in this book we analyse particular V4 economies, however the local context of regions and cities is crucial.

The operations of ABS firms in CEE should be viewed through several types of linkages within MNEs. First, ABS units are directly related to the core operations of MNEs in CEE. It means that the service centres are supplementary to their operational activities. The second group of companies have been established to deliver office support to Western European firms, which do not have any core operations in CEE. The third group of ABS units delivers services to American firms, which again do not run core operations in the region. Less importance is put on Asia, Australia

and Latin America. Interestingly, the knowledge services, which are easy to transfer across large distances, are predominantly based on the geographical proximity.

It is also important to note that FDI in ABS is not always the result of earlier investments in manufacturing operations. There are two sides of the situation. First, there are firms with ABS units in CEE, which have never invested in manufacturing operations there in spite of the fact that they have global networks of production units. The second issue is that, enterprises from non-manufacturing sectors invested in ABS in CEE. There is a strong representation of financial firms, service firms and IT firms. This also calls for a new policy approach, when it comes to the motives and results of such investments. The category of non-manufacturing investors is directly linked with knowledge-based economy, what is a fundamental element of numerous national and regional policies aimed at attracting ABS investment projects.

Besides the geographical distance, we can also include the psychic distance, which is understood as differences hindering international contacts. In the case of Asia, large differences in business, legal and political environments make it difficult to deliver services from CEE. It should of less importance for IT services than, for example, accounting or legal services. However, there are even larger barriers to IT companies delivering services to China.

Together with the geographical scope of operations of ABS units, comes also the issue of languages used by employees in the centres. The foreigners are employed in ABS firms, because they are specialists, who speak required languages. When we observe the pattern of foreigners working in the industry, it is frequently corresponding to the nationality of students at universities in host economies. We can assume that strong labour markets also increase the number of foreign students, who after graduation are employed by the ABS firms. It can be confirmed by the structure of employment by age – mostly 25–34. So it means that they are young people speaking languages and having higher education.

It is also crucial to mention that MNEs are also highly diversified when it comes to their geographical range. Companies that can be considered as global are not numerous and many MNEs operate only on selected continents or even in a few countries. Therefore offshoring of services is prevalent among the largest global corporations. They have enough financial resources and organisational capabilities to build separate services units in distant locations.

The development of ABS industry reached the level of maturity measured by the number of persons employed, and intensity of employment measured as a number of employees to the size of the population. The largest size of the ABS industry is in Poland, where employment accounts for two thirds of all employees in V4 economies (Figure 19). The approach to investigating the impact of ABS using the employment data is the optimal one, as the activities of international firms in this industry have not been marked by vast amounts invested or reported revenues. This type of operations by foreign-owned firms is about people. Therefore in almost

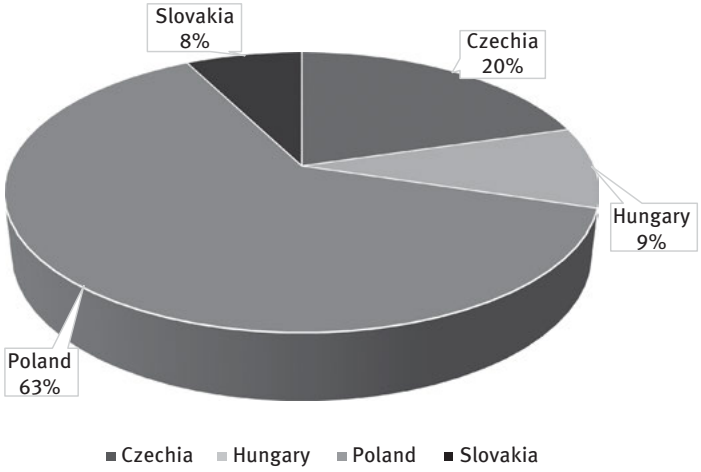

Figure 19: Share of employment in advanced business services in V4 economies (source: own elaboration).

every metrics related to global, local or even firm-level data on ABS, the number of employees play the crucial role.

The fact of different sizes of economies and populations should be underlined when comparing the economic impact and further business opportunities in particular V4 economies. The outcome is different when the employment in the ABS industry is related to the total population of a country (Figure 20). The largest economies of Poland and Czechia report also the highest intensity, what confirms that a larger economy may attract not only large number of jobs in absolute terms, but may also gain when investors aim at achieving the economies of scale. The cost-cutting reasons are accompanied by the abundance (however already pretty exploited) of talents. German or British firms when deciding about creating a SSC with hundreds of specialists direct their efforts to CEE, as it would be very difficult to fulfil such a large number of positions in already very tight jobs markets in home economies. The lower values of Slovakia and Hungary may be interpreted in relation to the lower number of potential employees and limited number of favourable locations for ABS.

As ABS firms are not equally distributed among the V4 economies, the levels of intensities on the country and city levels are highly diverged (Table 8). The most ABS dependent city in the sample is Wroclaw in Poland with the intensity of over 9%. This is more than 11 times the value reported when the entire population of Poland was considered. An important conclusion may be that non-capital cities in Czechia and Poland report higher values than the capitals. The value of the indicator for Brno is twice the level of Prague, in the case of Wroclaw it is three times higher than that

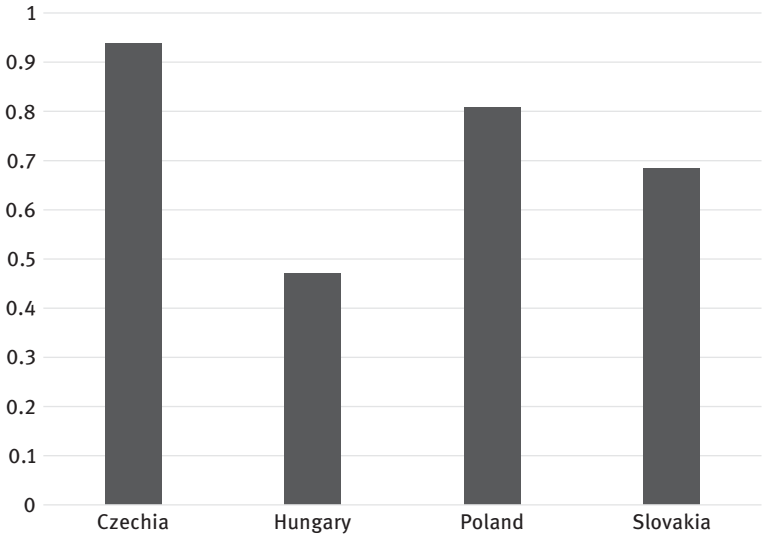

Figure 20: Intensity of advanced business services employment (2018) (source: own elaboration).

Table 8: Intensity of employment in advanced business services in the total population of selected cities (source: own elaboration based on data of ABSL in Poland, ABSL in Czech Republic, Hungarian Service and Outsourcing Association (HOA), Slovak Investment and Trade Development Agency (SARIO) data and official statistics of Main Statistical Office in Poland, Czech Statistical Office, Hungarian Central Statistical Office, Statistical Office of the Slovak Republic).

Country	City	Share (in %)
Czechia	Prague	3.84
	Brno	5.80
Hungary	Budapest	1.87
	Debrecen	1.77
Poland	Warsaw	3.07
	Cracow	7.43
	Wroclaw	9.10
	Tricity (Gdansk, Gdynia, Sopot)	3.41
Slovakia	Bratislava	5.95
	Košice	3.24

of Warsaw. On the other end of the spectrum we have Hungarian destinations with very low intensities, what is in line with the values for the entire economy.

The peer-to-peer analysis of V4 economies confirmed that even within a pretty homogenous region, the differences in the scale of the ABS industry are grave. Anyway, it is important to put the V4 economies into the broader context of global offshoring. The ABS are considered to depend on the quality of human capital as skilled-labour is the main input in services. Skills are developed through education, which is a component of the Human Development Index (HDI). One of the measures of attractiveness of an offshoring destination may be a relative difference in HDI between home and host economies. We present values of the indicator for key home economies, as well as offshoring destinations in CEE and in Asia (Figure 21). First, host destinations of the V4 economies report very similar values of HDI as the key home economies. Therefore it is expected that the quality of knowledge that can be used in the provision of knowledge-intensive services may be at a similar level. The economies of the V4 with a higher HDI index attracted more employment in ABS. It is fully in line with the intensity of ABS employment presented in (Figure 20). Second, the world leading destinations by employment (India and the Philippines) report relatively low level of HDI. From the perspective of V4 economies it means that these are destination for higher-value business services. This has been underlined in many strategies of MNEs, which frequently use a mix of offshoring to low-cost economies and medium-cost or even high-cost ones. The geographical distribution of services between V4 and Asia is not only because of the cost differences, time zones, but also because of a differentiated quality.

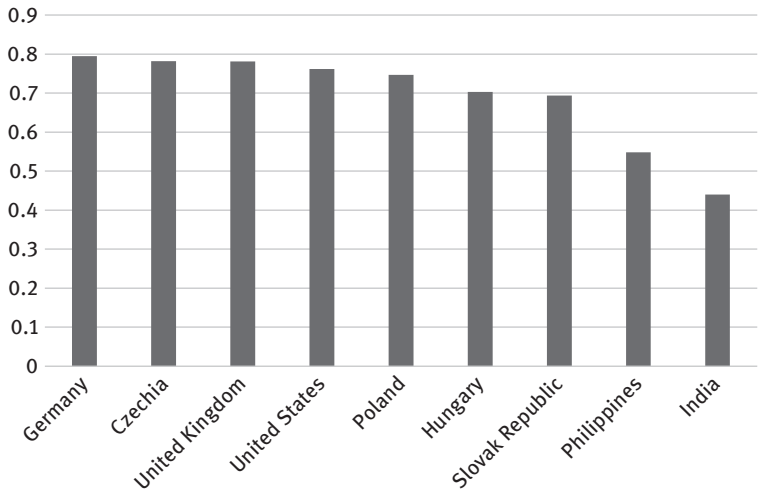

Figure 21: Human development index (2017) (source: own elaboration based on the World Bank data).

The world leaders in the size of offshoring services are laggards when it comes to the internet infrastructure (Figure 22). It means that the access to fast internet, which is the main carrier of ABS, is very restricted in India and the Philippines. Furthermore, the V4 economies report values similar to the home economies for offshoring services. If the access to internet is contextualised to the opportunities for education and social development, it means that Asian leaders in BPO/SSC operations do not provide a sustainable basis for the development of knowledge-intensive services. Besides the low level of fixed broadband penetration, there is no dynamic growth in this respect. Since a few years investors underline the focus on the quality of competences and abundance of talents, which are scarce in other locations. The dynamism also means the saturation of the key destinations and the necessity to search for new locations.

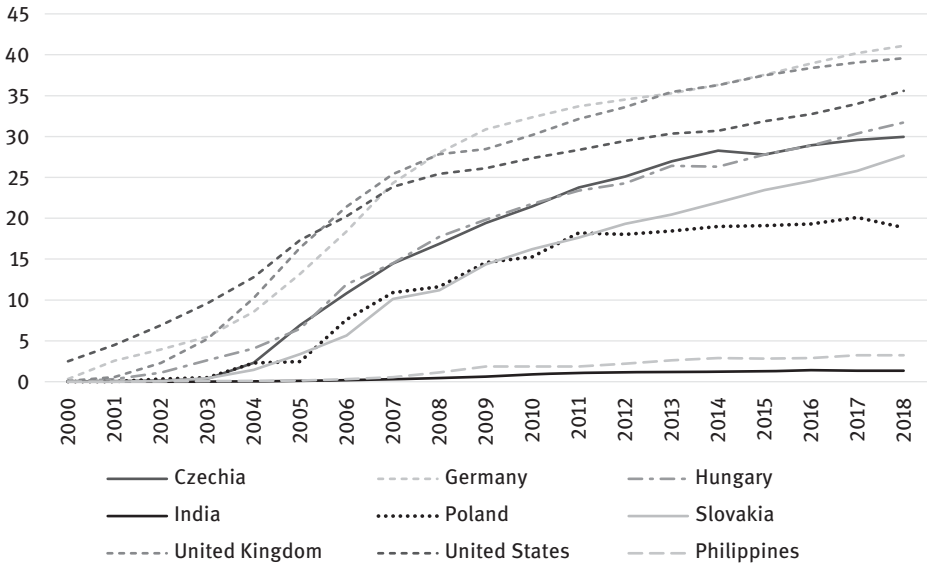

Figure 22: Fixed broadband subscriptions (per 100 people) (source: own elaboration based on International Telecommunication Union, World Telecommunication/ICT Development Report and database).

The background for the analysis of employment costs is the level of GDP per capita, which can be used as a proxy of the wealth of citizens in an economy (Figure 23). For ABS firms the rising value of the indicator means a higher level of development, thus an increased possibility to locate services requiring advanced skills. The most dynamic change in the GDP per capita between years 2000 and 2018 was observed in the Philippines. However, the value for the peer country – India – is very low and even lower than for some advanced economies, which have higher bases.

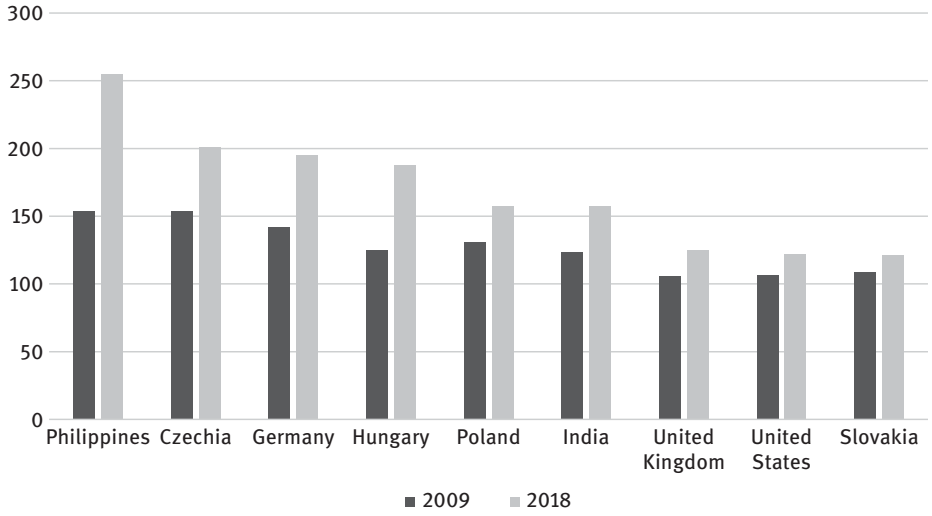

Figure 23: Change in GDP per capita (2000 = 100, constant 2010 US$) (source: own elaboration based on the Word Bank data).

However, the positive change in GDP per capita in the Philippines did not translate into an average level of salaries (Table 9). In spite of the highest growth of GDP per capita of all countries in the sample, the Philippine salaries were rising at lower pace comparing to other analysed economies. It may be interpreted as good information for foreign investors, because the costs of salaries have been quite flat.

Table 9: Dynamics of nominal monthly earnings of employees in selected European economies and Philippines, 2009 = 100 (source: own elaboration based on the Word Bank data).

Country	Year							
	2010	2011	2012	2013	2014	2015	2016	2017
Czechia	101	98	100	104	107	109	115	125
Germany	104	110	113	115	118	119	124	129
United Kingdom	102	102	101	103	103	102	107	111
Hungary	102	111	110	115	115	116	124	137
Ireland	104	103	103	103	101	101	103	106
Philippines	97	96	96	94	93	91	93	95
Poland	108	116	121	127	131	136	141	150
Slovakia	109	112	115	123	131	134	143	151

Note: Comparable data for India was not available.

The confirmation of the cost attractiveness of the Philippines is also provided by the ratio between salaries in particular economies (Table 10). However, it also means that the attractiveness of the economy for migrant workers was limited. This should not be, however, a problem hindering development of the ABS industry in India or the Philippines as they offer favourable demographic conditions.

Table 10: Ratio of mean nominal monthly earnings of employees in selected European economies to Philippines = 100 (source: own elaboration based on the Word Bank data).

Country	Year								
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Czechia	269	279	273	280	297	312	323	332	352
Germany	600	640	686	708	732	767	787	801	810
Hungary	237	248	271	272	290	295	302	315	340
Ireland	457	486	489	494	501	498	508	509	510
Poland	230	255	276	290	312	325	343	350	361
Slovakia	203	226	236	245	265	287	298	311	321
United Kingdom	401	419	424	424	439	445	451	462	466

Note: Comparable data for India was not available.

More detailed information is provided by the evolution of labour costs in V4 economies by various categories of employment closely related to advanced business services (Table 11). In general, the salaries in V4 economies were changing more dynamically than in the "old" EU economies. The low base in 2004 is especially evident, when the gap to the Western Europe was around 20 percentage points. In year 2018, the dynamics of V4 was much higher than in the EU15 economies and the advantage was in a range between 4 and 16 percentage points. Salaries in particular categories present differentiated dynamics. The employees in *Information and communication*, as well as in *Financial and insurance activities* faced similar dynamics as in the overall business economy. However, two categories of *Professional, scientific and technical activities* and *Administrative and support service activities* report higher dynamics, especially when the low base is taken into consideration. Moreover, the dynamics is not equal among V4 economies. The only Eurozone economy – Slovakia – stands out of the group of V4 economies by sharing values similar to the Western Europe. Hungary is on the other extreme with much higher dynamics in all analysed categories.

It is confirmed that the rise of the ABS industry in V4 was initiated by the cost difference between source economies of the Western Europe or the United Stated and host economies of Eastern Europe. However, the fact that salaries and property

Table 11: Evolution of average labour costs in V4 economies, 2016 = 100 (source: own elaboration based on Eurostat data, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lc_lci_r2_a&lang=en).

Geographic entity	Year		
	2004	2011	2018
Business economy			
European Union – 15 countries (1995–2004)	78.6	92.8	104.1
Czechia	62.2	90.6	113.0
Hungary	57.5	82.1	120.7
Poland	59.1	85.1	112.4
Slovakia	58.7	88.2	108.4
Information and communication			
European Union – 15 countries (1995–2004)	78.6	92.8	104.1
Czechia	62.2	90.6	113.0
Hungary	57.5	82.1	120.7
Poland	59.1	85.1	112.4
Slovakia	58.7	88.2	108.4
Financial and insurance activities			
European Union – 15 countries (1995–2004)	73.2	91.2	106.4
Czechia	70.0	94.2	110.4
Hungary	60.8	88.4	120.1
Poland	58.2	85.0	110.4
Slovakia	60.7	87.4	107.9
Professional, scientific and technical activities			
European Union – 15 countries (1995–2004)	76.0	93.9	105.0
Czechia	60.8	92.0	112.9
Hungary	44.6	78.4	122.1
Poland	54.9	83.7	112.2
Slovakia	62.9	89.1	112.9

Table 11 (continued)

Geographic entity	Year		
	2004	2011	2018
Administrative and support service activities			
European Union – 15 countries (1995–2004)	74.8	90.1	105.2
Czechia	64.6	87.6	114.5
Hungary	50.2	70.6	131.0
Poland	45.2	76.7	116.8
Slovakia	59.1	87.8	110.4

prices have been rising faster in the V4 countries than in the EU15 countries means losing the competitive advantage, as the cost arbitrage is evaporating. Therefore it is necessary to search for other advantages of the region than the low costs.

From the business perspective, the most important issue is the availability of skilled employees. Generally, there is a high level of competition for workers. However, there are different qualifications and seniorities required. The most difficult is to fulfil posts for IT specialists. Anyway, the other categories of ABS positions are also far from being easy to fulfil. Moreover, the time necessary to employ more senior employees, such as team leaders and managers, is pretty long and equals on average several months. This is reflected by salaries offered for particular positions. To mitigate this issue, many companies employ entry job candidates and then focus on training on the job. More detailed data on the salaries for particular positions in the ABS industry are provided by industry bodies in particular locations (Table 12).

There is a profound change in the V4 economies when it comes to the transformation of business operations. First, the scope of operations within business services is expanding by adding new processes to the portfolio of many units. Besides the traditional finance, HR or IT, there is a big push towards supply chain management or quality management. This means that the direction of ABS industry is to transfer most of headquarters operations towards BPO/SSC. It also means that operations in CEE with respect to headquarter services have been well assessed within broader strategies of corporations.

Besides the rising scope of services, there is a rising trend of increasing sophistication of services. There is a clear move from services of a transactional nature towards more knowledge-intensive. Therefore some opinions expressed only a few years ago are no longer fully justified. Micek (2015) concluded that there is a threat for Poland of being locked to less knowledge intensive services, as the low portion of highly advanced activities within ABS industry.

Table 12: Average monthly salaries in selected positions in EUR, 2018 (source: own elaboration based on ABSL in Poland, ABSL in Czech Republic, Hays, Sario).

Position	Czechia (Prague)		Hungary (Budapest)		Poland (Warsaw)		Slovakia (Bratislava)	
	Min	Max	Min	Max	Min	Max	Min	Max
Accountant (junior 0–2 years of experience)	1092	1287	1035	1317	1220	1525	1000	1200
Payroll Specialist (junior 0–2 years of experience)	1170	1365	1129	2038	1455	2112	1000	1200
IT Development average (3 years of experience)	1950	2924	1129	1882	2699	3989	1400	3300
Customer Service representative (junior 0–2 years of experience)	1092	1287	1003	1411	939	1173	1000	1200

Note: Average annual exchange rates: EUR/CZK=25.647, EUR/HUF=318.99, EUR/PLN=4.2615. Categories in each economy are subject to some variations.

Summing up, in the analyses of determinants attracting foreign-owned firms into ABS industry in V4, the empirical evidence suggests that the most important are the supply factors in the host economies. It means that investors choose the destinations based on the availability of the inputs for the provision of services. The demand factors are not relevant for the operations of ABS industry in the V4, despite some linkages to the core operations in the same locations. This can be interpreted as the selection of the same spot for core and support services was motivated by the prior experience in a location and positive results derived there.

7.3 Firm-level approach to advanced business services in V4 economies

The key characteristics of firms engaged in offshoring of white-collar services is their size and market power. Frequently these are MNEs with billions of dollars in revenue and thousands of employees spread among many locations. Therefore the crucial element of the study is a firm-level analysis using detailed data regarding the ABS units. There are two perspectives in the firm-level analysis.

First one takes into consideration the characteristics of parent companies, which engage in offshoring of white-collar services. An earlier study of firm-level offshoring was based on the sample of large Western European firms having ABS subsidiaries in the V4 economies (Klimek, 2018). The analysis revealed some patterns regarding the location of offshoring of services. Three largest EU economies (France, Germany, United Kingdom) were origins of more than 50% of firms having

their service subsidiaries in V4 economies (Figure 24). This is a confirmation that the nearshoring strategy was dominating among the European firms. This is also in line with the assumptions of European integration allowing firms to locate activities in favourable locations and removing barriers to flow of services. The countries of origin were also in line with the evidence provided by representatives of official institutions responsible for cooperation with investors. Also reports of associations of firms operating in the industry in the selected economies confirm the findings (for example ABSL in Poland, 2019).

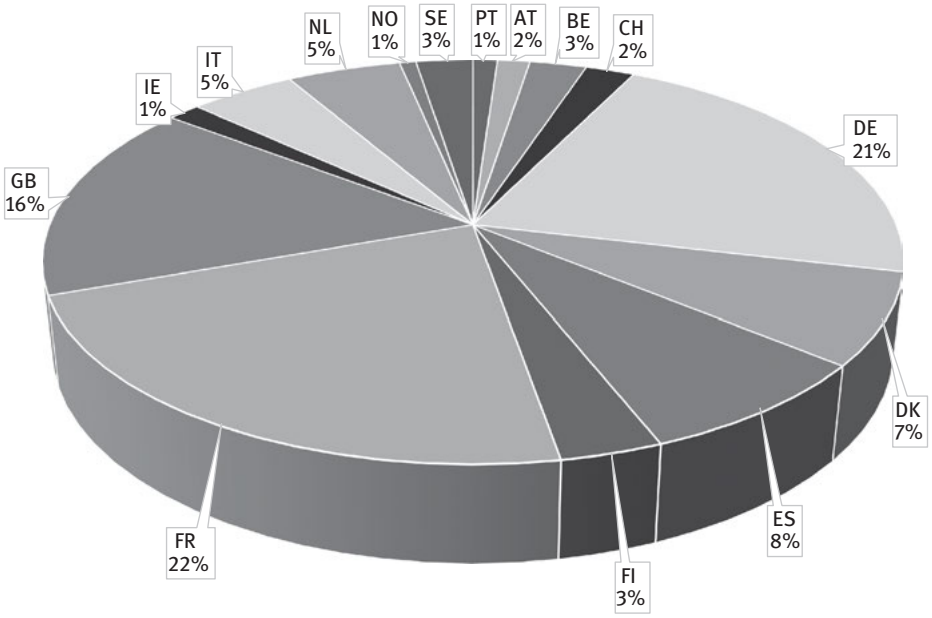

Figure 24: European enterprises with advanced business services units in V4 economies (source: Klimek, 2018).

The second perspective employs characteristics of ABS units in V4 economies and this is the main approach to studying offshoring in the empirical part of the book. Out of more than 20 million active European firms listed in the Amadeus database by Bureau van Dijk, only those with a certain size of operations and belonging to the category of ABS were selected.

First, in line with the conceptual boundaries of ABS, the following NACE Rev. 2 (primary codes only) activities were included: 62 – Computer programming, consultancy and related activities, 63 – Information service activities, 69 – Legal and accounting activities, 71 – Architectural and engineering activities; technical testing and analysis, 72 – Scientific research and development, 73 – Advertising and market research.

Moreover, only firms with minimum EUR 5 million in revenue were selected. Another criteria was the status of a subsidiary of a multinational firm considered as having a foreign shareholder with at least 10% of shareholding capital. Using these criteria we found 5,163 firms in Europe belonging to ABS category including 500 ABS firms operating in the four CEE economies. This approach will be applied in the analysis of particular V4 economies.

Czechia

The ABS operations in Czechia are characterised by their advancement and maturity. In spite of a relatively small size of the economy, it has been an attractive location for many types of foreign investments. For many years Czechia attracted many large investment projects in manufacturing. However, recently the focus is on knowledge-intensive services. It is associated with the development pattern of the economy. Indeed, the ABS industry fulfilled some deficiencies of the labour market by creating many white-collar jobs. Officials expect the positive development of the industry in coming years, however there are some difficulties expected. Main determinants of foreign investment in ABS in Czechia according to representatives of CzechInvest are as follows:

- Localisation in proximity to the Western Europe,
- Supply of well-educated staff speaking foreign languages,
- Quality of life (especially important for expatriates),
- Good international and domestic communication.

The mentioned factors are related to the fact that the ABS operations in Czechia have been designed for global or at least regional deliveries. Moreover, the links with the existing manufacturing subsidiaries of the same corporation in the country are not important determinants of investment.

CzechInvest is confident about the longevity of the ABS in the country. Until now there have been no cases of a foreign investor closing an ABS unit. The operations and tasks are evolving toward more value-added activities. Automation and AI will inevitably change the industry in coming years. It will free many workers from low-value repetitive tasks. Thanks to the development in technology, the industry may still grow at the expected pace and the limitations in the number of newly available employees will not hinder its growth. Anyway, the tasks will be more skill-intensive, composition of tasks within ABS will alter, and still greater role of IT is expected.

There is a high level of competition for employees. It causes a high level of rotation of employees. It is linked to the fact that employers offer very similar financial conditions and perks. The rotation is mostly the result of looking for other types of tasks. To decrease the rotation, companies offer possibilities of a horizontal promotion, that is, changing tasks for employees to make their work less routine.

The companies also offer some managerial positions, however the opportunities of developing careers within the ABS sector are limited.

The Czech ABS industry is also characterised by a high level of foreign workers. Around 60% of employees in the industry are foreigners, both from developed and emerging economies. The issue is a proper visa policy and it should be solved on the governmental level. CzechInvest actively promotes jobs opportunities in the country. For example, they exhibited at a job fair in the UK in order to attract migrant workers.

Czech universities are aware of the needs of the ABS industry, however no specific programs have been designed. There is an assumption that general qualifications in business or IT are sufficient for new employees of ABS. The specific knowledge is then provided by employers. However, the ABS employers demand better skills and are ready to contribute to this process.

The regional distribution is highly skewed towards the capital city – Prague (Figure 25). This is a common situation among smaller economies, where the main

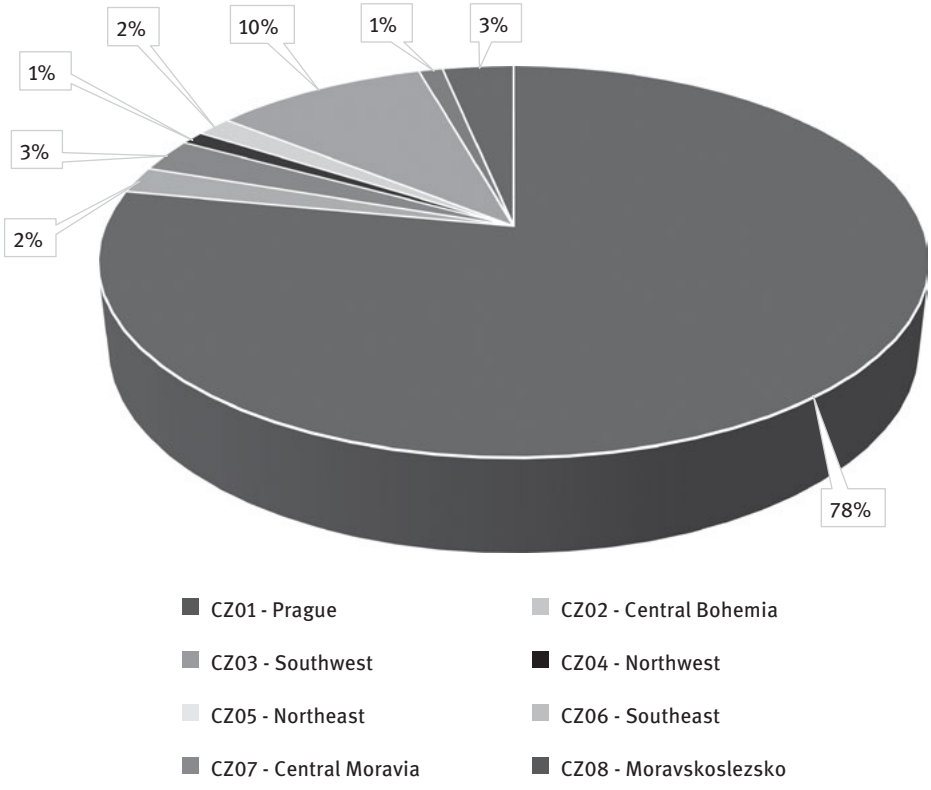

Figure 25: Regional distribution of foreign advanced business services firms in Czechia (Source: own elaboration based on Amadeus database).

city is the business, political and social centre. Prague, because of its international appeal, became not only important location within Czechia, but also within the entire V4 region. Prague is, by a big margin, the most important location of ABS in Czechia. However, the attractiveness of the city caused the competition for talents between foreign investors. The saturation of the market is very high and the costs of operating an ABS unit in this city are rising. To further develop the industry, there is a need to attract more talents, especially from abroad. The other solutions is more geographic distribution within the economy. Secondary cities become important locations for such operations. Brno is the second most important destination for foreign investors, especially for ICT sector. Ostrava also play some role in the landscape.

Smaller cities like Olomouc do not attract many ABS projects due to the dominance of the manufacturing sector. Although Olomouc has a university, many graduates move to other cities, such as Prague or Brno. Smaller cities are not very attractive locations due to the lack of a multicultural atmosphere. Moreover, small distances and good communication between cities in Czechia increase mobility of employees. However, the authorities work on locating more projects in smaller cities.

The high level of concentration of knowledge-intensive services in Czechia should not be explained without the role of multinational firms. Ženka, Novotný, Slach, and Ivan (2017) concluded that KIBS are concentrated in Czechia mostly in Prague, but also in Brno and Ostrava, however they focused only of the linkages with the manufacturing operations, instead of incorporating KIBS into operations of MNE and offshoring activities. This is another confirmation, that the mainstream approach to business services does not fully correspond to the progress in provision of services in the international scale.

The regional distribution of firms should be also related to the prices of main input in ABS – salaries. In the case of Czechia the differences between Prague and two other important locations are not very high (Table 13). It partially explains dominance of the capital city as the potential savings in many categories of jobs are relatively limited. Anyway, the issue may be higher availability of talents and less completion from peer ABS firms.

The ABS industry is dominated by foreign-owned firms and Czech firms with foreign ownership. Purely Czech firms rarely engage is such reorganisation mostly due to a smaller size of operations. By a big margin American firms dominate as main investors in Czechia (Figure 26). It is associated with the types of operations by American firms. As it was mentioned earlier, the US is a home economy for large BPO firms and they are active foreign investors in Czechia and other CEE economies. Companies such as DXC Technology or IBM are not only numerous, but also their size measured by revenue and employment are among the largest in the host economies. The motives of American firms are rather related to search for new locations where BPO firms can expand their activities, not directly relocate them from the home economy. The second reason for high number of American ABS firms is the dominance in the list of the largest corporations in the world and the presence

Table 13: Discrepancies in salaries between locations (Prague = 100), 2018 (source: own elaboration based on ABSL in Czech Republic data).

Position	Brno	Ostrava
Accountant (junior 0–2 years of experience)	90	90
Payroll Specialist (junior 0–2 years of experience)	100	85
IT Development average (3 years of experience)	72	72
Customer Service representative (junior 0–2 years of experience)	90	74

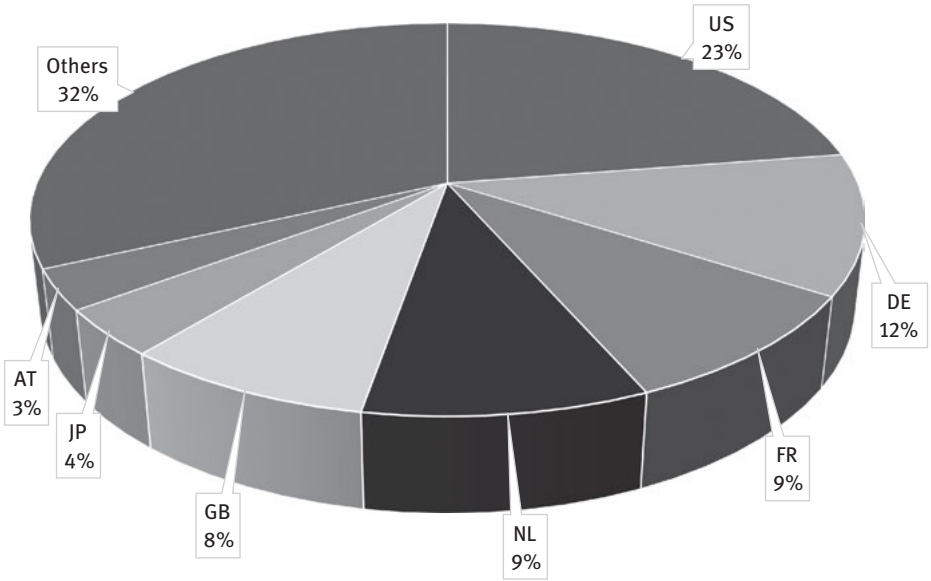

Figure 26: Country of origin of foreign investors in advanced business services in Czechia (source: own elaboration based on Amadeus database).

of ABS units is related to the prior presence of large manufacturing firms or financial institutions from the US.

The second important group are investors from the Western Europe. Their presence is rather connected to the search for nearshoring opportunities for services' execution. The proximity and openness of the Czech market makes it an important location for companies transforming their business services. It is a result of recent waves of restructuring of headquarters' services and their relocation to lower-cost destinations.

Brexit has not influenced the decision of firms to relocate some operations to Czechia yet. However, some investors are investigating the opportunities and prepare

initial plans. Emerging Asian economies (like China, India) are not important investors in ABS in Czechia.

The ABS firms in Czechia are mostly present in the computer related services (Table 14). The share of all such services reaches almost 40%. It is both related to BPO and SSC operations. However, the SSC argument is not supported by the low value of accounting units (NACE code 6920). Important for the economy is also the high level of engineering and technical activities. It is related to the developed manufacturing sector and significant role of foreign investors in, for example, the automotive industry. This confirms that the ABS operations should be analysed in the broader context of linkages to other firms, but also characteristics of the macro environment.

Table 14: Types of activities by advanced business firms in Czechia (source: own elaboration based on Amadeus database).

NACE code	Activity	Share of firms (in %)
6201	Computer programming activities	18.1
6202	Computer consultancy activities	11.5
6203	Computer facilities management activities	2.2
6209	Other information technology and computer service activities	0.5
6311	Data processing, hosting and related activities	6.6
6312	Web portals	1.1
6391	News agency activities	0.5
6910	Legal activities	0.5
6920	Accounting, bookkeeping and auditing activities; tax consultancy	5.5
7111	Architectural and engineering activities and related technical consultancy	1.6
7112	Engineering activities and related technical consultancy	14.3
7120	Technical testing and analysis	3.3
7211	Research and experimental development on biotechnology	0.5
7219	Other research and experimental development on natural sciences and engineering	6.0
7311	Advertising agencies	16.5
7312	Media representation	6.0
7320	Market research and public opinion polling	4.9

The real diversity of profiles, services and operational details of ABS industry can be only investigated when representative companies are analysed. The selection of the companies was arbitrary and based on several characteristics. First of all, the companies in the analysis are affiliates of multinational enterprises. Moreover, those providing financial details and headcount were selected. Important was also an analysis of profiles of selected companies. Many firms had to be dismissed due to fact that ABS functions have not been explicitly separated from their core operations.

It is worth noting that ABS firms have not been analysed from the angle of their financial performance. It was due to treating their operations as subordinated to other functions of parent companies. It is one of the first attempts to treat the units as standalone companies with their profit and loss statements, and balance sheets. The ABS companies operate below the radar as their size measured by revenue or profits are not included in ranks of top companies in particular economies.

As a result of the selection, ten ABS companies in Czechia were analysed (Table 15). We focused on the financial indicators that are relevant for the analysis of the ABS industry. As the role of people in offshoring is highlighted throughout the book, the crucial information is the size of employment in particular companies. Combined with revenues, it provides information about the size of operations. Another important element is the value of employee salaries and benefits. As the ABS operations are labour-intensive, we anticipate a high share of salaries in total costs. Indeed, in most cases the salaries constitute the largest category of costs. When we measure the ratio of salary costs to revenue it is most firms more than 50%.

The information on profits is used to assess the model of operations of ABS units. In most cases the profits are low, thus the tax bill is of minor value. It also provides information regarding the channels of direct financial contributions to a host economy. Income taxes paid by the selected firms are low, thus the payroll taxes can be treated as the main source of government revenues generated by ABS operations.

The category of assets is also included in order to analyse the size of operations. The assets were also studies in details to investigate the ratio between fixed and current assets. In most cases the value of fixed assets is low, what confirms the assumption about low value of investments. It can be also treated as information on the low sunk costs for ABS operations, what can stimulate international relocations.

When it comes to the size of operations measured by the number of employees and value of revenues, companies that can be put in the category of BPO are the largest. SSCs which belong to manufacturing firms are smaller and report weaker financial results.

The presentation of the Czech ABS industry led to several conclusions. First, service operations in this country belong to the most developed among the V4 economies. It may be measured by the intensity of employment, as well as the scale and scope of processes executed. As CzechInvest underlines, the country should not be considered as a destination for low-value processes. Thus the competition from

Table 15: Selected foreign-owned advanced business services companies in Czechia (source: own elaboration based on EMIS database).

Company name	City	Inception	Head-count (category)	Revenue (thousand EUR)	Profit – net of tax (thousand EUR)	Tax (thousand EUR)	Assets (thousand EUR)	Employee salaries, benefits, and payroll taxes (thousand EUR)
Accenture Services s.r.o.	Prague	2001	2,000–2,499	75,557	5,289	1,786	28,419	59,512
CGI IT Czech Republic s.r.o.	Prague	1995	500–999	54,386	5,923	912	32,818	28,696
Deutsche Börse Services s.r.o.	Prague	2006	250–499	55,245	2,627	859	25,705	30,946
Exxonmobil Business Support Center Czechia s.r.o.	Prague	2003	1,000–1,499	92,238	3,154	1,407	30,583	41,295
Honeywell International s.r.o.	Prague	2006	1,000–1,499	75,926	4,955	36	172,250	48,797
IBM Global Services Delivery Center Czech Republic s.r.o.	Brno	2001	4,000–4,999	150,366	7,995	2,085	32,049	123,533
JNJ Global Business Services s.r.o.	Prague	2006	1,000–1,499 (2019)	46,058 (2017)	817 (2017)	437 (2017)	29,517 (2017)	24,206 (2017)
KBC Group Shared Service Center CZ (2016)	Prague	2009	500–999	15,729	1,315	398	4,682	9,664
Konica Minolta Business Solutions Czech spol. s r.o.	Brno	1990	250–499	88,838	5,188	1,366	54,869	19,737
PPG Industries Czech Republic s.r.o.	Brno	2004	500–999	15,540	803	252	7,712	10,677

Note: Unless otherwise indicated, financial data for 2018, information on headcount for 2017.

low-cost countries is not a real threat for Czechia. India or the Philippines are offering different quality and prices of services. Czechia is mostly selected by companies looking for higher-value activities in a European Union country. The biggest limitation for further development of the industry may be a low number of available employees. The immigration is the key element that may boost further development. However, the significant increase of employment should not expected also due to the technology progress and focus on increasing efficiency by the service companies.

Officials assess the impact of the ABS industry positively, both at the national and regional level. According to CzechInvest the ABS industry contributes positively to the job market situation by providing good jobs for highly educated people. It is assumed that without the dynamic development of ABS many young and productive citizens might have emigrated. On the contrary, thanks to ABS job opportunities Czechia attracts many well-qualified workers from abroad.

ABS in Czechia both exploit existing knowledge and create new knowledge. The employees acquire new, quite general skills that can be transferred to other ABS companies and other types of business. Moreover, the additional source of knowledge are immigrant workers with their skills. There are also R&D operations by foreign investors supporting the transfer of knowledge from other countries. It is reinforced by the fact that main investors originate in highly developed economies.

Hungary

The size of the Hungarian ABS industry puts it on the third position among the analysed V4 economies. Hungary has been a proven location for offshoring of services for many years and still attracts new projects and supports them with active policies. The ABS industry in the country accounted for 1.2% of GDP, 1.6% of exports, and 1.1% of employment in 2018 (HIPA and HOA, 2018).

However, there are also problems similar to those in other V4 economies. First, the regional distribution is skewed (Figure 27). According to Hungarian Investment Promotion Agency (HIPA) around 38,000 out of 46,000 employees were located in Budapest and 4,000 in Debrecen in 2018. However, there is a rise in the role of tier two cities. Especially those having universities. The incentive system is aimed at locating the offices in those cities, especially in eastern regions (Debrecen, Szeged). Due to weaker economic performance, the eastern regions are also characterised by higher level of unemployment. In the analysis of impact of FDI on particular regions, it is important to consider also the number of employees in manufacturing FDI (especially western regions). Indeed, potential locations must provide good business opportunities, because investors do not decide based only on even very robust incentives. In general, foreign investors choose Budapest and then some of them open a satellite office in a smaller city. For example, IT Systems has its main office in Budapest and three satellite units in other cities.

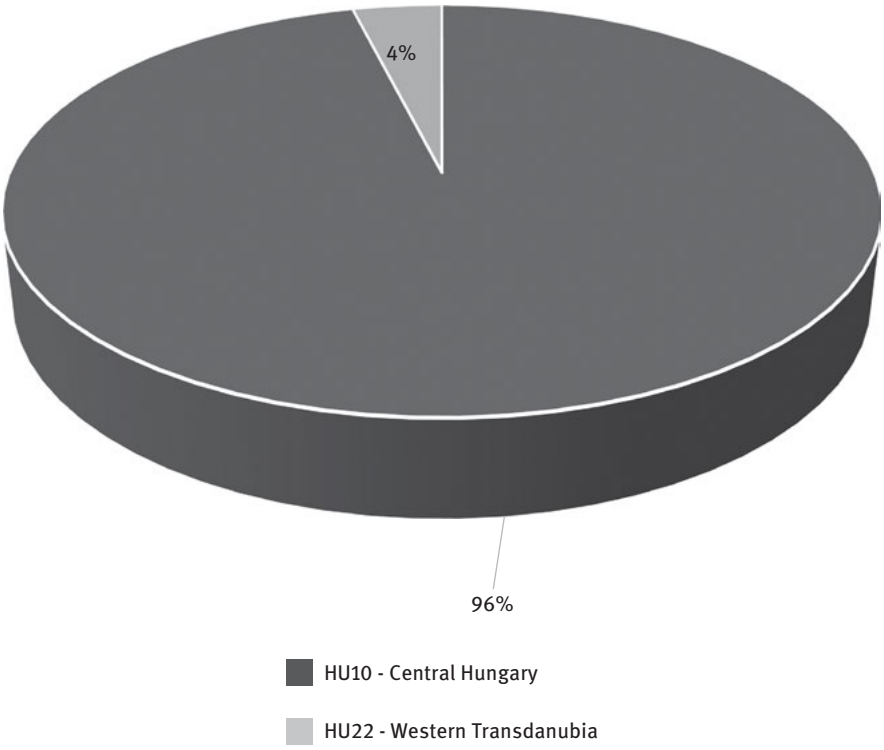

Figure 27: Regional distribution of foreign advanced business services firms in Hungary (source: own elaboration based on Amadeus database).

The country pattern of investors in Hungary is less diversified than in Czechia or Poland (Figure 28). However, top home economies are very similar due to a large number of MNEs originating in those economies. The three largest countries are responsible for almost three quarters of all ABS units in Hungary. In the case of Czechia, the number of countries of origin was more than twice as many, as particular shares were much lower.

Also the group of other source countries is not numerous. Almost three quarters of firms are owned by companies from the Western Europe. It means that the main strategy by firms is nearshoring and taking advantage of lower labour costs. The second element is that the countries of origin of investors in services are in line with the country pattern for investment project in manufacturing. Firms from one country frequently choose to cluster in the same locations due to the proven track and known regulations.

The most important activities from the perspective of detailed approach are those related to accounting (6920) and computer programing (6201) (Table 16). The level of accounting services is threefold the value reported for Czechia. It well illustrates the

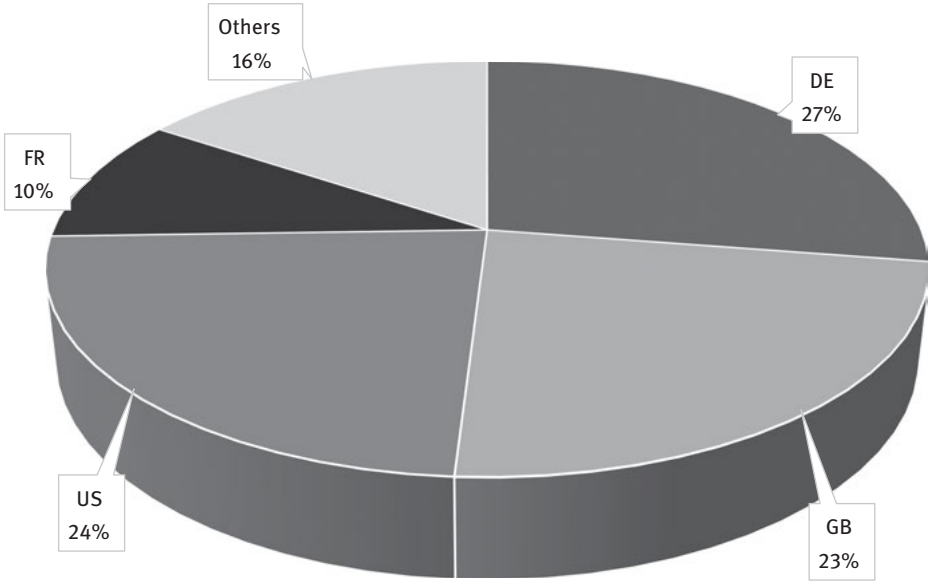

Figure 28: Country of origin of foreign investors in advanced business services in Hungary (Source: own elaboration based on Amadeus database).

Table 16: Types of activities by advanced business firms in Hungary (source: own elaboration based on Amadeus database).

NACE code	Activity	Share of firms (in %)
6201	Computer programming activities	15.7
6202	Computer consultancy activities	5.9
6203	Computer facilities management activities	2.0
6209	Other information technology and computer service activities	7.8
6311	Data processing, hosting and related activities	5.9
6920	Accounting, bookkeeping and auditing activities; tax consultancy	15.7
7112	Engineering activities and related technical consultancy	11.8
7120	Engineering activities and related technical consultancy	5.9
7211	Research and experimental development on biotechnology	3.9
7219	Other research and experimental development on natural sciences and engineering	2.0

Table 16 (continued)

NACE code	Activity	Share of firms (in %)
7220	Research and experimental development on social sciences and humanities	2.0
7311	Advertising agencies	9.8
7312	Media representation	2.0
7320	Market research and public opinion polling	9.8

importance of particular operations in Hungary. However, when activities are aggregated, then computer related activities dominate with around 40% of all companies in the sample. A distinctive element of the activities is also a high level of engineering activities, what can be associated with the presence of many foreign-owned firms in the manufacturing sector. We can conclude that the activities of ABS firms in Hungary have been focused on technology.

The firm pattern in Hungary is dominated by BPO units (Table 17). However, there are also large SSCs belonging both to European and American firms. Important information provided by the Hungarian firms is the value of foreign sales in total revenues. In most cases the share of export revenues is close to 100%. It fully confirms the status of the firms as offshoring units aimed at delivering services to other economies. It also confirms that the demand for KIBS services in a host economy is not a relevant factor in choosing a location. Indeed, the supply factors play the dominant role.

An additional element crucial in understanding business operations of ABS units is the value of salaries in comparison to revenue. The salaries are the largest category of costs for the ABS units. Together with the low value of assets, they confirm that the operations are labour intensive and investment value is low. It also validates correctness of the research approach of the book with the main focus on employment. The absolute values of FDI in the ABS industry are small and could easily be overlooked. Moreover, it confirms that FDI value is a very weak indicator for the analysis of intangible operations. Indeed, such activities are very common in the economies transforming towards services and digital assets.

The dominant model of operations of ABS units in CEE is a cost centre. It means that such a unit is treated as a separate department of a corporation with its own budget, but is not designed to bring profits. The opposite is when a centre is treated as a business unit that is supposed to bring profit for the entire organisation. For example, 72% of ABS units were costs centres and the rest were profit centres in Hungary (HOA, 2017).

Because of the intangibility of ABS, their pricing methods may be also used for tax optimisation. Anyway, to avoid skewness of profits and taxes between onshore

Table 17: Selected foreign-owned advanced business services companies in Hungary (source: own elaboration based on EMIS database).

Company	City	Inception	Headcount	Revenue (thousand EUR)	Foreign revenue (thousand EUR)	Profit – net of tax (thousand EUR)	Tax (thousand EUR)	Assets (thousand EUR)	Employee salaries, benefits, and payroll taxes (thousand EUR)
BT ROC Kft.	Budapest	2011	2,425	76,183	76,183	3,699	371	27,565	61,670
Diageo Kft.	Budapest	2001	1,346	67,619	67,603	167,371	1,836	3,908,082	44,551
EPAM Systems Kft.	Budapest	2000	1,663	81,359	75,708	5,210	559	36,636	61,075
ExxonMobil Üzletsegítő Központ Magyarország Kft.	Budapest	2004	1,859	119,541	119,541	3,814	335	26,367	56,390
IBM Hungary ISSC Kft	Budapest	2000	1,951	70,641	68,536	2,990	375	13,497	48,627
IT Services Hungary Kft.	Budapest / Debrecen / Pecs /Szeged	2006	4,805	189,138	183,979	5,150	113	64,433	131,389
Morgan Stanley Magyarország Elemző Kft.	Budapest	2005	1,517	156,380	156,306	11,084	1,393	71,669	78,044
Tata Consultancy Services Limited Mft.	Budapest	2004	1,706	63,719	63,719	1,720	248	11,521	39,987
Unisys Magyarország Kft.	Budapest	1993	869	27,480	27,339	865	100	9,005	21,284

Note: Unless otherwise indicated, financial data for 2018 unless, information on headcount for 2019.

and offshore destinations, the appropriate pricing method should be applied. From the perspective of a firm headquartered in the US and having offshore ABS units, the best method of pricing is cost plus (Eden, 2005). The issue of taxing ABS units should be put in the broader context of taxing digital economy. It is underlined that due to features of digital activities preparing a solid global tax rules is a really difficult task (Bräuninger, 2019).

Applying the proper pricing is important both from the macro and micro point of view. From the macro perspective, the correct calculation is important as the value of offshoring of business services is increasing globally, thus its economic impact is higher. From the micro perspective, the proper calculation is important for corporate purposes, especially for financial reporting.

There is a high level of competition for employees in Hungary. It causes a high level rotation at some companies (even up to 40%), but those with a good human resource strategy could decrease the indicator to around 5%. Most of employees in the ABS industry are Hungarians, however the share of foreigners is estimated at 16% (HIPA and HOA, 2018). There is a need for talents from abroad, however the issue is a proper visa policy, what should be solved on the government level. The economy provides attractive jobs, especially in Budapest, and should grasp more opportunities of the international type of activities provided. Actually, foreign talents may become key elements keeping the sector developing. This is particularly important for highly-advanced activities. Those of junior type may be still fulfilled by graduates, however their number is also limited.

Hungarian authorities expects keeping a similar pace of growth of the industry in coming years (around 8–10% annually), however it may be a bit lower due to limitations in supply of talents. HIPA is rather focused on higher value-added activities. They are also confident about the longevity of the ABS investment. Many investors started more than 10 years ago. They also adjust to new conditions and upgrade the working environment. For example, Morgan Stanley moved to a newly designed offices in order to increase scale, but at the same improve standard of their facilities in Budapest.

Until now there have been rare cases of foreign investors closing a ABS unit in Hungary. For example, the American insurer AIG closed their service unit employing around 200 people and moved operation to India. British Systemax – due to an internal reorganisation scaled down its operations in Hungary with the prospect of leaving the country.

Poland

Foreign investments in ABS have been prioritised for many years in Poland due to the expectation that foreign companies creating white-collar jobs will boost the nation-wide and local development. There have been many positive effects of the ABS

investments, however there was surely no equalisation effect of development on the regional level. As previous evidence suggested, there is a significant level of concentration is few regions. Out of 16 regions in Poland, only 10 has been listed here as those having at least one foreign-owned ABS firm (Figure 29). Even within the regions that are considered as destinations of FDI in ABS, there is a high level of concentration in the largest and most prosperous regions.

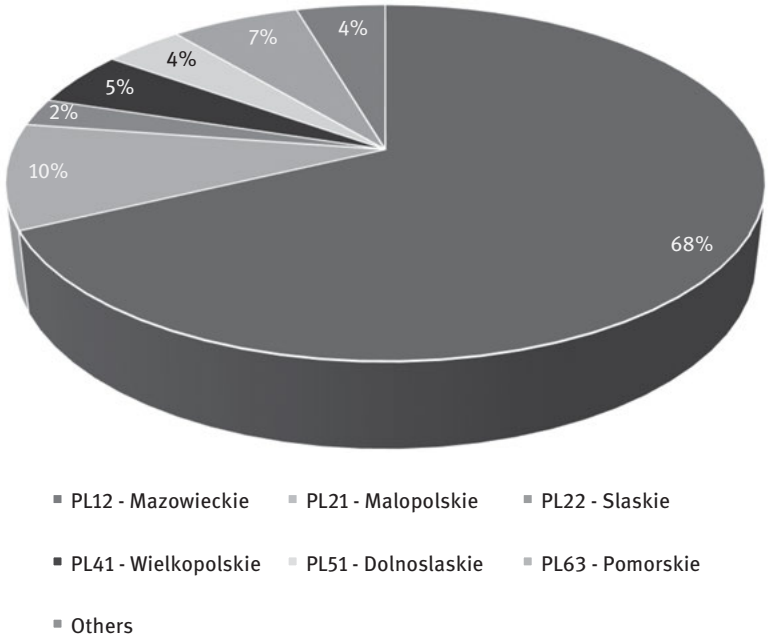

Figure 29: Regional distribution of foreign advanced business services firms in Poland (source: own elaboration based on Amadeus database).

The number of firms in the capital region (PL12 – Mazowieckie) is inflated by the fact that many firms register their head offices there, however the actual operations are conducted in other regions. The number of firms is again not fully correlated with the employment. (ABSL in Poland, 2019) data suggests that Poland is the only country in the group, where the largest employment is not in the capital region, but in PL21 – Malopolskie, with the Cracow as the leading destination in Poland. Moreover, the data by the organisation suggests that employment is much equalised across particular regions. Five main cities have been indicated: Cracow (PL21 Malopolskie), Warsaw (PL12 – Mazowieckie), Wroclaw (PL51 – Dolnoslaskie), Tricity (PL63 – Pomorskie) and Katowice (PL22 – Slaskie). Anyway, it all rather means that the role of particular tier one regions may alter depending on the approach, however still most of the projects are located in the most prosperous regions.

As it was mentioned, ABS operations tend to be clustered in few locations. Anyway, in this respect the situation in Poland is much better than in the remaining V4 economies. The matter that must be noted is that the regional distribution evolved pretty naturally and any direct interventions were not necessary. This was rather a result of the market powers, as investors avoided crowding in one or two locations. On the other hand, there were several available locations providing similar conditions (e.g. infrastructure, human capital, support). However, there is still a large gap in possibilities to develop ABS activities outside tier one locations. We can say that there is no critical mass when it comes to infrastructure and human capital in smaller towns in Poland. Some incentives on the central level have been created for locating the advanced services in such locations, however many business leaders state it is frequently not feasible from the business perspective.

The presence of foreign ABS firms in particular regions should be combined with internal migrations. Again, regions with a high number of ABS firms attract a higher number of migrants. Moreover, the impact of ABS firms is not only limited to the internal flow of people, but also attracts talents from abroad.

The top position of the US as a source of investment requires closer examination (Figure 30). On the one hand, number of investments by American firms is positively correlated with the size of Poland's economy. Projects requiring a larger number of workers are then directed into locations with a larger pool of talents. It is particularly important for the US firms not having any core operations in Poland, but employing

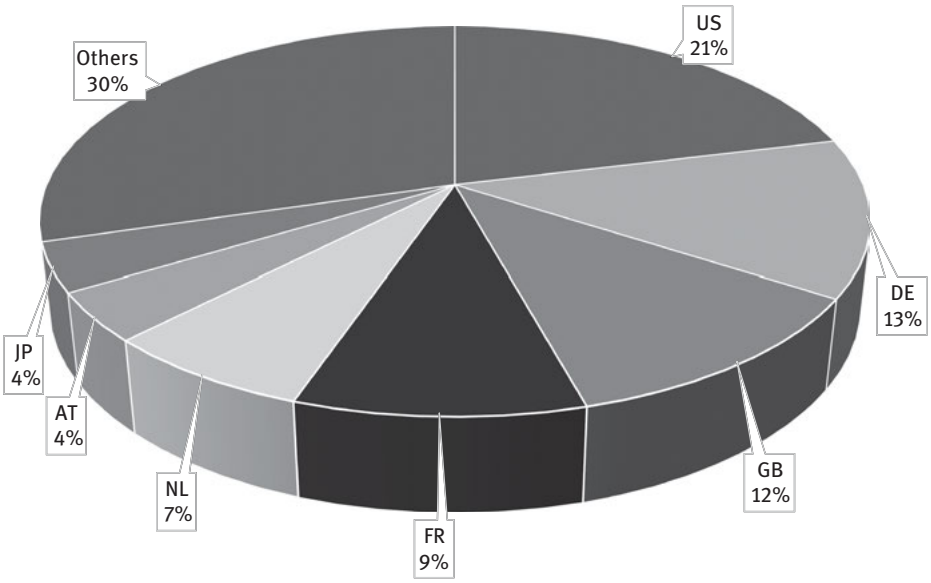

Figure 30: Country of origin of foreign investors in advanced business services in Poland (source: own elaboration based on Amadeus database).

a vast number of workers in the ABS industry. It confirms that the larger economy of Poland is a viable location for long distance offshoring, not only nearshoring by firms from other European countries. Thus, the position of Germany, the UK, and France is a natural consequence of distance and linkages to core activities.

The geographic pattern of investors in Poland is quite diversified. Next to firms originating in the main source economies, there are also investors from Japan, Canada, or Brazil. The firm-level data on the country of origin is almost entirely immune to the issue of round tripping, that is, the investment flows through a third country before being located in a final destination. Such an example may be Bermuda in the case of investment in ABS in Poland by some American firms.

The distribution of activities reveals that besides a high share of the computer-related services firms, accounting activities constitute a significant share (Table 18). It is connected to the fact that there are many SSCs in Poland with dominant activities in finance and accounting. Moreover, the diversity of services provided by ABS firms in Poland is a distinctive element among V4 economies. It means that not only the size of the business services industry is significant, but also the scope of its operations. From a sustainability point of view, such a composition makes the industry more immune to the structural changes within services. This is also a proof that there is a supply of talents with diversified qualifications.

Table 18: Types of activities by advanced business firms in Poland (source: own elaboration based on Amadeus database).

NACE code	Activity	Share of firms (in %)
6201	Computer programming activities	19.1
6202	Computer consultancy activities	6.0
6203	Computer facilities management activities	2.0
6209	Other information technology and computer service activities	4.5
6311	Data processing, hosting and related activities	4.5
6312	Web portals	2.0
6399	Other information service activities n.e.c.	1.5
6920	Accounting, bookkeeping and auditing activities; tax consultancy	10.6
7111	Architectural and engineering activities and related technical consultancy	1.5
7112	Engineering activities and related technical consultancy	9.0

Table 18 (continued)

NACE code	Activity	Share of firms (in %)
7120	Technical testing and analysis	3.0
7211	Research and experimental development on biotechnology	0.5
7219	Other research and experimental development on natural sciences and engineering	3.5
7220	Research and experimental development on social sciences and humanities	0.5
7311	Advertising agencies	21.1
7312	Media representation	6.5
7320	Market research and public opinion polling	4.0

The maturity of the industry in Poland is confirmed particularly by the substantial role of research-related activities. Around the tenth of all firms could be classified as R&D units. As it was indicated earlier, these units are characterised by a high content of knowledge and provision of crucial inputs into the core operations of MNEs. Such units are smaller when measured by employment or revenue, however are highly appreciated by the authorities in host economies. This can be best confirmed by a low number of employees required to receive the public support is host economies.

The list of important ABS units in Poland is composed of firms employing even five thousand people (Table 19). The largest headcount is reported by SSC firms, what comes together with a high number of this type of units. The size of the economy is reflected by the size of employment in particular firms, but also their financial indicators. The largest companies in V4 economies are located in Poland and their revenue exceeds 200 million euros. This threshold has been met only by two companies in the study. This makes them significant from the economy-wide perspective and somehow systematic. The ten selected firms in Poland reported combined revenues of more than EUR 1.1 billion. The money transferred to employees and payroll taxes almost reached EUR 600 million, what is a significant amount in the national scale. However, taxes on profits do not significantly contribute to the budget and were around EUR 20 million for the analysed companies. From this perspective their role is smaller, however again the values related to employment are substantial.

The low level of concentration of employment in the capital city influences also very equalised level of salaries across main cities (Table 20). Interestingly, some positions in non-capital cities are better paid than those in Warsaw. It is related to the main factor – competition for talents. A high share of people employed in ABS in total population of Wroclaw, or Cracow are unusual patterns for

Table 19: Selected foreign-owned advanced business services companies in Poland (source: own elaboration based on EMIS database and Orbis database).

Company name	City	Inception	Head-count	Revenue (thousand EUR)	Profit – net of tax (thousand EUR)	Tax (thousand EUR)	Assets (thousand EUR)	Employee salaries, benefits, and payroll taxes (thousand EUR)
Accenture Services Sp. z o.o.	Warsaw	2001	6,000 (est.)	81,597 (2017)	5,076 (2017)	1,439 (2017)	25,478 (2017)	58,906 (2017)
Bny Mellon Sp. z o.o.	Wroclaw	2007	1,366	85,986	1,441	3,710	64,813	42,983
Credit Suisse Sp. z o.o.	Wroclaw/ Warsaw	2001	4,221	223,462	8,147	2,671	181,035	139,856
DXC Technology Polska Sp. z o.o.	Wroclaw/ Warsaw	2016	3,000 (est. 2017)	120,993 (2017)	6,381 (2017)	1,846 (2017)	44,579 (2017)	71,424 (2017)
Goldman Sachs Poland Services Sp. z o.o.	Warsaw	2015	563	55,365	2,073	1,535	38,520	35,686
Hewlett Packard Enterprise Global Business Center Sp. z o.o.	Wroclaw	2004	890	35,525	919	480	–	28,025

IBM Global Services Delivery Centre Polska Sp. z o.o.	Wroclaw	2009	5,164	191,182	8,103	3,588	50,652	150,995
Infosys Poland Sp. z o.o.	Lodz	2007	2,700 (est. 2017)	67,935 (2017)	12,335(2017)	126 (2017)	72,531 (2017)	41,410 (2017)
Lufthansa Global Business Services Sp. z o.o.	Cracow	2003	942 (2017)	28,978	916	342	7,622	22,206
Ubs Business Solutions Poland Sp. z o.o.	Cracow/ Wroclaw	2007	3,710	268,259	4,533	7,704	67,776	–

Note: Unless otherwise indicated, financial data for 2018; est. = estimation.

Table 20: Discrepancies in salaries between locations in Poland (capital region = 100), 2018 (source: own elaboration using ABSL data).

Position	Cracow	Wroclaw	Tricity	Katowice
Accountant (junior 0–2 years of experience)	90	94	87	85
Payroll Specialist (junior 0–2 years of experience)	89	98	98	98
IT Development average (3 years of experience)	91	98	77	82
Customer Service representative (junior 0–2 years of experience)	83	106	92	100

offshoring destinations. Moreover, there is a certain number of employees moving from one city to another in search for job opportunities. It forces the competition for workers between particular cities. Moreover, many of the jobs are also fulfilled by foreigners and the level of salary cannot be only related to the local conditions, but should be also in line with international levels.

The significance of the ABS industry is also underlined by its bargaining power. The government of Poland planned to remove the cap on social contribution for the high earners. It would add approximately of 5 billion PLN to incomes in the national budget in year 2020. At the same time, it would directly impact the costs of employment in the ABS sector, which is considered as a strategic one. The dialogue with the government allowed to avoid the additional costs.

Slovakia

The smallest economy of the V4 is also the smallest when it comes to the size of the ABS industry. In 2019 there were 65 firms which can be included in the industry, what in comparison to more than 900 business units in Poland, seems an insignificant number. It is rather not related to the lower attractiveness of the economy for ABS, but rather national priorities when it comes to FDI. Slovakia bid for and attracted many projects in manufacturing, especially automotive industry. There are also factors related to the local situation, for example, the population in main cities is lower than in the rest of V4 economies. Indeed, the ABS operations in Slovakia are highly concentrated in the capital city – Bratislava (Figure 31). According to the official data the capital city has population of around 400,000 people, while the second largest – Košice – around 240,000 people. Therefore foreign firms in ABS do not have much room for manoeuvre and if they are present in this country, they choose Bratislava.

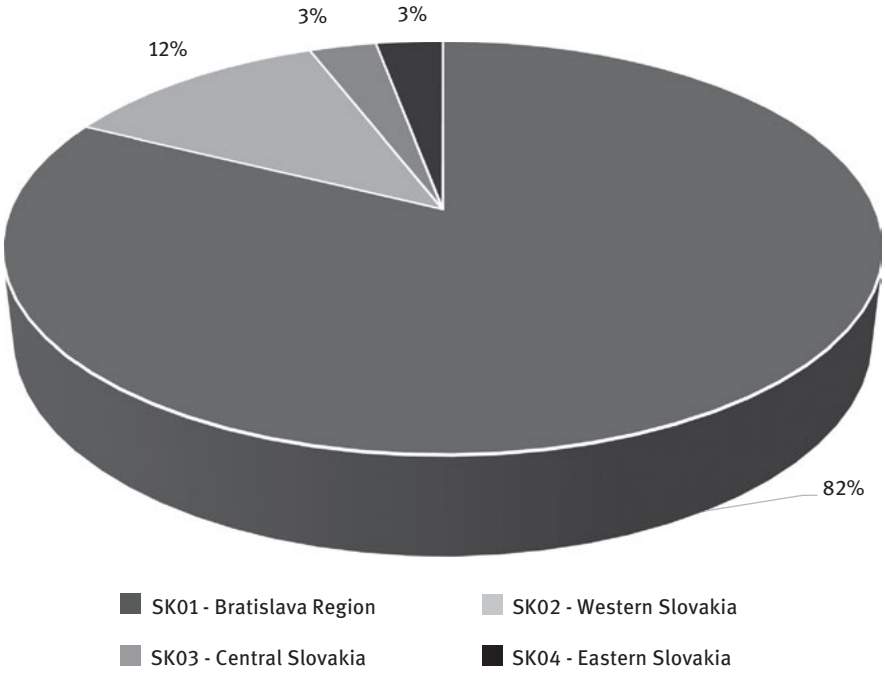

Figure 31: Regional distribution of foreign advance business services firms in Slovakia (source: own elaboration based on Amadeus database).

Top three economies of origin account for almost a half of foreign-owned ABS firms in Slovakia (Figure 32). Each of the remaining countries is a home of just few firms. However the geographical diversity of investors is pretty high. Among important investors we can list the neighbouring economies of Austria and Czechia, what confirms the argument for the nearshoring strategy. It also confirms that units in Slovakia rather supplement the regional presence of MNEs, than become centres for the CEE region.

The pattern of activities of ABS firms in Slovakia does not present a great deviation from that observed in other V4 economies (Table 21). It is confirmed by a high level of computer-related activities, however the main discrepancy can be observed in *Accounting, bookkeeping and auditing activities; tax consultancy*, with the highest level among all analysed V4 economies. It is related to the fact that Slovakia is an important destination for medium-sized SSCs. MNEs choose optimal locations depending on the size of their operations, but more importantly taking into consideration the supply of production factors in a host location. The decision becomes more difficult due to increasing saturation in host countries.

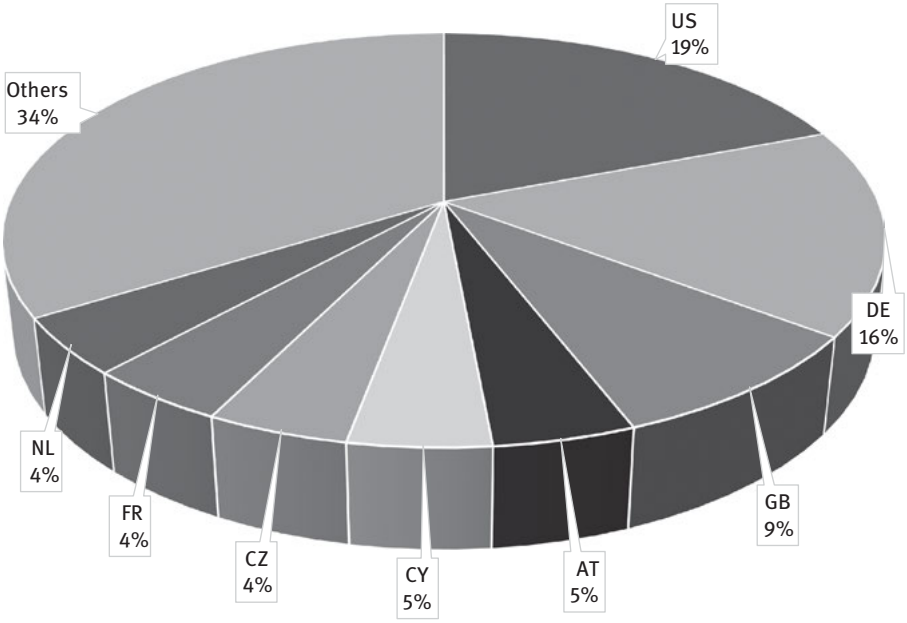

Figure 32: Country of origin of foreign investors in advanced business services in Slovakia (source: own elaboration based on Amadeus database).

Table 21: Types of activities by advanced business firms in Slovakia (source: own elaboration based on Amadeus database).

NACE code	Activity	Share of firms (in %)
6201	Computer programming activities	8.8
6202	Computer consultancy activities	5.9
6203	Computer facilities management activities	2.9
6209	Other information technology and computer service activities	11.8
6311	Data processing, hosting and related activities	5.9
6920	Accounting, bookkeeping and auditing activities; tax consultancy	19.1
7111	Architectural and engineering activities and related technical consultancy	1.5
7112	Engineering activities and related technical consultancy	8.8
7120	Technical testing and analysis	5.9

Table 21 (continued)

NACE code	Activity	Share of firms (in %)
7219	Other research and experimental development on natural sciences and engineering	1.5
7311	Advertising agencies	23.5
7320	Market research and public opinion polling	4.4

The data on firms' operations provide crucial insights into the specifics of ABS operations in Slovakia (Table 22). Besides large BPO firms such as IBM International Services Centre or Accenture Technology Solutions with more than a thousand employees, the remaining firms mostly are in the range of employment 250–499. They are specifically units providing shared services for international recipients. The headcount of the selected SSC firms matches their financial operations and is in line with sizes of population in the key locations. Due to a limited supply of highly-qualified employees, the establishment of numerous companies employing thousands of workers would not be possible.

The multilevel analysis revealed many differences in the ABS industry between the V4 economies. The types of activities conducted in particular countries are highly diversified. It is associated with the equipment with skills, but also partially to the structure of core operations located in particular economies. Although the link between ABS and core activities is weak, there are some supporting operations directly related to the main corporate functions.

The most diversified picture has been provided by the geographic distribution of firms in regions and cities. Depending on the relative size of population, we can conclude that the minimal number of inhabitants is around 100,000 in order to attract foreign investors in the ABS industry. However, optimal conditions for the development of ABS industry are provided by locations with at least 500,000 inhabitants. In such cities it is possible to achieve required critical mass when it comes to attractiveness for investors, migrants, thus knowledge creation. On top of that, the requisite factor is the presence of a university.

Table 22: Selected foreign-owned advanced business services companies in Slovakia (source: own elaboration based on EMIS database).

Company name	City	Inception	Headcount (category)	Revenue (thousand EUR)	Profit – net of tax (thousand EUR)	Tax (thousand EUR)	Assets (thousand EUR)	Employee salaries, benefits, and payroll taxes (thousand EUR)
Accenture Technology Solutions – Slovakia, s.r.o.	Bratislava	2003	1,000–1,999	63,134	3,805	1,124	17,462	42,140
Allianz Business Services, spol. s.r.o.	Bratislava	2003	–	15,332	-2,513	196	4,347	6,267
Covestro (Slovakia) Services s. r. o.	Bratislava	2016	200–249	14,100	216	431	3,841	9,280
Deutsche Telekom Services Europe Slovakia s.r.o.	Bratislava	2009	500–999	29,988	233	216	9,055	21,524
First Data Slovakia, s. r. o.	Bratislava	1994	250–499	57,241	9,186	1,939	31,098	20,784
Holcim Business Services s.r.o.	Kosice	2013	250–499	13,588	137	215	6,587	8,549
IBM International Services Centre s.r.o.	Bratislava	2003	5,000–9,999	196,369 (2015)	6,419 (2015)	1,953 (2015)	41,478 (2015)	125,106 (2015)
Kone SSC s.r.o.	Bratislava	2004	250–499	10,573	309	135	4,254	7,469
Mondelez European Business Services Centre s. r. o.	Bratislava	2004	250–499	19,710	452	159	5,840	14,542
Orange Business Services Slovakia, s.r.o.	Bratislava	2001	250–499	26,918	1,859	610	7,148	19,874

Note: Financial data for 2018 unless otherwise indicated.

7.4 Incentives towards advanced business services in selected CEE economies

The fact that ABS is a global phenomenon, especially with respect to the footloose nature of activities and the global scope of the largest service providers, influences the position of host economies in the site selection process. This translates into competition for new investment projects between low-income, medium-income and even high-income locations. The size of a host economy and thus possibility to develop the ABS industry also varies significantly. Moreover, there are emerging locations in the ABS industry offering favourable conditions, especially with respect to costs and accessibility to resources. Therefore, the active economic policy towards foreign investment in ABS is compulsory.

Even mildly active policies can change the landscape for the BPO/SSC industry. As it was mentioned earlier, the largest ABS location in Poland is not the capital city, but the city of Cracow. Again, there were both natural factors attracting investors to Cracow, but also the favourable conditions offered by central and local authorities. The landscape is very different in Czechia, Slovakia and Hungary. The dominant position of the capital cities has not been altered by active policies. If there is not enough local critical mass, even the best policy cannot alter it. And pushing more on the lower-tier locations may be simply a waste of national resources.

It is also important to note that there is a certain level of competition for new investment projects between the CEE economies. The fact that many economies of CEE are members of EU makes the barriers to flow of services very low (the official barriers are non-existent, however there are also informal barriers). The lack of barriers causes that investors have a vast portfolio of possible destinations when it comes to ABS. Therefore, the decision is not, for example, between Prague or Brno in Czechia, but rather between Prague in Czechia, Cracow in Poland and Vilnius in Lithuania. Moreover, frequently the decision is not in which region of a country, but rather in which city of a region, where the infrastructure and talent pool is good enough for their operations. It is mostly due to changing expectations of the investors and changing global landscape of ABS. The picture is quite different in comparison to Asia, where there is in fact a duopoly of India and the Philippines. These all makes the support policy more complex and requires the local level to play important role in attracting investors.

The decision regarding the support for foreign investors should depend on the answers to the following questions. Which knowledge-intensive activities and companies to support? What measures to apply to support the ABS? What are costs of supporting ABS? The answers vary with respect to the level of development of a country and the maturity of its ABS industry. Economies entering the global competition are keen on providing support. After a certain level of maturity of the ABS operations have been reached, the economies are more careful in supporting the operations, especially in the most attractive locations. Such an example is a ban on creating new economic zones in the capital city of the Philippines.

The economies with a higher saturation in the ABS market, should focus on activities providing higher-value added and requiring higher content of knowledge. However, the selection of such activities in the case of services is a very complex issue. In this vain, should many massive BPO firms be discouraged to invest in the economies of a high saturation, as they use valuable (human) resources, which could be better utilised by other firms? Despite the very imperfect competition in the market of ABS, the process of self-selection is taking place. The rising costs and expectations of employees force companies to focus on more advanced processes. Anyway, the presence of only few high-end providers of services would significantly influence the structure of the market and could distort the ecosystem for ABS, as both low-end and high-end processes are utilised by core businesses.

A proper policy towards foreign investors should have several layers. There should be a central approach, which organises the strategic objectives in line with national policies and economy-wide needs. The main identified roles of governments in attracting foreign investment in ABS have been grouped into two categories: investments (well-developed infrastructure, well-educated labour force), and administration and legislation (economic and political stability, competitive taxation, low administrative burden) (Mroczek, 2019). There should be also a regional approach towards foreign investors. And the third one should be a local level. In the case of SSC/BPO the local level is mostly a city, rather than a town. It is important, because larger local units have more resources and organisational capacity to build the support for foreign investors. In the Philippines, the large role in attracting BPO/SSC foreign investors was played by local authorities (Kleibert, 2014). Similarly in Poland, the local authorities have focused on providing support to foreign investors in ABS. Examples include the support provided to ABS firms by Wroclaw Agglomeration Development Agency or Invest Pomerania.

A very important characteristics of FDI in ABS is a low value of investment, especially in fixed assets. This is also one of the arguments for choosing greenfield projects as such investments do not represent very significant expenditures for large MNEs. However, probably the most important limitation for an industry-wide trend towards acquisitions is a lack of target firms, that could suit the expectations of a buyer. Then the enterprise's perspective should go beyond the modes of FDI and should focus on a non-equity arrangement in the form of offshore outsourcing. In the same vain, FDI in ABS is different from perspectives established in international business and economics, because joint-venture arrangements are almost non-existent in ABS. All in all, FDI in ABS due to various reasons are very different to investments in other industries. ABS FDI are predominantly directed into wholly-owned subsidiaries being result of greenfield investment.

Such characteristics of FDI in ABS makes them a good candidate for government support. The national policies have been frequently aimed at creating jobs. However, this should be limited to bringing only good jobs to the economy. It means that even in the narrowly defined ABS industry there are various job levels and competences

required. Therefore, it may be postulated that the support should not be to clerical jobs, but high-value knowledge-intensive tasks. They are also less prone to automation or relocation to even cheaper locations. It means there is a need to reshuffle the support policies towards more detailed criteria and more selective approach. This is the case for the CEE economies, as many of them face shortages of talents. However, we argue that the shortages is also the result of misallocation of talents between jobs and the mismatch of competences and tasks they perform.

A proper design of incentives towards the ABS industry should promote innovation, which may be beneficiary both for enterprises and an economy at large. It could take a form of cooperation of ABS firms with local universities and research institutions. In such a setting, enterprises would access valuable knowledge with the local context. From a host economy point of view such a cooperation would lead to the transfer of knowledge and good practices between enterprises and universities. This point is important, as the cooperation between ABS and local stakeholders is still quite limited. When it comes to cooperation with universities, the most common form is employer branding. But in such a situation it is merely an interest in the supply of talents provided by universities. It is closely linked to the roles of many ABS units in CEE countries – transactions' execution, not knowledge creation. From the perspective of enterprises it may be considered as a large overlook. MNEs frequently invest heavily in cooperation with universities and research institutions in their home economies, however they rarely transfer this practice to host locations of ABS units. Such a mechanism of cooperation should be in place in host countries too. This is especially important if services of higher knowledge content are considered to be an engine of future economic growth and societal development.

These arguments have one common denominator – FDI in ABS is not investment in core processes of the companies. Such characteristics of investment in ABS also influences the policy towards them. The incentives are frequently based on the number of employees, not the value of the investment. The financial incentives towards inflow of FDI into ABS in the V4 countries are still in place. In Poland the ABS have been divided into two categories when it comes to eligibility for support:

- SSC/BPO and ITO, which invested in fixed assets, intangible assets and increased investment of at last 200 employees. The support is provided both for establishing a new unit and expanding existing ones.
- R&D unit, which invested in fixed assets, intangible assets and increased investment of at last 10 employees in R&D.

There have been also government grants deployed for establishing ABS units in Poland. One of the site managers interviewed in the course of working on the project, said that the amount of support was not high, but it helped to furnish newly rented offices. He also added that the financial support was not of a large importance, however it helped to convince the headquarters that one of Poland's cities is a good place to invest. The unit expanded to more than expected 200 employees,

and the support has been even more negligible. Other managers underline that financial support is not very important as the costs of investment in ABS is not very high. The factor that is really important in the final decision is the supply of talents and stable business conditions.

According to the authorities, investment incentives in the ABS industry in Czechia, especially of the financial nature, play recently a smaller role. Two facts decrease the significance of the incentives: this type of investment is not very costly to an investor and such investments are mostly undertaken by financially strong companies. Anyway, investors would welcome indirect incentives aimed at increasing supply of talents.

There are different levels of support and eligibility criteria. For large firms in ABS, depending on the type of activity between 20 and 100 new jobs are required (CzechInvest, 2020). When it comes to SSCs there are 70 new jobs required. For small and medium-sized enterprises (SMEs) the requirements are around 50% lower than for the large firms. Also the intensity of the public support is different for the two categories of firms. For large enterprises it is maximum 25%, while for medium firms it is 35% and for small firms it is 45%. In Prague the support rate in any of the cases is 0%. The form of incentive is also 10-year corporate tax relief.

In Slovakia there are several layers of support towards the ABS industry. They range from very specific to very general ones. Importantly, the authorities have a comprehensive strategy towards the industry. The ABS operations have being treated as one of the national economic priorities, however the size of the industry is still relatively small and there are no arguments to expect the high growth in coming years.

An important pillar of the strategy in Slovakia are people (SARIO, 2019a). Taking the limitations of the economy, when it comes to population, the need and support towards foreign workers was explicitly expressed. The aim of the Slovak approach is to attract jobs, especially for the university graduates. Therefore the design of the incentives is based on the number of jobs created. A basic criterion for the priority activities in the ABS industry (Business management, Business finance or Information technologies) is creation of at least 20 jobs with salaries of at least 1.8 times the average salary in the district (SARIO, 2019b). For other types of ABS activities, there is a requirement of 50 jobs with the salaries of at least 1.5 time the local average. The values of required number of jobs are quite low in comparison to, for example, Poland. Nevertheless, the requirement of higher salaries underlines, that Slovakia focuses in its policy on higher-value jobs.

The incentives can also take a form of tax relieves, cash grants, financial contribution to newly created jobs, or discounts when purchasing or renting a land/property. To support less prosperous regions, there are different levels of allowed public help. It means that maximum level of support in most regions of Slovakia equals 35%, in some western regions it is 25%, while in Bratislava Region there is no allowed support. It means that the most important location for ABS does not provide

financial incentives, while in Košice Region or in Prešov Region the support may reach the maximum value of 35%.

In Hungary, the design of support is also based on the number of jobs created. So called, "VIP Cash Grants" are available for creating at least 50 jobs (HIPA, 2018). However, the intensity of public support is higher, than for example in Slovakia, and may reach up to 50% of eligible costs in most of the territory, 25%-35% in some western regions and 0% in Budapest. Again, the most important destination does not offer financial incentives, however they are not necessary conditions for foreign investors, and it would not be justified to provide support in the most attractive location in the country. The most important forms of support in Hungary include cash subsidies, tax relieves, and low-interest loans. The largest projects of more than EUR 100 million are eligible for maximum support of 34%. Anyway, the monetary conditions for ABS are of little relevance, as the investment is usually of in the range of 5 to 20 million euros.

The rise of ABS requires an attention of policymakers regarding supply of crucial skills. The prerequisite skills for KIBS positions were presented a quarter of century ago, though they are very relevant for advanced business operations nowadays: "One type of skill which is required in these services involves a better understanding of the innovation process and its management; another involves the ability to work across conventional sectoral boundaries. Training programmes need to take account of the fluidity of these boundaries, and the new generic professional skills that are emerging in consequence." (Miles, et al., 1995, pp. Executive Summary – VI).

Only a few years ago, the key factor was cost arbitrage of CEE destinations. Nowadays, together with the maturity of ABS operations and tectonic changes in their execution, the focus is much more on quality than quantity and more on value than costs. The speed of changes in the industry is so high, that the best support policy is to build universally excellent conditions for any type of operations, not particularly designed for ABS.

7.5 Impact of advanced business services on CEE economies

The recent flow of foreign investments into the ABS industry in the V4 countries is very different from the previous wave, which was directed into manufacturing. As it was earlier underlined, FDI in ABS is not based on machines and muscles, but on knowledge and skills. The bearers of them are human beings and consequently the focus of analysis should be on quantity and quality of jobs. Indeed, the job creation element of FDI (especially in the greenfield mode) is frequently underlined.

According to the classical approach to FDI, more jobs is one of the most desired results. However, not every job is equal, especially if we consider economy-wide effects. Therefore it is postulated that countries should focus on attracting FDI bringing good jobs, understood as those offering higher productivity, greater productivity

growth, and knowledge externalities (Javorcik, 2014). Many jobs offered in the ABS industry meet those criteria. Moreover, the jobs in foreign-owned ABS units meet criteria of individual workers by offering comparatively higher salaries or international working environment.

The white-collar jobs are expected to be of a higher quality than manufacturing jobs, because almost every employee holds a university degree. The ABS industry created opportunities to utilise the educational attainments, which were earlier not fully relevant in the manufacturing. This in turn led to high level of emigration of highly-educated people from CEE to the Western Europe after the enlargements of EU in 2004 and 2007. The improvement in the job market structure, by providing jobs for people with university degrees, resulted in a significant reduction of the outflow. It was also underlined by the officials responsible for attracting foreign-owned ABS firms.

The impact of foreign-owned ABS firms on the job market should be viewed from two perspectives. The first one uses the macroeconomic lenses. The study by Klimek and Sass (2019) confirmed positive changes in the sectoral structure of employment due to the presence of ABS firms in Hungary and Poland. It means that there was a transfer of workers from the secondary sector (manufacturing) to the tertiary sector (services). The main feature of the study was incorporation the specificities of the ABS industry. Therefore the number of firms was taken into consideration instead of the value of capital invested, which was confirmed irrelevant for measuring the services industry. Moreover, the issue is the regional inequality in distribution of ABS firms and jobs. Therefore the regional perspective on the impacts was crucial.

The second is the microeconomic approach to job market and ABS. To supplement the economic discussion regarding impact of the labour market, it is important to conceptualise the individual worker's perspective on ABS. Is ABS firm a good start of the carrier for a young individual with a university degree? Or maybe it means dismal and meaningless job?

On the contrary, the experience in BPO/SSC means possibility of acquiring skills that can easily be transferrable to other companies in the industry. In many economies, the employment in ABS is very dynamic, so the acquired skills can be quite easily employable elsewhere. On the other hand, the skills have limited employability in companies not having a multinational structure. In most economies, small and medium enterprises are responsible for most of employment. So there might be a mismatch between the needs of local firms and international ones. It was confirmed that low and middle level workers in the ABS industry in the Philippines acquired skills easily transferable to other companies, however high-skilled workers were not easily employable as their skills were company-specific (Beerepoot & Hendriks, 2013).

Among BPO and SSC firms, the latter are in a better job market position, as they use well known global names associated with, for example, banking, IT, automotive, or pharmaceuticals. SSCs promote themselves as a part of large global organisations. It appeals to many candidates and they foresee many possibilities to progress in their career. However, it is not always possible, as SSCs are frequently treated as separate

units subordinated to the core functions. The issue is how to distinguish the company in the job market and attract best talents. In saturated markets the job propositions of BPO firms are less attractive, however they offer more junior positions, thus their offer is directed to a broader group of potential workers. It means there is stratification in the ABS industry – from very repetitive to real knowledge-based jobs.

The impact on a host labour market may significantly change in coming years. The industry uses the notion of a full time equivalent (FTE) instead of a full time post. It may also mean that the job does not have to be necessarily conducted by a human being. There is a widespread of various types of advanced machines.

Despite an intangible form of business services, the crucial aspect of understanding the factors influencing establishment and results of ABS units is the geography. The business services are inextricably linked with urbanisation. They are almost exclusively located in urban areas, favourably in large cities. When we analyse the results we need to focus on migrations of people from less prosperous regions into leading cities with respect to the economic development and quality of life.

A fundamental transformation of business support services is underway, so the gap between companies not operating in ABS and members of the market will rise. Especially when we take into consideration automation, blockchain or AI, that are finding more and more applications in ABS, but are not very useful yet in smaller enterprises.

From the perspective of an individual, the question is also about the usefulness of qualifications acquired in ABS over time. Again, the newest technologies in ABS require constant upskilling.

The development of ABS industry in V4 economies has an impact surpassing the borders of the economies. It influences the immigration of workers from other economies. The outflow from particular economies is rather not very significant, however the aggregate inflow to V4 is changing the domestic job markets and may also have indirect changes on the culture.

The country that significantly increased the share of foreigners is Czechia (Figure 33). The rise of a share of foreigners working at ABS firms is associated with two main factors. First is the need for specialists speaking foreign languages. Therefore the sector attracted a lot of people speaking languages with high proficiency. But it is not only about languages, but also other easily transferable skills, like in IT.

The second factor behind the rise of foreign workers is improved situation in the labour markets. According to Eurostat (2019) in the end of 2018 among top five EU countries when it comes to the lowest level of unemployment were Czechia (2.1%), Germany (3.3%), Poland (3.5%), the Netherlands (3.6%) and Hungary (3.7%). The average EU 28 unemployment rate was (6.6%) and Eurozone (7.9%). If we also add that the unemployment is not equally distributed within economies it means that some regions have large problem with availability of candidates: especially capitals like Prague, Budapest and Warsaw. It adds a pressure to the job market in ABS. It means that there is a great competition for talents, especially with crucial skills.

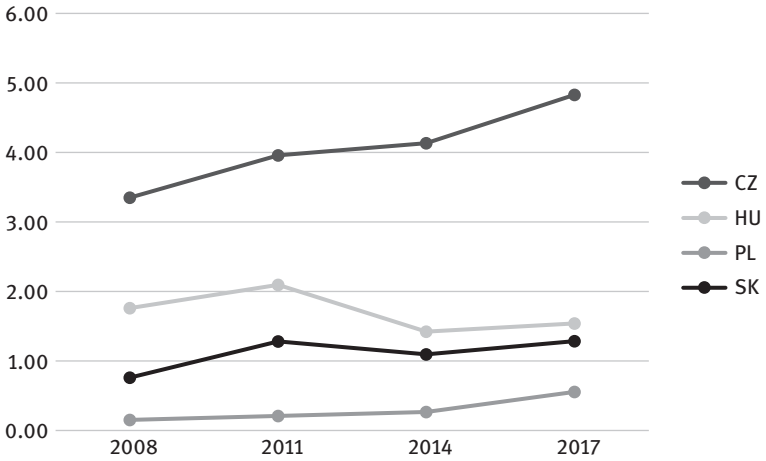

Figure 33: Share of foreign citizens in total population (in %) (source: own elaboration based on Eurostat data).

In many instances the foreign languages at ABS units are spoken by foreigners. The large demand for employees in the sector is also influencing immigration to Poland (Table 23). It is not only for lower income countries, but also for many countries of a higher level of development. This will in turn modify the structure of population in Poland and may also influence its culture, in large cities at least.

Table 23: Countries of origin of foreign employees in advanced business services in Poland (source: own elaboration based on ABSL in Poland, 2019).

Rank	Country
1	Ukraine
2	Italy
3	Spain
4	India
5	Germany

Moreover, the rank of top countries of origin of foreigners in ABS firms in Poland in 2018 almost perfectly matches the list of nationalities of foreign students at Polish universities (Ukraine, Belarus and India).

An important outcome is that Poland became a significant destination for European migrants. In year 2018, Poland granted the highest number of residence permits among all European Union countries. In this large group of foreigners there were also highly qualified specialists, what is closely connected to the rise of the ABS industry.

A very important element, but less highlighted is the impact on the property market. The ABS industry has a large influence on new developments of commercial properties. According to JLL, a consultancy, in 2018 ABS firms leased in Poland 380,00 sqm, accounting for around 50 percent of the aggregate demand in the centres of largest cities (WBJ, 2019).

However, the effects of offshoring of white-collar jobs in Central and Eastern Europe are not solely positive. There is also a crowding-out effect of foreign investment. It means that most of economies in the region face a very good situation in the labour markets due to the low unemployment. Actually, a new problem that occurs is the limited supply of qualified workers. In such a situation, the local firms are in a weaker position against large international firms, when it comes to employment opportunities for talents. It can be even perceived as the other form of a brain drain in the Central and Easter European economies.

From a policy standpoint, besides the impact on the particular economic elements, it is also important to present an overall impact of foreign-owned ABS firms on the level of economic development. Again, the regional approach confirmed a highly positive influence of such firms on GDP per capita (Klimek, 2017). Regions that host a higher number of ABS firms reported better results that regions with a limited exposure to this type of firms. Moreover, the positive results were also reported in the second and third year of operations of the firms. However, such a trend still exacerbates the regional development inequalities. The regions hosting a vast number of ABS firms have already been prosperous and those with a lower level of development are not attractive for foreign-investors. When it comes to the regional development the gaps between rich and poor regions will rise, as the ABS firms are concentrated in only few locations.

7.6 Survival analysis of service units in CEE economies

The impact of foreign investment in ABS on various aspects of an economy should be also analysed from the perspective of its longevity. An important question arises of whether MNEs invest in locations with favourable conditions, but are very sensitive to their worsening and relocate the activities to other countries, which offer even better environment. This is particularly important for V4 economies, which face a dynamic increase in labour costs and constraints in the supply of talents. Such circumstances should increase the number of companies relocating their ABS

units outside the V4. Furthermore, there are many other locations in the CEE region with lower costs and still not saturated markets.

The issue of survival is important from the development perspective as many white-collar jobs are dependent on the ABS industry. Just within a few years, the industry became an integral part of the job market in V4 economies. If firms from this industry start moving their processes to other countries it may significantly influence the situation of hundreds of thousands of employees.

The search for companies that closed the ABS units or significantly reduced their employment in V4 led to uncovering several issues. First, there are only few cases of such events. Second, it is highly related to the internal reorganisation or restructuring of firms. Especially, when mergers and acquisitions take place. Third, there is an ongoing evolution of processes in companies. It was already mentioned that the costs of operations in V4 economies are rising and are much higher than in India or the Philippines. Therefore, many companies relocate more standardised processes to those economies. However, at the same time the ABS units in V4 receive new, more advanced tasks. There are also cases when departments of some firms were reorganised into a separate entities and then transferred to external contractors dealing with lower-value processes, but still in the same country. For example, a large American consultancy firm moved several hundred posts from a Polish ABS unit to an Indian BPO firm in Poland. It means that dynamic changes to the external environment have not yet induced foreign-owned ABS companies to limit their V4 operations.

For the recent decades, one of the main trends in the global economy was the development of foreign operations by firms. They offshored their production processes to low-cost locations, where labour was cheap and production facilities could be easily set up. Long term results of offshoring are increased growth and competitiveness of firms, however, for the general public offshoring is also a source of increased fears, as employment is seen to be decreasing, jobs are seen to be offshored to other locations. Therefore, a new important element of the survival analysis is the approach of companies towards reshoring or backshoring of business services.

There is a long list of arguments against offshoring and outsourcing, with the dominant perspective on hidden costs, that cannot be directly calculated and introduced in the economic analysis of the decision regarding the global disintegration of processes. One of the elements related specifically to international outsourcing is the erosion of internal competences of firms. There have been examples of manufacturing firms bringing some operations to the shores. It has been chiefly linked to the issue of transportation, time, and rising tariffs (e.g. US-China trade war). However, the issue and motivations regarding knowledge-intensive activities should be different. The trade barriers are not that easy to implement as for the physical goods.

However, the sunk costs of offshoring and outsourcing operations are lower, thus the decision of moving them back to a home economy might be easier. On top of that, we should put automation, which means that processes once streamlined and

optimised for offshoring, can be implemented back to the headquarters. As the processes have been highly automated, their execution requires just a fraction of the original number of employees, and the cost of labour and its availability, which were the main motivations towards offshoring, are not as relevant as prior to offshoring.

Therefore we argue that the offshoring phase is important even from the perspective of the reversing processes. The efforts of transforming the processes have been cheaper and more efficient when conducted abroad. However, the decision of repatriating some of knowledge intensive operations to a home economy and inside a firm is again a complex task. It can be even more complex than moving the activities abroad. The situation is more complex for the offshore outsourcing. Two key elements should be in the centre of the decision: retained knowledge in the organisation, as well as the managerial capabilities and commitment to the operation of reversing outsourcing (Nujen, Halse, Damm, & Gammelsæter, 2018). That being said, there must be a critical mass of capabilities in the organisation to reintegrate the knowledge processes to its home operations. For some businesses it may not be possible to reintegrate processes in all cases, because of lack of internal capabilities.

The motives of reshoring of business services depend on motives of offshoring. According to Albertoni, Elia, Massini and Piscitello (2017) when offshoring was motivated by cost-savings and market access, in the case of unsatisfactory results it was likely to relocate the operations to another offshore destination. However, when the offshoring was aimed at increasing the efficiency or adding new talents, it did not make firms to move the processes elsewhere.

The evidence regarding dependence on offshoring suggests that it may lead to an economy-wide volatility. For example, the offshoring industries in Mexico (a host country) experienced twice as high fluctuation in employment than in the US (a home country) (Bergin, Feenstra, & Hanson, 2011). It was studied using the manufacturing industries and it can be only partially related to professional services. First, the business processes, which are offshored are not directly related to the sales or production volumes in the organisation. The services are rather treated as overheads, not direct factors of production. The finance department needs to prepare the same report irrespective if the production is 10 or 100 pieces. Anyway, there are types of business services that may be affected by the decrease in core processes. For example, the decrease in number of IT projects in an organisation may reduce demand for IT programmers in an offshore location. The decrease in employment of offshore white-collar workers may be also a result of strategic changes within an organisation. For example, exiting a market may induce making some finance specialists responsible for reporting about the business redundant. The strategic change may also mean closing a SSC in one location and moving it elsewhere. Or at least it may lead to relocation of some processes to a more efficient location. It means that there is a real threat for employment in some service centres, however there is also flexibility allowing for placing redundant employees in other roles.

7.7 Conclusions regarding economic role of advanced business services

The situation in the ABS industry in CEE is dynamic. The word dynamism means more jobs, more investors, and more knowledge over time. An important part of the investigating the economic role of ABS industry in V4 economies were studies of selected foreign-owned firms operating in particular economies. The study revealed a high degree of diversification of companies with respect to types of activities and modes of operations (captive and outsourcing). The study using firm-level information also helped to distinguish between the firms operating as shared service units and those providing business outsourcing. The latter group is particularly important for IT services.

The analysis defies the conventional division between offshoring operations and FDI. The former has been mostly considered as relocating activities to other countries, while FDI has been considered rather from the market expansion point of view. Most of the companies presented in the study simultaneously applied both types of approaches. It also means that particular ABS units in V4 are both results of relocation and expansion approach. For example, many outsourcing firms have expanded their operations to CEE in order to be closer to their customers and access the attractive market for talents.

The analysis of particular companies also brought new findings regarding the ABS industry. Until now the operations of firms in particular V4 economies were analysed in separation. However, there are some new patterns revealed in the study. There are ABS firms that do not choose between particular V4 locations. Some firms (e.g. DXC Technology, Accenture Services, IBM Global Delivery Centers) have their service units in all V4 economies, somehow replicating the model of operations.

In total more than 500 companies have been screened, however due to various reasons only some of them have been selected to represent the industry. In many cases, the companies that have been recorded as belonging to the industry of ABS, have limited operations in services. Moreover, many companies still do not have a separate unit providing business services. There are some shared services operations, however they are still subordinated to the core production or distribution operations. Therefore it is impossible to distinguish the employment or financial results of the companies.

When such restrictions were imposed the number of companies that could be considered as explicit ABS units shrank significantly. Moreover, in many cases the size of operations was quite small. Employment of tens of workers means that the scope and advancement of the operations within ABS units was limited. Such dismissals also led to a conclusion that the ABS industry, in spite of large number of units, has been dominated by the limited number of large companies. The largest

units are responsible for most of the employment. This possess some challenges to the support policies by governments.

Two main elements of offshoring are expected to report different dynamism in coming years. First, due to the restrictions in supply of labour and rising costs of employment, the CEE economies are supposed to lose some attractiveness for BPO operations, especially those of low-end complexity. There are more attractive locations for mass supply of services. Second, the CEE economies should still keep an important position for shared services, as the short distance, cultural proximity, common legal and institutional framework foster closer cooperation with other units of MNEs, mostly from EU economies, as well as for American firms with a vast exposure to European markets.

A very important development in the ABS sector in coming years will be automation of processes. There is a large cognitive gap regarding impact of automation on less advanced economies. The current position of CEE with respect to ABS is unique. It is due to the fact that many of the processes, that were placed there just a few years ago, may the subject to profound changes due to automation. If the offices located in this region are capable of participating in the process, they may gain important position within MNEs for the coming years. Unfortunately, there are significant threats for CEE economies due to automation.

First, this is not the only region in the world where the work on automation of white-collar services has begun. The stake is high for information-driven service sectors in India, China, the US or the Western Europe. Moreover, the mentioned economies have an important advantage over the CEE economies – the headquarters of MNEs that conduct the automation are located there.

Second, the development of automation is expected to reduce the number of employees in the tradable services. The automation is particularly important for locations dependent on foreign investors such as South East Asia or Central and Eastern Europe. Especially the latter region is prone to structural changes due to automation. For many years the region has been an important location of investments by Western European firms, but also the US or Asian firms aiming at accessing the European Single Market. The foreign investments have been predominantly in manufacturing sector, however the services are of grave importance recently, and both sectors are subjects of automation. Anyway, the scope and pace are different. The discussion of automation is placed in the broader context of the declining share of labour in national incomes across many economies, for example, Piketty (2014); Dao, Das, Koczan, and Lian (2017).

8 Policy implications

The best economic policy towards the ABS industry should be actually no specific policy. The needs of the industry are the same as those requisite for the development of an economy: quality and abundance of talents, stable legal and political framework, and good infrastructure. Unfortunately the size of the industry, international competition for FDI, and multiple externalities do not allow for applying such a pure free market approach.

One of the key externalities is concentration of ABS firms in very few and most attractive locations within particular economies. The main idea to solve this issue is to attract this type of activities to smaller cities and towns. However, such locations are frequently not highly attractive for investors, as there is no critical mass of talents, limited educational infrastructure, few business opportunities, and insufficient attractiveness to mobile workforce. The key element attracting talents to top locations is the abundance of employers. In tier two locations, even if some jobs have been created, there is quite a limited room for manoeuvre for potential employees, who in turn may avoid settling there for a longer period of time. Furthermore, the technology does not provide much support to secondary locations to mitigate the distance. In spite of developments in communication technology, there is still a high propensity towards more concentration in primary destinations and agglomeration economies play a very important role in the decision regarding location of ABS units.

The situation of tier two locations is also not encouraging due to the changes in the technological sophistication of services. Two elements should be underlined here. First, the technology intensity in services means that there is a rising need for larger scale of operations and deploying advanced technology requires a vast investment and large number of users. The emergence of new technologies, for example, robotic process automation, increases the need for concentration. It is easier to be achieved in tier one locations. Moreover, the level of competences required to be combined with the newest technology is rising. It means they are easiest accessible in primary locations. On top of that we should put the slowdown in the number of jobs created by ABS firms in V4 economies in recent years. It means that if tier two locations will not become significant destinations for ABS firms soon, their chances of doing so in a coming future are quite slim. It may be also considered that the time to employ technology to spread the services geographically within particular economies may be elapsing.

Consequently, technology provides also an important challenge for the policy towards this type of FDI. For many years investors have been praised for bringing many new jobs to host economies. In V4 economies we can notice cooling sentiment towards more very large projects. Actually, new investments in ABS have not been focused on the number of employees, but rather on the complexity of operations.

Automation also requires a new approach to policies regarding attracting FDI and development of competences. For many years, key elements of incentives programmes

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towards foreign investors in ABS were lower labour costs and abundance of talents. Automation should be seen here as an opportunity.

First of all, across many industrialised economies the number of workers is falling due to demographic changes. On the other hand, many jobs do not fit the aspirations of new generations. Therefore it seems natural that such jobs should disappear and workers should focus on more meaningful occupations. So the most important is to build requisite capabilities. This may profoundly change flows of FDI in ABS. There will be no necessity to locate ABS units in a spot with a large pool of employees. Rather it will be about the highly skilled specialists, so to gain an advantage is to build requisite capabilities. Indeed, an introduction of AI requires a vast pool of talents and according to Gerbert, Mohr, and Spira (2019, p. 5): "Many companies are finding it challenging to hire the talent to feed their ambitions. Systems engineers are especially hard to find." Thus the next wave of FDI projects in advanced business services will be focused on locations providing requisite talents.

The issue of automation is also important from the perspective of national policies in CEE towards FDI in services. Positive element of automation might be the shift of talents from large MNEs, into small and medium-sized domestic firms. The crowding-out effect by foreign-owned firms has been frequently pronounced in the analysis of impact of FDI for host economies. Especially recently, when the large wave of foreign-owned firms started their operations in CEE and employ hundreds of thousands of highly educated workers, frequently to do some routine tasks. Thanks to automation, these talents may be freed and their qualifications may be utilised in activities of higher productivity: their own businesses or doing more meaningful tasks.

In spite of some attempts and many declarations, the ABS industry does not support the equal regional development. The expected equality may be considered somehow idealistic, however there is even no moderate increase in the number of companies and employment in tier two regions in the selected V4 economies. Naturally, there is a high level of saturation in the most prosperous regions, what should force firms to search for locations providing lower costs and a certain pool of available talents. Due to gained experience and economies of scale, it would be expected that satellite offices of already existing ABS firms are to be created in other locations in the same economy. However, this is happening only rarely. A more profound trend is searching for tier-one location in economies outside V4. It means that Lithuania, Bulgaria, Bosnia and Herzegovina, and many others are attracting a higher number of investors from abroad. The competition for this type of investment is dense and dynamic. It is also easy from the strategies of corporations, as costs of such an investment are not high, so even riskier locations may be selected for offshoring of services.

The policies towards ABS should have been altered depending on the complexity of the projects, not only the number of jobs offered. The time for a new policy approach is high as the ABS industry in V4 economies is already mature. The growth of new jobs has flattened. On the other hand, there are economies, like India or the Philippines,

that have much lower costs of labour, thus V4 countries should avoid the competition for projects with a massive employment. Moreover, the barriers of entry by countries to the group of providers of services are not high, especially for the repetitive services. Therefore, we can expect that the competition for new projects may increase in near future. To withstand the tense competition it is necessary to specialise and offer better business conditions.

There is an issue of how to avoid the middle income trap when it comes to ABS in the macroscale. Indeed, the focus on ABS some years ago was motivated by an attempt to define new advantages of V4 economies. Today, it would be very premature to declare that it has been achieved. The investments in ABS can be understood as an evolutionary step in development of the economies. For many years CEE has been perceived as an attractive location for manufacturing goods for the Western Europe. Since a few years, this has become the location of services for the Western Europe and other international recipients. The investments in ABS require completely new optics, comparing to the manufacturing operations. The policy towards them should be very dynamic and incorporating a high level of a micro approach. Therefore, the focus of the book was to merge the two perspective. Without them it is not possible to design, deploy and assess policies. From the policy perspective, it is impossible and unjustified to select and support only narrowly defined processes within the ABS industry. Due to the dynamism in the sector, the processes executed in ABS units are changing profoundly. Fortunately the trend is upward, what means that more value added and processes of higher knowledge intensity are executed.

There is a need for national strategies in V4 that will support the most important developments in the ABS industry. There should be a clear strategy towards data science, machine learning, robotics, and artificial intelligence. However, the issue is that there is already a high level of competition in this industry. Some years ago the Indian ABS industry has already started approaching these technologies, and have sufficient resources and scale to embrace them. However, the technologies are not developing linearly and the scale cannot be the only determinant. It is rather about agility and competences in applying the solutions. Indeed, the new competences is the area, where authorities have great role to play. Importantly, the competences for the future are not only technical ones, but rather soft ones, like communication skills and abstract thinking.

The discussion regarding a policy towards the ABS industry is hindered by classifications and statistics. A low-cost solution to understand the phenomenon of advanced business services is to update the structure of statistical data. At the moment it is impossible to access internationally comparable (even within European Union) statistics regarding ABS. There are many drawbacks of the current approach to the ABS industry, as it has been treated as a subsector or industry within a broader category of services. Because of that it was difficult to comprehend this activities as highly-knowledge intensive and design policy towards them.

Concluding remarks

The book has been devoted to merging two perspectives on offshoring of advanced business services. Business operations have been analysed to responsibly approach the economic meaning of offshoring of services. Currently, there are many developments taking place within the ABS industry and it is absolutely crucial to include them in the economic analysis. Without providing the business perspective any economic and policy conclusion would be irrelevant.

The main conclusion from the empirical analysis of the Visegrád Group economies is that there are still strong arguments supporting the traditional perspective on the white-collar jobs offshoring. It is confirmed by the differences in wages between home and host economies. The largest number of investors originate from the Western Europe and the United States. However, when we take into consideration the context of many CEE economies, where the gap between production costs and highly developed economies is getting smaller and smaller, other qualities are attracting investors. It is more proof that the investors do not only look for low costs, but also for quality. When we put it in the context of a corporate strategy, it means that firms search for both cost savings and high quality and they use a mix of these two depending on their overall strategy.

The V4 locations are very different from their Asian peers due to the history of FDI. First, incumbent foreign-owned firms, which earlier invested in the economies of CEE in core operations in manufacturing, services or finance later invested in ABS. The road towards knowledge-intensive activities was a result of earlier developments in activities of lower knowledge content. The key locations for offshoring of ABS in Asia had not developed the secondary industry before accepting vast amounts of FDI in services. Second, there are new investors in CEE, without any prior core operations, interested in providing support activities by accessing the pool of talents, good institutions and proximity to main operations.

Moreover, the CEE economies became an important and integrated element of the global services delivery chain. In the beginning of the 21st century there were three main locations for advances business services: North America, the Western Europe and some Asian economies. Adding the CEE economies filled the gap when it comes to time zone and cost arbitrage. It also confirms that the survival rate of companies in the industry should be high as operations in CEE are important for the entire global network.

Indeed, very few companies in ABS withdrew or significantly reduced the scope and size of support services provided by CEE units. The survival rate may be lower when it comes to some outsourcing operations. The conclusion may be that shared services are more prone to be stable operations, while BPO is not fully embedded in the host economies and may easier relocate to other destinations providing cost advantages and better job market situations.

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Offshoring of white-collar services is footloose, which means that at low cost the operations can easily be moved from one country to another. In such an idealistic setting, all ABS should be executed in the very low-cost economies of India or the Philippines. The sheer size of the ABS industry in those locations confirms that cost arbitrage is still an important magnet. Moreover, the vast scale of operations helps to achieve economies of scale and allows for investment in further development. Anyway, there is room for many other players and CEE economies with their geographic position, integration with EU, sharing similar values, and, very importantly, offering a high level of education can still play an important role in the industry for years to come.

Throughout the discussion about the determinants and impacts of FDI in ABS in V4 only one group of factors proved to be relevant – those related to supply of inputs. Despite the intensive search for demand-related elements of the ABS operations, there are virtually none identified. It means that operations of ABS firms are not embedded into local operations of MNEs, but rather provided globally, or at least regionally. This poses some threats for the longevity of the projects, as a lack of demand linkages makes the operations very footloose and they can actually be delivered from almost any place, which provides a proper supply of inputs.

Several levels of analysis were employed to explain the phenomenon of offshoring. Conducting the empirical analysis regarding ABS in the V4 economies on the regional level provided more insights thus made the results more robust. Moreover, using regions as the units of observation enabled also the comparison within particular economies. This is important as FDI in the business services sector are not evenly distributed across countries. Consequently, combining data on the regional level with data on a firm level allowed for a very thorough analysis. The inclusion of firms in the analysis of offshoring was also crucial due to their bargaining power. The firms in the ABS industry are relevant enough not to take the local conditions as granted, but have power to shape them.

There is a further expansion of FDI in knowledge-intensive services expected. However, the V4 economies are already pretty saturated and the trend may be rather increasing complexity of processes executed, not significantly increasing the headcount. There are no reasonable arguments to expect that the employment will rise as dynamically as it was in the previous decade.

There is still room for the upgrade of the functions in ABS units. However, there are no strategic approaches to do so. It can be interpreted that ABS units are still subordinated to main decisions of the headquarters, rather than provide knowledge to operate entire organisations. Anyway, to fully utilise the opportunities provided by the global presence and access to talents, there should be a further progress towards most advanced functions and direct influence on the decision process of a MNE.

I was focused on analysing operations of multinational firms in advanced business services in CEE. However, the additional objective was to observe changes within MNEs due to their offshoring operations. MNEs are changing dynamically due to reorganising their processes. They put bigger chunk of activities in separate units both within and outside the boundaries of a firm. Importantly, they put knowledge-intensive processes, which despite being considered as support or secondary activities, are actually playing the key role. When it comes to finances, it is no longer about recording transactions, but rather analysing operations and transforming processes. When it comes to IT, it is no longer about solving some software errors, but more about designing new software or new solutions for businesses.

There is an ongoing evolution of the ABS and they become more and more technology-oriented. This creates new challenges for labour markets as new competences are required. At the same time, it creates new challenges for already employed, whose competences may be very short-lived. This is a new challenge for policies regarding the ABS industry. Due to the global competition for projects, it is expected that host destinations offer unique characteristics. However, the most important is rather to provide quality of education and skills. The supply of talents will help to maintain the cost advantage. However, the demographic conditions may provide some headwinds. It was underlined that the immigration policies in CEE should be relaxed towards those migrants having requisite skills. The solutions adapted by, for example, Canada may be also useful here. An increase in number of skilled immigrants may help not only the ABS industry, which can be a direct beneficiary, but also economies in large.

The technological changes are especially important for locations, which are dependent of foreign investors and have not developed their own service multinational firms. We can build links between technological and organisational changes, through altered environment for multinational firms in home and host economies. The issue is also the productivity of white-collar services, which is rising due to the technology improvements and bigger focus on quality.

Unfortunately the official statistics are decades behind the developments in the business environment. It is more and more difficult to use quantitative measures to understand business operations, which become increasingly intangible or digital. However, such data are necessary to build economic and policy recommendations.

From the policy perspective, it is also crucial to understand the role of ABS units within companies. In spite of significant upgrade of processes and gained trust within MNEs, ABS units in CEE economies are still treated as auxiliary units with minor role in creating value added in the company. Still such units are treated as costs centres, not profit centres, which induces the cost optimisation as the key imperative of their operations. Because of the limitations, ABS units are still on the

outskirts of the operations of MNEs. This means that the knowledge creation is still not the most important task of many ABS units. Some years ago, the CEE economies have been considered as favourable locations for manufacturing, nowadays they are good locations for "services factories". However, it still means that they are not in the centre of the operations within MNEs. There are little prospects that the situation may change any time soon.

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